

**Examining group purpose and self-motivation as
antecedents to cohesiveness in groups: An action research
inquiry exploring a notion of “Teamship”**

A thesis submitted in partial fulfilment for the degree of Doctor of Business
Administration

Kieran Lees

HENLEY BUSINESS SCHOOL

THE UNIVERSITY OF READING

June 2021

Declaration

I confirm that this is my own work and the use of all material from other sources has been properly and fully acknowledged.

Name: Kieran Lees

Date: 4th June 2021

Signature:

Certificate of readiness to be included in library

I grant powers of discretion to the University Librarian of Henley Business School to allow this thesis to be copied in whole or in part without further reference to me. This permission covers only single copies made for study purposes, subject to normal conditions of acknowledgement.

Name: Kieran Lees

Date: 4th June 2021

Signature:

Acknowledgements

Little did I understand when I set out on this personal endeavour just how much help I would need along the way. My sincere thanks to the many people personally, professionally and academically who have contributed to my understanding, awareness, studies and ideas. However, special thanks are extended to:

- Professors Malcolm Higgs and Vic Dulewicz, my supervisors, for both their knowledge and skill. The wisdom to guide rather than lead has been profoundly valued, and a wonderful lesson learned.
- Professors Claire Collins and Liang Han, Directors of the Doctor of Business Administration (DBA) Programme at Henley Business School, for allowing me this opportunity and supporting me throughout the process.
- Dr. Sharon Varney for her mentorship in the early stages, and providing me with a role-model of what “good” really looks like.
- Louise Hillier and Becky Kite, for providing tireless, kind and professional management and administration of everything we do at Henley.
- Veronika Sweet and Ergham Bachir, fellow students in my DBA cohort, for our weekly Sunday morning conference calls throughout 2020 and into 2021. To be able to share our progress and discuss, debate and ideate has been invaluable.
- To Robin Stalker, President of the Deutscher Rugby Verband at the time of this research study, for permitting this engagement and for his enthusiastic and active interest in its potential both within sport and beyond.
- To all of the participants in the German Rugby XV's squad, for allowing me to become a member of your team in 2018 and 2019.
- To Mike Ford, head coach for the German Rugby Men's XV's during the period of this research study, for inviting me to become a member of his team and allowing me to conduct this research. We came so close to achieving the unachievable, and I am eternally grateful for his trust, leadership and support.

Dedication

To Jackie: Thank you for standing by me and supporting me throughout these five years of immersion. I'm looking forward to our "new-normal" and to shaping it together.

To my children; Scott, Chloe and Jude: Dad's back! I hope that you'll enjoy reading this one day – but I'm all yours now!

But mostly to my parents: I know that you'd have both loved to have seen this day, and I'm so sad that you're not here to share it. This journey took determination to complete – something that came from a childhood of watching you. You were my inspiration for starting and keeping going when it was tough. I dedicate my thesis to you both and my cherished memories of my mum and dad.

Abstract

The primary purpose of this study was to examine group purpose and self-motivation as antecedents to cohesiveness in groups, and to explore a notion of “teamship”. The study employed a longitudinal action research design in an international rugby squad over an eight-month period and spanning two competitive tournaments, including the Rugby World Cup Repechage in 2018, and the Rugby Europe International Championship in 2019. The researcher held both academic and practitioner roles for the duration of the engagement.

Multiple data sources were used: in-depth interviews; observation; documents; social media channels; photographic records; video recordings and researcher reflections which were analysed from first-, second-, and third-person perspectives, providing a comprehensive longitudinal perspective on the temporal development of group processes and self-motivational needs and fulfilment.

The research contributes to knowledge in the areas of group cohesiveness, group purpose, group stage development, group processes and group-member motivation and behaviour.

The main contributions of the study are: 1) reconceptualisation of group purpose as a multi-level construct; 2) reconceptualisation of group cohesiveness as a multi-dimensional fluid emergent state in groups, with bonds of cohesion that evolve and change; 3) a novel typology of groups and group stage development based on group purpose, task interdependence, group cohesiveness, group identity and self-motivational needs; 4) the addition of “affective interdependence” to the extant literature on group interdependence; 5) the determination that a “team” is an emergent group state based on selfless behaviours, group identity and group self-regulation; and 6) the conceptualisation and definition of “teamship” in both theory and practice.

The structure of the thesis and use of abductive second-person analysis to create third person retroductive insights contributes to action research method.

Future research should seek to explore further the findings from the study.

Contents

DECLARATION	I
ACKNOWLEDGEMENTS	III
DEDICATION	IV
ABSTRACT	V
CONTENTS	VI
LIST OF TABLES	XI
LIST OF FIGURES	XII
LIST OF ABBREVIATIONS	XV
1 INTRODUCTION	1
1.1 INSPIRATION	1
1.2 SUMMARY OF THE RESEARCH PROBLEM, PURPOSE AND QUESTION	3
1.2.1 <i>Defining the Research Problem</i>	3
1.2.2 <i>Theoretical Purpose</i>	6
1.2.3 <i>Practical Purpose</i>	6
1.2.4 <i>Research Question</i>	6
1.3 THE ACTION RESEARCH APPROACH.....	6
1.4 CONTRIBUTIONS	8
1.4.1 <i>To Theory</i>	8
1.4.2 <i>To Method</i>	10
1.4.3 <i>To Practice</i>	11
1.5 ORGANISATION OF THE THESIS	12
2 BACKGROUND AND CONTEXT	13
2.1 RUGBY UNION	13
2.2 ENGLAND RUGBY 1997 - 2003	15
2.3 GERMAN RUGBY 2007 – 2018	18
3 LITERATURE REVIEW	20
3.1 OVERVIEW	20
3.1.1 <i>Structure of literature review sections</i>	21
3.2 “TEAMSHIP”	22
3.3 GROUPTHINK	26
3.4 GROUP COHESIVENESS.....	33

3.5	GROUP STAGES OF DEVELOPMENT (GSD)	44
3.6	GROUP PURPOSE	52
3.7	GROUP INTERDEPENDENCE	60
3.8	SELF-MOTIVATION	74
3.9	LITERATURE REVIEW SUMMARY – THE GAPS IN KNOWLEDGE	81
3.9.1	<i>Teamship</i>	81
3.9.2	<i>Groupthink</i>	81
3.9.3	<i>Group Cohesiveness</i>	82
3.9.4	<i>Group Stage Development</i>	83
3.9.5	<i>Group Purpose</i>	83
3.9.6	<i>Group Interdependence</i>	84
3.9.7	<i>Self-Motivation</i>	85
4	RESEARCH DESIGN: PHILOSOPHY AND RESEARCH QUESTIONS.....	86
4.1	INTRODUCTION	86
4.2	PERSPECTIVES ON THEORY	86
4.2.1	<i>Knowledge</i>	87
4.2.2	<i>Theory</i>	88
4.3	RESEARCH PROBLEM	91
4.4	RESEARCH PURPOSE	92
4.5	RESEARCH QUESTION	94
4.5.1	<i>The importance of the Research Question</i>	94
4.5.2	<i>Research Question for this study</i>	95
4.6	RESEARCH STRATEGY	96
4.6.1	<i>Linear reasoning approaches</i>	99
4.6.2	<i>Cyclical Reasoning Approaches</i>	100
4.7	RESEARCH PARADIGM.....	101
4.8	ONTOLOGY, EPISTEMOLOGY AND AXIOLOGY	103
4.9	SUMMARY – RESEARCH DESIGN: PHILOSOPHY AND RESEARCH QUESTIONS	104
5	RESEARCH DESIGN: METHODOLOGY AND METHOD.....	105
5.1	BACKGROUND – THE ORIGINAL RESEARCH DESIGN.....	105
5.2	METHODOLOGY OPTIONS	107
5.2.1	<i>Case Study - a potential approach</i>	109
5.2.2	<i>Action Research</i>	109
5.3	METHOD.....	114
5.3.1	<i>Population selection and sampling</i>	114
5.3.2	<i>Researcher Role: Duality, Credibility, Rapport and Trust</i>	115
5.3.3	<i>Sample Nationality and Language</i>	116

5.3.4	<i>Cycles of engagement</i>	117
5.3.5	<i>Data types, collection and preparation</i>	119
5.3.6	<i>Data Analysis</i>	122
5.3.7	<i>Trustworthiness and validity</i>	127
5.3.8	<i>Ethical Considerations</i>	130
5.4	RESEARCH DESIGN: SUMMARY	131
6	DATA ANALYSIS	133
6.1	INTRODUCTION.....	133
6.1.1	<i>Unit of Measurement</i>	134
6.1.2	<i>The Importance of Change and Learning in Action Research</i>	134
6.1.3	<i>Structure of the Data Analysis Section</i>	135
6.1.4	<i>Use of Theoretical Constructs in the Fieldwork and Data Analysis</i>	136
6.2	AC DATA ANALYSIS: FIRST- AND SECOND-PERSON	140
6.2.1	<i>Overview</i>	140
6.2.2	<i>Action Cycle 1 (AC1)</i>	141
6.2.3	<i>Action Cycle 2 (AC2)</i>	182
6.2.4	<i>Action Cycle 3 (AC3)</i>	227
6.3	THIRD-PERSON ANALYSIS.....	250
6.3.1	<i>Initial Template</i>	250
6.3.2	<i>Second Iteration of Template</i>	250
6.3.3	<i>Final Iteration of Template</i>	250
6.3.4	<i>Summary of Third-person Analysis</i>	256
7	FINDINGS AND DISCUSSION	257
7.1	INTRODUCTION.....	257
7.2	SUMMARY OF FINDINGS.....	258
7.3	DESCRIPTION OF FINDINGS	264
	<i>Finding 1 Group cohesiveness is a temporally fluid multi-dimensional construct</i>	264
	<i>Finding 2 Alignment of group purpose and self-motivation accelerates cohesiveness in groups</i>	273
	<i>Finding 3 Group purpose is a multi-level, multi-functional construct</i>	275
	<i>Finding 4 Shared purpose comprises shared processes and outcomes</i>	280
	<i>Finding 5 A team is an emergent group state identifiable by selfless member-behaviours</i>	283
	<i>Finding 6 Affective Interdependence is an emergent behaviour in teams</i>	288
	<i>Finding 7 GSD is a recursive emergent state of identifiable group types</i>	290
	<i>Finding 8 "Teamship" describes the self-determined behaviours of individuals consistent with Self-Categorisation Theory</i>	302
7.4	DISCUSSION OF FINDINGS	304
	<i>Discussion Theme 1 – Group Cohesiveness</i>	305

	<i>Discussion Theme 2 – Group Purpose</i>	306
	<i>Discussion Theme 3 – Group Formation and Development</i>	309
	<i>Discussion Theme 4 – Group and Team Processes</i>	310
	<i>Summary of Findings and Discussion</i>	312
8	CONTRIBUTIONS, LIMITATIONS AND RECOMMENDATIONS	314
8.1	CONTRIBUTIONS TO THEORY	314
8.1.1	<i>Group Cohesiveness</i>	315
8.1.2	<i>Organisational and Group Purpose</i>	316
8.1.3	<i>Group Type and Development</i>	317
8.1.4	<i>Group Processes</i>	317
8.2	CONTRIBUTIONS TO METHOD.....	319
8.3	CONTRIBUTIONS TO PRACTICE	321
8.4	SUMMARY OF CONTRIBUTIONS.....	329
8.5	LIMITATIONS AND DELIMITATIONS.....	329
8.5.1	<i>Limitations</i>	329
8.5.2	<i>Delimitations</i>	331
8.6	AREAS FOR FUTURE RESEARCH	331
9	CONCLUSION	334
	REFERENCES	336
	APPENDICES	I
9.1	APPENDIX A BIOGRAPHICAL PROFILE - KIERAN LEES (AUTHOR)	I
9.2	APPENDIX B RUGBY UNION: A DESCRIPTION OF THE SPORT	II
9.3	APPENDIX C SUMMARISED HISTORY OF ENGLAND RUGBY	IV
9.4	APPENDIX D A SUMMARY OF FORMATIVE AND RECENT HISTORY IN GERMAN RUGBY	V
9.5	APPENDIX E REVIEW OF PUBLISHED LITERATURE FOR “TEAMSHIP”	VIII
9.6	APPENDIX F REVIEW OF GROUPTHINK META-ANALYSES 1990 - 2011	XIV
9.7	APPENDIX G UNIVERSITY OF READING ETHICS APPROVAL FORM A	XVI
9.8	APPENDIX H PARTICIPANT ENGAGEMENT AND CONSENT FORM	XXII
9.9	APPENDIX I MENTAL EXCELLENCE COACH – ROLE AND RESPONSIBILITIES	XXIV
9.10	APPENDIX J MY FOCUS AND MOTIVATION TEMPLATE FOR SQUAD MEMBERS	XXVI
9.11	APPENDIX K DEMOGRAPHIC PROFILE OF AC1 PARTICIPANTS	XXVII
9.12	APPENDIX L PERMISSION LETTER FOR DOCTORAL RESEARCH STUDY WITH DRV.....	XXVIII
9.13	APPENDIX M ROLES AND RESPONSIBILITIES - ACTUAL SUBMISSIONS	XXX
9.14	APPENDIX N DEMOGRAPHIC PROFILE OF AC2 PARTICIPANTS	XXXVI
9.15	APPENDIX O DEMOGRAPHIC PROFILE OF AC3 PARTICIPANTS	XXXVII
9.16	APPENDIX P SUMMARY OF THEMES AND CODES FROM AC1, AC2 AND AC3.....	XXXVIII

9.17	APPENDIX Q THIRD-PERSON ANALYSIS - INITIAL TEMPLATE	XLIII
9.18	APPENDIX R THIRD-PERSON ANALYSIS - SECOND ITERATION TEMPLATE	XLVI
9.19	APPENDIX S ANALYSIS OF PARTICIPANT REFLEXIVE INTERVIEWS (AUGUST 2019)	LI

List of Tables

TABLE 3.4.1	AN INTEGRATED MODEL OF THE FUNCTIONS AND STRUCTURE OF COHESION	40
TABLE 3.5.1	NINE KEY FACTORS [OF DIFFERENTIATION].....	48
TABLE 3.5.2	DEVELOPMENT FACTORS BY EACH STAGE OF DEVELOPMENT	50
TABLE 3.7.4	SUMMARY OF SAMPLE OF GROUP INTERDEPENDENCE STUDIES 1949 - 2010	66
TABLE 4.4.1	TYPES AND USES OF RESEARCH PURPOSES	93
TABLE 4.5.1	RESEARCH QUESTION AND SUB-QUESTIONS.....	96
TABLE 4.6.1	THE LOGIC OF FOUR RESEARCH STRATEGIES.....	97
TABLE 4.6.2	RESEARCH STRATEGIES IN RELATION TO DATA, THEORY, PURPOSE AND QUESTIONS	98
TABLE 4.9.1	SUMMARY OF RESEARCH DESIGN FOUNDATIONS FOR THIS STUDY	104
TABLE 5.2.1	ASSUMPTIONS OF EMIC AND ETIC PERSPECTIVES AND ASSOCIATED METHODS	113
TABLE 5.3.1	DETAILED BREAKDOWN OF THE GERMAN RUGBY MEN'S XV SAMPLE.....	114
TABLE 5.3.2	AR CYCLES AND DATA COLLECTED	119
TABLE 6.2.1.1	AC1: CYCLE CONTEXT AND PURPOSE	141
TABLE 6.2.1.2	AC1: CATEGORISATION OF OBSERVATIONS	158
TABLE 6.2.1.3	AC1: RE-THEMING OF CATEGORISATION AND TYPE OF CHANGE REQUIRED	160
TABLE 6.2.1.4	AC1: TRANSLATION OF THEMES, CATEGORIES AND OBSERVATIONS INTO CONCEPTS FOR PRACTISE	162
TABLE 6.2.2.1	AC2: CYCLE CONTEXT AND PURPOSE	182
TABLE 6.2.2.2	AC2 SUMMARY OF OBSERVATIONS AND THEMES	206
TABLE 6.2.2.3	AC2: CATEGORISATION OF AC2 OBSERVATIONS	209
TABLE 6.2.2.4	AC2: INTERVENTION TYPES OF AC2 OBSERVATIONS	210
TABLE 6.2.2.5	AC2: INTERVENTION DESCRIPTIONS FOR AC2 OBSERVATIONS	212
TABLE 6.2.4.1	AC3: CYCLE CONTEXT AND PURPOSE	227
TABLE 6.2.4.2	AC3: CATEGORISATION OF AC3 OBSERVATIONS	235
TABLE 6.2.4.3	AC3: INTERVENTION DESCRIPTIONS FOR AC3 OBSERVATIONS	236
TABLE 6.3.3.1	FINAL CODING TEMPLATE	251
TABLE 7.2.1	HOW THE RESEARCH QUESTIONS ARE ADDRESSED BY THE RESEARCH FINDINGS	261
TABLE 7.3.3.1	AN INTEGRATED MODEL OF THE MULTI-LEVEL FUNCTIONS AND STRUCTURE OF GROUP PURPOSE	279
TABLE 7.4.1	FOUR THEMES FROM FINDINGS	304

List of Figures

FIGURE 2.2.1	“TEAMSHIP RULES” (SOURCE: WOODWARD AND WALTERS 2003)	17
FIGURE 3.1.1	LITERATURE REVIEW: DEVELOPMENT OF APPROACH AND PRESENTATION	21
FIGURE 3.3.2	REVISED GROUPTHINK MODEL (SOURCE: LEE 2020:456)	30
FIGURE 3.5.1	STAGES OF SMALL GROUP DEVELOPMENT (TUCKMAN AND JENSEN, 1977)	46
FIGURE 3.5.2	PUNCTUATED EQUILIBRIUM MODEL OF GROUP DEVELOPMENT (SOURCE: GERSICK, 1988)	46
FIGURE 3.5.3	INTEGRATED TEAM DEVELOPMENT FRAMEWORK (SOURCE: SHEARD AND KAKABADSE, 2002:136)	47
FIGURE 3.5.4	ICT MULTIPLE ITERATIONS OVER TIME IN GROUPS (SOURCE: AKRIVOU, BOYATZIS AND MCLEOD, 2006)	49
FIGURE 3.7.1	THOMPSON’S TASK INTERDEPENDENCE WORKFLOWS (MODIFIED FROM SOURCE: THOMPSON 1967)	62
FIGURE 3.7.2	INTENSIVE INTERDEPENDENCE: THE FOURTH LEVEL (SOURCE: VAN DE VEN ET AL , 1976)	63
FIGURE 3.7.3	THIS AUTHOR’S INTERPRETED REPRESENTATION OF WAGEMAN’S (2001) “MEANING OF INTERDEPENDENCE”	64
FIGURE 3.8.1	A TAXONOMY: SELF-DETERMINATION THEORY (MODIFIED FROM SOURCE: RYAN AND DECI, 2000)	79
FIGURE 5.2.1	A LOGICAL FLOW FOR ABDUCTIVE DOUBLE HERMENEUTIC RESEARCH	108
FIGURE 5.2.2	THE THREE CYCLES OF THE ACTION RESEARCH SPIRAL (SOURCE: SAUNDERS, LEWIS AND THORNHILL, 2016)	111
FIGURE 5.3.1	THE ACTION RESEARCH CYCLE (SOURCE: COGHLAN 2019:9)	117
FIGURE 6.2.2.1	HEIDELBERG, WEEK 3: SQUAD ROOM (SOURCE: DRV 2018)	146
FIGURE 6.2.2.2	ORIGINAL SQUAD IDENTITY AND BRANDING - SUBSEQUENTLY CHANGED (SOURCE: DRV 2018)	150
FIGURE 6.2.2.3	EXEMPLAR EXTRACTS FROM “MY FOCUS AND MOTIVATION” SUBMISSIONS, SEPTEMBER 2018	156
FIGURE 6.2.2.4	SQUAD BRIEFING ROOM: PLAYER’S ATTENTION AND CONCENTRATION ON THE FOUNDATIONS OF THE PLAN (SOURCE: DRV 2018)	167
FIGURE 6.2.2.5	ROLES AND RESPONSIBILITIES TEMPLATE	168
FIGURE 6.2.2.6	ROLES AND RESPONSIBILITIES PRESENTATION, 3 RD OCTOBER 2018 (SOURCE: DRV 2018)	169
FIGURE 6.2.2.7	ALTERCATIONS FORGOTTEN: AFFECTIVE COHESION IN PREVIOUSLY HOSTILE RELATIONSHIPS (SOURCE: DRV 2018)	172
FIGURE 6.2.2.8	PLAYERS ACTIVELY MONITORING THEIR OPPONENTS: INCREASING GROUP COHESION (SOURCE: MEN’S XV’S “WHATSAPP” GROUP 2018)	173
FIGURE 6.2.2.9	CAPTAIN’S MESSAGE TO THE SQUAD TO INCREASE FOCUS AND PERSONAL PREPARATION (SOURCE: MEN’S XV’S “WHATSAPP” GROUP 2018)	174
FIGURE 6.2.2.10	ENFORCEMENT AND ACCOUNTABILITY: TASK COHESIVENESS AND TEAM CULTURE (SOURCE: MEN’S XV’S “WHATSAPP” GROUP 2018)	174
FIGURE 6.2.2.11	THE START OF THE BRONCO FITNESS TEST IN SOARING TEMPERATURES (SOURCE: DRV 2018)	175
FIGURE 6.2.2.12	COMMITMENT AND DETERMINATION TO BELONG: INTRINSIC MOTIVATION (SOURCE: DRV 2018)	175
FIGURE 6.2.2.13	GROUP IDENTITY, TASK COHESION, GROUP VALUES, AFFECTIVE COHESION (SOURCE: DRV 2018)	176
FIGURE 6.2.2.14	INDIVIDUALITY AND LACK OF COLLECTIVE PRIDE OR IDENTITY (SOURCE: DRV 2018)	176
FIGURE 6.2.2.15	UNIFORMITY, GROUP-PRIDE, TEAM STANDARDS AND CULTURE (SOURCE: DRV 2018)	177
FIGURE 6.2.2.16	COLLABORATION AND SHARING: RECIPROCAL INTERDEPENDENCE AND TEAMWORK IN THE COACHING TEAM (SOURCE: DRV 2018)	177

FIGURE 6.2.2.17	AFFECTIVE INTERPERSONAL EVOLUTIONS INCREASING GROUP COHESIVENESS (SOURCE: DRV 2018)	178
FIGURE 6.2.3.1	SETTING THE STANDARDS: LINKING PERSONAL COMMITMENT TO GROUP PURPOSE (SOURCE: DRV 2018)	184
FIGURE 6.2.3.2	BREAKING AWAY FROM COACH-CONTROL (SOURCE: MEN’S XVS “WHATSAPP” GROUP 2018)	188
FIGURE 6.2.3.3	RISK OF GROUP FRACTURING AND FRAGMENTATION: THE IMPACT OF PERFORMANCE ANXIETY (SOURCE: DRV 2018)	189
FIGURE 6.2.3.4	CREATING TASK-FOCUS AND COHESIVENESS #1: PURPOSE-FOCUS WAS WHAT SHOULD HAVE BEEN GENERATED (SOURCE: DRV 2018)	195
FIGURE 6.2.3.5	CREATING TASK-FOCUS AND COHESIVENESS #2: PURPOSE-FOCUS WAS WHAT SHOULD HAVE BEEN GENERATED (SOURCE: DRV 2018)	196
FIGURE 6.2.3.6	CELEBRATING THE FIRST VICTORY AS THOUGH THE PURPOSE HAD BEEN FULFILLED: THE ERROR OF THE MENTAL COACH (SOURCE: DRV 2018)	197
FIGURE 6.2.3.7	KENYA: TO COMPETE AGAINST THEM REQUIRED COURAGE, COMMITMENT AND TEAMWORK (SOURCE: DRV 2018)	200
FIGURE 6.2.3.8	MENTAL EXCELLENCE CLINICS: OVER-SUBSCRIBED (SOURCE: MEN’S XVS “WHATSAPP” GROUP 2018)	214
FIGURE 6.2.3.9	BOX BREATHING: TAUGHT TO THE SQUAD IN CAMP 1 (SOURCE: DRV 2018)	215
FIGURE 6.2.3.10	CENTERING AND MINDFULNESS: TAUGHT TO THE SQUAD IN CAMP 1 (SOURCE: DRV 2018)	216
FIGURE 6.2.3.11	WHOLE SQUAD MINDFULNESS SESSION IMMEDIATELY PRIOR TO HONG KONG MATCH (SOURCE: DRV 2018)	216
FIGURE 6.2.3.12	CAPTAIN LEADING SQUAD “CENTERING” AND “BOX-BREATHING” PRIOR TO TRAINING (SOURCE: DRV 2018)	217
FIGURE 6.2.3.13	HEAD COACH REINFORCING THE IDENTITY, CULTURE AND VALUES OF THIS TEAM (SOURCE: DRV 2018)	218
FIGURE 6.2.3.14	TEAM LEADERS TAKE FULL RESPONSIBILITY FOR BRIEFING: ASSURING CONFIDENCE, AUTONOMY AND ACCOUNTABILITY (SOURCE: DRV 2018)	221
FIGURE 6.2.3.15	TEAM RITUALS AND HUMOUR: CRITICAL IN CREATING CULTURE, BELONGING AND CAMARADERIE (SOURCE: DRV 2018)	222
FIGURE 6.2.3.16	THE SQUAD SEND A VIDEO MESSAGE OF SUPPORT TO THE AUTHOR’S PARTNER (SOURCE: DRV 2018)	225
FIGURE 6.2.4.1	DRV EXECUTIVE LEADER CHOSE TO WATCH A DIFFERENT NATIONAL MATCH TO HIS OWN TEAM (SOURCE: AUTHOR’S WHATSAPP MESSAGE, 9 TH FEBRUARY 2019)	231
FIGURE 6.2.4.2	WORLD RUGBY LETTER TO DRV EXPRESSING CONCERNS OVER CONDITIONS (SOURCE: DRV 2018)	233
FIGURE 6.2.4.3	TEAM DOCTOR REPORT HIGHLIGHTING THE EXTENT OF HEALTH CONCERNS (SOURCE: COACHES’ WHATSAPP GROUP 2019)	242
FIGURE 6.2.4.4	THE POSITIVE IMPACT OF NEW SQUAD MEMBERS TO GROUP COHESION #1 (SOURCE: LEES, 2019)	244
FIGURE 6.2.4.5	THE POSITIVE IMPACT OF NEW SQUAD MEMBERS TO GROUP COHESION #2 (SOURCE: LEES, 2019)	244
FIGURE 7.3.1.1	THE PRIMARY BOND #1: PLAYER COMMUNICATIONS HIGHLIGHTING TASK (SOURCE: XVS PLAYERS’ WHATSAPP GROUP 2018)	265
FIGURE 7.3.1.2	THE PRIMARY BOND #2: PLAYERS SHARING IMAGES OF THEIR OPPOSITION (SOURCE: XVS PLAYERS’ WHATSAPP GROUP 2018)	266
FIGURE 7.3.1.3	PRIMARY BOND OF COHESIVENESS FOR INDIVIDUALS IN THIS STUDY: INSTRUMENTAL-TASK	267
FIGURE 7.3.1.4	SECONDARY BOND OF COHESIVENESS	269
FIGURE 7.3.1.5	TERTIARY BOND OF COHESIVENESS	270

FIGURE 7.3.1.6	GROUP COHESIVENESS AS A TEMPORALLY FLUID MULTIDIMENSIONAL CONSTRUCT	272
FIGURE 7.3.1.7	CONCEPTUAL REPRESENTATION OF THE RELATIONSHIP BETWEEN PURPOSE, MOTIVATION AND COHESION	274
FIGURE 7.3.4.1	CLASSIFICATION OF GROUPS AND TEAMS BASED ON COMMUNALITY OF PROCESS AND OUTCOME	282
FIGURE 7.3.5.1	FACTORS DIFFERENTIATING “GROUPS” FROM “TEAMS”	287
FIGURE 7.3.6.1	AFFECTIVE INTERDEPENDENCY: SIGNIFYING THE EMERGENCE OF “TEAM” STATE	289
FIGURE 7.3.7.1	PRE-‘ASSEMBLY’ ORGANISATIONAL PROCESSES	291
FIGURE 7.3.7.2	GROUP DEVELOPMENT STAGE 1 – “PRE-ASSEMBLY”	291
FIGURE 7.3.7.3	GROUP DEVELOPMENT STAGE 2 - “ASSEMBLY”	292
FIGURE 7.3.7.4	GROUP DEVELOPMENT STAGE 3 – “LOOSELY COUPLED”	294
FIGURE 7.3.7.5	GROUP DEVELOPMENT STAGE 4 – “TIGHTLY COUPLED”	296
FIGURE 7.3.7.6	FORMALISED BRANDING OF THE MEN’S XV’S RUGBY SQUAD FOR RWC19	297
FIGURE 7.3.7.7	GROUP DEVELOPMENT STAGE 5 – “INTEGRATED”	298
FIGURE 7.3.7.8	GROUP DEVELOPMENT STAGE 6 – “AFFECTIVE”	300
FIGURE 7.3.7.9	STAGES OF GROUP DEVELOPMENT AND GROUP TYPOLOGY	301
FIGURE 8.1.1	SUMMARY OF CONTRIBUTIONS TO THEORY	314
FIGURE 8.2.1	SUMMARY OF CONTRIBUTIONS TO AR METHOD	319
FIGURE 8.3.1	MULTIPLE LEVELS OF PRACTICE-BASED CONTRIBUTIONS	321

List of Abbreviations

XVs	German RFU Senior Men's XV's Squad
7s	German RFU Senior Men's 7s Squad
AC	Action Cycle
AGT	Achievement Goal Theory
AR	Action Research
BPNT	Basic Psychological Need Theory
CEO	Chief Executive Officer
CET	Cognitive Evaluation Theory
CIT	Critical Incident Technique
DBA	Doctor of Business Administration
DHPS	Director of High-Performance Sport
DRV	Deutscher Rugby Verband (German RFU)
EA	Evaluating Action
EPCR	European Professional Club Rugby
GCT	Goal Content Theory
GSD	Group Stage Development
GST	Goal Setting Theory
HRK	Heidelberg Ruder Klub
IGCP	Instrumental Group Collaboration Processes
IT	Information Technology
ITA	Inductive Thematic Analysis
LMX	Leader-Member Exchange Theory
MBA	Master of Business Administration
MSc	Master of Science
OIT	Organismic Integration Theory
PAR	Participatory Action Research
QCA	Qualitative Comparative Analysis
RD	Research Design
REIC	Rugby Europe International Championship
RET	Rugby Europe Trophy
RFU	Rugby Football Union
RP	Research Proposal
RQ	Research Question

S&C	Strength and Conditioning
SCT	Self-Categorisation Theory
SDT	Self-Determination Theory
SIT	Social Identity Theory
TSD	Team Stage Development
WR	World Rugby
WRA	Wild Rugby Academy

1 Introduction

1.1 Inspiration

The ambition to improve the efficacy of organisational endeavour sits at the heart of most practitioner and academic focus in management practice and research (Levi, 2017). The rewards for successfully aligning, directing and nurturing the collective capabilities and skills of members of a social group is the essence of the purpose of society (Darwin, 1859). However, the latter part of the twentieth century was dominated by research into the role of the leader in organisational performance, resulting in the development of numerous theories of leadership in increasingly clear eras over that time (Van Seters and Field, 1990). By comparison, the twenty-first century has seen an increasing focus on the value of teams and the social structures and behaviours that define them (Hackman and Morris, 1975; Tesluk and Mathieu, 1999; Wageman, 2001; Mathieu *et al.*, 2008; Hackman, 2012; Wageman, Gardner and Mortensen, 2012; Puranam and Raveendran, 2013). Even in the traditionally leader-centric and polarised world of venture capitalists and private equity investment, there is a shift in focus from the ‘inspiring leader’ to the power of collaboration.

“The value of a high-performing team has long been recognized. It’s why savvy investors in start-ups often value the quality of the team and the interaction of the founding members more than the idea itself. It’s why 90 percent of investors think the quality of the management team is the single most important nonfinancial factor when evaluating an IPO. And it’s why there is a 1.9 times increased likelihood of having above-median financial performance when the top team is working together toward a common vision.” (Keller and Meaney, 2017:1)

The world of sport provides inspiration for many individuals and organisations who aspire to exceptional collective efficacy, but even some of the world’s greatest and most celebrated individual sportspeople attribute success to group collaboration, and not just individualism, supporting the notion that high-functioning groups deserve more attention and understanding.

“Talent wins games, but teamwork and intelligence win championships.” (Jordan, 1994:32)

Much as successful group collaboration can result in outstanding outcomes, ineffective group endeavour can exact a high cost on individuals (Kozlowski, 2011), on organisations (Hotz, 1999) and external affected parties (Fisher and Kingma, 2001).

Attempts to define a formula for team formation and leadership, that can be understood, replicated and applied by organisational leaders in all circumstances remains an elusive ‘holy grail’ (Mohrman

et al., 1995; Ulrich et al., 2017). It is therefore unsurprising that when exceptional organisational or team success is observed, the attentions of practitioners and academics alike are drawn to the exemplar, seeking to understand *how* such high performance was achieved (Sandy, 2007; Burnes and O'Donnell, 2011). It is one such exemplar – the winning of the Men's Rugby World Cup (RWC) by England Rugby in 2003 - that inspired this research study and initiated the author's quest over the last six years to try to identify critical factors that allow high performance teams to compete and succeed.

This endeavour began with a Master in Business Administration (MBA) dissertation in 2015 which engaged directly with the leader of the exemplar case - Sir Clive Woodward - and his Team and High Performance Coach, Humphrey Walters (Lees, 2015). The phenomenon identified in that initial study which appeared unique was referred to by Sir Clive Woodward as “teamship”; a concept that he differentiated from effective teamwork as being less about the practical actions and interactions of team members, but rather about the underlying shared values, standards and behaviours of all members of an organisation (Woodward, 2004). Whilst offering a practical definition of this term, the study was inconclusive in identifying underlying social mechanisms that might serve to provide insight into what factors may have contributed to the emergence of the notional state of “teamship” (Lees, 2015).

This initial study did however uncover clues that might help future researchers to delve deeper into how groups operating in similar conditions bond in such a way that “the whole is greater than the sum of the parts” (Koffka, 1935). It is this concept that is explored in this study; how do the ‘parts’ (individual group members) bond together such that the collective effort increases the efficacy of the ‘whole’ (the group or team) in pursuit of the purpose of the group?

The author decided to pursue his investigations of “teamship” through completing a Doctorate in Business Administration (DBA). It was felt that to maximise the potential of uncovering underlying mechanisms that may contribute to “teamship”, immersion into similar environments to the original exemplar phenomenon may be required, and an abductive approach to inquiry be adopted. The logic of this decision is covered in detail in Chapter 4. The practice-oriented approach of a professional doctorate encourages contributions to both theory and practice (Anderson *et al.*, 2015) and is therefore well-suited to the ambitions of the study.

Utilising Action Research (AR) methodology, this study was executed with the German Rugby Football Union (RFU) Men's Senior XV's squad as they prepared for, and competed in, the qualifying tournament for the RWC 2019 in November 2018 and the Rugby Europe International Championship (REIC) from January to April 2019. In addition to his research role, the author

was also asked to take an active role in the preparation of the squad as the Mental Skills and Team Development coach, and also as a member of the leadership team. A biographical profile of the author is provided in Appendix A.

The study comprises two cycles of competition with the sample over a period of eight months. The researcher held both participant and research roles throughout the period and participated fully in all the preparation and competition over that time, including travelling with the team for international matches against Canada, Hong Kong, Kenya, Belgium, Romania, Spain, Portugal, Russia and Georgia, as well as ten weeks in the pre-competition training camps in Heidelberg, Germany. The participant role carried specific responsibilities and requirements to identify team development issues and needs, and to design and implement interventions to change and improve teamwork and collaboration within the squads (players, staff and coaches). The researcher stance was participant observation (Denzin, 1989; Flick, 2018). The selection of AR as the research methodology was therefore consistent with both the sponsoring organisation's core purpose, as well as the academic research problem and purpose.

This thesis documents and reports on the resultant action research study.

1.2 Summary of the Research Problem, Purpose and Question

1.2.1 Defining the Research Problem

As described in Chapter 3, there is a dearth of empirical research relating to “teamship” – something that may appear surprising considering the extensive bodies of research and knowledge on other concepts with similar etymological origins such as ‘leadership’ and ‘followership’. This lack of theoretical knowledge or empirical research suggested that the practical problem of understanding the original phenomenon of interest (England Rugby) would require an approach that was neither founded in theory, nor in any pre-conceived conceptual model; in order to examine “teamship” it was necessary to commence the research with an exploratory approach to the inquiry and to ‘forget’ about “teamship” in the design and execution of the study, and focus instead on the actual behaviours, actions and interactions that might be observable in a group operating under similar conditions to those experienced by the England Rugby squad in 2003.

With this in mind, the re-examination of the data and findings from the MBA and subsequent Master of Science (MSc) studies pointed towards the importance of group cohesion in organisational efficacy and indicated that the relationship between a) the purpose for the formation of the group and b) the personal motivation of its individual members may have influence on the existence and strength of that cohesion.

There is an increasing body of empirical study across a range of different organisational types that explores the importance of cohesion to the efficacy of groups. For examples Ellis *et al.* (2014) examined the importance of group cohesion in the treatment and recovery of patients suffering from post-traumatic stress disorder; Van Vuuren *et al.* (2008) investigated group cohesion and organisational commitment of employees in a chemical company; and Leo *et al.* (2016) explored the direction of the relationship between collective efficacy and cohesion in football teams. These examples represent a tiny fraction of the empirical research that seeks to strengthen understanding of the relationship between the effectiveness of organisational endeavour (efficacy) and the commitment and bonds within and between its members (group cohesion). The findings of this researcher's early studies supported the assertions offered of the positive relationship between group cohesion and efficacy.

As described in Chapter 3, examination of group cohesiveness literature revealed problems with regard to the unitary construction of the concept, as well as lack of temporal considerations of the stage of group development in the many cross-sectional research designs (RD) in this field. Additionally, there is a low number of empirical investigations into the antecedents that contribute to group cohesiveness, as compared to analysis of the relationship between cohesiveness and performance (Casey-Campbell and Martens, 2009; Severt and Estrada, 2015). Groupthink literature provides interesting and relevant insight into group cohesion and organisational efficacy, which is directly relevant to this study (Park, 1990, 2000; Rose, 2011; Forsyth, 2020). Empirical research tends towards case study examinations of significant corporate and organisational disasters utilising documentation, archival records, and critical incident questioning as primary data. Examples include BP Deepwater Horizon (Dunkley, 2012; Silver, 2014), the scandals at WorldCom and Enron (Maharaj, 2008), the Mount Everest disaster 1996 (Burnette, Pollack and Forsyth, 2011) and many others. Group cohesion is identified frequently as a potential contributing symptom to groupthink, but without explanation as to how or why it is important or created (Severt and Estrada, 2015). Whilst these and other groupthink studies support the assertion of group cohesion to task, organisation and inter-personal relationships, the methodologies employed in the research designs limit the ability of the researcher to understand *how* and *why* a group bonded in a particular way; specifically the issues of intentionality, behaviour, motives, emotions and environmental considerations (Hall, 2015). Without collecting data in real-time as the particular case in question is evolving, the reliability of any interpretations of individual or collective motivation for actions taken is open to challenge; context and environment are critical factors in how people behave, and the motives of individuals for the actions that they take in any circumstance impact on how the group collaborates and performs.

The challenges of access, approach and timing for a researcher to “*be in the right place, at the right time, with the right research question*” (Waddington, 2004:156) makes the exploration of the formation of group bonds exceptionally difficult. Notwithstanding this challenge, the potential to make a contribution to both research and practice is clear.

The examination of a range of groupthink case studies, alongside a review of group cohesiveness literature and re-examination of the author’s original “teamship” study revealed several potentially important insights.

1. Group cohesiveness theory remains inconclusive as to whether the construct is uni-dimensional (Lott and Lott, 1965) or multi-dimensional (Zaccaro and Lowe, 1988; Zaccaro and McCoy, 1988; Zaccaro, 1991; Wise, 2014; Severt and Estrada, 2015), with different perspectives asserting that group cohesion is driven by interpersonal relationships (‘affective cohesion’,), by task orientation (‘instrumental cohesion’), or organisational commitment and loyalty (‘group pride’) (Beal *et al.*, 2003).
2. Studies of groupthink cases and teams often associate task-orientation with shared purpose and instrumental cohesion (Burnette, Pollack and Forsyth, 2011) which results in collaborative teamworking, *ignoring* the fact that the group members may all share the same *personal ambition*, which is not the same as a *shared goal* or purpose (which would result in every group member either succeeding or failing collectively). The assumption that teamwork indicates shared purpose has potentially catastrophic implications under stressful or dangerous conditions – proven in multiple cases. The issue of interpretation of “purpose” (Argyle, 1972; Babington Smith and Farrell, 1979; Dyer, 1984; Wageman, 1995, 2001) and “shared purpose” (Campion, Medsker and Higgs, 1993; De Dreu, 2007; Mathieu *et al.*, 2008; Adler and Heckscher, 2018) emerges as a potentially important problem in literature and of particular relevance to the changing interpretations of groups and teams in the 21st Century (Parmar *et al.*, 2010; Hackman, 2012; Wageman, Gardner and Mortensen, 2012; Adler and Heckscher, 2018; Gartenberg, 2021).
3. A review and re-coding of the author’s early “teamship” data indicated that the concern highlighted in ‘2’ above has a possible link to the personal motivations of an individual to belong and contribute to a particular group, and what they desire or need from that membership (Ryan and Deci, 2018), which in turn may indicate the level and type of their commitment to the group; put simply, how does what the individual *wants* align to the reason for the existence of the group?

This study addresses problems in literature and practice regarding group cohesiveness, group purpose and self-motivational needs.

This research study therefore has both theoretical and practical purposes.

1.2.2 Theoretical Purpose

The theoretical purpose of the study was to examine the influence of individual motivation and group purpose on the functional and structural properties of cohesiveness in groups.

1.2.3 Practical Purpose

The practical purpose of the study was based upon the organisational needs of the sample case and those of the research sponsor (the Head Coach). Section 2.3 provides detailed contextual background to the challenges facing the leadership team in taking responsibility for the group. The individual and collective issues associated with those circumstances resulted in the requirement to bring alignment and unity to the organisation, and to assist individual members in preparing for the levels of personal and collective performance needed to compete successfully in the RWC19 Repechage and REIC tournaments.

1.2.4 Research Question

Section 4.5 provides a detailed explanation of the genesis and importance of the research questions for this study, including sub-questions that were required in order to address the primary research question. However, the research strategy, philosophy and methodology were determined on the clarity of the following research question:

What effects do the personal motivations of individuals in a team have on the group's cohesiveness in the context of the purpose of its existence?

1.3 The Action Research approach

Action Research (AR) takes a unique approach to the creation of knowledge where the researcher is an active participant in the case itself, contributing with other participants to identify, define, and implement interventions with a view to effecting change within the organisation (Reason and Bradbury, 2012). This co-creation of knowledge is an iterative process of action cycles (ACs) which review progress from the previous AC and uses this as the basis for the execution of a new

AC of assessment, design, implementation and collective review (Coghlan, 2019). It is recommended that an AR study comprises at least three ACs.

As can be understood, the starting point of an AR study is not with the formal collection of data as one might see with an inductive research design, nor is the starting point based in theory and hypothesis as is the case with deductive approaches. Whilst there is a temptation to enter into the study with a conceptual model as used in retroductive studies, the pseudo-deductive approach of a retroductive approach narrows the focus of the researcher to looking for affirmation of their preconceptions and risks overlooking the discovery of realities affecting social interaction as experienced by the participants.

It can be seen therefore that the starting point of an AR study is the reality “...as understood and experienced by the participants” (Blaikie, 2010:89). It is the role of the researcher to actively immerse and collaborate in the environment in order to explain and understand it, defining reality and the generation of new knowledge with the participants (Flick, 2018). The practical (or ‘Core’) purpose of the study is that as understood by the participants in their efforts to change their experienced reality. However, AR still requires disciplined and rigorous academic praxis (McNiff, 2017). All AR studies must also address a clearly defined research problem and theoretical purpose. The method by which the requirements of both Core and Theoretical Purpose are fulfilled is through a combination of first, second- and third-person practice. First person practice involves self-awareness of one’s own values, beliefs, assumptions, ways of thinking, strategy and behaviour, and requires extensive reflexivity skills (Coghlan, 2019). First-person reflexivity is critical to both understand and mitigate researcher bias which may otherwise impact upon the trustworthiness of data analysis and findings. Second person analysis reports on the collective input and reactions of the participants and the researcher and includes the action-based work and interventions. This is the practice-based element of the research and is likely to be of the greatest interest to the research sponsor. Third person analysis takes an objective approach to analysis and interpretation of the data collected and reflects on findings in the context of theory and literature and informs the theoretical contribution from the research.

This study comprises three action cycles of a single case spanning two international rugby tournaments. First- and second-person analysis is provided within each AC. The third-person analysis applies a retroductive interpretation of the second-person analysis, ensuring the ontological integrity of the AR methodology. To assist in increasing trustworthiness, reflexive interviews were conducted with four participants four months after completion of the field-based

activity, discuss the participants' reflections of all three ACs, and their perspective of researcher's interpretations of events and social interactions.

1.4 Contributions

1.4.1 To Theory

The research offers contributions to theory in four different areas of literature.

Group Cohesiveness. The study provides empirical support for theoretical models suggesting the multi-dimensionality of group cohesiveness as a fluid emergent state, functionally categorised as either affective and instrumental, and structurally segmented into group pride, interpersonal and task-orientation (Severt and Estrada, 2015). The findings add to theory by identifying that the structures (or types) of cohesiveness co-exist, emerging longitudinally determined by the group purpose and the environment. In addition, these bonds assume a primacy which can change over time dependent on the nature of the instrumental task (and the task interdependence required) and the strength of the affective cohesion. When considered in concert with an analysis of member self-motivation, it can be seen that cohesiveness emanates from individuals to the group (its purpose, members and social identity) and that the cohesion is therefore constructed at an individual level and manifests at a group-level. This results in the assertion that group cohesiveness should be reconceptualised as a fluid emergent multi-dimensional state with primary, secondary and tertiary bonds, constructed at the individual-level.

Group Purpose. Taking a critical realist perspective to interpret the symptoms of disharmony between the group and its parent organisation led to a realisation that "purpose" for a group can differ vertically between organisational levels. In addition, misunderstanding or misalignment of purpose vertically can lead to negative outcomes both instrumentally and affectively for the group and its participants. This leads to the identification that group purpose is a multi-level, multi-functional construct comprising: (1) an organisational-level, which determines an existential purpose for the group; (2) a group-level purpose which is the operational requirement given to the group leader(s); and (3) an individual-level purpose which is the operationalisation of the purpose determined by the group leader to inspire and bond its members. Purpose does not need to be identical at each level, but it does need to be clear.

A comparison of the *in vivo* empirical findings and the *a priori* literature review of groupthink cases led to the realisation that current theoretical and practical acceptance of the terms "shared", "common" and "collective" in regard to definitions of purpose and tasks in groups and teams is misleading and can have negative effects. In the field work, the emergence of affective cohesion

as the dominant bonds in the group led to the identification that members had both shared process and group-level (entity-level) outcome – “We all win, or we all lose together.”

The combination of these two contributions regarding group purpose has major implications for both theory and practice. For example, when the groupthink case study of the Mount Everest disaster of 1996 (Burnette, Pollack and Forsyth, 2011) is reconsidered with the application of both these assertions, a very different interpretation of member and leader behaviour and decisions can be drawn, which could lead to significant *a priori* group design decisions in future expeditions. This process could be applied to all groupthink case analyses of organisational failure.

Group Typology and Stages of Development. The nature of AR means that the researcher takes both a practitioner and scholarly approach to the study. The combination of these when applied to AR intention (affecting change in a group) means that both practice and theory can be applied *and* assessed. The outcome of that in this study is the recognition of (1) stages and developments of groups (from formation to dispersion) which are based on the nature of the group purpose and the processes required to achieve them; and (2) a recognition of group types based upon the same. The study therefore contributes a novel model of the stages of group development which is markedly different, but complementary to Tuckman’s models from 1965 and 1977 (Tuckman, 1965; Tuckman and Jensen, 1977), and those from Van de Ven *et al* (Van De Ven, Delbecq and Koenig, 1976) Gersick (Gersick, 1988), Akrivou *et al* (Akrivou, Boyatzis and McLeod, 2006) and Sheard and Kakabadse (Sheard and Kakabadse, 2002). In addition, the functional and structural properties of each development stage also define a typology of groups accordingly. The identifiable properties are based on existing concepts, as well as those developed in this study, and as such are measurable. This means that this model can be studied empirically in future studies, which will add rigour to the theories offered by this doctoral study.

Group Processes – “Teamship”, Affective Interdependence and the identification of “team” as an emergent group state. The longitudinal design of the study, and its span of all stages of development, allowed the observation of the development of individuals within the group, identifying behaviours that supported an emerging culture and group norms, and behaviours that did not. The practitioner role of the researcher required interventions both at an individual-participant and a group-level throughout the study, allowing for understanding of the changes – or not – of member self-motivation and group efficacy. This combination of observation at both levels resulted in the definition of “teamship” as being “*The actions, behaviours and attitudes of individuals that support the purpose, ethos and culture of the group*”. In addition, the description of behaviours associated with “teamship” is consistent with those posited in Self-

Categorisation Theory (SCT) (Turner *et al.*, 1987; Turner and Onorato, 1998) regarding depersonalisation and also in Social Identity Theory (SIT) (Tajfel, 1974; Tajfel and Turner, 1979). “Teamship” is therefore empirically placed into literature in support of these existing theories.

Rugby is a sport requiring high levels of collaboration, courage, self-sacrifice and interpersonal understanding. Interdependence Theory (Thompson, 1967) provided a useful framework in this study for observing the temporal development of group processes. However, as the efficacy of the group improved and the environmental circumstances altered (increased pressure of actual competition, prolonged period of isolation and insulation of the group, decline in conditions and resources) high levels of interpersonal emotional support were observed leading to increased task efficacy and group cohesiveness. Participant interviews revealed significant changes in motivation, shifting from extrinsic to intrinsic motivators (Ryan and Deci, 2000). It is therefore posited by this study that a fourth type of interdependence should be added; **Affective Interdependence**. The behaviours and attitudes associated with it are observable and measurable at both an individual and team level, and it can therefore be explored in future studies. This emergent behaviour is also key in the determination of the final group type (“Affective Group”) proposed in the typology of groups.

The combination of the findings from this study described above has allowed the author to delineate between the concepts of “groups” and “teams”. It is proposed that a team has a purpose that requires shared processes to achieve a group-level outcome, and where affective interdependence is evident. This implies that **a team is not a formative entity, but an emergent state from group development**. This assertion requires the integration and acceptance of the findings of this study, but if accepted, has potentially significant contributions to group and team literature and study.

1.4.2 To Method

Use of retroduction to create insight from abductive analysis. AR seeks the co-creation of knowledge *with* the participants; it takes an emic not an etic epistemological stance. In order to contribute to theory, a third-person interpretation of data provides comparison with extant literature to determine novel contributions to knowledge. However, if the researcher conducts an *a posteriori* analysis of the raw data inductively there is the risk that the epistemological foundation of AR could be compromised; the new knowledge would not be based on a shared interpretation of reality with the participants, but on the subjective interpretation of the raw data. This study has therefore taken a retroductive approach to the third-person analysis, drawing codes and themes not from the raw data, but from the second-person *in vivo* interpretations and actions documented

in the thesis. This ensures that the reality created and interpreted by the participants is that which forms the template of themes from which findings are drawn. The researcher contribution is then to apply theoretical interpretation to these findings to identify novel contributions, thus preserving the integrity of ‘where’ the knowledge came from.

Use of Critical Realism to uncover causal mechanisms. An AR study seeks to affect change in the sample. The process of doing so involves phases of diagnosis, planning action, taking action and evaluating action, and then using the interpretations to assume an understanding of reality and causation, and then to enter further interventionist cycles. This infers that the researcher and participants believe that their reality is the result of social mechanisms, which can be changed through targeted intervention. This is consistent with the ontological and epistemological foundations of critical realism (CR), which proposes reality exists on three levels: the observable *empirical* level, an accessible *actual* level, and an underpinning *real* level. When trying to make sense of apparently irrational decisions and conflict between the parent organisation and the group, the researcher made a conscious decision to adopt a CR approach to trying to understand why there was a gulf between what resources were needed from the parent organisation to support the group, and what was actually made available. Employing a CR perspective to the problem led to the recognition that “purpose” was constructed at different levels and that the misalignment between levels was the cause of the problems. The application of CR in an AR study therefore contributes significantly to providing an abstracted lens of interpretation, which reduces researcher and participant bias, revealing multiple levels of reality, whilst ensuring the epistemological integrity of the co-creation of knowledge.

1.4.3 To Practice

The findings of the study have relevance to rugby and to other team sports. However, the findings may prove important to *any* organisation that seeks to improve the collaboration and performance of groups or teams – both at a macro and micro level. The models created will enable leaders to re-examine the purpose of the creation of groups and teams in their organisations, and to use this authenticity and clarity to determine the type of group required to fulfil that purpose using the Group Development and Typology from the study. The findings in regard to the alignment of self-motivation to group purpose and requisite group processes (determined by the Typology model) will help to assess appropriate group membership for both leadership and non-leadership roles.

The increase of need for collaboration in organisations to achieve tasks has led to an unconscious acceptance that this equates to the need to create “teams”. This study highlights that a team is a

unique form of group development and is an emergent state that supports a purpose that has both shared process requirements and a group-level shared outcome. The typology allows organisations to be comfortable in recognising that functioning groups are - in most scenarios - the most appropriate form of collaborative structure. This realisation will change how groups are formed, developed and managed, and the expectations of operationalisation that may result. In a world of increasing remote working, this distinction may be critical in both operational efficiency and efficacy, as well as the mental wellness of individuals.

1.5 Organisation of the Thesis

The thesis is organised into nine chapters. Chapter 1 locates the reader in the topic of interest and phenomenon of inspiration and provides a summary of key design criteria for the study. Chapter 2 gives contextual background to both the original phenomenon and also to the specific case for the action research study in order that a balanced comparison between the two situations can be understood and sense made of the sample choices. Chapter 3 examines literature in the core areas of “teamship”, group cohesion, motivation and self-determination, organisational purpose, groupthink, and group interdependence, as well as other relevant theory in regard to groups and teams. Chapter 4 provides a detailed perspective on the creation of knowledge and theory, and how this resulted in the determination of the research question; the importance of this chapter relates to the need to demonstrate rigour and to maximise the potential to offer generalisable knowledge from AR. Chapter 5 explains AR in detail, as well as the specific method employed in this study. Chapter 6 details how the data was analysed and includes the analysis of all cycles of the AR sample. Chapter 7 discusses the findings of the research and offers conceptual models that help to explain those findings. Chapter 8 provides the contributions to theory, method and practice, as well as the limitations and recommendations from the study. Chapter 9 concludes the thesis and discusses whether the research purpose and questions were appropriately addressed. References are included only when literature has been specifically cited in the thesis. Appendices provide supportive information, documents, analysis, as well as confirmation of the ethical compliance of the study.

2 Background and Context

The primary research question for this study was “What effects do the personal motivation of individuals in a team have on the group’s cohesiveness in the context of the purpose of its existence?”. This question addresses problems both in literature and practice regarding the structures and mechanisms that contribute to the cohesiveness of groups and was inspired by the performance of the England Rugby team in 2003 and the importance that the leaders and members of that organisation attributed to the strength of the bonds that existed within the group. As described in Chapter 3, an examination of the extant bodies of literature regarding group cohesiveness, groupthink and “teamship” identified a dearth of empirical study into these constructs. The challenges for a researcher to be “in the right place, at the right time”, and to have enough colloquial understanding of the social group being studied exacerbates the challenge of being able to recognise and capture observable and nuanced behaviours and attitudes within a group that influence cohesiveness. It’s clear that context and external factors impact on the individuals within a group, and the collective itself.

The purpose of this chapter therefore is to provide the reader with a high-level explanation of rugby as a sport and as a social group so that the dynamics and pressures present can be understood. A summary of the situation, circumstances and achievements of England Rugby from 1997 to 2003 is provided to highlight specific antecedent conditions present at that time for both the group and individuals that may have contributed to the cohesion and efficacy of the group. The study does not attempt to provide a cross case comparison between England Rugby and German Rugby, and the inclusion of this description of England Rugby is provided to give the reader context and background to the considerations in the research design choices.

Finally, an explanation of German Rugby from 2007 to 2018 is included in order to provide the important antecedent background influences that are subsequently referred to in the data analysis and findings.

2.1 Rugby Union

Rugby is a full contact team sport, played between two teams of fifteen players (Appendix B). International squads such as England and Germany typically invite around forty players from professional clubs to attend training and selection camps, from which a match-squad of twenty-three (fifteen starters and eight substitutes) are selected. The sport requires high levels of inter-player collaboration, personal courage and commitment as well as whole-team unity and alignment.

This is similar to experiences in high-performing and intense team collaborations in other environments such as medical surgical teams, emergency services teams, or high functioning executive teams; the examples span every aspect of life and social endeavour.

At an organisational level, the playing teams require extensive coaching, medical, logistical and administrative support. Success requires tight integration and alignment for all elements of the playing and back-room staff. When considered at the level of the national unions, a recognisable corporate structure is normal with functions extending from Chief Executive Officer (CEO), to finance, Human Resources (HR), marketing, sales, legal, information technology (IT), and so forth.

There are two main versions of the sport; 'XVs' which comprises teams of fifteen players, and Sevens ('7s') comprising teams of seven players. The XVs version of rugby is the more commonly recognised version of the sport and games comprise two halves of forty minutes each. Across the world there are professional domestic leagues and competitions, as well as regional international tournaments between country teams. XVs was an amateur sport globally until 1995, when the international governing body of the sport - now known as 'World Rugby' (WR) - voted to professionalise the sport, allowing players to be paid as full-time employees.

In Europe the annual regional international competitions for XVs are known as the 'Six Nations' (tier 1), 'Rugby Europe International Championship (REIC)' (tier 2) and 'Rugby Europe Trophy (RET)' (tier 3) tournaments. At the time of this study, the competing nations were: Tier 1 - England, France, Ireland, Italy, Scotland and Wales. Tier 2 - Belgium, Georgia, Germany, Romania, Russia and Spain. Tier 3 - Holland, Lithuania, Poland, Portugal, Switzerland and Ukraine. Every four years a global international tournament is held, known as the Rugby World Cup (RWC). In 2019 this tournament was held in Japan over a period of eight weeks of competition between the top twenty nations worldwide. Qualification for nineteen of these competition places is based upon global rankings of national teams; the final place is awarded as the outcome of a 'play-off' tournament called the 'Repechage' between the four nations occupying global ranking positions of twenty through twenty-three. In 2018 the Repechage competition was held in Marseille, and competed for by Hong Kong, Canada, Kenya and Germany. The winner earned the twentieth spot for the RWC19.

As can be understood from the descriptions above, rugby is a complex sport requiring significant organisational and financial support on an on-going basis. The nature of the sport means that individuals are at high risk physically, and the need for exceptional levels of unity and collaboration is paramount for both safety and success. In order to compete safely and meaningfully, players must show high levels of personal commitment to the goals of the organisation; misalignment of

the individual with the group or the organisational goal undermines organisational efficacy and puts others at risk. The extent of the managerial and fiscal demands is comparable with many other business or non-sports organisations of all types. The nature of the international competitions means that whole squads as well as all coaches and support staff travel and function together for long periods of time, sharing working, living and social environments, often under considerable pressure.

The problem that this study seeks to explore is the gap in empirical research regarding the understanding of group cohesiveness as an emergent state in teams, and the effects of intrinsic and extrinsic motivation and group purpose on the structure and function of team formation. It is therefore important to view a rugby team not simply as a sports team, but as a complex and diverse social group comprising multiple demands and agendas, and with an array of both competing and complimentary needs across a broad portfolio of stakeholders and participants who must be working in concert in order to meet the objectives of the organisation.

2.2 England Rugby 1997 - 2003

The phenomenon that inspired this study was the winning of the RWC in 2003 by England. This section provides a brief summary of the six years leading up to that success, highlighting specific events that affected unity, and both personal and collective efficacy (Shearer, 2015) of the organisation and its members during this time. The relevance of this information is to provide the reader with context and indications of antecedent factors that were present in the squad that went on to win the RWC. Whilst this section is specific to England Rugby, the personal, organisational, social and cultural considerations find parallels in many organisations tasked with improving organisational performance, collective efficacy, group cohesion and member engagement. Appendix C provides further history of England Rugby.

Since its inception, England's performance at the RWC had caused frustration for the England Rugby establishment (Rugby Football Union, 2004). The team failed to win any of the first three tournaments, achieving a quarter-final, final and semi-final position in the 1987, 1991 and 1995 respectively, despite the fact that England was by far the best-resourced of any nation globally (domestic clubs, players and funding). These failures created significant pressure on the head coaches and their staff, as well as on the players. As a result of this and the failure of the incumbent coaching leadership to affect appropriate changes from amateurism to professionalism in 1995, the RFU appointed a new head coach in 1997 – Clive Woodward (Woodward, 2004). Woodward was a relatively inexperienced head coach with no senior international coaching experience, but he

had generated significant domestic success in tier one and two rugby in England, primarily through implementing highly innovative thinking and approaches to training, tactics and team preparation. He had played rugby for England earlier in his career, as well as for the British Lions (Woodward, 2004)

Woodward's first tour with his England team was to Australia in 1998, which became known as the "Tour from Hell"; three international test matches resulting in three defeats, one of which was the largest defeat ever suffered by an England team (Greenwood, 2004; Woodward, 2004). Woodward, his coaches and the players were all subject to significant public criticism and abuse. However, Woodward viewed the tour as a learning experience, maintained trust and belief in his staff and players, and in his own approach and plans (Woodward, 2004). In the Five Nations tournament of 1999 England performed well and were poised to win the tournament but conceded a try in the final moments of the final match against Wales, depriving them of a tournament victory. The depth of disappointment and criticism was once again harsh and painful for the entire organisation. Later that year in the RWC 1999 England under-performed once again, suffering a heavy defeat by South Africa in the quarter finals.

It can be understood from this summary of the first two years of Woodward's reign as Head Coach that the squad had experienced disappointment and criticism as individuals and as a team. However, Woodward maintained his vision and strategy to become the number one ranked team in World Rugby. He consistently defended and protected the team and the individual players and urged the squad and players alike to focus on the vision and the route to achieving it. Woodward created an 'esprit de corps' within the squad and established a squad identity and culture that was independent of the RFU (Woodward, 2004). He implemented values, behavioural standards, and consequences for membership of this elite group that were co-created and enforced by the players themselves, but which then became the ethos by which the squad conducted itself; these were known as the "Teamship Rules" and were documented and signed by every squad member when they initially joined the organisation (Figure 2.2.1).

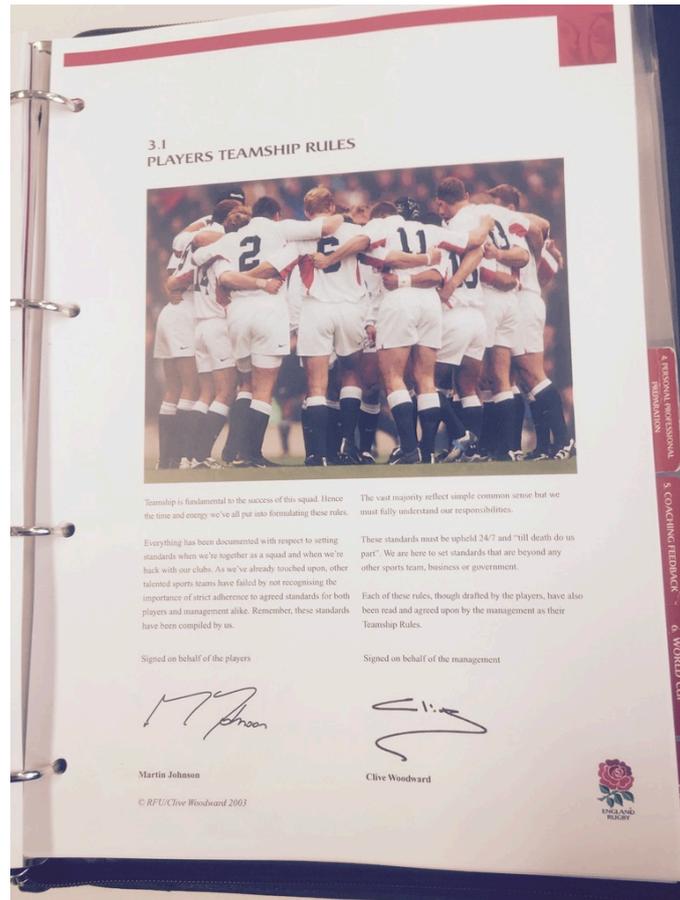


Figure 2.2.1 “Teamship Rules” (Source: Woodward and Walters 2003)

It can be seen therefore that Woodward had created a unique identity for the England Rugby team, which was exclusive, distinct and separate to the RFU. He leveraged the failures and hostility towards the group to create an insulation from outsiders and used senior and established players within the core squad to create and enforce a culture. In so doing, he generated a ‘siege-mentality’ within England Rugby and layered upon this a clear vision and strategy for a future state. These antecedents have much commonality to those described in Groupthink Theory (Janis, 1983).

Over the following three years England began to secure continued – and increasingly dominant – success over all teams globally, achieving Woodward’s goal of becoming world ranking #1 in 2002. The performance of this squad was underpinned by the stability and consistency in the playing and coaching staff over this time and the alignment of the individuals to the vision (or ‘purpose’) of the England Rugby team. This period of success and achievement was finally capped with victory at the RWC2003, where England beat Australia in the final, winning the game in the last seconds of extra time. This epitomised the exceptional levels of alignment, commitment and understanding between the players and the coaches, based on the deep-rooted culture of standards, selflessness, teamwork and effort of every individual in the organisation. There existed an

individual and collective resilience built over many years, combined with a cohesiveness within the group to the group purpose, to each other and to the England Rugby organisation.

Woodward described this phenomenon as “teamship”. His subsequent definitions of “teamship” are however inconsistent and vacillate from a “*style of leadership*” (Woodward, 2004:219), to a “*set of behaviours and standards*” documented in a rulebook (Woodward, 2004:310), to “*the ability to work together as a team*” (Woodward, 2004:309), to a “*model of operating*” (Woodward, 2019:73). It is this confusion that has inspired this study; ascribing ultimate team efficacy to an apparently new social construct attracts significant practitioner and researcher attention, but the lack of consistency in explanation, nor an understanding of the structures and mechanisms that contributed to exceptional group cohesion is problematic. Practitioners seek a formulaic method from which they might be able to replicate the success in their own applied environments. Researchers seek insight that might locate the construct within the existing bodies of knowledge regarding group performance and social interaction. Unfortunately, without examining the structures and mechanisms that emerge in groups functioning in such antecedent conditions *as they evolve* the potential contribution to understanding and knowledge is limited. The outcome of Woodward’s endeavours and leadership may provide clues, but to understand the social interactions and influences that contribute to high levels of group cohesiveness, it is necessary for a researcher to be immersed in such an environment and to both experience and consciously observe the dynamics at play.

2.3 German Rugby 2007 – 2018

The German Rugby Football Union in German is the Deutscher Rugby-Verband (DRV). For the remainder of this thesis reference may be made to the DRV or German Rugby interchangeably. The detail included in this section is necessary to understand the self-motivation and group dynamics that were existent at the beginning of the field-work stage.

German Rugby was selected as the target for this study as it stood at a unique point in its history, driven by circumstance and good fortune. However, in summary, with only three months’ notice, in the summer of 2018 WR invited the German Men’s XV’s team to compete in the RWC19 Repechage tournament against Canada, Hong Kong and Kenya. The prize; to qualify for the RWC19 tournament in Japan. At the time of the invitation, German rugby was in crisis with loss of funding, a players’ strike, and deep divisions between the squad and DRV executives. WR nominated an experienced international coach to take over as Head Coach for the squad and attempt to prepare them for the tournament. This coach identified problems regarding

interpersonal relationships and cohesion within the team and requested the support of a dedicated expert in teams and mental excellence. The new head coach approached this author to become a member of his coaching team, also agreeing to the academic research purpose of this DBA study. It was this unique set of organisational circumstances and goals that made this case an ideal sample from which to observe and influence the mechanisms that contribute to group cohesion. A more detailed history of German Rugby is provided in Appendix D, including recent history which has relevance regarding the dynamics within the squad for the duration of this study. From a review of the recent history in German Rugby it can be seen that - similar to the England team (1997 – 2002) - the German XV's squad had experienced public and personal criticism, disappointment and hardship, isolation from and conflict with their parent organisations, and repeated failure. The inclusion of Germany to the RWC19 Repechage tournament represented a unique opportunity to form a team in a very short period of time. The head coach appointed to lead Germany had been a coach with England through RWC07 and understood the requirements of the players and group to have any chance of success. Many antecedent conditions existed with the German XV's group that were consistent with those of England prior to 2003. For these reasons it was determined that this sample had the potential to give insight into the phenomenon of “teamship” and the impact of group purpose and personal motivation on group cohesiveness.

The literature review examines areas of theory that relate to the group and individual processes that may be relevant in the interpretation of field-based observations.

3 Literature Review

3.1 Overview

Chapters 1 and 2 provide context and background for this study. The notional concept of “teamship” in relation to high performing teams is explained in the context of England Rugby. The practitioner and colloquial interpretations of this term are described in Sections 1.1. and 2.2 identifying the inconsistency of understanding associated with its use. Also identified are environmental and antecedent conditions in the 2003 England Rugby squad which were similar in many respects to those recognised in “groupthink” (Janis, 1972, 1983). As was established in this author’s formative studies (Lees, 2015, 2018b, 2018a), no empirical research literature exists examining “teamship” as a concept. This defines a clear gap in knowledge, which - along with the increasing practitioner use of the term - suggests a scholarly examination of it may be appropriate. To design a research study that may allow for the exploration and explanation of “teamship”, it has been necessary to consider the notional use of the term - to describe the actions and behaviours of group members which support the norms of the group - and consider antecedents that may contribute to its emergence in a similar group and environment. The findings from the aforementioned formative studies (Lees, 2015, 2018b, 2018a), identified that the notion of “teamship” appeared to be related the cohesiveness of the group, and the desire and commitment of the individual to willingly and wholly commit to its purpose.

This literature review therefore follows a structured line of inquiry examining seven specific topics relating to the contextual understanding of “teamship”. The core bodies of literature reviewed are:

- i) “Teamship”
- ii) Groupthink
- iii) Group cohesiveness
- iv) Group stage development
- v) Group purpose
- vi) Group interdependence
- vii) Self-motivation

These topics are presented in this order to provide the reader with an understanding of the author’s sequential approach to the examination of literature and identification of gaps therein, which ultimately determined the design of the study. Figure 3.1.1 provides representation of the author’s

sequence of investigation. The introduction to each topic reviewed explains the relevance to that topic's inclusion in relation to gaps identified in preceding topics.

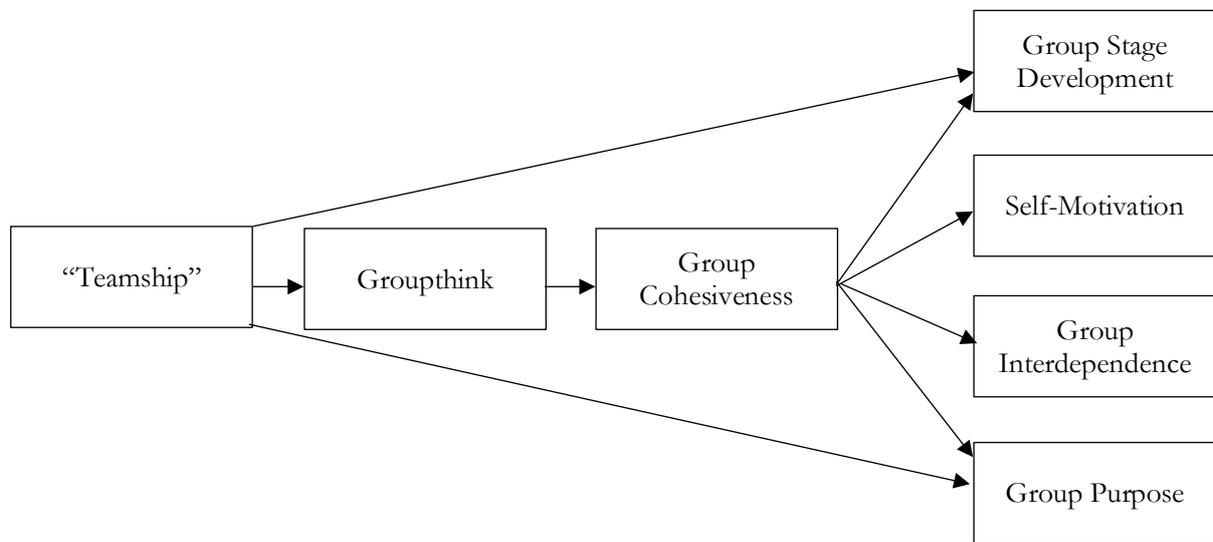


Figure 3.1.1 Literature review: Development of approach and presentation

3.1.1 Structure of literature review sections

Each section in this chapter starts by framing the particular topic concerned, explaining its relevance in the iterative process, its seminal contributors and concepts, the temporal development of knowledge related to it, current thinking and research, and problems identified by this author that may relate to the topic of this study.

A summary of findings from each topic is provided at a section-level. A discussion of those findings is provided in the final section “Summary of Literature Review”. This highlights how the various bodies of literature may relate to each other, identifying problems in topic areas (theoretical, empirical and/or methodological).

3.2 “Teamship”

Framing

“Teamship” is a term which is becoming increasingly commonplace in colloquial and practitioner descriptions of group processes and activities associated with team performance (Woodward, 2004, 2019; Dallaglio, 2008; Wilkinson, 2012; Mohla, 2020). Chapter 1 explains the author’s interest in the term, and Chapter 2 highlights some of the multiple - and confusing - definitions being used. The lack of consistency in the conceptual understanding of “teamship” extends beyond the colloquial; as shown in this review, not only is there a dearth of empirical or theoretical research relating to understanding and defining the concept, that which does exist offers diverse interpretations of what the word may represent to both practitioners and scholars. This section focuses only on the *scholarly* understanding of “teamship”, and its presence in research literature.

The phenomenon that inspired this research study (England winning the RWC in 2003) was ascribed by its head coach to be based upon a concept of “teamship”. Subsequent interest in the term as it relates to high performance teams has resulted in a growing body of popular literature and comment, some of which includes leadership and team training organisations specifically focused on the term (Hood, 2020; Taylor, 2021). It could be argued that academia has a responsibility to provide a consistent theoretical foundation for the concept, and either align the term with existing defined theory and constructs, or to recognise and determine its uniqueness, and contribute to a gap in existing knowledge.

Seminal Contributions

As detailed previously, there are *no* seminal empirical or literature-based theoretical contributions regarding “teamship”. Scholarly literature of any type referring to the term is minimal. EBSCO lists only nineteen academic articles referring to the word.¹ Of these, only one focuses on the concept of “teamship” (Townsend and Gebhardt, 2003), offering a theoretical construction in respect to their proposed dyadic continuum between leadership and followership in group environments. The remaining articles use the concept in different ways to describe different aspects of group and team processes.

¹ “Teamship” as search term with unlimited “field” constraints, limited to Scholarly (Peer Reviewed) Journals published at any time (Search date 11.02.21)

Review of available literature

The nineteen peer-reviewed articles have been analysed to understand the context in which “teamship” has been used in the research. Of the nineteen results, four have been excluded from this review based on the use of “teamship” in the articles, where the context has no relevance to group behaviours or where the article is a book review of popular literature. The analysis of the remaining fifteen articles is provided in Appendix E. Three articles are briefly discussed here as they represent a) the only theoretical definition of “teamship” (Townsend, 2002; Townsend and Gebhardt, 2003), and b) reference to “teamship” in a study of resilience within the England Rugby 2003 squad.

The analysis of literature highlights the problem with “teamship” as a concept; the term is used with an assumed meaning across a diverse set of environments and contexts, extending from construction and healthcare, to military, education and tourism, to sport and biotechnology. Only Townsend (2002, 2003) offers a theoretical conceptualisation of “teamship”, summarised in Figure 3.2.1. However, his theoretical concept lacks rigor, context, validity or reference to literature or previous research. The interpreted application of *followership* in the proposed “teamship” continuum shows lack of understanding of the scholarly examination of the term. Indeed, Townsend’s description of “teamship” is consistent with that of shared leadership (Pearce and Sims, 2001) but contains no reference to this, or distributed leadership (a similar concept). It is therefore challenging to rely on the credibility of Townsend’s theory, particularly when compared to the empirical studies and essays in the literature reviewed in detail in Appendix E, that position “teamship” in a very different context.

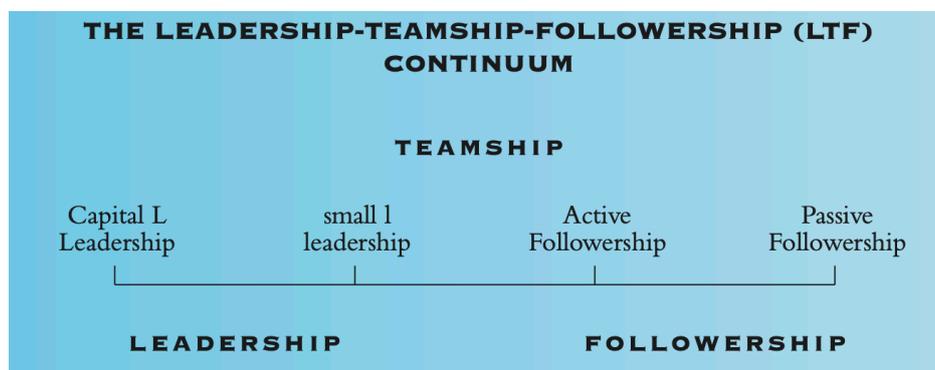


Figure 3.2.1 The Leadership-Teamship-Followership (LTF) Continuum (Source: Townsend and Gebhardt 2003:19)

In their reference to “teamship”, Morgan *et al* (2015) explored the psychosocial processes associated with resilience in elite sports teams, examining England Rugby in 2003, and several autobiographies from participants of that squad. Their research has significance in consideration of the catalyst for this author’s research study as it focuses on the same sample and participants that inspired this study and also seeks insight into group social processes and behaviours. They suggest the importance of transformational leadership behaviours from the team coach, as well as leadership within the team between players. Whilst their investigations did relate their observations to SIT (Tajfel, 1974; Hogg and Abrams, 2006; Hogg, Abrams and Brewer, 2017) they did not examine other underlying sociological mechanisms that may be associated with these observations and assertions, for example the dyadic relationship between leader and follower (Leader-Member Exchange Theory; (Dansereau, Graen and Haga, 1975; Graen, Novak and Sommerkamp, 1982; Graen and Uhl-Bien, 1995)) and how this might manifest in vertical interpersonal group cohesiveness (Feldman, 1968; Severt and Estrada, 2015), or the dyadic interactions between group members examined in Social Exchange Theory (Thibaut and Kelley, 1959; Emerson, 1976) and the supportive or coercive impacts on horizontal interpersonal group cohesiveness and instrumental task cohesiveness (Festinger, Schachter and Back, 1950; Feldman, 1968; Severt and Estrada, 2015). The narrative analysis from Morgan *et al* (2015) supports the findings of this author’s critical incident case analysis (Lees, 2015) of the same event, with both studies identifying antecedents and symptoms consistent with Groupthink (Janis, 1972, 1983), specifically insulation of the group, homogeneity of members, high external stress, temporary low self-esteem from recent failures, lack of impartial leadership, oppression of dissenters, illusion of unanimity, invulnerability, stereotypes of out-groups and self-appointed mind-guards.

Summary and Discussion of “Teamship” Literature

A dearth of scholarly literature, and the absence of any empirical studies indicates a clear gap in knowledge. The lack of academic interest could indicate that “teamship” has no relevance in the understanding of groups and teams, and that the concepts that are implicit in the colloquial and popular use of the term are captured under different descriptors in other areas of group theory. However, the counterargument to this perspective is that the colloquial use of “teamship” is increasing and significant. A Google search of the term provides 42,900 results². In the first 50 results, twenty-one of them referred to Sir Clive Woodward’s definitions and the RWC2003.

² “Teamship” as search term in Google (search date 12.02.21)

Twelve of the results were from companies offering “teamship” training. The combination of increasing practitioner interest, increasing popular usage and non-existent stance or empirical research from the academic community suggests a clear and important gap in knowledge. The identification in the England Rugby 2003 team members of antecedents and symptoms consistent with groupthink offers the researcher a potential starting point to design an empirical exploratory study into the concept.

3.3 Groupthink

Framing

Analysis of the “teamship” literature highlighted the presence of antecedents and symptoms of groupthink in the England Rugby squad of 2003 where the notion of “teamship” was identified. Considering the lack of research in “teamship”, it was considered that examination of the groupthink literature may reveal specific antecedents that could help in understanding “teamship”.

Seminal Contribution

Groupthink theory examines decision-making failures in highly cohesive groups (Janis, 1972, 1983). Janis (1983) defined a set of twenty-four variables that relate to the construct: eight antecedents, eight symptoms of defective decision-making, and eight symptoms of Groupthink (Figure 3.3.1). The main proposition of Janis’ framework is that when a group is moderately or highly-cohesive, the presence of specific other antecedent conditions increases the chances of the development of groupthink symptoms (Janis, 1983).

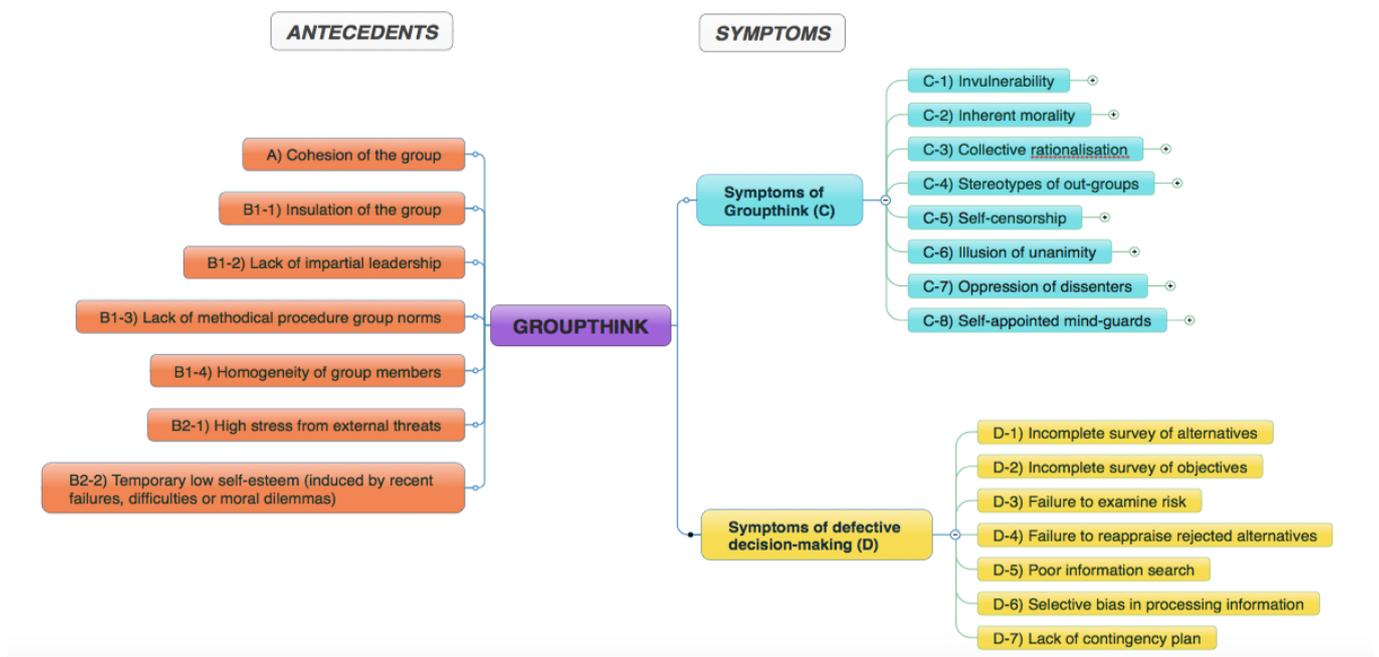


Figure 3.3.1 Groupthink antecedents and symptoms (Modified from source: Janis 1983)

Temporal Developments

Groupthink has attracted scholarly attention over the last fifty years, with heightening interest in the concept mirroring the instances of scandals in both governmental and commercial settings. My research identified four specific literature reviews on groupthink (Park, 1990; Neck & Moorhead, 1995; Esser, 1998; Rose, 2011). Appendix F provides a summary of meta-analyses of these studies.

Park (1990) identified sixteen empirical studies, which show only partial testing of Janis' framework, resulting in only partial support of the theory. Eight of these were case-studies, seven experimental and one content-analysis. Park found that despite the intentions of the researchers to examine all eight of Janis' antecedents, methodological design of the various studies resulted in only four of them being satisfactorily assessed. Of these, 'group cohesiveness' – emphasised by Janis *above* all other antecedents – was concluded to have *less* impact than other antecedents. Park observed that this may be a direct result of the challenges of producing or interpreting cohesiveness from experiment or case study analysis respectively (Flowers, 1977; Courtright, 1978). He also notes that the effect of leadership style was examined in five of the studies, but the conclusions in support of Janis' hypothesis were split (Fodor and Smith, 1982; Leana, 1985; Moorhead and Montanari, 1986) suggesting more empirical research is required. However, it is also notable that *none* of the empirical studies attempted to define group cohesiveness, nor determine how it could be measured. There is a lack of examination of the factors that affect its presence in groups, nor of an understanding or exploration of whether it is a group process or emergent state, or whether it is constructed at an individual or group level. Janis' assertion of the high importance associated with group cohesiveness in groupthink is dismissed by Park in his analysis of these previous studies.

Neck and Moorhead (1995) proposed enhancements to Janis' original framework, based on their own literature analysis. They reviewed fifteen research papers focused on groupthink, differentiating between case study and experimental methodologies. They note "...*the scarcity of research examining its [groupthink's] propositions is startling...*" (Neck and Moorhead, 1995:538). Their analysis identified that two additional antecedent conditions should be added to Janis' framework, the high consequential implications of the outcome of the group's activities, and significant time constraints on the group. The antecedents of groupthink - other than cohesiveness - are identified empirically from the source studies, as well as symptoms of both groupthink and defective decision-making. However, cohesiveness can only be *assumed* in the historical analyses, and only task cohesion can be reliably catalysed in laboratory conditions. Their analysis did not find support

in either case or empirical studies for group cohesiveness as an antecedent to groupthink, but they nevertheless include it as the primary antecedent in their revised conceptual framework of groupthink. This challenges the trustworthiness of the conclusions regarding the importance of group cohesiveness in this meta-analysis.

Esser's (1998) review of theoretical and empirical research also separates the literature into two categories (case and empirical studies). A total of twenty-eight studies were analysed, identifying seventeen as case, and eleven as experimental. His analysis of literature highlights the independent and dependent variables of each study, the results associated, along with comprehensive narrative interpretation of his findings. Esser's conclusions highlight the prevalence of analysis and re-analysis of the same original five case studies from Janis (1972), and the limitations of laboratory studies to reproduce all the conditions of the original twenty-four variables of groupthink. Additionally, he notes that there has been no adoption of a consistent experimental paradigm. The qualitative papers analysed were all historical, and - as pointed out by Esser - lack the ability to reflect on the private feelings or beliefs of the participants. Esser posits that the inability to capture primary data on such subjective issues as how and why people are behaving in certain ways is a consistent weakness in all groupthink empirical studies; *"...most of the symptoms of groupthink cannot be assessed easily by an outside observer. Rather, most groupthink symptoms represent (private) feelings or beliefs held by the group members or behaviours performed in private. Therefore, the most appropriate way to measure these symptoms is to ask the group members. Only two studies have used questionnaires to assess the full set of eight symptoms of groupthink..."* (Esser, 1998:136–137). His call for more original empirical research echoes those from Park (1990), and Neck and Moorhead (1995).

Extending from his 1990 literature review, Park (2000) looked to address the limitations of previous experimental studies into groupthink with an ambitious experiment including 256 participants, split into sixty-four groups. He posed two key questions: (a) Is Janis' theoretical model correct; and (b) What is the contribution of each symptom? His conclusions contradicted those of previous experimental research in that he *did* find clear evidence to support the presence of group cohesiveness when groupthink occurs.

Groupthink is also explored across a range of settings, investigating how it applies to autonomous work groups (Manz and Sims, 1982) and self-managing teams (Moorhead, Neck and West, 1998; Flippen, 1999). Schafer & Crichlow's multiple case comparative analysis (Schafer and Crichlow, 1996) looked to answer the specific research question *"Do certain antecedent conditions give rise to defective decision-making during times of crisis?"* (p.417). They reviewed the nineteen case study analyses used in the original development of groupthink theory and explored the presence of Janis' antecedent

conditions. Their conclusions support Janis' framework, but they have omitted - without explanation - group cohesiveness as a key antecedent. This oversight undermines an otherwise comprehensive and well-executed research design.

Rose (2011) provides the most comprehensive review of groupthink literature. He examined over sixty scholarly articles since 1972. His analysis provides clearer categorisation of the research, identifying not only the split between case studies, experimental studies, theoretical contributions and literature reviews, but also breaking down the results by whether the research paper was looking at isolated decisions, or multiple decisions, and whether the studies were attempting to examine all the groupthink variables, or specific subsets. He debates the argument for and against support for Janis' theory, as well as its application and potential application in other environments. Rose also incorporates some of the suggested proposals for the constructive development of groupthink from the likes of Hart (1998) and Mohamed and Weibe (1996), who posited that "...*the nature of the theory is still unclear. This ambiguity represents a major barrier to theory testing*" (p.417). He concludes with two clear recommendations; (a) that groupthink theory should be redefined based on research to date, and (b) it needs to be clear whether groupthink is "...*a process model or a risk mitigation approach.*" (p.51). A comparative summary of these four meta-analyses is provided in Appendix F.

Current Thinking

More recent research examines the presence of groupthink in a range of other settings, from failures in the airline, banking, and energy industries (Hermann and Rammel, 2010; R. R. Sims and Sauser, 2013) to the 1996 disaster on Everest (Burnette, Pollack and Forsyth, 2011), to its impact in educational settings (Brady, 2015). Breitsohl, Wilcox-Jones and Harris (2015) examined the behaviours of online communities in regard to customer conformity, employing a survey method to 343 participants, concluding that group cohesiveness was present along with groupthink. This is an interesting finding considering the lack of interpersonal relationships, shared purpose or group identity.

The empirical studies provide contradicting conclusions, which may be explained by challenges of (a) replicating specific antecedents in experimental design, (b) lack of conclusive evidence of the presence of certain antecedents in quantitative analysis of case studies, and (c) limitations of survey techniques in assessing fewer tangible antecedents, such as group cohesion and leadership style.

However, analysis of recent qualitative case study analysis offers a more holistic perspective, and additional insight (Burnette, Pollack and Forsyth, 2011; Brunkhorst, 2020; Lee, 2020). Burnette,

Pollack and Forsyth (2011) case study analysis of the 1996 Mount Everest climbing disaster asked the question whether groupthink was in part responsible for the events that occurred. Their findings were positive, conclusively observing the presence of antecedents and symptoms of groupthink. In addition, they determined the presence and type of group cohesiveness in this case, recognising both task and interpersonal cohesion. The impact of leadership style and behaviour on group relationships, cohesion and efficacy was also noted. Their summary highlights the presence of two specific antecedents which support Park's (2000) quantitative conclusions: directive leadership and group cohesiveness. This case study incorporated multiple data types and sources, and as a result overcame some of the issues stated regarding other research designs which seek to examine groupthink as a phenomenon. Caya's (2015) examination of juvenile gangs in Turkey finds overwhelmingly in support of the presence of affective group cohesiveness in relation to groupthink-oriented decisions and behaviours. However, Lee's (2020) analysis of the presence of groupthink in the 1989 Tiananmen Square massacre concluded the absence of group cohesiveness and offered an alternate model for groupthink that specifically *excludes* group cohesiveness as an antecedent (Figure 3.3.2). Whilst the methodological approach and rigour of execution of this study is compelling, employing an adapted version of Qualitative Comparative Analysis (QCA) (Ragin, 2014), its findings regarding group cohesiveness are problematic. As with many other studies, the definition of group cohesiveness as a uni-dimensional or multi-dimensional construct is not considered, nor the functional or structural facets incorporated. This in turn catalyses the question of "what is being measured in regard to the determination of group cohesiveness that may reliably conclude on its presence or otherwise?"

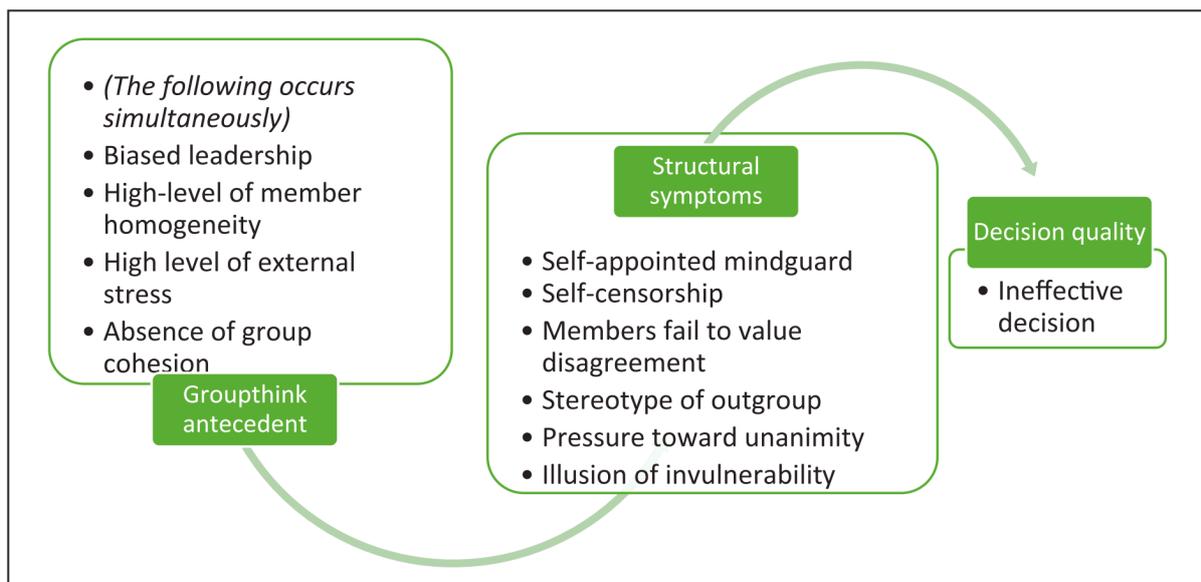


Figure 3.3.2 Revised Groupthink Model (Source: Lee 2020:456)

Summary and Discussion of Groupthink literature

The conceptual link between “teamship” and groupthink – both phenomena relating to group performance and outcomes – led to the detailed examination of groupthink literature. The review of literature highlighted significant problems in the understanding of group cohesiveness as a construct, and of its importance in phenomenon such as groupthink. Case studies examined in the review bring to light important considerations in regard to defective decision-making in groups that led to disastrous outcomes. Whilst scholars are in agreement with the measurement and recognition of many of Janis’ suggested antecedents, there is a consistent problem with the identification and measurement of group cohesiveness (Esser and Lindoerfer, 1989; Esser, 1998; Park, 2000; Callaway and Esser, 2006; Rose, 2011; Lee, 2020). The disaster on Everest highlights extreme levels of many elements of groupthink (Burnette, Pollack and Forsyth, 2011), and the presence of cohesion in the group was essential for many group processes to function (teamwork and various types of interdependence). However, it is difficult to ascertain from these case studies what caused the defective decision-making associated with groupthink. The QCA analysis of the Tiananmen Square massacre (Lee, 2020) provides an empirical analysis of qualitative data that supports an amended version of Janis’ (1972, 1982) groupthink model, but - as with much of the theoretical, case and empirical research since 1972 - struggles to provide consistency or reliability in regard to the conclusions about the role of group cohesion in groups which make disastrously poor decisions.

What we *can* conclude from all of these studies is that the role and importance of group cohesiveness on the performance of groups and teams is poorly understood in these research fields; on the one hand we have a collection of scholars who dismiss the construct as an irrelevant antecedent in the understanding of decision-making and outcomes of groups (Flowers, 1977; Courtright, 1978; Leana, 1985; Moorhead and Montanari, 1986; Callaway and Esser, 2006; Lee, 2020), and on the other that it is a key antecedent (Janis, 1983; Park, 2000; Burnette, Pollack and Forsyth, 2011).

The differing views of the importance of group cohesiveness in occurrences of groupthink is problematic (Park, 2000; Burnette, Pollack and Forsyth, 2011; Caya, 2015; Lee, 2020). The challenge for scholars and researchers to reproduce conditions that might allow examination of the presence and importance of group cohesiveness is important. It is not unreasonable to conclude that experimental or survey-based quantitative research designs are not conducive with

creating conditions that may propagate genuine affective cohesion between group members and are – at best – only able to artificially create simulated and exaggerated instrumental task cohesion (Moorhead and Montanari, 1986; Neck and Moorhead, 1995; Rose, 2011).

3.4 Group Cohesiveness

Framing

The findings from the analysis of “teamship” literature indicated antecedents in the case examples that were similar to those suggested in groupthink. The examination of groupthink literature revealed two consistent problems in both qualitative and quantitative empirical studies regarding the influence of group cohesiveness in instances of groupthink. The first is a methodological issue; there is a consistent pattern in all the studies of the operationalisation of group cohesiveness (Rose, 2011). In experimental studies investigating groupthink, the challenge has been to create conditions where group - rather than personal - motivation drives collective endeavour to fulfil tasks set (Park, 2000). In historical cases analyses, the challenge has been in credibly interpreting emotions and motivations of participants in those cases based upon the secondary data sources used (Esser, 1998). The second issue is the interpretation and application of group cohesiveness as a construct. Despite many studies purporting to investigate “group cohesiveness”, different researchers have used the term to measure different behaviours; Bernthal and Insko (1993) evaluated cohesion from a social emotional perspective, Hogg and Hains (1998) evaluated from a friendship basis, and Tetlock *et al.* (1992) defined cohesion as well-defined and shared goals. More recently, scholars’ attention is drawn to group cohesiveness and groupthink relating to the COVID-19 pandemic, identifying group cohesiveness and groupthink in both the behaviours of government leadership (Griffin, 2020) and public resistance to COVID-19 health measures (Forsyth, 2020). In the former of these examples, it is identified that group cohesiveness is positioned as a multi-dimensional group process, and in the latter, cohesiveness is described as an emergent state with multiple dimensions; initially task-oriented (resistance to legislation), and later group pride-oriented and finally emerging as bonds between individuals (as individuals recognise and identify with a growing group with a common purpose).

It can be concluded therefore that the definition and understanding of group cohesiveness is problematic in groupthink studies and is of increasing importance in the understanding of the management of, and reactions to, global crises. Both the “teamship” and groupthink literature point to group cohesiveness as a potentially important concept relating to this research inquiry. This section therefore explores the extant body of literature relating to group cohesiveness.

Seminal contributions

Group cohesiveness refers to the interpersonal bonds that hold a team together (Levi, 2017). Festinger, Schachter and Back (1950) theorised that cohesiveness in groups occurs when members have an attraction to both the group (and its identity), specific individuals in that group, and the task; “[cohesiveness is] *the total field of forces which act on members to remain in the group. These forces may depend on the attractiveness or unattractiveness of either the prestige of the group, members of the group, or the activities in which the group engages*” (p.274). Gross and Martin (1952) provided an empirical critique of the studies by Festinger *et al* (1950), challenging both the efficacy of their experimental research, and the robustness of the measures employed in those studies, questioning the reliability of conclusions on the complex study of cohesiveness, when only a single measurement (how much the participants liked or disliked other group members) was employed. Feldman (1968) agreed with the conceptualisation of group cohesiveness as a multi-dimensional construct as suggested by Festinger *et al* (1950), positing that it comprises normative (bonding to the group’s cultural and behavioural norms), functional (bonding to the task) and interpersonal (bonding to each other) facets.

Seashore (1954) defined cohesiveness as a member’s “*attraction to the group or resistance to leaving*” (p.11). Seashore designed a five-item scale to measure the construct, limiting it to assessing group members’ attraction to remaining part of the group. The focus on the individual’s desire to remain within the group reduces the group-level construct of cohesion to an individual-level construct. Lott and Lott (1965) also asserted that cohesiveness is a uni-dimensional construct based only on the strength of interpersonal attractions. Whilst the strength of their argument for the importance of affective bonds in the cohesion of a group was implicitly supported by the inclusion of interpersonal cohesion by advocates of a multi-dimensional conceptualisation of group cohesiveness (Festinger, 1950; Festinger, Schachter and Back, 1950; Feldman, 1968), their omission of the importance of task cohesion is difficult to accept practically, theoretically or empirically, as demonstrated by the volume of research findings identifying task-focus in group cohesion (Zaccaro and Lowe, 1988; Zaccaro and McCoy, 1988; Zaccaro, 1991; Beal *et al.*, 2003; Severt and Estrada, 2015; Serban and Roberts, 2016).

Temporal Developments

Several studies in the late 1970s and early 1980s sought to quantitatively examine the multi-dimensional nature of group-cohesiveness, employing laboratory experiments to test the impact of task- versus interpersonal-cohesiveness on outcomes (Hackman, 1976; Carron, 1982; Tziner, 1982b; Zaccaro and Lowe, 1988; Zaccaro and McCoy, 1988). Whilst supporting the notion that

task-cohesiveness positively affected outcomes, and interpersonal-cohesiveness inhibits success through over-familiarity and distraction, Zaccaro (1991) sought to examine the multidimensionality of group cohesiveness. His research design looked to remove the artificiality of a lab environment such that contention over the replicability of interpersonal-cohesiveness could be minimised in comparison to task-cohesiveness. His conclusions supported the multidimensional theory of group cohesiveness, identifying that task-cohesiveness catalysed clarity and focus from the group on process and roles within the group, whereas interpersonal-cohesiveness generated bonds that assisted in collaboration and unity.

Beal *et al.* (2003) conducted a comprehensive meta-analysis of 64 group cohesiveness studies published between 1951 and 2002. Their findings highlighted the importance of task-orientation in the development of group cohesiveness. Importantly, they demonstrated that the *type* of task and the group interdependence required to complete it (Thompson, 1967; Tesluk *et al.*, 1997) positively correlated with cohesion and performance outcome. They also found a balanced influence of interpersonal, group pride and task orientation in regard to group cohesion. However, despite the rigour of their research design and execution, their choice to measure group cohesiveness on the basis of group *outcomes* (performance) is problematic. Their justification for this approach (p.991) is compelling; they view group cohesiveness as a group-level construct and as such position that it is group *performance* that must be measured in order to evaluate cohesiveness. They then differentiate performance as a measure of *behaviours* or *outcomes*. There is empirical appeal to this approach; whether measuring behaviours or outcomes, the importance for the researcher is that both are *measurable*. There is an underlying ontological assumption in this epistemological approach; the concept of “group” is being viewed as an entity in its own right, and that the behaviours of its members do not belong to the individual but are properties of the group entity. If the researcher’s aim is to measure the relationship between group cohesiveness and group task performance this is justifiable, as behaviours and outcomes can be defined, quantified and observed, and mapped against specific goals (Beal *et al.*, 2003; Evans and Dion, 2012; Severt and Estrada, 2015). However, a group is not a sentient entity; of itself it does not have thoughts or feelings. Analysis of concepts such as “interpersonal relationship”, “pride in the group” and “commitment to the task” can only be measured at an individual level; they are, after all, emotions and feelings held by individuals. The *result* of these emotional responses may manifest in group processes - such as interdependence, communication and collaboration - or in group outcomes, but it is difficult to argue that emotions are felt at an abstracted concept called “group”. The argument over whether group cohesiveness should be measured (and therefore considered) to be a group-level or individual-level construct is empirically examined by Salas *et al.* (2015) and

Grossman *et al.* (2015). The findings from these two meta-analyses of a range of group cohesiveness studies indicate that whilst group-level and individual-level measures of cohesiveness were roughly equivalent in identifying the presence of group cohesiveness, individual-level measures are most effective for predicting group performance; “...*individual-level items assess how each individual in a team feels about the team, whereas team-level items assess **individuals’ perceptions of how the whole team feels***” (Grossman *et al.*, 2015:159; emphasis added).

It could be argued that this problem sits at the heart of the confusion of how group cohesiveness should be conceptualised. Beal *et al.* (2003) set out with four research purposes; “*to (a) conceptually reconsider the structure and content of criteria used within group cohesion studies, (b) meta-analytically test hypothesized cohesion–performance relationships with respect to more refined criterion categories, (c) constructively re-examine the independent contributions of interpersonal attraction, group pride, and task commitment in relation to criteria employed within group cohesion studies, and (d) examine the potential influence of workflow patterns on cohesion–performance relations.*” (p.990). They did *not* examine the research designs of the 64 studies included in their meta-analysis. This means that they have *assumed* the interpretations of the subjective evaluations of individual participants’ emotions that are the formative inputs into the types of cohesion observed. The analysis of group processes based on interdependence appear to be robust and relevant (Beal *et al.*, 2003), but to assert that they relate to human emotions which have not been tested is challenging to accept.

This highlights two major concerns with current knowledge; a) the conceptualisation of group cohesiveness as a group-level or individual-level construct (Grossman *et al.*, 2015), and b) the research approaches that have been taken, all of which appear to abstract the researcher from the reality of the participants (Bravo, Catalán and Pina, 2019).

Current Thinking

More recent study designs implicitly begin to address the issue of abstraction from the participant emotions. Wise (2014) conducted an empirical analysis of group cohesion in a population of 187 sales teams in a large Canadian travel company, using Social Network Analysis of over seven million intra-team emails over a twelve months’ period. This approach and method provided insight into the authentic thoughts and feelings of participants. Wise concludes that whilst group cohesiveness *does* correlate directly with improved performance, too much active cohesion – measured by the number of emails exchanged within teams – has the opposite effect. This concurs with Zaccaro’s (1991) findings. However, a key weakness in Wise’s analysis was the inability to differentiate intra-team communications as task-focused or interpersonal; the study collected seven million intra-team emails across 180 teams over one year in a single organisation, but the

content of the emails was not examined. This research design limitation brings into question the essence of his findings, in that he suggests that the relationship between group cohesion and team performance is inversely curvilinear and therefore there is an optimal level of cohesiveness in groups, beyond which performance deteriorates. This conclusion is unreliable in that we are unable to determine which form of cohesiveness has the positive effect, and which drives deterioration, if indeed there is a difference (Grossman *et al.*, 2015; Salas *et al.*, 2015).

Serban and Roberts' (2016) mixed methods study into the antecedents of shared leadership identified that task-cohesiveness positively affects outcomes, a conclusion that again supports many of the studies to date. Their research also offers the view that shared leadership is likely to emerge in groups that are task-focused and operating in stressful or highly pressured conditions (p. 195). Shared leadership is described as an informal, distributed form of leadership within a group (Conger and Pearce, 2003). This phenomenon has similarity to that of 'mindguards' in *groupthink* (Janis, 1972, 1983), and 'leaders within the team' in "teamship" (Woodward, 2003; Greenwood, 2004; Johnson, 2004; Morgan, Fletcher and Sarkar, 2015). If this is the case, it may be reasonable to suggest the following proposition: "In groups operating under stressful or extreme conditions, the emergence of shared leadership behaviours within the group positively contributes to the cohesiveness of the group and to the focus on achieving positive outcomes". This proposition could thus be used to support or disprove the notion that groupthink and "teamship" do indeed share common antecedents and symptoms.

In their qualitative narrative analysis investigating resilience in teams, Morgan, Fletcher and Sarkar (2015) identified social identity as a key antecedent in resilience, highlighting "*individual and shared experience of adversity created such strong affective attachments and a 'band of brothers' mentality*" (p. 98). Their research highlights both task- and interpersonal-cohesiveness, but also emphasises the deep cohesion created by the desire to be a member of the group (group pride) and the conviction of members to maintain that identity, and thus create in-groups and out-groups; a phenomenon that sits centrally in Social Identity Theory (Tajfel, 1974; Tajfel and Turner, 1979), and in Groupthink Theory (Janis, 1972, 1983). The conditions in which the team examined by Morgan *et al* operated is consistent with those defined as 'extreme environments' (Harrison and Connors, 1984), marked by (a) hostile environmental demands, (b) danger and physical risk, (c) restricted living or working conditions, and (d) social demands that may include isolation from those outside the setting and close confinement with those inside.

In their review of research on teams in extreme environments, Driskell, Salas and Driskell (2018) identify group cohesiveness as key to performance in such teams. Their literature review identifies

Feldman's (1968) notion of the three identifiable dimensions of cohesiveness (Normative, Functional and Interpersonal). Their conclusions have relevance to the findings of Morgan, Fletcher and Sarkar (2015) in that increased stress on the group can have either positive or negative impacts on the group depending on the source of that stress; internally induced stress may weaken cohesiveness, whereas external stress (or threats) can strengthen cohesiveness. When applied to teams in extreme environments this has relevance to the behaviours of individuals and potential outcomes. Based on Harrison and Connors' (Harrison and Connors, 1984) definition of extreme environments, the case studies referred to in both the groupthink and "teamship" literature could be deemed 'extreme', and therefore research in this area could have significance in my study.

A common feature in the literature reviewed is the lack of explicit identification of the stage in the group lifecycle for the populations examined, an issue highlighted by Casey-Campbell and Martens (2009). This omission has the potential to influence interpretation of observed behaviours, as described in Tuckman's Group Stage Development model (1965). Tziner (1982) posits that the cross-sectional approach to group process research designs results in a lack of incorporation of the dynamic changes in socioemotional and instrumental cohesiveness experienced by individuals and reflected in the group. Tuckman's (1965) group developmental stages imply differing levels of interpersonal cohesion and conflict in a team, with consequent impact on outcomes. Not clearly identifying the stage of development of the group being researched may therefore undermine the reliability and validity of any research into cohesiveness (Santoro *et al.*, 2015). This gap in literature is addressed by Hall (2015) in his survey-based quantitative study. He proposes that the multi-dimensions of cohesiveness fluctuate through the development stages of a group, showing a direct correlation between cohesiveness and effectiveness, and identifying the differing primacy of the three cohesiveness variables at the differing stages. He concludes that there is a positive correlation based on the hypothesis. Santoro *et al.* (2015) address the paucity of knowledge regarding the antecedents, stability and dynamic interactions of team cohesiveness with other team processes. They suggest that a factor is the dominance of cross-sectional research designs in group cohesion studies.

Hall's (2015) and Santoro *et al.*'s (2015) recognition of such an important antecedent in the interpretation of the impact of the multi-dimensions of group cohesiveness raises other questions: What is the effect of the personality types of participants in the groups being analysed? What impact does the style of leadership have on the focus of the group on task or group performance (directive, autocratic, transformative *et cetera*)? How does the personal motivation of all group members influence intergroup relations and determination to perform collaboratively and with focus on the outcome? What influences do personal risk, danger or consequence have on

cohesiveness? There is a noticeable lack of reference to any of these considerations as antecedents in any of the studies that I reviewed in this research, which represents a potential weakness in the findings.

As can be seen, study designs are becoming increasingly varied and imaginative (Wise, 2014; Beal, 2015; Morgan, Fletcher and Sarkar, 2015; Santoro *et al.*, 2015). This has the potential to reveal significant new insight into the conceptualisation and construction of group cohesiveness and will present interesting challenges for scholars seeking to perform meta-analyses of the topic going forwards, as the ontological, epistemological and methodological assumptions in every study may have increasing influence in the interpretations of findings from individual studies.

“The innovative methods discussed...have the potential to unpack the “black box” of team processes...They may be helpful in identifying individual and situational characteristics that facilitate team processes...(e.g., enhancing cohesion over team and fast restoration of cohesion after a conflict episode.”

(Santoro et al., 2015:138)

In an effort to consolidate the diverse interpretations of group cohesiveness, and based on their analysis of much of the formative literature discussed in this chapter, Severt and Estrada, (2015) offered an integrative framework that incorporates the functional and structural properties of cohesion as shown in Table 3.4.1. They posit that cohesion serves two main functions; an affective function which highlights the emotional impact on group members, and an instrumental function, which refers to those aspects of cohesion that are task or goal-oriented. Their framework aligns the multidimensions of earlier scholars (interpersonal, group pride and task) (Festinger, 1950; Festinger, Schachter and Back, 1950; Seashore, 1954; Lott and Lott, 1965; Feldman, 1968; Zaccaro, 1991) into the function they serve, also addressing whether the cohesion can exist between group members of the same level (horizontal), or between hierarchical levels (vertical). In addition, their framework recognises that groups rarely function “in a vacuum”, but that groups are usually embedded in a larger organisation, and/or require inter-group collaborations (Severt and Estrada, 2015). They describe this as “boundary spanning” (p.16). Their model integrates this important aspect as it relates to structure and function. Their framework is particularly useful for scholars seeking to interpret the dynamics of behaviours and outcomes associated with group cohesiveness research. During the conduct of this study - and particularly in the data analysis and interpretation phases represented in this thesis - this author has used the framework offered by Severt and Estrada (2015) to categorise and explain the data findings.

Table 3.4.1 An Integrated Model of the Functions and Structure of Cohesion

Functional Properties	Structural Properties		Relationship that Cohesion Manifested by
	Facet	Level	
Affective	Interpersonal	Horizontal	Group Member- Group Member
		Vertical	Boundary Spanner - Group Boundary Spanner - Boundary Spanner
	Group Pride	Horizontal	Group Member- Group Member
		Vertical	Boundary Spanner - Group Boundary Spanner - Boundary Spanner
Instrumental	Social	Horizontal	Group Member- Group Member
		Vertical	Boundary Spanner - Group Boundary Spanner - Boundary Spanner
	Task	Horizontal	Group Member- Group Member
		Vertical	Boundary Spanner - Group Boundary Spanner - Boundary Spanner

(Source: Severt and Estrada, 2015:9)

Summary and Discussion of Group Cohesiveness literature

This review has identified key problems in literature in regard to the conceptualisation and construction of group cohesiveness:

1. Unit of analysis: Group-level or Individual-level? (Grossman *et al.*, 2015; Salas *et al.*, 2015)

It is clear that the majority view leans towards group cohesiveness as a group-level construct, based on the assumption that its function in group endeavour is to facilitate efficacy in group behaviours and outcomes. The link between cohesion and performance is therefore established and measurable. However, the processes of cohesion are affected at an individual-level, and it could be argued that to measure these processes, the construct must be considered at an individual unitary level.

2. Cause or Effect: Is cohesiveness an input into group functioning or an outcome from group functioning? (Grossman *et al.*, 2015; Santoro *et al.*, 2015)

With the focus on performance measurement, there is an inevitability that group cohesiveness is considered in the “output-end” of group endeavour. Questions exist about how group

cohesiveness - in its various forms - impacts on group performance; for examples does it moderate or mediate group processes or is it a process in itself.

3. Group Process or Emergent State? (Kozlowski and Klein, 2000; Santoro *et al.*, 2015; Severt and Estrada, 2015)

Group processes describe the interactions between group members (for example, task interdependence). An emergent state is defined as “*a collective structure that results from dynamic interactions among lower-level elements.*” (Kozlowski and Klein, 2000:15). Whilst disagreement continues to exist in regard to the level at which cohesiveness is constructed, there is an inevitability that this question will remain unanswered. This has ontological and epistemological implications, and therefore impacts on research design and data interpretation. If conceptualised as an emergent state, the lower-level elements assumed to exist can be explored, described and subsequently empirically tested. Whilst considered as a group process, the focus will remain on cohesiveness as a performance-related concept, and research will continue to measure various outcome-based criteria.

4. Functions or Structures: What purpose does group cohesiveness serve in group function? (Severt and Estrada, 2015; Vanhove and Herian, 2015; Ohlert and Zepp, 2016; McEwan *et al.*, 2017)

Research focus on the multi-dimensional facets of group cohesiveness (interpersonal, group-pride, task) and the links to group performance provides understanding of the mechanisms and outcomes of group cohesiveness (i.e., how it works and what impact does it have). The Input-Process-Outcome approach ignores the psychological relevance of group cohesiveness to the group member. Exploration of its functions - those being to bond members emotionally or instrumentally - would shift attention from the group-level outcome focus currently, to an exploration of what function cohesion serves for the group member as an individual.

5. Static or Dynamic: Does group cohesiveness alter temporally, and if so why? (Tziner, 1982b; Grossman *et al.*, 2015; Hall, 2015; Santoro *et al.*, 2015)

This question is of considerable consequence. If considered as static process or state, this would imply that the levels of the types of cohesion in a particular group do not alter temporally, irrespective of environmental, membership, performance or emotional developments. However, if considered as a temporally dynamic (or fluid) state, this would imply that any study investigating group cohesion must identify the stage of group development and its longitudinal changes, and report findings of cohesiveness in the context of the cross-sectional state at the time of data

collection. Only then can reliable comparison be made with other data or studies. This consideration represents a significant problem in most group cohesiveness research (Hall, 2015).

6. Antecedents: What are they? (Kozlowski and Ilgen, 2006; Casey-Campbell and Martens, 2009)

The focus on cohesion-performance research (driven by the conceptualisation of cohesion as a group-level construct) has resulted in little focus on examination of the antecedents that may catalyse or inhibit cohesiveness. This review has failed to uncover any studies that focus on the fundamental questions of the purpose of formation of a group (i.e., what is its shared or common purpose) and the nature of the complexity, difficulty, risk or environment associated with the purpose. Nor has the review revealed any research examining why individuals *choose* to contribute to a group, and how this may impact on the group's bonds. An understanding of personal motivation in the context of the group purpose may reveal significant insight into the function of group cohesiveness for the individual, and therefore the commitment to the group and its members.

Casey-Campbell and Martens (2009) also identify these problems in their review of cohesiveness literature, exploring many of the seminal texts and emergent literature highlighted in this author's thesis. The depth of their analysis and rigour of balanced argument provides a thorough foundation for any scholar seeking understanding of the issues of the construct. However, a problem exists even within such a thorough piece of research; a dearth of emic empirical studies exploring group cohesiveness. Throughout their analysis, and in the extensive portfolio of theoretical and empirical studies that they examine, there is a consistent theme of confusion about the six factors this author highlights above, and of the challenges for the researcher in accessing insight to *what* is causing (or not) the existence of cohesion, and what function the cohesion is *specifically* performing for the individual. Other areas of social and psychology theory such as Social Identity Theory (Hogg and Abrams, 2006) and Belonging (Rogers, 1951; Baumeister and Leary, 1995; Antonsich, 2010) may offer insight into these concerns, but this is rarely considered in most empirical research. The focus on etic research methods drives researchers to a belief that the motives of human behaviour can be objectively interpreted, or predicted by the researcher, allowing them to collect data that can subsequently be inductively or deductively analysed, separated from the reality of emotions experienced by the participants. As highlighted in the sections above, the three main dimensions of cohesiveness - interpersonal relationships, pride in the group [identity], and commitment to the goal or task - are *all* emotional responses *from individuals*. It seems logical therefore that *to understand the construct itself* - not what it contributes to

group performance - research should examine the individual group members emotions, not an assumption of them.

Considering the vast corpus of literature examining group cohesiveness over the last seventy years, it would be reasonable to assume that over time a stronger consensus on the construct could have been determined. As this is clearly not the case (indicated by the six major themes of concern highlighted above), perhaps it is appropriate to consider that maybe the confusion exists because the predominantly etic approach to studies (quantitative and qualitative) is both ontologically and epistemologically flawed as an approach to this topic. Maybe taking a more constructivist approach to exploring group cohesiveness could reveal new insight into the construct and help to generate a case-by-case understanding of why a group exists, why its members want to belong, what the environmental circumstances of the situation are, and what function cohesiveness performs in the context of the purpose of the group's formation.

“It is hoped that by defining both of the functional aspects of cohesion and describing the various ways in which those aspects could emerge within groups, future researchers will continue to dissect and disentangle the relationships between the functions, facets, and levels of cohesion. Indeed, research up until now has made significant progress in defining and conceptualising the relevant components of cohesion, but greater understanding of the processes underlying emergence of each element of cohesion will help to create a more complete nomological network or antecedents, covariates, and outcomes related to specific aspects of cohesion.” (Severt and Estrada, 2015:21)

3.5 Group Stages of Development (GSD)

Framing

The examination of group cohesiveness literature exposed a potentially significant issue, which is the stage of development of a group as this relates to the types of cohesiveness that may exist (Hall, 2015). There is no clear explanation in most group cohesiveness studies regarding the maturity or stage of development of the team (Grossman *et al.*, 2015; Hall, 2015; Santoro *et al.*, 2015), nor the complexity or consequential nature of the task outcome (Zaccaro, Gualtieri and Minionis, 1995; Beal *et al.*, 2003). Experimental studies of cohesiveness often involve the formation of a group to perform a task that requires a level of collaboration, from which evaluations are made about types and primacy of cohesiveness. Retrospective case study analyses such as those highlighted in the groupthink and group cohesiveness sections take a cross-sectional judgement of cohesiveness, based on a longitudinal event horizon (Siebold, 2006; Rose, 2011; Grossman *et al.*, 2015). One might reasonably challenge any findings with the question, “At what point in time and at what stage of development of the group is it suggested that this type of cohesiveness was present?”

GSD theories (also referred to interchangeably as Team Stages of Development, TSD) seek to categorise change in group function and identity, based upon temporal changes of interpersonal behaviours and relationships of group members (Tuckman, 1965; Tuckman and Jensen, 1977; Gersick, 1988; Sheard and Kakabadse, 2002; Akrivou, Boyatzis and McLeod, 2006; Ito and Brotheridge, 2008; Kozlowski *et al.*, 2009). Identification of stages of development align with the bonds and commitments that may exist between members, to the group and to the task. The problems associated with GSD in relation to determination of group cohesiveness are discussed in the previous section. This section examines literature relating to GSD.

Seminal Contribution

The most recognised and utilised theory for GSD is that developed by Tuckman (1965) and Tuckman and Jensen (1977). His linear model of sequential stages of development in small groups - articulated as Forming, Storming, Norming, Performing and Adjourning - set the stage for most of the research on small group development for the next fifty-five years (Gersick, 1988; Pirola-Merlo *et al.*, 2002; Sheard and Kakabadse, 2002; Akrivou, Boyatzis and McLeod, 2006; Ito and Brotheridge, 2008; Wheelan, 2009; Bonebright, 2010; Zoltan and Vancea, 2016; Gren, Torkar and Feldt, 2017). With the exception of Gersick (1988) and Akrivou *et al.* (2006) these latter studies focused on reviewing, validating, and enhancing Tuckman’s model.

Tuckman's (1965) original model comprised four stages; a fifth one was added in a latter research article (Tuckman & Jensen, 1977). Each stage has two dimensions: group structure and task activity. Group structure involves the patterns of interpersonal relationships reflected in the way team members act and relate to each other. Task activity comprises the content and the interaction associated with the task to be completed.

Stage 1 - Forming: Team members test their dependence and the overall group structure. This is also the stage where they are oriented to the task at hand, including goals, roles, responsibilities, and action strategies.

Stage 2 - Storming: Members express a resistance to group influence, potentially resulting in conflict. It is also in this stage where an emotional response to the weight of the task is expressed (Gren, Torkar and Feldt, 2017).

Stage 3 - Norming: Members experience openness to each other, resulting in the cohesiveness of the team. It is at this stage that team norms settle, efficacy emerges in member roles and responsibilities the team freely exchanges information, ideas and opinions, and collaboration ensues (Bonebright, 2010).

Stage 4 - Performing: The team is at the peak of their constructive action. Roles in this stage are more fluid and the team structure supports task performance. It is also in the fourth stage that task activities leverage interdependence, channelling group energy to novel solutions and accelerated task completion (Ito and Brotheridge, 2008).

Stage 5 - Adjourning: Team members disengage, experiencing separation anxiety, sadness, and strong feelings toward other members and the team leader. Often a period of conscious or unconscious self-reflection, both at the individual and team levels (Zoltan and Vancea, 2016).

Tuckman's model suggests a linearity to group development and implies that all groups will experience a period of conflict before the group is able to progress to stages of efficiency and effectiveness to achieve the group's purpose. This implies that development of groups is based upon the necessity for *negative emotion and experience* (i.e., a stage of disruption and conflict defined in "Storming"), and that subsequent stages cannot be attained without this emotionally negative experience.



Figure 3.5.1 Stages of Small Group Development (Tuckman and Jensen, 1977)

Temporal Developments

Gersick (1988) offered a progressive model of group development referred to as Punctuated Equilibrium, comprising three transitional periods (“Meeting”, “[Inertia] Transition”, and “Completion”) and two periods of group stability. Her research conducted in multiple settings and group types found that on assembly groups consistently followed a socialising and normalising process, and then settled into a steady state of relative inertia and stability. Her findings showed consistently that this period lasted for 50% of the total allotted time for any given task (whether the task was to be completed in hours or months). During this time, social group processes occurred, with little collective energy to the task-oriented processes. At the midway point, a transition occurs in groups, where realisation of task and time take precedence and the group realigns its priorities and structures to task-orientation. After this transition period, there follows a second phase of stability and calm, followed by a final urgency as the deadline for completion approaches. Whilst offered as an alternative to the linearity of Tuckman’s GSD model, it can be argued that Gersick’s model is also linear (based as it is on measuring activities over time). It could also be argued that Gersick’s model is *not* a model of group development, but one of task execution.

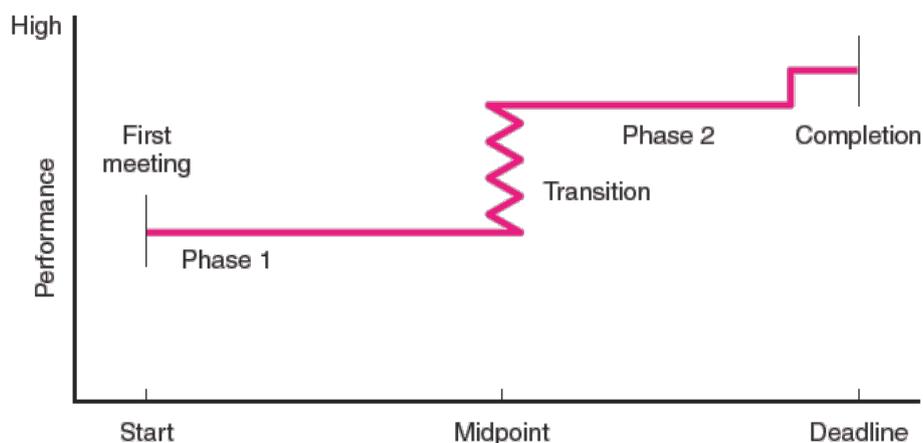


Figure 3.5.2 Punctuated Equilibrium Model of Group Development (Source: Gersick, 1988)

Sheard and Kakabadse (2002) developed on Tuckman’s construct in order to describe the group processes associated with the transition of a group from a loose group to an effective team. They identified nine key factors that differentiate between the two states, derived by the creation of an integrated framework that incorporated Tuckman’s Stages of Development, Kübler Ross *et al.* (1972) change transition curve, and Adair’s (1986) Task-Group-Individual model of team performance and function. The resultant integrated team development framework (ITDF) is shown in Figure 3.5.3.

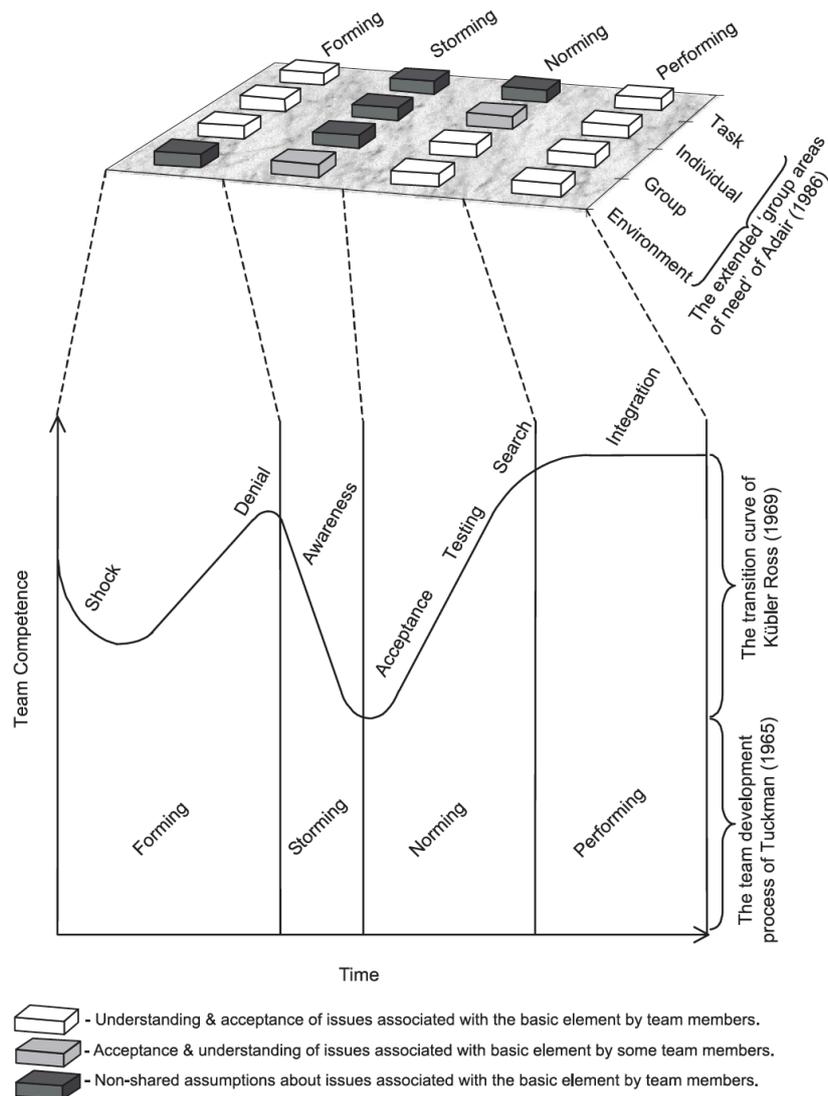


Figure 3.5.3 Integrated Team Development Framework (Source: Sheard and Kakabadse, 2002:136)

The use of the transition curve is useful, but perhaps misses positive emotions for group members such as excitement, anticipation, euphoria and others. Nonetheless, the resulting nine key factors differentiating loose groups and effective teams have value for both scholars and practitioners

(Table 3.5.1). The alignment with development stages and personal emotions allows researchers to identify behaviours in accordance with progress, and to determine interventions - task, group, individual or environment - which may assist in the efficacy of the group.

Table 3.5.1 *Nine Key Factors [of Differentiation]*

Key Factor	Loose Group	Effective Team
Clearly defined goals	Individuals opt out of goals not understood	Understood by all
Priorities	Split loyalty of individuals to other groups	Cohesive team alignment
Roles and responsibilities	Unclear, with gaps and overlaps	Agreed and understood by individuals
Self-awareness	Individuals guarded	Behaviour appropriate to team needs
Leadership	Directive	Catalytic
Group dynamics	Individuals guarded	Social system established and accepted
Communications	Formal	Open dialogue
Content	Task focused	Influenced, but not controlled by organisation
Infrastructure	Task focused	Stable support from organisational infrastructure

(Modified from source: Sheard and Kakabadse, 2002:138)

Akrivou *et al.* (2006) asserted that group development is not a linear process, but a series of recursive cycles of development and regression, based on complexity and multi-fractal interaction, intentionality, and positive emotion. They view group development as a process of intentional change (p.695). They therefore posit that group development must be conscious *and* intentional to be successful. In addition, they incorporate consideration of member emotional state, and the need for positivity in individuals to promote intrinsic motivation towards the collective endeavour. Their third proposition is that in order to create this positive intrinsicity in individuals, a shared purpose, ideal or vision must be established and embraced collectively, allowing alignment of emotion and endeavour (p.697). Their theory of Intentional Group Development (IGD) is based on Boyatzis' Intentional Change Theory (Boyatzis, 2001) and Complexity Theory (Boyatzis, 1999, 2001). The five stages are proposed as "discoveries" (p.699-701) and are described as:

Discovery #1: Emergence of shared ideal, vision, or dream

Discovery #2: Exploration of norms, paradoxes, challenges, and gaps

Discovery #3: The group's learning agenda

Discovery #4: Group experimentation and practice

Discovery #5: Resonant relationships

This author's analysis of the details of each proposed discovery phase finds significant alignment with the five stages suggested by Tuckman. The key differences are in the assumptions behind them; ICT considers groups to be complex organisations with both progressive and regressive characteristics, where progress requires positivism and cyclicity in each phase and between phases. Tuckman's model assumes negativity for progress ("Storming") and linearity in group development.

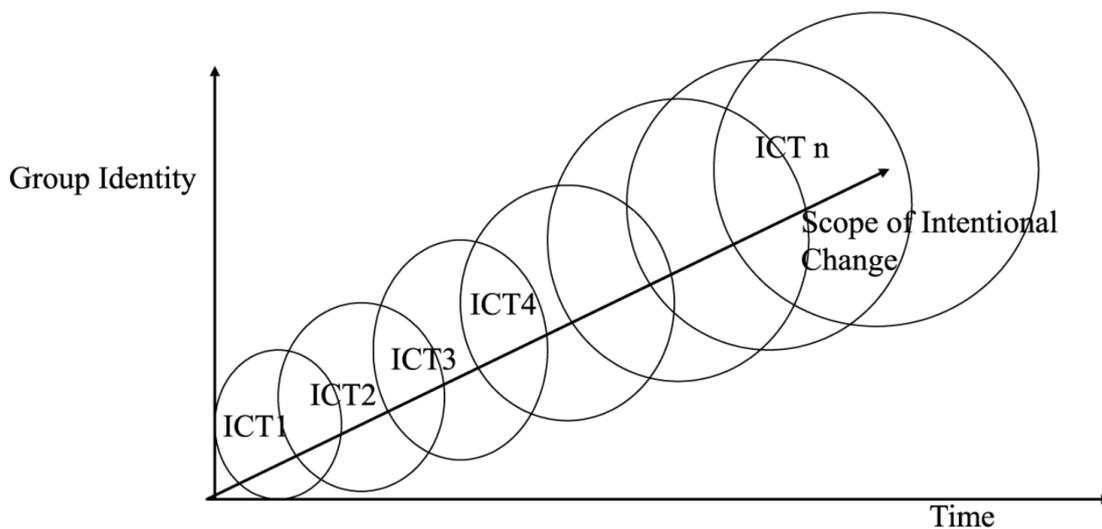


Figure 3.5.4 ICT multiple iterations over time in groups (Source: Akrivou, Boyatzis and McLeod, 2006)

Kozlowski et al.(2009) proposed a four-stage model of group development, identifying six developmental functions evolve with each stage; (a) task related, (b) social, (c) action strategies, (d) attitudes, (e) behaviours, and (f) cognitions. The first two functions correlate directly to Tuckman's functions of task activities and group structures. The latter four map to Tuckman functions in the following manner: attitudes and behaviours are part of group structures whereas action strategies and cognitions belong to task activities. Kozlowski et al. (2009) arranged their six functions into preparation and action. The first three factors: task related, social, and action strategies correlate to the preparation state; while attitudes, behaviours, and cognitions are aligned with the action state. Table 3.5.2 provides a summary of this model.

Table 3.5.2 Development factors by each stage of development

	New team (<i>team formation</i>)	Novice team (<i>task role development</i>)	Expert team (<i>team development</i>)	Adaptive team (<i>team improvement</i>)
Task related	<i>Team orientation</i> • Mission • Objectives	<i>Teamwork</i> • Individual task mastery • Self-efficacy	<i>Teamwork</i> • Task role interactions • Task role revision	<i>Adaption</i> • Team self-management • Continuous improvement
Social	<i>Team socialisation</i> • Norms • Social integration	<i>Role socialisation</i> • Acceptance • Attachment	<i>Cooperation</i> • Role interaction • Mutual trust	<i>Social cohesion</i> • Synergistic interaction • Conflict management
Action strategy	Provide	Provide rationale	Facilitate	Facilitate development
Attitudes	<i>Commitment</i> • Team mission • Other members	<i>Self-efficacy</i> • Individual's task focus • Social self-efficacy	<i>Team efficacy</i> • Team task focus • Mutual trust and respect	<i>Team efficacy</i> • Novel team task focus • New team contexts
Behaviours	<i>Interaction</i> • Bonding • Reciprocal	<i>Teamwork</i> • Self-regulation • Individual help-seeking	<i>Teamwork</i> • Coordination • Backup behaviours	<i>Adaptation</i> • Shared leadership • Exploration and risk taking
Cognitions	<i>Team mentality</i> • Boundaries • Shared responsibility	<i>Individual mental models</i> • Task • Interpersonal	<i>Shared mental models</i> • Members' task interactions	<i>Compatible mental models</i> • Knowledgeable specialisation • Transactive memory

(Modified from Source: Kozlowski et al., 2009)

The identification of measurable group-level and individual-level behaviours at each stage of development provides guidance to both practitioners and scholars when examining the development of a group, allowing identification of progress, as well as determination of interventions that may facilitate further development. In this regard, the model is similar in many respects to that offered by Sheard and Kakabadse (2002) and Tuckman and Jensen (1977). Like both of these models, Kozlowski *et al.* (2009) adopt a linear approach to GSD with no apparent recognition of the potential for regression in any of these areas nor on the impact that this may have on the stage of development. The assumption that a team progresses from “Novice” to

“Expert” is difficult to visualise based on the factors offered. Also, there is an implicit assumption that every group needs to progress to become an expert team and subsequently an adaptive team. A consideration of the nature of the purpose of the group would help to identify the types of interdependency processes required to achieve it and may impact considerably on the efficacy of this model.

Summary and Discussion of GSD literature

Analysis of the GSD models reveals three core schools of thought; 1) GSD is a linear process, with identifiable factors and processes that may indicate current state and requirements for progress (Tuckman, 1965; Tuckman and Jensen, 1977; Sheard and Kakabadse, 2002; Kozlowski *et al.*, 2009); 2) GSD is *not* a linear process, but an irregular and predictable sequence of member engagement activities, punctuated by periods of group stability and transition (Gersick, 1988); and 3) GSD is a recursive cyclical process, where progress towards efficacy will go through periods of regression and progression requiring positive intervention at a member level to develop (Akrivou, Boyatzis and McLeod, 2006). However, the overriding observation is that Tuckman’s (1965) model still dominates most thinking, despite extensive critique and identification of its limitations in development, a notion supported by the development of models such as those from Sheard and Kakabadse (2002) and Kozlowski *et al.* (2009) which are based on Tuckman’s (1965) framework.

The reason for inclusion of a review of GSD literature was in response to the problem highlighted in group cohesiveness literature of a lack of consideration of the stage of development in cohesiveness analysis. Whilst these models accommodate both group structure and group task (Tuckman, 1965; Sheard and Kakabadse, 2002; Kozlowski *et al.*, 2009), the *purpose* of the group (i.e., “why” it exists (its meaning), as opposed to “what” it must do (its activities)) is overlooked, which has relevance to the cohesion of its members to the instrumental and affective functions of cohesiveness in the group. This observation appears to be a gap in knowledge. Incorporation of clarification of a) group purpose and b) interdependency required to fulfil that purpose as two additional factors in the GSD models examined might offer new insight into the stages of development within groups and the *requirements for those stages to be attained*. A second and important gap with the linear models - and indeed with Akrivou *et al.*’s (2006) recursive model - is that they all specify or imply a temporally uni-directional development which is applicable in *all* groups irrespective of the nature or complexity of the task or purpose. The next sections of this review examine the group and team literature specific to group purpose and task interdependence respectively.

3.6 Group Purpose

Framing

The reviews of literature for both group cohesiveness and GSD uncovered the potential importance of group purpose in determining a) the *anticipated cohesiveness* likely or necessary in a group to attain the group's purpose, determined by the interdependence required (Beal *et al.*, 2003; Casey-Campbell and Martens, 2009; Kozlowski *et al.*, 2009); and b) the *anticipated stage of development* needed within a group to attain the group's purpose (Grossman *et al.*, 2015; Hall, 2015; Santoro *et al.*, 2015). The review of groupthink literature revealed the importance of "purpose" in regard to complexity, time and consequences of success and failure (Hermann and Rammel, 2010; Burnette, Pollack and Forsyth, 2011; R. Sims and Sauser, 2013; Caya, 2015; Lee, 2020). Specific case study analyses of groupthink disasters implicitly identify a problem with the interpretation of "shared" in regard to group purpose, raising the question that if a purpose is shared by the group, how is it possible for one individual to achieve their own ambitions from the group endeavour if the group fails to achieve the group purpose? In the examination of the Everest disaster (Burnette, Pollack and Forsyth, 2011), the fallacy of a "shared" or "common" purpose was exposed with the awful deaths of many group members. The examination of groupthink in the BP "Deepwater Horizon" disaster (Bozeman, 2011) and in the Challenger Space shuttle explosion (Esser and Lindoerfer, 1989) highlight a similar misalignment of purpose as understood at a meta-level in the organisation, as compared to the active group.

This review has therefore revealed three important considerations for the interpretation and importance of "purpose" in group endeavour; 1) its impact on type and strength of cohesiveness (Tziner, 1982b; Grossman *et al.*, 2015; Hall, 2015; Santoro *et al.*, 2015; Severt and Estrada, 2015), 2) its potential to determine the relevant type of group interdependence required (and therefore GSD expected) (Beal *et al.*, 2003; Grossman *et al.*, 2015), and 3) the assumption of "shared" in association with group member motivation and behaviour (Adler and Heckscher, 2018; Black *et al.*, 2018). This section of the review seeks to explore group purpose as it is understood in group and team literatures.

Seminal contributions

Adler and Heckscher (2018) examine the concept of organisational purpose in regard to changing perspectives to organisational design. Their definition of purpose in context with other organisational determinant statements provides a useful context for understanding the development of the use and understanding of "purpose" addressed in this chapter.

“By organization’s purpose we refer to the organization’s fundamental raison d’etre, the ultimate reason for the organization’s existence what it contributes to society in exchange for the resources it requires as distinct from the goals pursued by the individuals in it...Shared purpose in our sense is more closely related to concepts such as organizational mission - what the organization does to fulfil its purpose; organizational vision - what the organization (or the society it serves) will look like if its purpose is fulfilled; and organizational identity - the central, enduring, and distinctive features that define who we are and what we do when we pursue this purpose.” (Adler and Heckscher, 2018)

As can be seen, Adler and Heckscher (2018) distinguish between organisational purpose, mission, vision and identity. However - as discussed in their paper - much academic and practitioner literature fails to isolate “purpose” from “task” or “goals”.

Kozlowski and Ilgen (2006) reviewed almost 400 seminal articles from 1950 to 2005, synthesising the contributions of key authors into the effectiveness of groups and teams. The opening line of the abstract of their article is, *“Teams of people working together for **a common purpose** have been a centerpiece of human social organization ever since our ancient ancestors first banded together to hunt game, raise families, and defend their communities.”* (p.77, emphasis added). Their efforts resulted in a consolidated definition of “Team”:

“A team can be defined as (a) two or more individuals who (b) socially interact (face-to-face or, increasingly, virtually); (c) possess one or more common goals; (d) are brought together to perform organizationally relevant tasks; (e) exhibit interdependencies with respect to workflow, goals, and outcomes; (f) have different roles and responsibilities; and (g) are together embedded in an encompassing organizational system, with boundaries and linkages to the broader system context and task environment.” (Kozłowski and Ilgen, 2006:79, emphasis added)

As can be seen, the third element that they identify in their definition is that teams *“...possess one or more common goals.”* The interchangeable use of “purpose” and “goals” in this thoroughly researched and well-written paper sits at the heart of the relevance of this section in this thesis, and supports the problems identified in the group cohesiveness and GSD literature regarding the confused use of “purpose” and “goals”, and the assumptions made regarding “common” and “shared” in respect to those terms. Kozlowski and Ilgen have used both “purpose” and “goal” to mean the same thing; an instrumentally oriented and measurable task or set of tasks to be performed by the group.

One of the texts reviewed in their work - Katzenbach and Smith (1993) - warrants a more detailed examination. They offer one of the more frequently cited definitions of “teams”:

“A team is a small number of people with complementary skills who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable.” (Katzenbach and Smith, 1993:113)

As can be seen, Katzenbach and Smith differentiate between “purpose” and “goals”. In their description of “common purpose”, they implicitly identify that the formation of a group or team is to fulfil the requirements set by a higher level or organisational or management structure, but that in order for this purpose to be collectively embraced (“common”), the group needs to spend time collaboratively personalising that requirement at a group-level:

“Management is responsible for clarifying the charter, rationale, and performance challenge for the team, but management must also leave enough flexibility for the team to develop commitment around its own spin on that purpose, [and a] set of specific goals, timing, and approach. The best teams invest...time and effort exploring, shaping, and agreeing on a purpose that belongs to them both collectively and individually...failed teams rarely develop a common purpose...The best teams also translate their common purpose into specific performance goals.” (Katzenbach and Smith, 1993:114)

Defining group purpose in this manner is useful for both scholars and practitioners as it aligns purpose with the reason for existence of the group, as opposed to the group’s specific goals and tasks. This clarity is consistent with dictionary definitions of purpose, such as that offered by Collins online: “NOUN 1. the reason for which anything is done, created, or exists” (HarperCollins Publishers, 2021). Of interest, Katzenbach and Smith also implicitly highlight the different functions that the two concepts have in regard to the group and the individual, identifying that goals are measurable (and therefore provide an instrumental function), whereas purpose provides “meaning” (and therefore provides an affective function).

“The combination of purpose and specific goals is essential to performance. Each depends on the other to remain relevant and vital. Clear performance goals help a team keep track of progress and hold itself accountable; the broader, even nobler, aspirations in a team’s purpose supply both meaning and emotional energy.” (Katzenbach and Smith, 1993:115)

An exhaustive inclusion of definitions of “groups” and “teams” in this section will not bring additional insight to the issue highlighted by the analysis of the two papers described above; the indiscriminate and interchangeable use of “purpose”, “goals”, “tasks” and “aims” in regard to group existence and function is present in seminal and temporal studies. However, a small sample of examples serves to support the recognition of the problem:

- *“Teams are groups of people who carry out **a joint task.**” (Argyle, 1972, emphasis added)*

- “A team is a group in which the individuals have **a common aim.**” (Babington Smith and Farrell, 1979, *emphasis added*)
- “Teams are social entities composed of members with high task interdependency and **shared and valued common goals.**” (Dyer, 1984, *emphasis added*)

The importance of specific goals in group efficacy was established in literature with the development of Goal Setting Theory (GST) (Locke, 1968). The two key findings of this theory are that setting specific goals leads to higher performance than setting nonspecific goals, and that goal difficulty is linearly and positively related to performance. Goals have two characteristics: content, and intensity. Content refers to the chosen achievement. Intensity refers to the amount of effort and resource required to achieve the content. Locke’s work stimulated the Specific, Measurable, Assignable, Realistic, Time-bound (SMART) approach associated with goal-setting, developed by Doran (1981). The prevalence of the usage of SMART by practitioners is commonly stated as the standard for developing effective, measurable goals and objectives (Bowles *et al.*, 2007; Hessel, Cortese and de Croon, 2011; Hofman and Hofman, 2011).

The contribution of these two constructs is potentially significant in this section exploring group purpose. Locke’s GST paper highlighted the relationship between personal and group goals, and the commitment of individuals *and therefore* the group to achieve those goals. Of importance is the association that Locke established between personal motivation and group goal, specifically observing that financial or reward-based recognition did not necessarily align to high performance in all individuals, and that acknowledgement, praise and personal pride may have a higher impact (Locke, 1968). Locke did not seek to assess the alignment of goals to a higher-level purpose; indeed, the research analysed outcome-based criteria (instrumental task-performance) against defined and undefined goals to establish his theory. The strength of the correlations found in his work catalysed both practitioners and scholars to focus on the link between goals and performance - apparently at the cost of defining the importance and difference of “purpose”. The success of Doran’s SMART acronym made its adoption in practitioner environments irresistible, as highlighted in Bjerke and Renger's (2017) paper examining the over-reliance on SMART goal-setting and the potential issues this causes. This is not dissimilar to the over-use of Tuckman’s model of Small Group Development, which has also become so “main-stream” that its appropriateness or efficacy are relatively unchallenged. The combination of factors identified herein - lack of literature exploring “group purpose”, definitions of teams and groups across a broad spectrum of literature that have an interchangeable and assumed interpretation of “purpose”

and “goals”, and the proliferation of SMART objective-setting - all appear to have masked the importance of purpose as highlighted by Katzenbach and Smith in 1993.

Temporal Developments

Hackman (2002) addressed the importance of the concept of “shared purpose” in his examination of “co-acting groups” and “teams”. He posited that shared group outcome for which group members are accountable differentiates between the two constructs. Outcome interdependence (Campion, Medsker and Higgs, 1993; Mathieu *et al.*, 2008) is viewed as a necessary prerequisite for collective responsibility (Wageman, Hackman and Lehman, 2005). These four references establish links between shared purpose, individual group member accountability, shared group outcome, task interdependence requirements, and shared accountability. As can be seen from Hackman’s position, he asserts that these considerations are the differentiation between a “group” and a “team”. This could be summarised to understand that a “shared purpose” is one that involves “shared process”, “shared outcome” and “collective accountability” for both the process and the outcome. This is neatly captured by De Dreu (2007:628) “...under cooperative outcome interdependence, team members assume they sink or swim together and they benefit from each other’s performance.”

In their development of a Team Diagnostic Survey Instrument, Wageman *et al* (2005) define a team by three criteria; “Real teams have three features. First, they have clear boundaries that reliably distinguish members from non-members. Second, team members are interdependent for **some common purpose**, producing a potentially assessable outcome for which members bear collective responsibility. Finally, real teams have at least moderate stability of membership, which gives members time and opportunity to learn how to work together well.” (2005:377; emphasis added). As can be seen, even in this exceptionally rigorous contribution to literature and practice, the definition of purpose is assumed, and not differentiated from a goal or task. In addition, the term “common” has been used rather than “shared” with the *inference* of shared processes (“...collective responsibility”) and shared outcome (“...potentially assessable outcome...”). When this description is compared to that of Katzenbach and Smith (1993), the extent of the problem in literature becomes clear; Katzenbach and Smith define the difference between “purpose” and “goals”, but do not define “shared”. Wageman *et al* (2005) imply the definition of “common” (interchangeably accepted to also mean “shared”) but do not define “purpose”. Hackman *et al* (2002) establishes clarity regarding “shared” in respect of outcome and process, but do not provide clarity on “purpose” or “goals/tasks”.

Current Thinking

In their paper exploring the need for evolution in scholarly consideration of the concept and construct of “teams”, Wageman, Gardner and Mortensen (2012) argue that traditional definitions

of teams needs to change in the context of an increasingly connected, virtual, distributed and diverse world, enabled by new technologies and changing social structures. Their discussion paper unconsciously - but succinctly - highlights the pervasive problem regarding the use and understanding of “purpose” in group and team literature:

*“Teams scholars have some long-standing agreements about what they study - agreements that are now worth revisiting. The field’s long-held response to the deceptively simple question, “How do we define a team?” has changed very little since Alderfer’s early work (1977, 1980, 1987). Scholars traditionally define a team as a bounded and stable set of individuals interdependent for a **common purpose** (Alderfer, 1977; Cohen and Bailey, 1997; Hackman 1987; Offerman and Spiros, 2001; Sundstrom, De Meuse and Futrell, 1990). Thus, teams have two required elements: membership and a **collaborative task**. But is that still a helpful definition? Does it leave out something important? In this article, we first take up the requirement for stable and bounded membership. We then look at how interdependence toward a **common goal** is constructed...” (Wageman, Gardner and Mortensen, 2012:304–305; bold emphasis added).*

The interchangeable utilisation of “purpose”, “goal”, and “task” in this summary of the problem of team definition in literature exemplifies the core of the problem regarding “purpose”. In addition, these respected and highly published teams-scholars also unwittingly highlight the issue regarding the indiscriminate use of “common”, and “collaborative” (which I extend to include “shared” and “collective”) in regard to the existential definition of a team. Even some of the most prolific scholars in the field, discussing the very issue of the definition of teams, continue to fail to differentiate between shared processes, shared outcomes and shared accountability. However, taking a lateral perspective on “purpose”, in the context of organisational structure may bring hope of clarity.

Singelton (2014) provides an important contribution to this section of the literature and establishes both the cause of the indiscriminate and interchangeable use of “purpose”, “goals”, “tasks” and “aims” in organisational literature, and the gap in knowledge. Her study into the evolution of the theoretical construct of “purpose” identifies that in the early 20th Century the term was used in organisational research to reflect a deeper meaning for contributors and participants (Kern, 1919). However, with the focus on management and organisation theory in the mid 20th Century, scholars rejected the use of “purpose” in the definitions and direction of groups and teams, asserting that the term itself lacked specificity and created ambiguity, misinterpretation and inefficiency (Simon, 1946). The increasing focus on exogenously defined workflows within organisations, aimed at reducing wastage and inefficiency redefined “purpose” to mean “goal”, “task” or various other

instrumental-oriented descriptions, encouraging organisational scholars and leaders to focus on definable, measurable outcomes within groups and organisations (Barnard, 1938). The subsequent interchanged use of the term by scholars highlighted in this review is therefore understandable. However, the 21st Century is revealing an increasing need to revisit the importance of “purpose” (“meaning”) both from the perspective of organisational design (Wageman, Gardner and Mortensen, 2012) and social responsibility (Parmar *et al.*, 2010; Gartenberg, 2021).

In her paper exploring purpose-driven organisations, Gartenberg (2021) highlights the growing interest in “purpose” at a corporate level, and the associated exponential growth in dedicated business consulting practices in firms such as Boston Consulting Group and McKinsey³. Her examination of “purpose” at an organisational level highlights the increasingly important distinction between “outcome measures”, such as share price (goals) and “reason for being” relating to social contribution and meaning (purpose). In a world of increasing instability, where future corporate viability is being evaluated by more than economic performance, organisations of all types are revisiting the importance of purpose (Parmar *et al.*, 2010:21). Adler and Heckscher's (2018) suggestion of new organisational designs based around collaborative purpose supports the call for increasing clarity around distinguishing between “purpose” and “goals”. As they highlight, “*Shared purpose matters for direction as well as motivation*” (Adler and Heckscher, 2018:83).

The clarity of understanding of “purpose” as opposed to “goals” is perhaps easier to understand when considered at a corporate level, differentiating between economic performance and social meaning. Theorists in this sphere (Parmar *et al.*, 2010; Gartenberg, 2021) posit that the focus on measurable outcomes comes at the cost of corporate values and purpose, and therefore organisational conduct and market value has become based upon measurable goals. It is possible that this subliminal obsession has pervaded the way in which groups are formed and structured. The interchangeable use of the terms addressed in this section may be a result of a lack of understanding at most levels that there is a difference between “why” a group is formed (its purpose) as opposed to the outcomes that it needs to produce (its goals and tasks).

Summary and Discussion of Group Purpose literature

This section shows a clear gap in literature - both academic and popular - of the understanding of group purpose. Whilst some scholars have delineated between purpose and goals in relation to

³ Watchtell Memorandum, October 2020

their relevance in defining group endeavour (Parmar *et al.*, 2010; Adler and Heckscher, 2018; Gartenberg, 2021), the majority of definitions of teams and groups do not differentiate between the two, leaving assumptions of meaning and application (Alderfer, 1977, 1980; Kulik, Oldham and Hackman, 1987; Sundstrom, De Meuse and Futrell, 1990; Cohen and Bailey, 1997; Offermann and Spiros, 2001; Wageman, Gardner and Mortensen, 2012). Similarly, scholars have clarified the use of “shared” in the context of group processes, outcomes and accountability, but the majority of team and group definitions do not apply these important distinctions. These suggest gaps in literature and the understanding of what a group or a team is, or perhaps specifically what the definition needs to be in the 21st Century (Wageman, Gardner and Mortensen, 2012). As such a foundational assumption, it could be argued that lack of clarity of the differentiation of these terms has the potential to affect the interpretation of many aspects of group and team research. For example, a group formed on the basis of “purpose” may require different member profiles to a goal-oriented, outcome-based group. This author believes that this reflects the difference between “affective” (emotion-oriented), and “instrumental” (task-oriented) considerations. This in itself has impact on individuals; those who are extrinsically motivated towards goal-attainment will naturally engage more in a task-driven group. Individuals who are more intrinsically motivated may find group endeavour which is lacking in purpose to be unfulfilling and unappreciative of other skills and values. As cliched as this may seem, “purpose has a purpose”, and it would appear that goal-orientation associated with the last fifty years has masked it to such an extent that it has become lost from view.

3.7 Group Interdependence

Framing

A common theme found in all of the topics covered in this review is the importance of interdependence in groups and teams. In the groupthink literature the complexity of task is considered to contribute to group cohesiveness and subsequently to the propensity for the occurrence of groupthink (Schafer and Crichlow, 1996:50). Across the corpus of group cohesiveness literature, task complexity is considered as contributing to horizontal instrumental task cohesion between group members (Severt and Estrada, 2015:16–17). GSD literature highlights the nature of the task within groups in relation to the transitions of groups from initial stages of formation through to effective group functioning, relating to both task complexity, and roles and responsibilities of group members (Tuckman, 1965; Gersick, 1988; Sheard and Kakabadse, 2002; Ito and Brotheridge, 2008). GST theory relates task interdependence requirements to motivation, reward and compensation (Locke, 1968; Doran, 1981). Group and team definitions relate interdependence to the nature of shared processes, outcomes and collective responsibility in relation to group purpose and goals, and indeed to the distinction between groups and teams (Hackman and Morris, 1975; Katzenbach and Smith, 1993; Wageman, Hackman and Lehman, 2005). Considering the pervasion of “task interdependence” in all of these bodies of literature, as well as its implied relevance in “teamship”, this section examines the literature relating to task interdependence.

Seminal Contributions

Interdependence lies at the core of all organisations (Simon, 1946, 1947; Thompson, 1967; Galbraith, 1973, 1974, 1977; Van De Ven, Delbecq and Koenig, 1976; Wageman, 2001; Haußmann *et al.*, 2011; Burton and Obel, 2018). By their nature, organisations contain agents - individual workers, teams, or business units - that perform different parts of the overall work and are therefore bound to one another by interdependence (Wageman, 1995; Sheard and Kakabadse, 2002; Puranam and Raveendran, 2013; Raveendran, Silvestri and Gulati, 2020). Interdependence is a central concept in the research on organisation design (Barnard, 1938; Simon, 1946; Thompson, 1967), which studies the consequences of the division of labour and how to build effective organisational structures. Structuring the organisation around interdependencies facilitates the coordination of agents who have different tasks, goals, and knowledge (Wageman, 1995; Tesluk *et al.*, 1997; Marks, Mathieu and Zaccaro, 2001; Wageman, Hackman and Lehman, 2005; Mathieu *et al.*, 2008).

The formal study of organisation design is rooted in multiple theories and perspectives that range from the early exploration of organisations as social systems, (e.g., Barnard, 1938; Roethlisberger and Dickson, 1939) contexts for administrative behaviour (e.g., Gulick and Urwick, 1937; Simon, 1947) and providers of hierarchies (e.g., Taylor, 1913; Weber, 1946) to contingency and congruence theory (Burns and Stalker, 1961; Lawrence and Lorsch, 1967). A common factor in these seminal works is the presumption that task interdependence a) is exogenously determined by the nature of the work and by available technology, and b) must be managed.

Under these assumptions about work and technology, tasks were divided into a fixed number of interdependent subtasks that, when taken together, constituted the organisation's task structure. Managers then took sets of highly interdependent subtasks and grouped them to form jobs such that task interdependence was *higher within jobs* and *lower between jobs*. The strongest interdependencies would then be clustered together and allocated to a single agent (i.e., the job's occupant), who would resolve any coordination needs between them (Taylor, 1913; Thompson, 1967; Galbraith, 1977; Raveendran, Silvestri and Gulati, 2020).

Thompson (1967) proposed a unified theory to explain the variation in structure observed across different complex organisations. Specifically, he noted that differences in structure stemmed from variations in how an organisation's operations were set up to handle the uncertainty arising from its own interdependent components. Thompson suggested that interdependence could be characterised by pooled, sequential, or reciprocal interactions, which capture interdependencies of increasing complexity. The more complex the interdependence, the more costly the coordination mechanisms required, and the greater effort expended on communication and decision-making. In explaining the role interdependence plays in organisation design, Thompson defined interdependence between *workflows*, not between tasks. Figure 3.7.1 summarises Thompson's task interdependence theory.

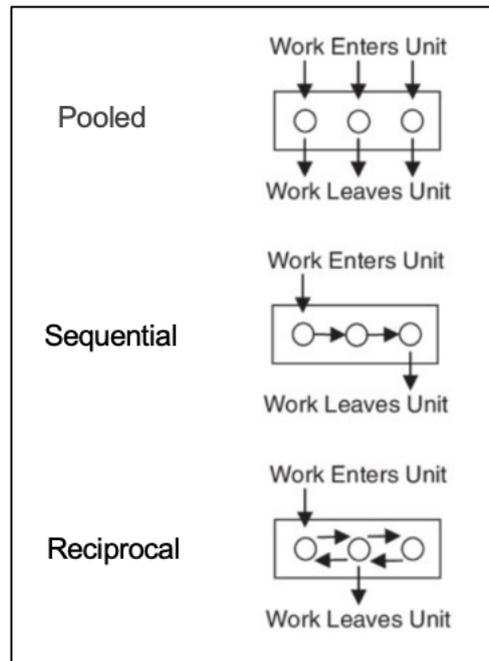


Figure 3.7.1 Thompson's Task Interdependence Workflows (Modified from source: Thompson 1967)

By conceptualising interdependence based on *workflow only*, Thompson had provided a *process-view* of task definition and attainment, ignoring the *resource requirements* that may need to be considered, specifically the agents performing the tasks. Mohr (1971) determined that Thompson's workflow-approach ignored the human-interactions implicit and necessary in the conduct of tasks, and posited interdependence should be defined as the extent to which work unit members have one-person jobs and the degree of collaboration required among unit members to produce or deliver the finished product or service of the unit. Thus, the fewer the one-person jobs and the greater the degree of task-related collaboration, the greater the interdependence. Pennings (1975) made the distinction between task (the flow of work between actors), role (the position of actors engaged in concerted action), social (mutual needs or goals of actors) and skill/knowledge (the differentiated expertise of actors) interdependence suggesting that "*Social interdependence appears to be the best predictor of organizational or group performance*" (p. 825). In this conceptualisation, Mohr's definition would align with "role interdependence". It can be seen therefore that Thompson's workflow approach was challenged strongly by the academic community not so much in regard to its framework, but by his assertion that interdependence was only workflow oriented.

Van De Ven, Delbecq and Koenig (1976), conducted a detailed study focussed on the coordination processes and propositions of Thompson (1967) at the work unit level of organisation analysis. Three alternative modes for coordinating work activities were presented (impersonal, personal and group). Their research examined the extent to which task uncertainty, task interdependence and

unit size predicted variations in the use of the three modes of coordination. Their findings supported the assertions of Mohr, Pennings and others, identifying that interdependence is operationalised in both workflow and resource contexts. Whilst their study supported Thompson's (1967) contribution of pooled, sequential and reciprocal interactions (albeit in more dimensions than just workflow), they also identified a fourth level of interdependence; "team-level" or "intense" interdependence. Extending beyond the reciprocal exchanges defined by Thomson, they posited that "team-level work-flow" interdependence occurs "...when work and activities come into a work unit and group members diagnose, problem-solve and collaborate as a group at the SAME TIME to deal with the work" (p. 335). Figure 3.7.2 shows the intensive/team-level interdependence workflow as designed and represented by Van De Ven *et al* (1976).

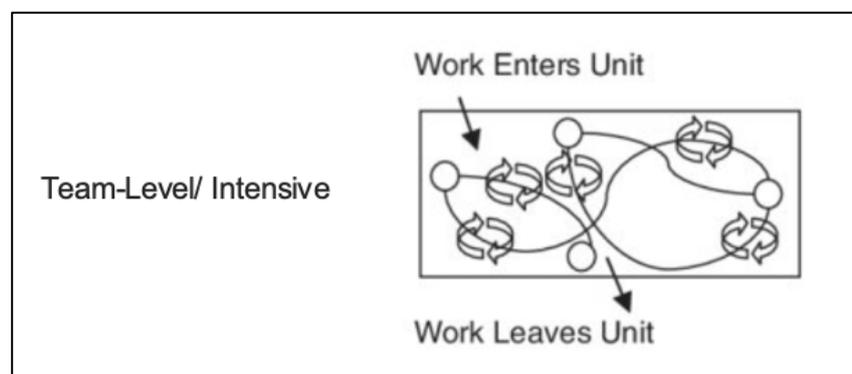


Figure 3.7.2 Intensive Interdependence: The fourth level (Source: Van De Ven *et al*, 1976)

Temporal Developments

Wageman (1995, 2001) addressed the issue of the diversity of interpretations of interdependence summarised above which prevailed for nearly twenty years. Reflecting from a practitioner perspective, she acknowledged the frustration for organisational managers in the lack of consistent operationalisation of task interdependence models, and the lack of clarity that resulted. Wageman's contribution to the understanding of interdependence is important and is therefore assessed in more detail herein.

Wageman (1995) initiated her review of interdependence with the assertion that the concept comprises two separate grouping types. The first is *structural* interdependence. This considers the process and workflow perspectives offered by Thompson (1967), Van De Ven *et al* (1976), and others (Mohr, 1971; Pennings, 1975). It refers to "...elements outside of the individual and [their] behaviour...that define a relationship between entities such that one affects (and is affected by) the other. These elements can include features of the work itself, how goals are defined, how rewards are distributed and so forth." (p.198). She then further separates structural interdependence into "task" and "output"

interdependence. Finally, she subdivides task interdependence into four further measurable elements - a) how the task is defined, b) the defined procedures for its execution, c) the technologies (or facilities) available to support it, and d) the resources (human, informational, material and communication) that are allocated. Output interdependence is also subdivided into four elements - a) shared consequences from collective performance, b) individually accrued consequences from group performance, c) goal interdependence, and d) reward interdependence (individual reward from only derived from group endeavour).

The second grouping is *behavioural* interdependence. This considers the *actual human actions* taken that support interdependence. Wageman (1995) separates these into 1) behaviours exhibited that support the structural frameworks established to fulfil the task, and 2) behaviours exhibited by individuals in support of each other and the task, irrespective of whether they comply with the structural frameworks. Figure 3.7.3 shows this author’s summarised representation of Wageman’s (2001) definition of the meaning of interdependence.

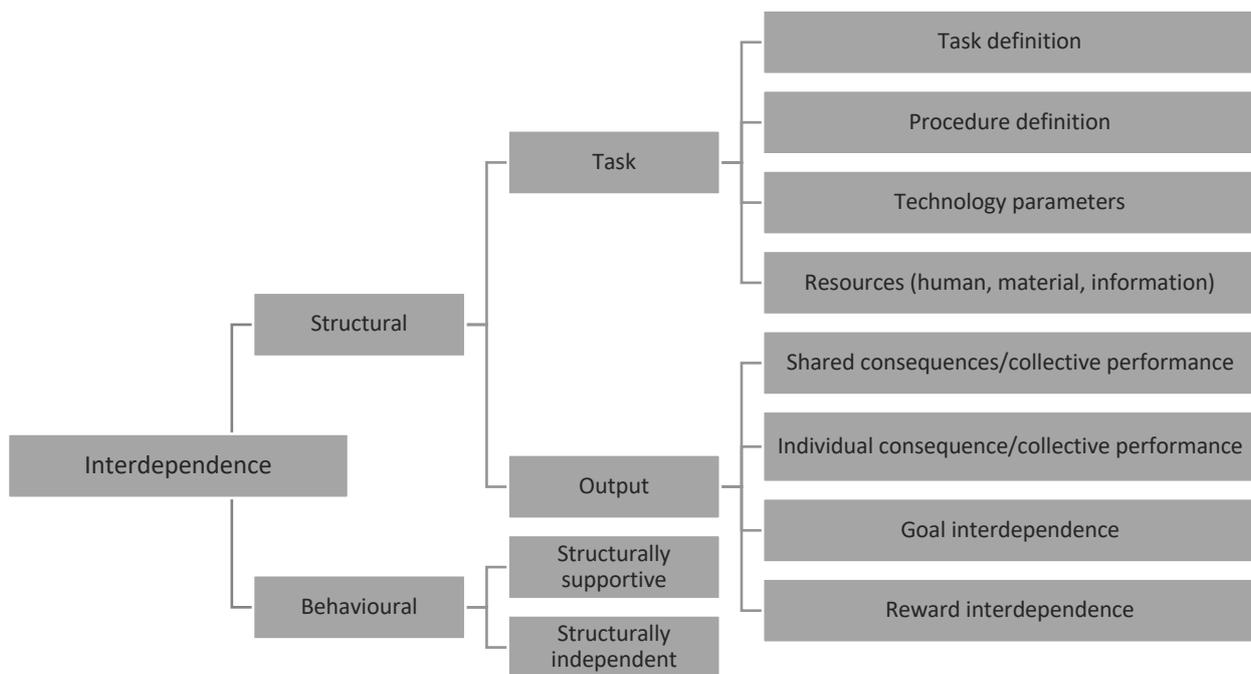


Figure 3.7.3 This Author’s interpreted representation of Wageman’s (2001) “Meaning of Interdependence”

Whilst providing clarity between the process-oriented determinations of interdependence and the human-oriented elements, as well as differentiating between process and outcomes, Wageman still refers to Thompson’s (1967) conceptualisation of “pooled”, “sequential” and “reciprocal” workflows (p.201). Her work could be considered to provide a framework of definition *within* each of Thompson’s 1967 (or Van Den Ven *et al*’s 1975) classifications of types of task. This author remains unconvinced that Wageman’s efforts offered an alternative view, rather that her

diligence provided depth, understanding and richness to the four posited types of task interdependence already defined.

However, notwithstanding Wageman's (2001) study, the field of task interdependence continues to attract the focus of scholars, central as it is to organisational and team design and performance. Table 3.7.4 provides a summarised synthesis of twelve studies ranging from 1949 to 2010. The analysis provides definition of whether the study was theoretical or empirical in nature, the research design, the form of interdependence ("Social" indicating agent-oriented, "Administrative" indicated process-bias), the operationalisation of the form ("task" indicating exogenous pre-determination of workflow, technology, resources or outcome; "behavioural" indicating endogenous agent interdependence), and finally this author's summarised observations.

The pattern of development of knowledge in regard to interdependence can therefore be seen to be largely based on the workflow-based model proposed by Thompson (1967). Whilst more recent studies have considered social interdependence more deeply (Mohr, 1971; Van De Ven, Delbecq and Koenig, 1976; Victor and Blackburn, 1987; Wageman, 1995, 2001; Baer *et al.*, 2010), the framework that most of these studies is based on remains Thompson's from 1967. Table 3.7.4 is included to provide a view as to the temporal development and focus of studies, highlighting the argument above.

Table 3.7.4 Summary of sample of group interdependence studies 1949 - 2010

Author(s)	Theoretical/ Empirical	Design	Form of interdependence	Operationalisation	Comments
(Deutsch, 1949)	Empirical	Experiment - 50 participants	Social	Task-Personal and Group	No procedures or workflows tested. Findings showed increase task uncertainty and complexity requires increased social interdependence. Also, that emergent friendliness positively correlated to task attainment in complex tasks.
(Thompson, 1967)	Theoretical	N/A	Administrative	Task-Workflow Task-Technology	3 types of interdependence - Pooled, Sequential and Reciprocal - based on inter-organisational unit workflows.
(Mohr, 1971)	Empirical	Survey - 115 groups	Social	Task-Personal	Simplistic evaluation of interdependency based on two survey questions only. Found that “pooled” tasks require little interpersonal collaboration and complex tasks required interdependence.
(Pennings, 1975)	Empirical	Survey	Administrative and Social	Task-Workflow Task- Role Task- Social Task-Skill	Sample selection limits generalisability. Utilises Thompson’s model to posit multiple modes of interdependence. Finds little correlation between modes, but data supports “Social” as the strongest mode.

(Van De Ven, Delbecq and Koenig, 1976)	Empirical	Survey - 1177 participants	Administrative and Social	Task-Workflow Task-Personal and Group	Added “Team” (or “Intensive”) to Thompson’s model as a type of interdependence. As task uncertainty and complexity increase, social interdependence as a co-ordinating mechanism increases.
(Victor and Blackburn, 1987)	Theoretical	N/A	Social	Task-Resource Task-Workflow	Utilise Interdependence Theory (Thibaut and Kelley, 1959) and Social Exchange Theory (Kelly and Thibaut, 1978) to propose a resource-exchange and social-needs view of interdependence between work units. Restricted by dyadic perspective of interdependence and lack of empirical support.
(Astley and Zajac, 1991)	Theoretical	N/A	Administrative	Political Mechanistic	Examine power and interdependency in organisational design and function. Propose that organisational design is loosely coupled, where work units seek minimal interdependence, or tightly coupled, where detailed process design determines interdependency between work units. Unit members are not considered and therefore no social interdependence.
(Wageman, 1995)	Empirical	Survey - 800 participants, 150 work units	Administrative and Social	Structural Behavioural	Examination of differential effects of task design and reward system design on group functioning; the effectiveness of "hybrid" groups, in which groups' tasks and/or rewards have both individual and group elements; and how individuals' preferences for autonomy moderate their responses to interdependence at work. Tasks influenced variables related to cooperation, while outcomes influenced variables related to effort. Individuals'

					<p>autonomy preferences did not moderate the effects of task and reward interdependence but, instead, were themselves influenced by the amount of interdependence in the work. The findings add to the task-type models from Thompson rather than offering an alternative visualisation. Uniquely, Wageman's study implicitly considers the <i>motivation</i> of the individual to the type of task, and the subsequent impact on voluntary collaboration (or commitment to interdependence). This could also be considered to be a direct indication of type and strength of group cohesiveness, determined by group purpose and individual motivation.</p>
(Adler, 1995)	Empirical	Inductive case study. 119 participants; semi-structured interviews.	Administrative	Task-Workflow Task-Technology	<p>Utilises Van de Ven <i>et al's</i> (1975) framework to explain alternate approaches to new product innovation and design approaches, and subsequent manufacturing methods. The rigour of the research, uniqueness of findings and contribution to practice and theory support both Adler's work <i>and</i> the conceptualisations of interdependence posited by Thompson and others.</p>
(Wageman, 2001)	Theoretical	N/A	Administrative and Social	Structural Behavioural	<p>A compelling addition to literature and practice. When considered in harmony with Thompson (1967) and Van de Ven <i>et al</i> (1976) the theoretical contribution adds clarity and both concept and construct for future research and practical application. Reinforces her 1995 findings and the implications noted above.</p>

(Baer <i>et al.</i> , 2010)	Empirical	Experiment - 280 participants	Social	Task-personal	Utilised Deutsch's (1949) theory of social interdependence to examine differing views on the benefits or limitations of cooperation and competition in innovation in groups. They tested fixed and variable group membership structures and the effect of inter-group competition on innovation. Their findings suggest that group instability stifles innovation with the pressure of external competition. Whilst not stated, this implies that knowledge-sharing, trust and tacit understanding are inhibited by instability in group membership, thus implying that affective group cohesiveness is important in the efficacy of groups operating in isolation and with external pressures. This has implications for understanding of groupthink and "teamship", albeit these assertions are offered only by this author.
(Sherman and Keller, 2010)	Empirical	Survey. 295 participants in 20 groups	Administrative	Task - Workflow Task - Technology	An examination of the effects of perception and coordination of group members on efficacy of intergroup collaboration and interdependency. The study specifically utilises Thompson's (1967) model. Findings support a) the interdependence modes suggested by Thompson and highlights the issue of perception and misinterpretation of motive in interdependent groups. Whilst not stated, this study tacitly suggests that as task uncertainty increases, member anxiety and need for collaboration also increases, but does not necessarily happen.

The examination of the development of literature reveals that there is broad support for the conceptualisation of Thompson's (1967) model, and that it has been both enhanced and supported by subsequent studies (Mohr, 1971; Pennings, 1975; Van De Ven, Delbecq and Koenig, 1976; Victor and Blackburn, 1987). His initial failure to discriminate between process interdependence and outcome interdependence is addressed by several empirical and scholarly studies (Pennings, 1975; Van De Ven, Delbecq and Koenig, 1976; Wageman, 1995, 2001) which bring additional value to Thompson's original theory by leveraging his framework of "pooled", "sequential" and "reciprocal" interdependence and considering not just workflows, but social interdependence within that recognised structure. The lack of consideration of the human (or social) aspects of interdependence is of concern and is highlighted both in the seminal work of Deutsch (1949) and the detailed empirical work of Wageman (1995, 2001). Studies included in this review also provide examples of the application and testing of the seminal model in a range of scenarios, each adding further insight and knowledge, but consistently supportive of the original conceptual framework of "pooled", "sequential" and "reciprocal" interdependence. These studies highlight the importance of workflow, resource, communication, knowledge sharing, technology, context and competition on the efficacy of interdependence. Astley and Zajac (1991) identify the concepts of tight coupling in organisational design, where process and procedure are mechanistically implemented and therefore encouraging of pooled and sequential interdependence, and loosely coupled organisation designs, where innovation and collaboration are key, and therefore reciprocal interdependence is paramount.

Perhaps the most perceptive contributions in the temporal development of task interdependency are those made by Wageman (1995, 2001). Her comprehensive empirical studies explicitly identified the notions of "structure" and "behaviour" in organisational interdependence. She usefully guides the reader to differentiate between process-related interdependence and outcome-related interdependence, as well as the between tasks and goals. In addition, she separates the human needs and behaviours of agents from the procedural considerations associated with structure. Whilst not explicit, when these notions are applied to tasks defined by Thompson's (1967) framework, there is the potential for considerable academic and practitioner insight, which appears to have been largely left unexplored in latter research.

Current Thinking

Reflecting on future directions for team research Wageman, Gardner and Mortensen (2012) discuss the changing nature of the understanding of what a team is in modern society, where groups form both purposively and spontaneously to perform an agreed task. They highlight the

impacts of both communications and information technology, and globalisation as the key drivers for this change. Their perspectives on the changing nature of group collaboration challenges the accepted definitions of “team”, highlighting the fluidity of group membership, shared outcomes, collective endeavour and co-location (Wageman, Hackman and Lehman, 2005; Wageman, Gardner and Mortensen, 2012). Exploring the implications of these changes in regard to interdependence, their reflections highlight the classical view of interdependence within groups as being based on the *structural* interdependence posited in Wageman’s previous studies (1995, 2001). As groups become increasingly dispersed, dynamic and self-managing, organisations need to adapt to the reality that processes and procedures (“structures”) are less definable *a ante* and that greater empowerment is required to allow groups to define how they will collaborate to fulfil their purpose or task (Cummings and Haas, 2012; Raveendran, Silvestri and Gulati, 2020). This requires a shift to *behavioural* interdependence within group function (Wageman, Gardner and Mortensen, 2012; Cordery and Tian, 2017). The implication of this is that the exogenous workflow definitions dominant in organisational design and management for most of the 20th Century - manifest in the administrative task-workflow models created by Thompson (1967) and others - are likely to need reconsidering (Hackman, 2012). As posited by Hackman (2012), the expectation that pre-determination of pooled, sequential and reciprocal workflows will be applicable in every organisation setting is unlikely to be appropriate. The “intense” (or “team”) mode of interdependence offered by Van de Ven *et al* (1975) may be more relevant, but there needs to a conscious acknowledgement and shift away from structural, work-flow based designs and expectations, and towards understanding and enabling behavioural interdependence (Wageman, Gardner and Mortensen, 2012:307).

Puranam and Raveendran (2013) offer implicit support to the reflections from Wageman *et al* (2012). In their paper they assert that, “...*interdependence between tasks need not imply interdependence between the agents performing these tasks; and interdependence between agents in turn does not imply a need for information processing between them.*” (2013:5). They reconceptualise interdependence based on knowledge-sharing requirements between agents, as opposed to work-flow requirements of the interdependent work-units. By measuring interdependence at a *task* level - rather than a *group* level implicit in all administrative conceptualisations - they release themselves from the constraints of group interdependence, and instead consider the knowledge requirements to meet the purpose or task.

*“...two tasks are interdependent **when the value generated from performing each is different when the other task is performed versus when it is not.** The tasks are independent if the value to performing each is the same whether the other task is performed or not. As a consequence, the combined*

value created when independent tasks are performed is the same as the sum of the values created by performing each task alone (e.g., pooled interdependence in Thompson, 1967, where each task makes a discrete contribution to the whole).” (Puranam and Raveendran.:8; original emphasis).

Their conceptualisation of interdependence as an agent-level epistemic construct helps to address the challenge offered by Wageman *et al* (2012) about the need reconsider the construction of interdependence in light of the need for endogenous work planning and dynamic and dislocated tasks, resources and agents.

Raveendran, Silvestri and Gulati (2020) develop the notion of knowledge and agent interdependence further, highlighting the nature of change in the modern world often means that organisational design cannot keep pace with output requirements, nor indeed the profound fluidity of global change in multiple dimensions. Their identification of three knowledge-based forms of interdependence (knowledge-interdependence, role-interdependence and epistemic-interdependence) is of potentially significant value considering the challenges facing society at the time of this writing.

Summary and Discussion of Group Interdependence literature

Thompson’s (1967) conceptualisation of group and task interdependence has provided the foundation for organisational and work design for nearly sixty years (Mathieu *et al.*, 2008; Hackman, 2012; Wageman, Gardner and Mortensen, 2012; Puranam and Raveendran, 2013). It is particularly well-suited to traditional organisational planning models which allow for pre-determination of task workflows (Sundstrom, De Meuse and Futrell, 1990; Hackman, 2002). Much organisational design over this period has sought to optimise the work that can be completed *within* a work-unit and to limit the inter-group interdependence, thus limiting the risk of inter-group failures (Alderfer, 1980; Hackman, 2002). This is consistent with the “pooled” form of interdependence (Thompson, 1967; Van De Ven, Delbecq and Koenig, 1976). However, where either skills, resource or efficiency have been deemed to require the creation of separate work-units, sequential and reciprocal workflows (and therefore interdependence) have been defined and operationalised in organisations. This approach to organisational design is well-established and has served organisations well for much of the 20th Century, incorporating both structural and behavioural considerations within the work-flow orientation of the model (Wageman, 1995; Tesluk and Mathieu, 1999; Hackman, 2012; Wageman, Gardner and Mortensen, 2012).

However, working structures in the 21st Century are demanding change in many - but not all - areas of organisation design. Profound advances in communications and information technologies

are generating new opportunities and requirements in regard to task-fulfilment (Mathieu *et al.*, 2008; Hackman, 2012; Wageman, Gardner and Mortensen, 2012; Puranam and Raveendran, 2013; Raveendran, Silvestri and Gulati, 2020). The ability to pre-design workflows and resources that are temporally “fit-for-purpose” requires certainty about many aspects of the elements contributing to the task. Modern society is simply removing that certainty, creating micro-challenges for planners in organisational design (Hackman, 2012; Raveendran, Silvestri and Gulati, 2020). Whilst not yet available in published literature, the real-world examples of the extent of these issues have been demonstrated on a global scale in 2020 and 2021 in regard to the lockdown and work-from-home requirements imposed by governments and corporations in response to the COVID-19 pandemic.

Calls for changes in thinking and conceptualisations of tasks are being answered by scholars, highlighting the importance of agent-based knowledge interdependence (Hackman, 2012; Cordery and Tian, 2017; Raveendran, Silvestri and Gulati, 2020). This author would suggest that this thinking should be extended further, positing that it is necessary to consider *purpose* for groups, allowing agents to define the *tasks* and *goals* necessary to fulfil the purpose, leveraging knowledge and technology, and allowing interdependence to emerge endogenously. This is consistent with Hackman’s (2012) assertion that societal and technology change requires groups of the future should be formed with six critical conditions in mind; two of which are 1) a compelling purpose, and 2) the “right people” who both can and will work collaboratively together.

3.8 Self-Motivation

Framing

The phenomenon that catalysed this study is the concept of “teamship”. Examination of “teamship” literature revealed a dearth of reliable research, but a pattern of interpretations that suggested that it is an individual-level construct, describing behaviours of group members that are supportive of the team’s norms (values, culture, purpose, goals and expected behaviours) (Townsend and Gebhardt, 2003; Akindayomi, 2015; Lees, 2015, 2018a; Morgan, Fletcher and Sarkar, 2015). This is consistent with the popular colloquial use of the term. The gaps in the “teamship” literature led iteratively to reviews of various group-level topics as described in this chapter and the identification of a variety of methodological and theoretical problems as detailed. Considering that this study is seeking to understand *how the individual* behaves in certain ways in response to the group entity, it is important to examine *why* a person engages - or not - with a group and its purpose, goals and tasks. This requires an examination of literature associated with motivation in sports.

Motivation has been repeatedly reported as a key element of athletes’ success in sports (Gould, Dieffenbach and Moffett, 2002). Participation in competitive sport is generally a voluntary decision made by the individual. Understanding the self-motivating factors that inspire the individual to choose a certain sport, and to commit to the sacrifices and effort required to compete - as well as the choice to partake in either team or individual endeavour - is the ambition for researcher’s examining this area of psychology (Deci and Ryan, 1985; Vallerand and Thill, 1993). Thus, it is not surprising that much research has been conducted on motivation in sport and physical activity. Intrinsic motivation (doing something for its own sake) and extrinsic motivation (doing something as a means to an end and not for its own sake), in particular, have been very popular topics and have allowed researchers to make sense of several phenomena of importance in sport and physical activity (Vallerand, Deci and Ryan, 1987; Vallerand and Rousseau, 2001).

Two well-known theories of motivation in sports are Achievement Goal Theory (AGT) (Nicholls, 1989) and Self-Determination Theory (SDT) (Deci and Ryan, 1985; Ryan and Deci, 2000). These theories have extensive applications in sport and exercise and have influenced understanding of motivated behaviour and related cognitive, affective and behavioural outcomes (Vallerand and Losier, 1999). AGT postulates that, in the achievement setting of sport, two goal orientations are evident: Task and ego. These goal orientations are linked to two different conceptions of ability. The first is the undifferentiated conception of ability, evident in most individuals below the age of about 12 years, whereby effort, luck and task difficulty cannot (or can only partially) be

distinguished from ability as causes of outcomes (Nicholls, 1989). The second conception of ability, the differentiated conception, is observed after the age of about 12 years, when, through various cognitive stages, effort, luck and task difficulty are differentiated as causes of outcomes. Nicholls (1989) AGT therefore implies that once an individual reaches an age of conscious awareness of the relationship between outcome and factors - such as effort - they will begin to make decisions about what energy and sacrifices they are prepared to make in order to participate and succeed in a sporting endeavour. Nicholls suggests that these decisions will be made based upon the need of the individual to satisfy their task-oriented focus, or their ego-driven needs.

SDT (Deci and Ryan, 1985) takes a position that human actions are taken to satisfy either intrinsic or extrinsic motivating factors. In comparison to Nicholls (1989) AGT is focused on only the extrinsic motivating factors suggested by Deci and Ryan (Vallerand, 2012). AGT and SDT do share certain characteristics. Both are social cognitive theories of motivation which emphasise that the way individuals construe the meaning of an activity will influence the quality of their engagement in it. However, as Butler (1989) and Ryan and Deci (1989) argued, each theory focuses on a different body of meaning and perceptions that should be viewed as complementary rather than contradictory. Specifically, AGT examines how perceptions of task- and ego-promoting climates, created by significant others (e.g., parents, teachers, coaches), interact with dispositional goals to influence cognition, effort and behaviour in achievement contexts. In contrast, self-determination theory examines how social factors - that is, human and non-human factors in social environments (Vallerand, 1997) - impact on human motivation through the mediating variables of competence, autonomy and relatedness.

This author's study seeks specifically to explore both the extrinsic *and* intrinsic factors that motivate an individual's behaviour *within a team setting*. This requires that the approach to evaluation of motivation examines both sport *and* group-membership factors that satisfy the psychological needs of the individual. The author has determined that AGT would not fulfil the study requirements, and therefore this study will employ an SDT approach to examining self-motivation in individual participants.

Seminal Contribution

Vallerand and Thill (1993) defined the concept of motivation as "*the hypothetical construct used to describe the internal and/or external forces that produce the initiation, direction, intensity and persistence of behaviour...*" (p.18; translated from French, emphasis added). Early research into human motivation focused on the reactions and behaviours of people to external stimuli such as danger, thirst and hunger, citing human action to be the result of external environments. However, during

the latter part of the 20th Century, psychologists increasingly ascribed to the view summarised by Vallerand and Thill, that human behaviour is driven and explained by the reactions to external factors, and internal drivers which fulfil emotional needs (“Attribution Theory”, Weiner, 1972). Recognised concepts of intrinsic motivation were becoming established in the 1950s and 1960s positing the innate needs of competence (White, 1959), autonomy (De Charms, 1968) and relatedness (Harlow, 1958) in human existence. The research of these - and other - scholars led to the development of the organismic approach to understanding human motivation, where it is proposed that individuals are proactive in their interactions with their environment because *“people are inherently motivated to feel connected with others within a social milieu [relatedness], to function effectively in that milieu [competence], and to feel a sense of personal initiative while doing so [autonomy]”* (Deci and Ryan, 1994:7).

The work of these early “need” theorists has been pursued extensively in the development of SDT (Deci and Ryan, 1985; Ryan and Deci, 2000, 2018). They posit that competence, autonomy, and relatedness are universally essential for optimal human development, motivation, and integrity. SDT asserts that the fulfilment of these three intrinsic needs supports the function of positive mental health, and that conversely, long-term failure to fulfil these motivational needs undermines psychological wellness. Research supports this crucial hypothesis with students (Reis *et al.*, 2000), athletes (Gagné, Ryan and Bargmann, 2003) and in different cultures (Sheldon *et al.*, 2001). It can be seen that intrinsic needs clearly matter with respect to people’s well-being and motivation (Ryan and Deci, 2000; Stenling, Lindwall and Hassmén, 2015; Stenling *et al.*, 2017; Sheehan, Herring and Campbell, 2018). However, “needs” matter for at least two other reasons. First, from a motivational perspective, “needs” represent the energy underlying people’s behaviour as described in Basic Psychological Need Theory (BPNT) (Ryan and Deci, 2018). That is, people engage in certain activities in order to satisfy their needs. To the extent that their needs are satisfied, people will be motivated to engage in such activities out of their own choosing without any prodding or reward (self-determined motivation) (Van den Broeck *et al.*, 2016; Ryan and Deci, 2018; Vansteenkiste, Ryan and Soenens, 2020). A second reason “needs” are important is because they represent the process through which changes in motivation take place as theorised in Organismic Integration Theory (OIT) (Ryan and Deci, 2000) and Goal Content Theory (GCT) (Ryan and Deci, 2000, 2018). The fulfilment of our psychological needs is important because it orients us toward certain types of behaviours and activities in the hope that they will fulfil our needs (Vallerand, 2012; Gunnell *et al.*, 2014; Vansteenkiste, Ryan and Soenens, 2020).

Self-Determination Theory

Deci and Ryan (1985) propose an integrated taxonomy of self-motivation, comprising three primary motivation groupings: Intrinsic, extrinsic and amotivation. Intrinsic motivation refers to performing an activity for itself and the pleasure and satisfaction derived from participation (Deci, 1971). Consistent with the formative studies in this field, within the intrinsic grouping Deci and Ryan posited three needs: Relatedness, autonomy and competence. Extrinsic motivation refers to performing an activity to satisfy a non-volitional influence compelling the individual to act, and therefore the individual is no longer acting autonomously, but is controlled by that influence (which can be external or internal to the individual) (Gunnell *et al.*, 2014). Deci and Ryan (1985) posit four types of extrinsic motivations: External, introjected, identified and integrated. Finally, amotivation describes a lack of intentionality or motivation, manifest as passivity, ineffectiveness or purposeless.

i) Intrinsic Regulation

Competence describes the intrinsic need to experience feelings of efficacy from one's capabilities, actions, knowledge and skills (Ryan and Deci, 2018). White (1959) suggested that the development of competencies - from walking, through to manipulating symbols and words, or handling objects dextrously - requires learning, which requires motivation. The innate need for competence provides the energy and motivation for the process of learning. The link between competence and the definition of "self" (also relating to self-esteem) is core to Deci and Ryan's (2018) interpretation and application of competence in self-determination. In summary therefore, intrinsic-competence relates to the individual's innate desire to improve their competencies in any given area simply for the satisfaction and pleasure of doing so.

Autonomy can be understood as both a phenomenological and a functional need. Phenomenally, autonomy concerns the extent to which people experience their behaviour as volitional or as fully self-endorsed, rather than being coerced or compelled (Vallerand, Deci and Ryan, 1987). In this sense, autonomy can be conceptualised as a state when an individual takes actions entirely of their own accord as congruent expressions of themselves (Ryan and Deci, 2018). Functionally, autonomy concerns the willing cognisance of the individual to access and apply their cognitive, affective and physical capacities and competencies towards a given situation (Sheehan, Herring and Campbell, 2018).

Relatedness is the need to have a feeling of belonging and of being significant or mattering in the eyes of others (Ryan and Deci, 2018). Associated feelings include being responded to, respected, important to others. Reis *et al.* (2000) expand on this, highlighting the need of individuals to have

social interactions that are sensitive, caring and kind, conveying that one is appreciated and significant. The need for acceptance and belonging has significant implications to group dynamics, as individuals often behave in ways that bring them inclusion and status - and therefore protection - within group environments. This in turn relates to social identity (Tajfel, 1974; Glassner and Tajfel, 1985; Hogg and Abrams, 2006) and the development and endorsement of culture, social rituals, dress codes and uniforms and adoption of group norms. It can be understood that that the intrinsic need for relatedness can conflict with autonomy, where group pressures exert extrinsic influence that the individual may accept to fulfil their intrinsic-relatedness need (Kluwer *et al.*, 2019).

ii) Extrinsic Regulation

Extrinsic motivation refers to engaging in an activity as a means to an end and not for its own sake.

External regulation refers to behaviour that is regulated through external means, such as rewards and constraints (Vallerand and Losier, 1999; Ryan and Deci, 2018). For instance, an athlete might say, “I want to win this competition so that I can enhance my earnings potential”, or “I’m going to make sure I train today so that I can be selected for the match-team.”

Introjected regulation occurs when the person is motivated to take an action not through the acquisition of rewards or the avoidance of constraints (“external”), but by internal emotions such as guilt, duty, obligation, shame, contingent self-esteem, fear of disapproval or rejection, recognition, self-aggrandisement, and ego enhancement (Ryan and Deci, 2018).

Identified regulation occurs when the individual recognises the value of an action or behaviour in the context of what benefits it may bring to them, but where such extrinsic factor is neither a reward nor an introjected sentiment (Stenling *et al.*, 2017; Ryan and Deci, 2018). An example would be an individual who undertakes a regime of fitness training in order to look slimmer for their summer holiday.

Integrated regulation is the most self-determined of the extrinsic motivation regulators, and appears to be very similar to intrinsic regulators, particularly competence and autonomy. However, it differs because the driver is still external to the individual. Integrated regulation occurs when the individual’s actions are taken of their own volition but because the action itself is congruent with the individual’s values or beliefs (Vallerand, Deci and Ryan, 1987; Ryan and Deci, 2000, 2018; Stenling, Lindwall and Hassmén, 2015; Stenling *et al.*, 2017). For example, replacing a hydrocarbon vehicle with an electric one not because of status, recognition, guilt, obligation or financial benefit, but because the individual believes in the need to protect the environment and that by changing

their car, they can contribute to something that they value and believe in. Figure 3.8.1 provides a summarised representation of Ryan and Deci’s SDT.

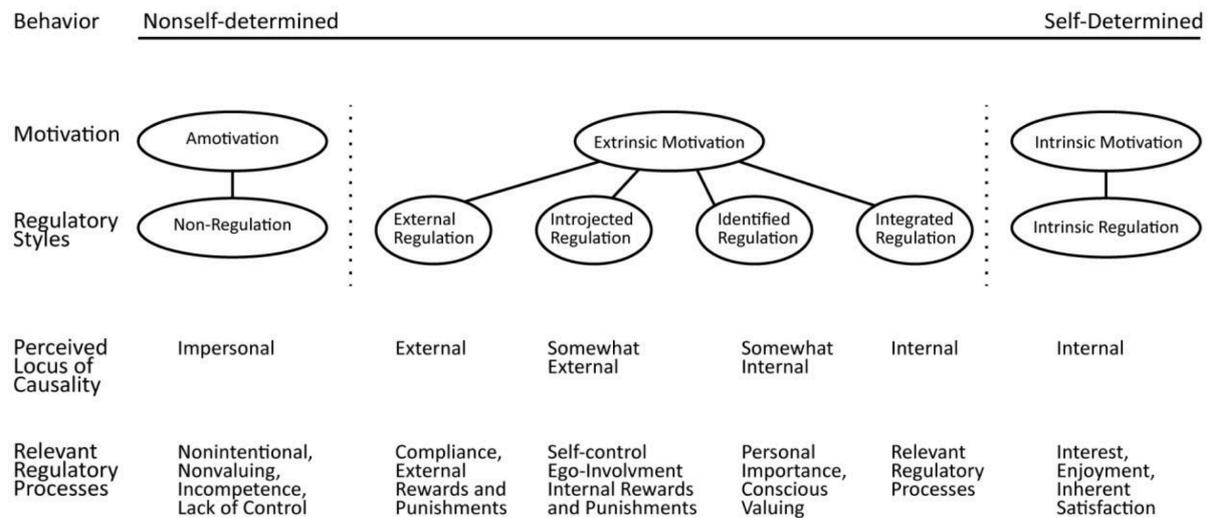


Figure 3.8.1 A taxonomy: Self-Determination Theory (Modified from source: Ryan and Deci, 2000)

Discussion and Summary of Self-Motivation literature

SDT offers a widely recognised and utilised approach to understanding how human behaviours and actions are linked to an individual’s needs and wants (Vallerand, Deci and Ryan, 1987; Vallerand and Thill, 1993; Vallerand and Losier, 1999; Vallerand, 2012; Stenling, Lindwall and Hassmén, 2015; Ryan and Deci, 2018). The distinction between extrinsic factors that regulate and influence the behaviours of individuals, and the intrinsic factors which satisfy psychological needs and wellness is of great importance (Gunnell *et al.*, 2014; Vansteenkiste, Ryan and Soenens, 2020). The previous sections in this literature review highlight the tendency in much of the literature and studies associated with groups for focus on process, efficacy and outcome. The concentration on goal and task-achievement, and on the structures and processes that support this is overwhelming (Hackman, 2012; Wageman, Gardner and Mortensen, 2012). By using SDT as a lens, it can be seen that this orientation in group and team research *and* practice is addressing extrinsic motivation for the participants - particularly external and introjected regulation (Ryan and Deci, 2018; Vansteenkiste, Ryan and Soenens, 2020). It does not take a great deal of expertise to understand that such focus naturally means that the intrinsic needs of individuals is largely ignored in this context. It is this author’s view that, - considering the importance of work in most people’s lives - it is worrying that the psychologically nourishing intrinsic needs of human beings are not being satisfied in working environments. A focus on “tasks” and “goals” as opposed to “purpose” means simply that we do not encourage people to associate meaning to their work, only outcome.

Without meaning, it is challenging to understand how people can link their work obligations to their needs for competence, autonomy and relatedness (Ryan and Deci, 2018; Neufeld, Mossière and Malin, 2020) .

This study is aiming to understand why individuals in a group might be willing to “go the extra mile” in supporting a group’s identity, values, culture and rules. This “values-based” approach to understanding an individual’s needs and behaviours sits at the heart of SDT’s intrinsic motivational foundations, and therefore provides a highly appropriate tool and approach to evaluating participant behaviour in the fieldwork.

3.9 Literature review summary – the gaps in knowledge

This review has examined six topics relating to groups and teams, and one topic specifically relating to individuals. The gaps identified in the literature are summarised below:

3.9.1 Teamship

The review confirmed the findings of previous literature reviews (Lees, 2015, 2018b) that this concept does not yet appear to have been subject to any scholarly analysis or definition. The theoretical assertion from Townsend (Townsend, 2002; Townsend and Gebhardt, 2003) is that “teamship” describes a transitional state of behaviour of individuals between leadership and followership roles. The theory has no empirical basis nor reference or foundation in literature and current knowledge. The colloquial uses of the term (Greenwood, 2004; Woodward, 2004, 2019; Fisher, 2007; Kiessling, Harvey and Moeller, 2009) indicate that the term refers to team member behaviours that support a group’s values and norms, but this is implied rather than explicit. The term has been used in other published academic studies (Duff, 1994; Parris and Vickers, 2005; Smith, 2006; Morgan, Fletcher and Sarkar, 2015) with an assumed meaning which is contextually inconsistent. Assessment of the contexts in which the term has been used indicate antecedent conditions which are similar to those defined in groupthink (Janis, 1972, 1983).

This review therefore finds that a clear gap exists in the definition and understanding of teamship.

3.9.2 Groupthink

Groupthink (Janis, 1972, 1983) is posited as an emergent state in groups which - with the presence of specific antecedent conditions - manifests in definable and observable symptoms and results in often catastrophic decision-making within the group. The theory has been debated and studied extensively over the last fifty years (Manz and Sims, 1982; Esser and Lindoerfer, 1989; Park, 1990, 2000; Schafer and Crichlow, 1996; Esser, 1998; Moorhead, Neck and West, 1998; Hermann and Rammel, 2010; Burnette, Pollack and Forsyth, 2011; Rose, 2011; R. R. Sims and Sauser, 2013; Breitsohl, Wilcox-Jones and Harris, 2015) with a range of research designs, including laboratory experiments, historical case analysis and theoretical conceptualisation. A consistent problem for researchers has been trying to accommodate the number of variables defined in groupthink theory and designing and reliably measuring those variables (Esser, 1998; Rose, 2011). Case analyses rely on historical secondary data, which is inconsistent in its capture of the range of variables, and subject to significant interpretation of sentiment and motivation of participants (Esser and Lindoerfer, 1989; Burnette, Pollack and Forsyth, 2011; Mejri and De Wolf, 2013). This has

resulted in an ongoing debate into the usefulness and reliability of the construct from a scholarly perspective (Hart, 1998; Mohamed and Weibe, 1996). A primary antecedent in Janis' (1972) formulation of groupthink was the presence of group cohesion. However, studies have failed to consistently identify its contribution to groupthink (Flowers, 1977; Courtright, 1978; Park, 1990, 2000). Analysis of the research designs suggests that the construct of group cohesiveness was inappropriately defined in many of these studies, bringing into question the efficacy of the findings (Fodor and Smith, 1982; Leana, 1985; Moorhead and Montanari, 1986).

The concerns regarding the limitations of research design - particularly a dearth of primary data in case studies and the potential for ethnographic contributions - is highlighted across the literature (Esser, 1998; Moorhead, Neck and West, 1998; Rose, 2011).

The gaps identified are therefore a) methodological problems across many designs caused by the number and complexity of variable; b) a lack of case study and ethnographic studies; and c) lack of rigour and agreement regarding the importance of group cohesiveness in groupthink.

3.9.3 Group Cohesiveness

The literature demonstrates a progression and development of understanding of the construct, with increasing agreement that group cohesiveness is a multi-dimensional construct (Festinger, 1950; Festinger, Schachter and Back, 1950; Feldman, 1968; Tziner, 1982; Carron, 1982; Zaccaro, 1991; Beal *et al.*, 2003; Severt and Estrada, 2015; Carron and Chelladurai, 2016; Serban and Roberts, 2016) comprising three elements; interpersonal-, group-pride, and task-cohesiveness. The extensive scholarly interest into group cohesiveness is inconclusive in regard to the relative importance of each type of cohesiveness, which may be a result of the research designs. For example, experimental designs that form groups for the purpose of fulfilling a task often identify task-cohesiveness as present, but group-pride as lacking; a conclusion that is not unexpected considering context. There remains debate as to whether group cohesiveness is constructed at group-level or individual-level (Beal *et al.*, 2003; Grossman *et al.*, 2015; Salas *et al.*, 2015; Severt and Estrada, 2015). Additionally, there is lack of agreement whether it is a group process or emergent state (Kozlowski and Klein, 2000; Santoro *et al.*, 2015; Severt and Estrada, 2015), what function it provides to the individual and the group (Severt and Estrada, 2015; Vanhove and Herian, 2015; Ohlert and Zepp, 2016; McEwan *et al.*, 2017), how its multiple dimensions change temporally (Tziner, 1982; Grossman *et al.*, 2015; Hall, 2015; Santoro *et al.*, 2015), and what are the antecedents of group cohesiveness that should be examined (Kozlowski and Ilgen, 2006; Casey-Campbell and Martens, 2009).

As can be seen, a range of gaps remain regarding group cohesiveness. However, the three that appear to have relevance to this study are; 1) the nature of the temporal change and development in group cohesiveness in a team; 2) the antecedents that may contribute to its presence (emergent or process); and 3) the issue of whether it is constructed at the group or individual level.

3.9.4 Group Stage Development

The review identifies three concepts in regard to GSD; 1) a temporally linear process comprising four (Tuckman, 1965) or five (Tuckman and Jensen, 1977) stages; 2) a temporally punctuated process comprising three transitional periods and two stable periods (Gersick, 1988); and 3) a temporally recursive and cyclical process of collaborative experience, learning and re-direction (Akrivou, Boyatzis and McLeod, 2006). All models - including those developed from the seminal frameworks (Sheard and Kakabadse, 2002; Kozlowski *et al.*, 2009) - imply that their models are applicable to all group and task types, and that the sequence must be completed in full in all scenarios. In addition, all models are based upon the assumption that a group is formed to perform a task, and achieve a measurable outcome - consistent with the generally accepted definitions of groups and teams (Alderfer, 1977; Adair, 1986; Hackman, 2012; Wageman, Gardner and Mortensen, 2012).

The gaps identified in the GSD literature are therefore three-fold; 1) a lack of examination of the recursive or regressive nature of GSD; 2) the lack of consideration of the difference in “purpose” (meaning-orientation) and “task” (instrumental-orientation) in group formation; 3) the assumed generalisability of each model across all group types, irrespective of the nature of interdependence required within the group. These issues are particularly relevant when considered in the context of the changing nature of the definition of “what is a team?” in the 21st Century (Hackman, 2012; Wageman, Gardner and Mortensen, 2012; Raveendran, Silvestri and Gulati, 2020).

3.9.5 Group Purpose

The review of “group purpose” necessitated an examination of the literature defining “groups” and “teams” (Hackman and Morris, 1975; Alderfer, 1977, 1980; Wageman, 1995; Hackman, 2012; Wageman, Gardner and Mortensen, 2012). This analysis revealed that “purpose”, “goal”, “task”, “objective”, and “aim” are used interchangeably and indiscriminately across the groups and teams literature, with the assumed interpretation of some form of outcome-orientation. However, these words have different meanings, in particular “purpose” which has a socio-emotive (or affective) meaning, whereas the others have instrumental meaning. Exploration of the history of “purpose” in relation to organisational scholarship (Singelton, 2014) revealed a conscious decision by scholars

in the 1930s and 1940s (Barnard, 1938; Simon, 1946) to assume an instrumental interpretation of “purpose” to support the increasing focus on the scientific approach to improving organisational efficiency and productivity (Taylor, 1913; Simon, 1947). In addition, the review uncovered a confusion with the usage of the terms “common”, “shared”, and “collective” in respect to “purpose”, “task” *et cetera*. The lack of distinction between shared processes and shared outcomes was shown to have potentially catastrophic implications (Bozeman, 2011; Burnette, Pollack and Forsyth, 2011; Meiri and De Wolf, 2013). Additionally, the suggestions of Hackman (2012) and Wageman *et al* (2012) of the changing nature of teams suggests that “purpose” will be of increasing importance in the future as teams form iteratively and fluidly to solve problems as opposed to simply perform tasks.

The gap here is therefore the need to distinguish and differentiate the concepts of “purpose” and “shared” in groups and teams.

3.9.6 Group Interdependence

The seminal model of task interdependence developed by Thompson (1967) and its development by Van De Ven, Delbecq and Koenig (1976) have dominated the understanding of group interdependence for over fifty years. Organisation designers have used the concepts of “pooled”, “sequential”, “reciprocal” and “intense” workflow definitions to define systems, processes, and entire supply chains. The exogenous nature of organisation planning - the assertion that optimal processes can be externally defined and designed, and applied to an organisation - has been at the centre of management and organisational science for most of the 20th Century (Hackman, 2012; Wageman, Gardner and Mortensen, 2012; Puranam and Raveendran, 2013). However, the nature of this approach tends to be mechanistic and ignores the social interdependence that may be necessary or desired by participants (Deutsch, 1949; Wageman, 1995). Recent examinations of the future of organisation design (Puranam and Raveendran, 2013; Raveendran, Silvestri and Gulati, 2020) suggest that accelerated development in technology, communications, social integration and globalisation (of societies and problems) will necessitate a shift from exogenous to endogenous design, with an inherent and implied significant change in perceptions and requirements from leaders and contributors (Hackman, 2012; Wageman, Gardner and Mortensen, 2012). It may be that the framework established by Thompson (1967) and Van de Ven *et al* (1976) remains appropriate, but that the emphasis needs to shift from workflow-driven planning to social-driven planning.

This author posits therefore that the gap in this literature is the dearth of understanding of the role of the participant - not as an agent in the structure of workflow interdependence, but as an endogenous contributor in a socially interdependent organisational network.

3.9.7 Self-Motivation

This study seeks to understand the notion of “teamship” in high performing groups. The analysis of “teamship”, groupthink and group cohesiveness literature all highlighted the potential importance of the psychological commitment of the group member to the group’s purpose and goals. Put another way, “why would someone decide to willingly contribute to the team?” This required an examination of self-motivation literature, and the identification of a preferred framework that could be used in the course of the study.

The review of literature revealed two potential theories associated with self-motivation in sport (Nicholls, 1989; Ryan and Deci, 2018). AGT (Nicholls, 1989) focuses on extrinsic motivators as agitators of personal action in sport. Whilst this model provides a comprehensive tool for examining what types of extrinsic stimulus provokes different types of response, this author’s study seeks to explore an examination of the participant’s response to group *purpose*, which therefore needs a theoretical approach with allows for both extrinsic and intrinsic assessment. For this reason, the author has selected to focus on Ryan and Deci’s (2018) SDT in this study.

4 Research Design: Philosophy and Research Questions

4.1 Introduction

This chapter guides the reader through the development and design of the research. The contributions to method proposed by this study require that a comprehensive explanation of foundational research design elements - such as the understanding and role of theory in academic research - is conducted in order that methodology choices are clear, and the design decisions can be understood. Of particular importance with an AR study is the issue of creation of generalisable theoretical contributions (Ospina *et al.*, 2008; McNiff, 2017). The rigour included in this chapter provides clarity for the methodology and method decisions made in this study.

A comprehensive critique is provided of the chosen methodology (Action Research), including its history, theoretical underpinnings, different interpretations, applications and examples of use. A short appraisal of alternative qualitative method choices that could have been selected is also provided. A detailed description of the method of the study is provided, including ethical considerations, engagement and management of relationships with participants; data collection techniques, types and timings; and data analysis decisions.

4.2 Perspectives on Theory

Blaikie asserts in his “Manifesto for Social Research” that “*Social research is about answering research questions*” (2010:10) and that it is the definition and accuracy of those research questions which provide the foundations for the generation of contributions to knowledge. Sarantakos (2013) offers a holistic perspective on the purpose of social research, positing, “...*social research is purposive and rigorous investigation that aims to generate new knowledge...[it] is about discovery, expanding the horizons of the known, of confidence, of new ideas and new conclusions about all aspects of life.*” (p.4)

In their explanation of the purpose of doctoral studies, Easterby-Smith *et al* (2015:2) highlight the requirements of contributions from students; “*Doctoral dissertations are required to produce contributions to knowledge...theoretical contribution is a necessary condition for the award of a doctorate.*” Saunders *et al.* (2016:5) explore the purpose of scholarly study and define research as “...*a process that people undertake in a systematic way in order to find things out, thereby increasing their knowledge.*” Walliman (2011) highlights that good quality academic research is much more than a simple collection of facts or information; data must be collected purposively, reassembled and reordered logically, and

interpreted systematically. He contends that only through this process can valuable knowledge be created and understanding increased. In a 2016 Academy of Management Annual Meeting Showcase Symposium, four prominent qualitative scholars - Denny Gioia, Kathy Eisenhardt, Ann Langley, and Kevin Corley - discussed different approaches to theory building with qualitative research. They concluded that the output of any research study *must* be credible and valuable theory (Gehman *et al.*, 2018). Indeed, Eisenhardt expounded specifically that “*Sometimes, the goal is to create a fundamentally new theory, while at other times the goal is to elaborate an existing theory. Regardless of the specifics, the goal is always theory building.*” (Gehman *et al.*, 2010:287).

The relevance of these references to the conceptualisation and design of this thesis – and indeed to any research study – is the requirement for the study to contribute a) to theory, and b) to knowledge in a specific area of social study. The contributions are determined by the topic or phenomenon under investigation, the extant body of knowledge already available relating to it, and the specific gaps within the current understanding of the concept. However, the two key concepts discussed here – ‘knowledge’ and ‘theory’ – are too often assumed in their meaning, and as such are overlooked in their importance for proper understanding *before* embarking on decision-making for the detailed design and planning of a research study. By exploring the definition, conception and understanding of ‘knowledge’, and separately what constitutes robust ‘theory’, the researcher is more able to understand the range of design choices available to them, and the benefits and limitations of the same. By doing so, the findings of the study will be more defensible, and are therefore more likely to be accepted as contributing to ‘knowledge’.

4.2.1 Knowledge

An examination of ‘knowledge’ as a concept requires an immersion into both the nature of reality (ontology) and the nature of ‘knowing’ (epistemology). In developing an understanding of the concept of ‘theory’ - and the generation of valuable theory - it is worth briefly reassessing the assumed understanding of epistemology as a concept, in order that the requirement to generate new ‘knowledge’ can be contextualised and from this the potential constraints of misunderstanding can be removed, and a more liberated approach can be taken in the research design. Scholars of philosophy such as Plato (427-347 BC), Locke (1632-1704), Kant (1704-1824) and Russell (1872-1970) have throughout history debated the focus and meaning of epistemology; Plato’s epistemology was an attempt to understand what it was to know, and how knowledge (unlike mere true opinion) is good for the knower. Locke’s epistemology sought to understand the operations of human understanding, Kant’s epistemology endeavoured to understand the conditions of the

possibility of human understanding, and Russell's epistemology looked to understand how modern science could be justified by appeal to sensory experience and to emancipate society. Much recent work in formal epistemology attempts to understand how our degrees of confidence are rationally constrained by our evidence, and work in feminist epistemology seeks to understand the ways in which interests affect our evidence and affect our rational constraints more generally.

Moving to the modern *interpretation* and practical application of epistemology, Easterby-Smith et al. (2015:46) define it as being "...about the theory of knowledge and helps researchers understand best ways of enquiring into the nature of the world." Etymologically, the term "epistemology" comes from the Greek words' "episteme" and "logos". "Episteme" can be translated as "knowledge" or "understanding" or "acquaintance", while "logos" can be translated as "account" or "argument" or "reason". Just as each of these different translations captures some facet of the meaning of these Greek terms, so too does each translation capture a different facet of epistemology itself. Considering this broader interpretation of epistemology, we might conclude that research studies are not simply required to contribute to 'knowledge' but are equally valuable and relevant in their contribution to arguing alternative perspectives, increasing understanding, providing new insight, or perhaps offering opinion and debate. This repositioning of the interpretation of epistemology may emancipate the student from the false expectation that their research must result in earth-shattering breakthroughs in explanations of social order. Instead, it may lead to more considered and modest aspirations and expectations for scholars, and in the process may contribute more subtly and valuably to increasing human understanding of the social world that we inhabit.

4.2.2 Theory

Considering that the second purpose of research is to develop theory, it is crucial to understand what constitutes 'good' theory, and to understand the different types (or levels) and how they are derived. Simple dictionary definitions of 'theory' give an insight into why it is important to differentiate from the colloquial use of the word, and the scholarly importance of the same.

- "*A theory is a formal idea or set of ideas that is intended to explain something.*" (Collins Dictionary (Online), 2020).
- "*A formal statement of the rules on which a subject of study is based or of ideas that are suggested to explain a fact or event or, more generally, an opinion or explanation.*" (Cambridge Dictionary, 2020).
- "*Definition of Theory:*

1: *A plausible or scientifically acceptable general principle or body of principles offered to explain phenomena.*

2a: *a belief, policy, or procedure proposed or followed as the basis of action.*

2b: *an ideal or hypothetical set of facts, principles, or circumstances.*

3a: *a hypothesis assumed for the sake of argument or investigation*

3b: *an unproved assumption*

4: *the general or abstract principles of a body of fact, a science, or an art.*

5: *abstract thought: speculation.*

6: *the analysis of a set of facts in their relation to one another.” (Merriam Webster, 2020)*

These three respected dictionary sources share the assertion that theory provides explanation of phenomena based on:

- a) An idea or set of ideas.
- b) An opinion, belief or speculation.
- c) A statement of rules and facts.

If these definitions are to be accepted in academic research, it would be reasonable to abstract that the generation of theory is simple; all one has to do is conjecture and speculate to explain a social phenomenon and extol a ‘theory’. Indeed, the etymological origination of the word is Greek, meaning ‘contemplation’ or ‘speculation’ and would seem to support this positioning. It may be that this colloquial understanding of the word ‘theory’ explains why the *role* of theory is much misunderstood, particularly outside of academia. When compared to ‘proven facts’, opinion-based ‘theory’ could be perceived to have far less value. In contrast, social theory from an academic perspective has a more specific interpretation. In general, the term ‘theory’ is used to refer to a systematic body of knowledge, grounded in empirical, theoretical or conceptual evidence, which can be used to explain or predict a social phenomenon through the collection and interpretation of data. Saunders *et al* (2016:47-50) provide a useful summarised answer to the question “What is theory?”, highlighting:

- a) Theory is used to examine social phenomena and seeks to explain 'cause and effect' based upon the influences or effects of contributing variables or concepts on the outcome observed;
- b) Theory is composed of four elements:
 - i) 'What' – the variables or concepts being examined
 - ii) 'How' – are these related [in the context of the particular inquiry]
 - iii) 'Why' – are these variables related [in the context of the particular inquiry]
 - iv) 'Where, when and who' – does this theory apply, and how might the adjustment, intervention or changing of the variables affect outcomes.

The final element above (predictability) relates to the broader potential application of the theory (generalisability) and its perceived 'usefulness'. Clearly, the narrower and more specific the variables and settings, the higher the potential accuracy of the theory that is generated, but equally the more challenging it is to justify the application of that theory to other settings or scenarios.

The term 'model' is often confused with 'theory'. For an understanding of the use of models in social sciences it is crucial to have a deeper look at the term first. Blaikie (2007) highlights the common view of the concept 'model' in the social sciences as a formalised theory, such as an integrated set of propositions that a) state relationships between various concepts, and b) have been successfully subjected to empirical testing (Blaikie 2007). The concept of 'theory' is sometimes regarded as being synonymous with a particular perspective or paradigm. Blaikie introduces expressions such as 'theoretical perspective', 'general model' or 'meta-theories' in his examination of Research Paradigms (Blaikie, 2010; Blaikie, 2007). Research Paradigms contain the principles and assumptions upon which the propositions of a theory are based. The main differentiation between theories and models can be captured as follows: Theories provide answers to *why* questions: "*Why is it that the patterns of phenomena are the way they are?*" (Blaikie, 2010:84), whereas models are pictures or images that are intended to represent an explanatory mechanism (Blaikie, 2010). Models specify what a mechanism may look like, hence they support researchers looking for these mechanisms.

Theory can be generated from the consolidation, re-interpretation and re-framing of other theories – known as '*Theoreticians' Theory*' (Blaikie, 2010:125; Menzies, 1982) which may be either macro or micro (large- and small-scale phenomena). Alternatively, theory can be generated from research which has been designed specifically to provide insight or explanation of a social phenomenon in consideration of defined concepts that may - in combination - affect the topic under investigation.

This requires the purposeful collection of data associated with those concepts *and* an interpretation of the observations of those data. This is referred to as ‘*Researchers’ Theory*’ (Blaikie, 2010:129).

With the aim of an applied doctoral research study being the generation of theory that contributes to both academia and practice, there is a clear need to generate theory that is both defensible and robust, whilst also being generalisable to the extent that it can be applied in organisational settings. To quote Merton, we should try to avoid the grandeur of grand theorists where there is the danger of succumbing to the adage, “*We do not know whether what we say is true, but at least it is significant*”, or equally to the potential dogmatism of radical empiricists who may seek defence in the motto, “*This is demonstrably so, but we cannot indicate its significance*” (Merton, 1967:139).

Taking these examinations of the interpretations of knowledge, epistemology and theory, and applying it to this research gives clarity to the ambitions of this project. My research seeks to examine and provide understanding and insight into the bonds between individuals in a group and the organisation, specifically exploring the concepts of motivation and purpose and how they work in combination to affect group cohesiveness. The study was designed to allow an iterative insight into the social interactions at play with a continued interpretation of the data and evaluation of how the group’s cohesiveness changed over time. The theoretical contribution is intended to be substantive in nature. Considering the current gaps in knowledge regarding the concept of “teamship” the study may also result in the generation of middle-range theory.

4.3 Research Problem

The examination of literature exposed a clear gap in knowledge regarding “teamship”; there is simply no empirical research exploring this concept, but that the term is contextually employed to describe member’s voluntary behaviour in relation to the established norms in a defined group. Examination of the groups where “teamship” was posited to have been present identified antecedent conditions similar to those defined in groupthink. Investigation of the groupthink literature revealed a consistent problem regarding group cohesiveness in terms of its conception, construction, operationalisation and unit of measurement across all groupthink studies. This problem was evident across the group cohesiveness literature, confirming these problems with regard to the conceptualisation of group cohesiveness. In addition, the review uncovered problems in the temporal consideration of group cohesiveness and the tendency for studies to take only a cross-sectional perspective on its multiple dimensions. Further exploration of literature in the topic revealed a clear gap in research examining the importance of a group’s shared purpose,

and how its interface with group-member self-motivation may impact the bonds of cohesion that form in a group, which in turn led to the finding that “shared purpose” has been used as a convenient description in definitions of groups and teams, but with a focus on outcomes rather than affective meaning or antecedent consideration. The issue of temporality in the group cohesiveness literature catalysed examinations of GSD and group interdependence literature which revealed problems in current theory and constructs with regard to linearity, reliance on exogenous, task-oriented theory and structure, and lack of reconsideration of the constructs in the light of profound social, technological and organisational change in the 21st Century.

When considered holistically, the central issue to this line of inquiry in literature appears to be the understanding of temporal group cohesiveness, in particular the antecedents that may contribute to its existence and development in groups. Considering that “teamship” is contextually used to describe the group-supportive behaviour of an individual in a group-setting, the antecedents to group-cohesiveness that are of interest in this study are a) the purpose of the group, and b) the desire of the individual to willing commit to that purpose.

The research problem that this study seeks to address is the gap in knowledge regarding how group cohesiveness is affected by both group purpose and the personal motivations of individual group members.

4.4 Research Purpose

Defining the purpose of research is a critically important step in the design of any and every study. The research purpose is not simply a re-phrasing of the topic of interest by the researcher, or a statement of the motives of the researcher or their hopes of the outcome of the study. Nor is it a list of activities that the researcher is going to carry out (Blaikie, 2010). A properly considered and worded research purpose stipulates and clarifies what the researcher wants to achieve with a study, and indicates the *type* of knowledge that the researcher wishes to produce (Alvesson and Sandberg, 2013). Creswell (2012:134) highlights the importance of the research purpose as “...*the most important statement in an entire qualitative study. [It] provides the major objective or intent, or ‘road map’ to the study.*” Social research can have a number of purposes, ranging from the simple to the complex, and encompassing both basic and applied research. Basic research purposes will include one or more of the following aims; ‘explore’, ‘describe’, ‘understand’, ‘explain’, ‘predict’, ‘change’, ‘evaluate’ or ‘assess’ (Blaikie, 2010). Each of these different purposes has a different starting point from the understanding of current knowledge, and a different end point in terms of the expected

outcome for the project. It follows therefore that each drives a different ontological, epistemological and methodological position. Blaikie (2010) provides a useful summary of each of these purposes to which I have added further description (Table 4.4.1):

Table 4.4.1 Types and uses of Research Purposes

Research Purpose	Use
Explore	To inductively develop an initial and broad description of a social phenomenon, endeavouring to take a holistic perspective, and with a view to developing insight and broad theory regarding the research topic and research problem. Data is iteratively collected and inductively analysed.
Describe	To capture and record detailed accounts, or the precise measurement and reporting of the characteristics of a specific phenomenon, population or sample, with the intention of developing theory that may provide insight into the interpretation of the phenomenon. Data is purposively collected and inductively analysed.
Explain	To establish specific elements, factors, structures, antecedents, symptoms or processes that appear to contribute to the phenomenon under investigation. The outcome is likely to be a clear theoretical explanation of the phenomenon. Data is purposively collected, and both inductively and deductively analysed.
Understand	To establish possible reasons for a particular social phenomenon derived from the actual, observed and interpreted contributions, behaviours and actions of the social actors involved, and the environmental influences relevant at the time. Looks to answer both 'what' and 'why' questions in regard to a particular social phenomenon. Data is both purposively and inductively collected, and both inductively and abductively analysed. Outcome is likely to be theoretical and/or hypothetical.
Predict	To use established understanding or explanation of a phenomenon to postulate certain outcomes under particular conditions.
Change	To intervene in a social situation by manipulating some aspects of it, or to assist the actors/participants to do so. Change in this context is affected based upon theoretical or hypothetical assertions in regard to the specific phenomenon, derived from descriptive, explanatory or predictive inquiry.
Evaluate	To monitor, measure and interpret whether change initiatives have altered the social state of the phenomenon being investigated.
Assess Impact	To identify, qualify or quantify the social or cultural consequences on people or social systems of change interventions.

(Modified from source: Blaikie 2010:69)

The research purpose therefore links the identified research problem – which was derived from understanding the gaps or problems in current knowledge determined the literature review – to a specific research question which is worded to fulfil the aims defined the research purpose.

The problem that my research seeks to address is to disentangle some of the underlying facets, functions and social processes that effect cohesion in groups. This study therefore *explores, describes, explains and understands* the effects of purpose and motivation on group cohesiveness. The research design includes other considerations such as the nature of the group purpose and the interdependence processes necessary; the risks, pressures, rewards and consequences of outcomes; environmental considerations; stage of formation of the group; and previous interactions and experiences of the group. The study attempts to provide interpretation and insight into the observations of the lived experience, and in so doing offer new understanding into the formation of group cohesiveness.

The research purpose of this study is therefore to explore, describe and understand the influence of self-motivation and group purpose as antecedents to group cohesiveness.

4.5 Research Question

“The path of all knowledge leads through the question.” (Gadamer, 1994:363)

4.5.1 The importance of the Research Question

The formulation of the central research question in any study is fundamental to the potential generation of useful theory and new knowledge or understanding. The development of creative and ‘good’ research questions is addressed in much of the reference literature providing guidance on designing and conducting social and business research (Alvesson and Sandberg, 2013; Anderson et al., 2015; Blaikie, 2007; Blaikie, 2010; Cassell and Symon, 2014; Creswell, 2013; Easterby-Smith et al., 2015; Saunders et al., 2016). It is essential that the phrasing of the research question leads to strategy and methodology decisions that are consistent with the philosophical foundations appropriate to the purpose of the research.

Alvesson and Sandberg (2013) suggest four types of research questions, summarised below:

- i) *Descriptive* questions (also referred to as ‘First Order’ questions) are used to find out what concepts and conditions characterise a phenomenon, such as substance, function, status and rationale.
- ii) *Comparative* (or ‘Second Order’) questions seek to establish the nature of the relationships between variables and draw conclusions or sense-making in regard to the phenomenon. It can be seen therefore that comparative questions are an extension from descriptive, and fulfil the first requirements of theory generation, in so much as they are adding to understanding.
- iii) *Explanatory* (or ‘Third Order’) questions specifically seek to generate knowledge – and therefore a theoretical contribution – by theorising potential correlation, conditionality and causality between variables.
- iv) *Normative* questions are designed for the purposes of predictability and are the basis for the generation or testing of hypotheses.

The construction of the research question will generate specific types of knowledge. To answer higher order questions (such as normative or explanatory questions), lower order questions must first be answered. The role of existing knowledge is critical in this regard, and hence the importance of the examination of the extant body of literature on a research topic; by understanding the extent of the answers to the lower order questions, the researcher is able to place their focus appropriately, and lead logically to a specific research purpose and subsequent question.

4.5.2 Research Question for this study

The Research Problem that this study seeks to address is the lack of theoretical and field-based studies examining the specific antecedents of motivation and purpose and how they affect cohesiveness in groups. The Research Purpose isolates the focus of the study to ‘explore’, ‘describe’, ‘explain’ and ‘understand’ these concepts in a group setting.

Section 4.2.2 highlights that ‘good’ theory is composed of four elements; 1) what variables or concepts being examined, 2) how are these related in the context of the particular inquiry, 3) why are these variables related in the context of the particular inquiry, and 4) where, when and to whom does this theory apply, and how might the adjustment, intervention or changing of the variables affect outcomes. Section 4.5.1 asserts that to meet these criteria, a research question should meet the criteria of ‘third order’ questions offered by Alvesson and Sandberg (2013). Accordingly, the primary Research Question for this study is a third order question, supported by a number of

second and first order questions required to ‘explore’ and ‘describe’ the concepts that are identified in the Research Problem. Thus, the research questions are shown in Table 4.5.1.

Table 4.5.1 Research Question and Sub-Questions

Research Questions	
Primary Research Question	What effects do the personal motivation of individuals in a team have on the group’s cohesiveness in the context of the purpose of its existence?
Sub-question 1	What roles do common purpose, shared purpose and collective purpose have in differentiating a ‘group’ from a ‘team’?
Sub-question 2a	Does organisational purpose have to be instrumental in nature to create a team, or
Sub-question 2b	Can a team develop when the organisational purpose is affective?
Sub-question 3	To what extent does the extant body of knowledge on group cohesiveness support the notion that cohesiveness exists on a continuum?
Sub-question 4	What influence do intrinsic and extrinsic personal motivation have on an individual’s choices in regard to group membership, and
Sub-question 5	Are there any identifiable individual or collective behaviours, values, rituals, rules, rites, or beliefs that emerge in groups that experience high levels of group cohesiveness?
Sub-question 6	How do isolation, insulation, adversity and threat affect group cohesiveness?

4.6 Research Strategy

Research strategies are the logic of enquiry employed to answer the research questions, and differ in their ontological assumptions, starting-points, output, use of concepts or theories, process, style, data type and underlying research paradigm. Blaikie (2010) identifies four research strategies as shown in Table 4.6.1.

Table 4.6.1 The logic of four research strategies

	Inductive	Deductive	Retrospective	Abductive
Aim	To establish descriptions of characteristics and patterns	To test theories, to eliminate false ones and corroborate the survivor	To discover underlying mechanisms to explain observed regularities	To describe and understand social life in the terms of the social actors' meanings and motives
Ontology	Cautious, depth or subtle realist	Cautious or subtle realist	Depth or subtle realist	Idealist or subtle realist
Epistemology	Conventionalism	Falsificationism Conventionalism	Neo-realism	Constructionism
Start	Collect data on characteristics and/or pattern Produce descriptions	Identify a regularity that needs explaining Construct a theory and deduce hypotheses	Document and model a regularity Describe the context and possible mechanisms	Discover everyday lay concepts, meanings and motives. Produce a technical account from lay accounts
Finish	Relate these to the research question	Test hypotheses by matching them with data explanation	Establish which mechanism(s) provide(s) the best explanation in that context	Develop a theory and elaborate it iteratively

(Modified from source: Blaikie 2010:79)

Text books provide guidance on the different research strategies, providing the student with a consistent understanding of the importance of research strategy in defining the *type* of research that is relevant to fulfil the aim of a particular study (Blaikie, 2007; Buchanan & Bryman, 2007:283; Saunders et al., 2016). Each research strategy differs in the ontological assumptions on which they are based, as well in what they each attempt to deliver as an outcome for the study. The role of data and theory is different in each strategy, as well as the research purpose that is served by them.

Table 4.6.2 below provides the author's summary of the four research strategies from the perspective of data, theory, research purpose and types of research question as offered by Blaikie (2010) and Alvesson and Sandberg (2013).

Table 4.6.2 Research strategies in relation to data, theory, purpose and questions

	Inductive	Deductive	Retroductive	Abductive
Role of Data	The starting point of the study. Data is collected to explore and describe a social phenomenon.	Data is collected on variables identified in the theory specifically for the purpose of testing the hypotheses.	Data is collected purposively after the creation of a conceptual model that <i>may</i> explain the phenomenon under investigation.	Data is collected holistically in a real-life setting and examined hermeneutically. Multiple cycles of collection, analysis, reflection and interpretation are employed.
Role of Theory	Conceptual theory generation may be the outcome of the study.	The starting point of the study. Existing theory is tested by the development of hypotheses. Theory falsification or corroboration may be the outcome of the study.	A theoretical model is imagined and defined by the researcher to initiate the study. from which hypotheses are formulated and tested. Falsification or corroboration of the conceptual theory may be the outcome of the study.	Substantive or middle-range theory generation or modification may be the outcome of the study. Theory is used iteratively during the study for sense-making of findings and to guide ongoing data collection choices.
Research Purpose	Explore Describe	Predict Evaluate Assess Impact	Explain Predict	Explore Describe Explain Understand Change
Research Question Type (Blaikie)	What?	How?	Why? How?	What? Why?
Research Question Type (Alvesson and Sandberg)	Descriptive (First Order)	Normative	Explanatory (Third Order)	Comparative (Second Order) Explanatory (Third Order)

4.6.1 Linear reasoning approaches

Much philosophical argument continues regarding the merits, limitations, objectivity and generalisability of both the inductive and deductive approaches to logical inquiry and reasoning (Blaikie, 2007). Inductive and deductive research strategies are based on contrasting styles of reasoning; inductive reasoning starts with multiple singular statements from which a generalised statement is determined. Deductive reasoning moves from a generalised statement or premise (determined from problems or gaps in existing literature and knowledge) and examines the premise in a pre-determined and precise setting, delivering specific singular statements supporting or challenging the initial generalised premise. Both styles of reasoning are *linear* in nature; by which it is understood that they follow a logical and uni-directional sequence specific to the approach.

The ontologies and epistemologies of the inductive and deductive approaches are therefore diametrically opposed and offer very different contributions to knowledge and understanding. As highlighted by Merton (1967), theory generated from inductive study may offer interesting insight and potential generalisability, but the trustworthiness of the approach is questionable based on the lack of specificity of the examination of data; whereas theory from deductive study may offer high levels of validity and accuracy, but the generalisability of findings becomes a problem as a result.

Early advocates of the inductive approach (Durkheim, 1964; Harré, 1972) emphasised the need for social research to generate empirical theory from observation without pre-conceived bias and interpretation. Critics of the inductive approach (Popper, 1959; Hempel, 1966) challenged the assumption that the researcher is able to observe and gather data without bias or pre-conceived hypothetical expectation. Popper (1959) therefore pioneered the deductive approach to research, asserting that valid theory could only be generated by testing a hypothesis 'to destruction'. The outcome of such study would either be to falsify the theoretical assertion, or to offer corroboration for its feasibility.

However, critics of deductive reasoning (O'Hear, 1989) challenged the approach on three key concerns: 1) all decisions made by the researcher in conceiving the design of the study are based on the subjective experiences and biases of the researcher, and hence the initiation of the deductive study is inductively influenced from the outset and therefore cannot be considered objective; 2) the specificity of the approach and its claims of accurate falsification or corroboration are bound by the particular point in time when the data was collected. It may not hold true that the same outcomes would be deduced at some future time, unless an *inductive* interpretation and application of the findings is taken to project the knowledge forwards; 3) the highly defined conditions of a

deductive study apply specifically to the conditions examined, and therefore generalising beyond that environment is difficult to justify.

4.6.2 Cyclical Reasoning Approaches

Addressing the perceived limitations of both inductive and deductive reasoning, two further research strategies have taken an increasingly central position in social science research; retroductive and abductive strategies. The retroductive approach has arguably been used since the beginning of science. Its principle is based on the imagination of the researcher. Bhaksar (1998) suggests that the approach is used to explain observable phenomena where the structures and mechanisms that underpin the observable interactions are *not* available to observation. In such circumstance the researcher must imagine what underlying structures *might* exist that would explain the phenomenon, and then create a conceptual model of this, which can then be tested through an iterative process of observational data collection, analysis, interpretation, reflection, reference to theory and then revised and testing to be repeated until the imagined hypothesis is falsified or supported.

As can be understood from the above, this approach requires both inductive and deductive reasoning, but focuses on the concept of hypothesis creation and testing, and falsification. Importantly, the process differs distinctly from either inductive or deductive reasoning as it is *not* linear but comprises of a series of cycles. It is also important to understand that retroductive logic does not start with either data or theory; its start point is a phenomenon and a conceptual model that may explain it. Ontologically it also assumes that there *is* a reality to be discovered, and that structures and mechanisms *do* exist to explain the reality.

Specific to this study, there was some appeal to considering a retroductive approach; my own passion for the topics of “teamship” and group cohesiveness inevitably lead me to have ideas and opinions about the potential group structures and mechanisms that may exist that contribute to the presence of any of these concepts. However, I was wary that my level of bias could influence my objectivity in execution of the study; I may have unconsciously focused on data collection and analysis to make it fit my conceptual model, and in the process missed critical alternate explanations. My research purpose is specifically to explore, describe, explain and understand; a retroductive approach would *assume* the exploration and description elements, and would have directed me towards an explanatory and predictive research purpose.

The final logic of reasoning is the abductive strategy. The approach endeavours to emancipate the research from the bias of the researcher or of current sociological theory, and to focus on understanding the motives and behaviours of the research participants *from their perspective* (Blaikie, 2010). The key principle to abductive reasoning is that social actors make sense of their world through the construction of their own constructs. This internal sense-making and shared understanding is underpinned by values, behaviours, actions and rituals that have meaning *within* that social setting. It is possible that scholars of social behaviour may ‘translate’ these social interactions into externally known, understood, and accepted social theories, but that by initially imposing these external constructs onto a social phenomenon risks failing to openly observe the society from the perspective of its members. Therefore, the starting point of an abductive study is the members of the social phenomenon under investigation, as opposed to preconceived conceptual modelist (retroductive reasoning), or the application and testing of existing theoretical understanding (deductive reasoning), or a third-person collection and linear examination of data (inductive reasoning).

Considering the purposes of this research study, it is concluded that an abductive research strategy should be followed.

4.7 Research Paradigm

“A paradigm is a set of assumptions and perceptual orientations shared by members of a research community. Paradigms determine how members of research communities view both the phenomena their particular community studies and the research methods that should be employed to study those phenomena.” (Given, 2008:591)

The concept of research paradigms is a relatively recent inclusion in social science, with roots extending from Kuhn’s adoption of the term to describe the framework of concepts, results, and procedures that underpin scientific understanding (Kuhn and Hawkins, 1963). However, classical research paradigms such as *critical rationalism*, *classical hermeneutics* and *interpretivism* have represented the different philosophical views and approaches of social scientists for centuries (Blaikie, 2007; Blaikie, 2010). Saunders *et al* suggest that research paradigms are relevant in helping to differentiate between research philosophies, highlighting that the various paradigms represent the political or ideological convictions or leanings of the different proponents respectively (Saunders et al., 2016). Blaikie (2007) provides a comprehensive critique and comparison of ten different research paradigms, identifying the significant and subtle differences in each paradigm, and of the ideological positions that contribute to the approaches.

By identifying the research paradigm that aligns to the research purpose, the ontological, epistemological and axiological positions under which the study should be conducted can be determined. This in turn guides the potential research methodology, sample selection, data collection and data analysis choices. Also, determining the appropriate research paradigm helps to identify the *endpoint* of the study, and its potential contribution to knowledge or theory. Specifically:

- Ethnomethodology studies focus on exploration and thick description of the social setting and the social actors concerned, but utilise an inductive research strategy. This implies that the research is being conducted on the participants by a engaged observer.
- Phenomenological studies seek to discover the recollections and stories from participants specific to a particular event. The voice of the participant is the focus of the study. The role of the researcher remains that of the observer and interpreter; the outcome of the study is likely to be the identification of themes raised by participants, and explanation of the incident, with 'lessons learned' and potential generalisability from this insight. Methodological choices would tend towards critical incident methodology, or case study.
- Hermeneutic and Interpretive studies require the researcher to become immersed in the social setting and to experience the reality of the situation as perceived and understood by the participants. This immersion is intended to allow the researcher to 'feel what the participants feel'. The researcher must also continually 'come up for air', and allow for periods of reflection and interpretation on their experiences, feelings and observations, subsequently re-immersing. This process is demanding on the researcher in terms of emotional dislocation and relocation, reflexive discipline, and the shift between subjective involvement and objective reflection. The end-point should be thick description, explanation, understanding and – if a double hermeneutic approach has been adopted – change. Such studies would reflect an idealist or shallow realist ontology. Epistemologically, this research paradigm derives the creation of knowledge, insight and understanding from the lived experiences and perspectives of the participants, and the interpretation and translation of meaning by the researcher. Therefore the epistemology is constructionism.

It can be seen therefore that the purpose of this study is consistent with the interpretive paradigm, albeit that the ambition to affect change could tend towards a radical humanist position. However, the affective change envisaged in the study design is to be determined from the interpretation of the structures and processes of the group as understood by its members. This is consistent with the double hermeneutic theorised by Giddens (1979) and the concepts asserted in critical realism,

where reality is posited to exist on three levels: the observable empirical level, the unobservable but accessible actual level, and the underpinning and possibly accessible real level. Therefore, consideration in this study is given to the guidance provided by critical realism applied within an interpretive paradigm.

4.8 Ontology, Epistemology and Axiology

Considering the research purpose, question and strategy described in sections 4.4, 4.5 and 4.6 respectively, this study adopts an idealist ontology and an interpretivist epistemology. Whilst not wholly consistent with an abductive approach, it is important to note that the research problem identifies specific issues in literature, which have determined the research purpose. The fieldwork has been executed with a constructivist approach, but the *a posteriori* analysis has sought to answer the research questions, which implies a clarity of focus in the examination of data, which is consistent with interpretivism (and hence critical realism).

Turning to axiological considerations, the role of values and bias in research is fundamental when deciding upon the research paradigm (Saunders et al, 2016). In contrast to more objective approaches to studies such as those residing in the functionalist paradigms, subjective research approaches actively seek understanding from the interpretation of the *actual* experiences and sense-making of their social world of and by the research participants. It therefore follows that to decipher meaning, the researcher must – as much as possible – gather insight into the values that drive the belief and sense-making processes for those individuals. This objectivity is difficult to attain for the researcher, especially when the values of the participants may be diametrically opposed to those of the researcher. For an action-research study, the researcher may consider that in order to be authentically engaged in the group – and therefore to build genuine trust and rapport – a detached approach is inappropriate, and the researcher may need to allow their own values and emotions to be accessible to the other participating members of that group, and therefore the researcher's axiology becomes integral to the study. This may subject the researcher to significant psychological and emotional pressure whilst immersed in the social environment being studied, and certainly requires a significant level of self-awareness, reflexivity and ability to transition between the roles of observer, participant and interpreter. The issues described here are consistent with Blaikie's views regarding researcher's stance (Blaikie, 2010).

This study has been conducted as an action research study over a period of eight months in a period of intense activity for the group concerned. Personal reflections of the study provided in

Chapter 6 explore the paradoxical nature of the experience, and the axiological implications of the findings of the study. However, it can be summarised that axiologically, the research paradigm and selection of methodology encourage a values-rich approach from both participant and researcher.

4.9 Summary – Research Design: Philosophy and Research Questions

Table 4.9.1 below therefore provides a summary of the key design elements and philosophical positions for this research study:

Table 4.9.1 Summary of research design foundations for this study

Section	Research Design	This Study
4.3	Research Problem	The gap in research regarding how group cohesiveness is affected by both group purpose and the personal motivations of individual group members.
4.4	Research Purpose	To explore, describe and understand the influence of individual motivation and group purpose on functional and structural properties of cohesiveness in groups and teams.
4.5	Research Question (Primary)	What effects do the personal motivation of individuals in a team have on the group’s cohesiveness in the context of the purpose of its existence?
4.6	Research Strategy	Abductive (Schütz; Giddens)
4.7	Research Paradigm	Interpretive
4.8	Ontology	Idealist
4.8	Epistemology	Constructionism
4.9	Axiology	Value-bound, integral and reflexive

5 Research Design: Methodology and Method

5.1 Background – The Original Research Design

As described in Chapter 1, this research study was inspired by the winning of the Rugby World Cup by England in 2003 – and an interest by this author into a concept of “teamship” that was suggested by the England head coach of that team (Sir Clive Woodward). An initial phenomenological study was conducted in 2015/2016 as a dissertation submission in partial completion of an MBA, exploring the recollections of the head coach (Sir Clive Woodward) and his ‘teams and leadership adviser’ from 1999 - 2004 (Humphrey Walters). In addition, several other senior executives in the Royal Navy, Royal Bank of Scotland, and in academia were inductively interviewed to identify whether their recollections of organisational leadership yielded any structures, mechanisms or behaviours that might show commonality with those described by Woodward (Lees, 2015).

The study revealed potentially important insight into the teams and organisations that had been led by those individuals, including:

- i) Group cohesiveness
- ii) Common and shared purpose
- iii) Personal motivation and determination
- iv) The influence of extreme conditions on individual and group performance, specifically danger, isolation, deprivation and trust
- v) Leader-member exchange and member-member exchange (including Followership Theory and Social Exchange Theory)

Following completion of that original work, as part of the requirements for the completion of an MSc in Research Methods, the author completed a pilot study (Lees, 2018a) that re-examined the original dataset with the specific purpose of informing the design of the research proposal for a doctoral study. The outcome of this pilot study identified:

- a) Gaps in literature regarding “teamship”, groupthink and group cohesiveness.
- b) A lack of empirical research examining the affects of individual member motivation group purpose on group cohesiveness.
- c) The sample cases selected should – as near as possible – represent characteristics similar to those observed in the original phenomenon (England Rugby, 2003) in order to increase the

potential of identifying social behaviours likely to be consistent with those described from the MBA study of the England Rugby case.

The resultant research proposal (Lees, 2018b) incorporated all of these design recommendations and a multiple case study research design was produced. Three cases were identified that met the sample profile requirements: A professional rugby union team (Dallas Griffins, USA), a British Fire Service station (East Sussex, England), and a Canadian law firm (Cassel and Brock, Toronto). However, shortly prior to the commencement of the study in September 2018, a significant change – and opportunity – occurred. The study sponsor at the Dallas Griffins Rugby Club (Head Coach) was head-hunted by the German RFU to become the National Men's XV Head Coach, and to prepare and lead this international rugby squad in their bid to qualify for the RWC19 Repechage tournament as described in Chapter 2. He accepted this position and invited me to conduct the research study with the German international rugby squad over an eight-month period. In addition to my research role, to become one of his coaching team for the squad, focusing on the rapid development of the mental preparedness and team-bonding within the squad that he regarded as essential in their preparations for the tournaments ahead.

The opportunity that this change offered was to adjust the research purpose to execute a study that could yield a deeper and richer understanding of the motives and social interactions of group members in very similar conditions to those present in the original case examination of England Rugby in 2003. This change in purpose also affected the research strategy, which would now be abductive, and therefore affected the choice of research methodology. The potential for the researcher to be fully immersed in the research environment would allow real-time observation and a deeper insight of the social reality created by the group members, addressing issues identified in literature regarding the lack of temporality in studies examining the various group processes associated with this study. Additionally, the potential to actively participate as a group member, and to be specifically tasked with bringing about change in the cohesion of the group would offer the opportunity to authentically engage with the squad (players, coaches and all the support staff) and by necessity to seek individual opinions of the group's cohesiveness, the input of the social actors into the development of those bonds, and the mutual assessment (measured subjectively by observation and interview, and objectively by performance and results) of the effects of such interventions.

Notwithstanding the potential benefits that this change in research design might afford, the move away from an inductive, multi-case research design had implications in regard to the generalisability of any findings and the objectivity of the research.

Ultimately, after consultation with the researcher's doctoral supervisor, it was decided that the change in research design could provide a fuller and more robust response to the research problem and original topic of interest when taking the closeness of replication of the offered sample (an international rugby squad preparing to compete in the Rugby World Cup) to the original circumstances for the phenomenon under investigation (an international rugby squad competing in the Rugby World Cup). This chapter therefore explains the research design decisions that were subsequently made and the conduct of the study.

5.2 Methodology options

The determination of the research strategy and paradigm detailed in 4.6 and 4.7 provided focus for the methodological options that may be appropriate to fulfil the research purpose and to contribute to knowledge and theory as described in 4.4 and 4.2.1 and 4.2.2 respectively. An abductive research strategy suggested a qualitative study design, with the start-point of the study to be neither data nor theory, but the requirement to agnostically engage with and 'hear' the participating social actors communicate and make sense of their own society. The translation of the participants' language and construction of their social environment into academically understood theory and knowledge, and the subsequent sense-making of the observations made (explaining and understanding the descriptions of events and behaviours), and then finally the 'circling-back' verification of that understanding directly with the participants is consistent with the cyclical nature of the double hermeneutic approach advocated by Giddens (1979). The author's interpretation of this cyclical approach is summarised in Figure 5.2.1 below.

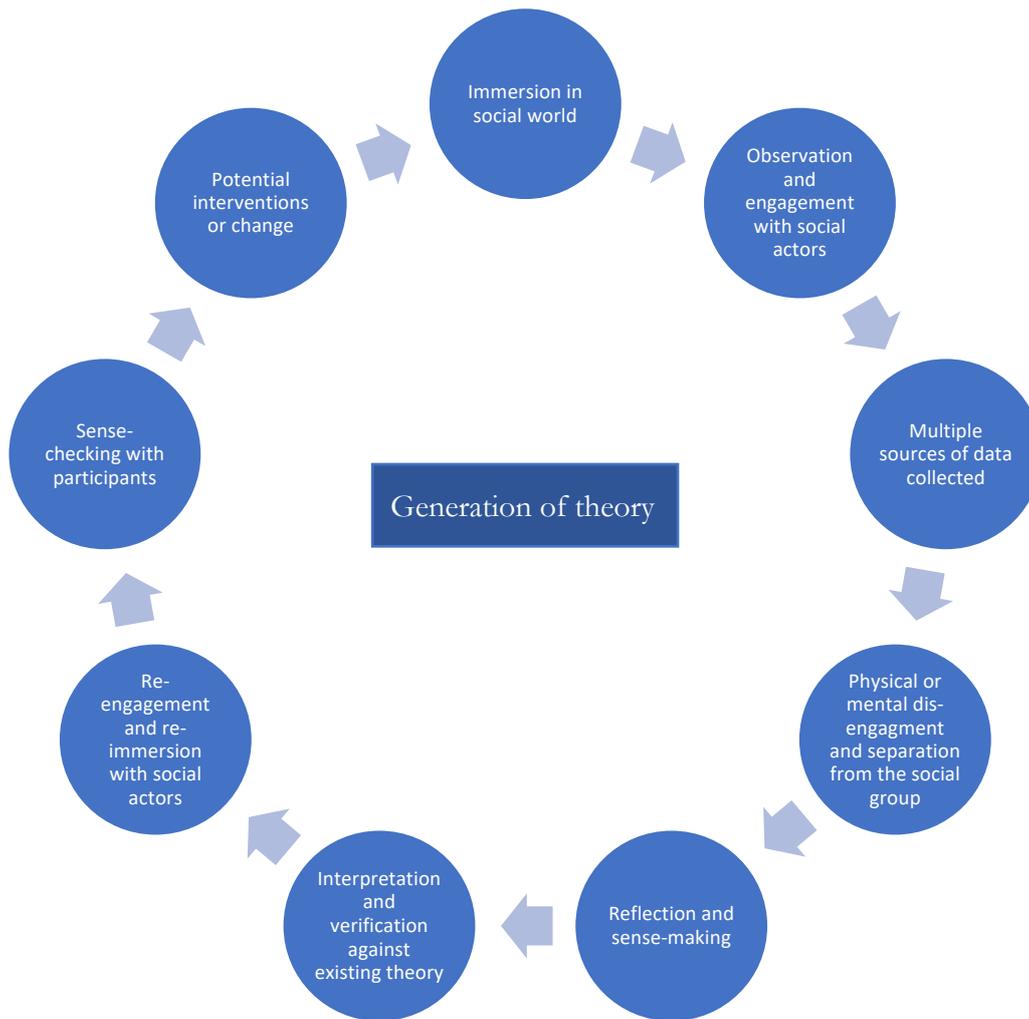


Figure 5.2.1 A logical flow for abductive double hermeneutic research

Abductive research strategy focuses the researcher onto a limited number of research methodologies that meet the criteria of its interpretivist foundations. As described above, the key features of the methodology are that a) the researcher is immersed in the social setting; b) reality and knowledge is created from the perspective of the participants; c) the researcher goes through cycles of immersion and emergence; d) sense-making occurs on three levels – internally for the researcher, externally with current literature and theory, and socially with the participants; and e) theory is generated that addresses the research question and purpose. An abductive study is done *with* the participants, rather than *on* them; it is an *emic* approach to creating knowledge (reality created from the perspective of the participant) rather than an *etic* approach (reality created from the perspective and interpretation of the observer). Inductive, deductive and retroductive research studies all share the etic approach to the creation of knowledge.

Considering the elements of the research design described in Chapter 4, and the opportunity-driven access to a specific case for study, two methodologies were considered in detail: case study and action research.

5.2.1 Case Study - a potential approach

Case study research is an investigation and analysis of a single or collective case, intended to capture the complexity of the object of study (Stake, 1995). It draws together “...*naturalistic, holistic, ethnographic, phenomenological, and biographic research methods...*” (Stake, 1995:xi). Case study methodology allows close connection to researcher motives and is “...*particularistic, descriptive and heuristic*” (Merriam, 2009:46). It is *not* an abductive approach to reasoning, and on this basis, it could be argued that it should not be considered as an appropriate option to fulfil the paradigmatic frameworks identified as appropriate to this study; that being interpretivism. The counterargument to its exclusion as a research option relates to the potential of ‘participant-observation’ as a type of case study. However, importantly the researcher maintains an *etic* perspective on the case and its participants; reality is still being created by the interpretations of the researcher, *not* by the social actors. Additionally, the process of research and knowledge generation is *linear*, not *cyclical*. In a participant-observer study the researcher does *not* validate and verify their interpretations with the participants and co-create understanding; it is a single hermeneutic approach rather than a double hermeneutic one.

In conclusion therefore, case study methodology does not meet the double-hermeneutic requirements and participant-driven creation of knowledge required by the interpretivist paradigm. Whilst the sources of evidence and methods of data collection and analysis may be very similar to those used in AR, the ontological foundations and epistemological positions are different. These philosophical differences and emic position of the research excluded case study as an appropriate mode of inquiry for this study.

5.2.2 Action Research

5.2.2.1 Perspectives on Action Research

According to Coghlan (2019:xi):

“Action research is neither a method or a technique; it is an approach to living in the world that includes the creation of areas for collaborative learning and the design, enactment and evaluation of liberating actions...it combines action and research, reflection and action in an ongoing cycle of cogenerative knowledge.”

In an earlier attempt to provide clarity on the positioning and understanding of the concept, Coghlan and Shani (2018:4) describe AR as “*an emergent inquiry process*” that involves “*collaboration and co-inquiry*” with the aim of “*bringing about change...developing self-help competencies...and adding to scientific knowledge.*” Reason and Bradbury (2012) define action research as:

“...a participatory process concerned with developing practical knowing in the pursuit of worthwhile human purposes. It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people...” (Reason and Bradbury, 2012:4)

McNiff introduces her interpretation of AR with an acknowledgement of the diverse perspectives that different people have of the approach. She describes it as a “*practical form of enquiry that enables anyone in every job and walk of life to investigate and evaluate their work.*” (McNiff, 2017:9). Similar perspectives as those described above can be found in much of the literature defining and describing action research (Cassell and Symon, 2014; Anderson *et al.*, 2015; Easterby-Smith, Thorpe and Jackson, 2015; Saunders, Lewis and Thornhill, 2016). What emerges from these descriptions is a common agreement that AR is a practical approach to the co-creation of knowledge between researchers and participants.

The differentiation between the various focuses of AR is captured by Anderson *et al.* (2015) in the reframing of the term ‘action research’. They highlight that there are multiple uses and purposes of ‘action-orientation’ in contemporary research and refer to these as ‘action modes’; action research, action learning, action science, appreciative inquiry, cooperative enquiry, cultural-historical activity theory, developmental action enquiry and participatory (critical) action research. This research paper does not allow for a detailed examination, critique and comparison of these eight action modes, but it is important to note the clear categorisation of these modes, as they have different purposes.

A requirement for any DBA research study is to contribute to practice through the practical engagement with business (Anderson *et al.*, 2015). To provide academic credibility it is essential that the researcher understands the ontological, epistemological, and logic of reasoning that the AR double hermeneutic process requires. It is not acceptable to simply conduct an interesting consulting exercise, capture the results and present it as a report. It is for this reason that this researcher has placed such heavy emphasis on the detail in Chapter 4; the logical selection of AR as the most appropriate method of inquiry to address the investigation into the social phenomenon of interest has been determined by a rigorous understanding of the structures of research design.

5.2.2.2 Principles of Action Research

As a mode of inquiry, AR comprises a number of core principles and processes that are the subject of detailed description in the associated extant body of literature. To provide clarity in the methodological uniqueness of AR as compared to other research approaches, a summary is provided below of core features of the action research principles and process. Points 13 and 14 are not unique to AR studies but are felt to have significance in the consideration of the conduct of the study for the researcher.

1. Research takes place within a local social situation and seeks to contribute to the development of the organisation (Coghlan, 2019).
2. The researcher collaborates with the social actors to co-create knowledge (Coghlan, 2011).
3. The process of AR is both emergent and iterative (Anderson *et al.*, 2015; Saunders, Lewis and Thornhill, 2016).
4. The process of knowledge creation is cyclical or spiral (Saunders, Lewis and Thornhill, 2016).

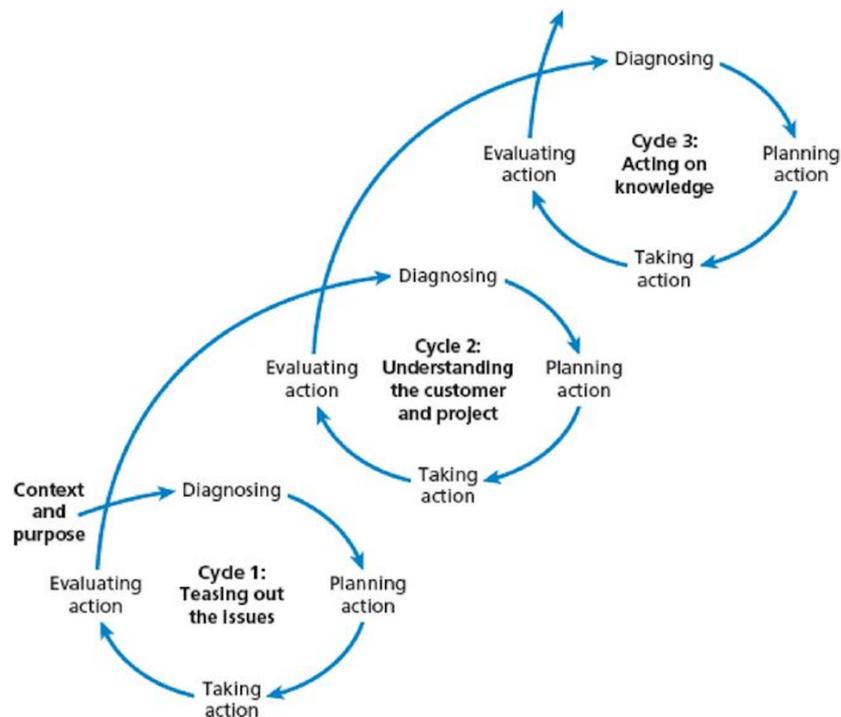


Figure 5.2.2 The three cycles of the Action Research spiral (Source: Saunders, Lewis and Thornhill, 2016)

5. Validation is partly through the learning process itself (Cassell and Symon, 2014).
6. Knowledge creation is deemed to occur at 3 levels; 1st, 2nd and 3rd person (Reason and Bradbury, 2012).

- i) 1st Person: inquiring into one's own life, beliefs and behaviours; increasing self-awareness of personal axiology.
 - ii) 2nd Person: inquiring authentically *with* others to develop dialogue and *mutual* understanding.
 - iii) 3rd Person: inquiring *externally* to the social setting, seeking sense-making by reference to existing knowledge and theory.
7. The starting point of the study is neither data nor theory, but the reality as perceived and experienced by the participants (Blaikie, 2007).
 8. The practical outcome of the research may be change in the social world under investigation (Coghlan, 2019).
 9. The research process is *emic* ('with' the participants) rather than *etic* ('on' the participants). See Table 5.2.1 below (Morris *et al.*, 1999).
 10. Ethics and organisational politics considerations are of great importance as the researcher may become directly involved with interventions that are designed to change the status quo of the social situation (Brydon-Miller, 2008; Coghlan, 2019).
 11. Triangulation of findings in AR is possible within the case itself (Easterby-Smith, Thorpe and Jackson, 2015).
 12. The axiological position of the researcher has a high level of significance in AR considering both the interventionist role of the researcher and their immersion in the environment, when balanced against the 1st, 2nd and 3rd person requirements.
 13. AR is demanding on the researcher both mentally and potentially physically, and requires a range of researcher skills and disciplines sustained for the duration of the study (Easterby-Smith, Thorpe and Jackson, 2015).
 14. Data types are similar to those captured in case study methodology (McNiff, 2017; Yin, 2018).
 - i) Direct observations
 - ii) Participant observations
 - iii) Interviews
 - iv) Reflective journal
 - v) Video and audio recordings
 - vi) Documentation
 - vii) Social media

Table 5.2.1 Assumptions of Emic and Etic Perspectives and Associated Methods

Features	Emic/Inside View	Etic/Outside View
Defining assumptions and goals	Behaviour described as seen from the perspective of cultural insiders, in constructs drawn from their self-understandings. Describe the cultural system as a working whole.	Behaviour described from a vantage external to the culture, in constructs that apply equally well to other cultures. Describe the ways in which cultural variables fit into general causal models of a particular behaviour.
Typical features of methods with this view	Observations recorded in a rich qualitative form that avoids imposition of the researchers' constructs. Long-standing, wide-ranging observation of one setting or a few settings.	Focus on external, measurable features that can be assessed by parallel procedures at different cultural sites. Brief, narrow observation of more than one setting, often a large number of settings.
Examples of typical study types	Ethnographic fieldwork' participant observation along with interviews. Content analysis of texts providing a window into indigenous thinking about justice.	Multisetting survey; cross-sectional comparison of responses to instruments measuring justice perceptions and related variables. Comparative experiment treating culture as a quasi-experimental manipulation to assess whether the impact of particular factors varies across cultures.

(Modified from source: Morris *et al.* 1999:783)

In summary therefore it can be seen that the aims of an AR study - to generate understanding and knowledge from *within* a social setting that may initiate change and development for the participants but that may also generate a theoretical contribution – is wholly consistent with the research design criteria for this project, as well as the philosophical considerations that need to be satisfied to substantiate the methodology choices.

5.3 Method

This section describes the specific considerations and decisions in the design and execution of this study as well as the detail of how the study was conducted.

5.3.1 Population selection and sampling

As described in section 5.1 the case identified to conduct the original research design followed a purposive sampling process (Saunders, Lewis and Thornhill, 2016). The case represents a group that required high levels of collaboration and teamwork in order to achieve the group purpose. The determination of the case followed the guidance from Pettigrew (1988) who advises to choose cases in which the process of interest is transparently observable, such as extreme situations and polar types. Engagement with the DRV was opportunistic and based on reference from a potential participant. This is an example of snowball sampling, where participants or the sample itself are volunteered to be part of the research as opposed to chosen (Saunders, Lewis and Thornhill, 2016). The decision was made in line with the guidance on critical case sampling (a specific form of purposive sampling) where a case may offer the opportunity to collect data that have the potential to explain the phenomenon of interest most accurately (Saunders, Lewis and Thornhill, 2016).

The sample for this study is therefore the German RFU Men's XV's squad from 2018–2019. It is a single-case design, covering two cycles of group formation to dispersal, and comprising three action cycles (ACs) in total. The squad was engaged in preparation for international tournaments of significant importance to the national sport, and had a mixture of established players, staff and coaches, and a significant number of new members, and had the need to integrate these group members quickly and effectively, at the same time as establishing group cohesion that might allow them to compete more effectively. Details of the sample is provided in Table 5.3.1.

Table 5.3.1 Detailed breakdown of the German Rugby Men's XV sample

Men's XV's squad profile	
Period of study	7 months (September 2018 to March 2019)
# Player participants	44
# Coach participants	9
# Support staff participants	7

Project stakeholder/sponsor	XVs Head Coach and XVs Director of Rugby
-----------------------------	---

5.3.2 Researcher Role: Duality, Credibility, Rapport and Trust

Role duality in AR studies occupies a particular focus of attention for scholars (Holian and Coghlan, 2013; Saunders, Lewis and Thornhill, 2016; Coghlan 2019). The challenge for the researcher to actively participate – often in a position of influence or authority – whilst simultaneously observing and recording the actions of others and themselves creates a unique paradox for action researchers. Ethical considerations become of significance in regard to this duality of role, explored in some depth by Holian and Coghlan (2013) and Brydon-Miller (2008), providing insight into the paradox, and the potential importance to both researchers (1st person), participants (2nd person) and to the trustworthiness of the academic output (3rd person).

On a practical basis, immersion into any social setting involves a period of adjustment for all parties involved. Existing group members experience a range of emotions towards new members, extending from suspicion, anger, hostility and resentment, through to curiosity and ignoring (Adler and Rungta, 2002). It is understandable therefore that when a researcher is introduced to an existing social group with a *dual* role – participant and researcher – the emotions of suspicion, mistrust and fear/threat are heightened.

In order to overcome this issue rapidly in this research project, five techniques were applied:

- a) Role credibility: The squad were excited and enthusiastic about the appointment of their new Head Coach, based on his career successes as an international rugby player and international coach. He therefore held an authority and level of trust with all the organisation even before he arrived. It was his personal decision to volunteer for this research study to be undertaken, and to subsequently ask the researcher to also take an active and contributing member role in the organisation. This endorsement provided credibility to the validity of the dual roles of the researcher.
- b) Definition of role and responsibilities: It was decided to provide absolute clarity about the role that the researcher would take at the immediate initiation of the engagement; that being as a doctoral researcher investigating the bonds that existed in high performing groups, and in the capacity as a senior coach in the organisation, advising the Head Coach directly on matters of team behaviours development, individual mental strength and skills, and leadership skills development. The latter role was documented and shared with *all* group members, and posted publically on notice boards in the training facilities. This was done to allow the participants to understand and challenge the role, and to be able to accept

the involvement in a time and manner that suited the individuals (Appendix I). Additionally – and in line with the ethical requirements of the study – participants were provided with a written description of the purposes of the study (Appendix H).

- c) Personal credibility: The researcher was invited by the Head Coach to address the group and deliver a short presentation on the importance of mental excellence in high performing teams. This formed the foundation for all the ongoing practical work thereafter. This presentation was well-received and catalysed significant interest and positive engagement, allowing the initial concerns of mistrust or suspicion to be allayed immediately.
- d) Rapport: The researcher considered it imperative not be seen as just a coach, or a researcher, but to be an active and complete participant, engaged for the benefit of the participants as well as the purposes of the study (Saunders, Lewis and Thornhill, 2016). Despite there being a significant difference in age, physical fitness and rugby skills and experience, from the first morning of engagement with the squad, the researcher asked the players for their permission to undertake some of the physical training with them. This request was met with amusement, positivity and enthusiasm across the whole squad. The researcher consistently trained as hard as they could with the players (albeit at a significantly lower level of capability and attainment). This engagement built trust, respect and rapport.
- e) ‘Early wins’; creating value for participants: On the second day of the study, the researcher provided all squad participants (player, coaches and staff) with a simple question sheet, developed to catalyse thinking about motivation and alignment (Appendix J). It was considered by the researcher that aside from the value of the insight to the dual roles being performed, the potential to begin a process of developing mental engagement with the ‘business of winning’ might establish professional trust and relevance.

In summary therefore the researcher performed two formal roles in this project; the academic role was as a participant-as-observer (Saunders, Lewis and Thornhill, 2016) and the practitioner role was “Mental Excellence, Teamship and Leader Development Coach.”

5.3.3 Sample Nationality and Language

It should be noted that whilst the sample is a German sports teams, it comprised multiple nationalities including German, South African, English, New Zealand, Australian and Argentinian. All communication within the playing and coaching activities was always in English. All German players spoke fluent English.

5.3.4 Cycles of engagement

Developing on Lewin's original description of the action research cycles (Lewin, 1997) and as shown in Figure 5.2.2, Coghlan (2019) recommends practical amendments to the phases of the action research cycle as shown in Figure 5.3.1; it should be noted that this represents a single cycle in a three-cycle sequence.

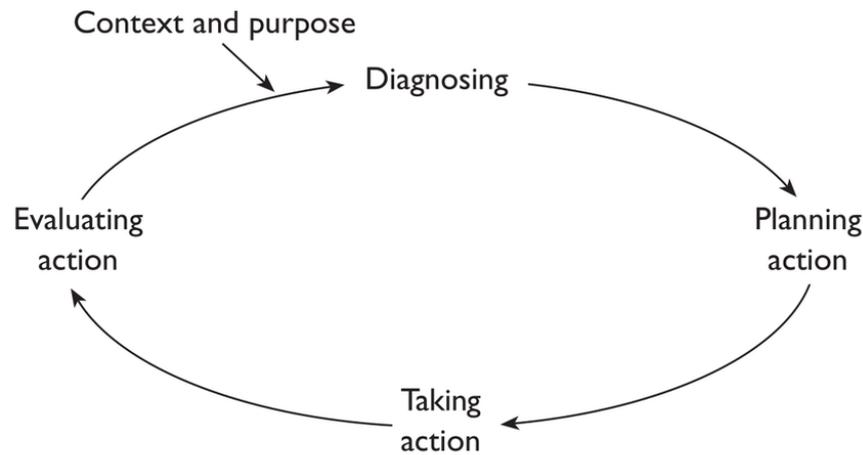


Figure 5.3.1 The Action Research Cycle (Source: Coghlan 2019:9)

The key differences with Lewin's model are in the preparation work that Coghlan proposes ("Context and Purpose") and in the change of emphasis of the initial stage of engagement from "Constructing" to "Diagnosing". Coghlan (2019) recommends that in preparing for the study the researcher should explore the context and background of the case as thoroughly as possible (a practitioner approach), and also to explore potentially relevant theory in literature that may become important as the engagement progresses (an academic approach). On completion of the research phase literature takes a greater importance in order to translate the narrative from the 'voice of the participants' to the interpretation required for the academic contribution (the 3rd person perspective) (Blaikie, 2007).

The diagnosis stage is also subtly but importantly different, and especially as it pertained to this study, and the practical aim of preparing the squads for international rugby competitions. Coghlan (2019) specifically recommends that the first stage of the engagement is a dialogic activity with the stakeholders of the project to establish the organisational requirements and perceived issues. This baseline activity forms the foundation for the 'planning action' stage for the researcher, which may define a first step, or first few steps, including the initial introduction and immersion into the social setting. This step was of critical importance for this study; it was essential to establish clarity of role for the researcher as a key staff member and contributor as well as an academic researcher.

Concerns such as credibility, potential value, boundaries, trust and communication were of paramount importance to all parties, and as such this stage of *'planning action'* was carefully and collaboratively conceived.

AC1 concludes with an evaluation of the actions undertaken. This then informs the commencement of the second cycle. The evaluation stage was undertaken with the project sponsors to agree the new status of the development of the organisation resulting from AC1 activities and created the agreed issues and priorities for AC2. It is of note that the project sponsor (Head Coach) adopted a collaborative and transformative leadership style and included his coaching and support staff, as well as the senior players, in much of the detailed planning stages, whilst agreeing the construction priorities in consultation only with the researcher.

In accordance with the guidance from Coghlan (2019), three distinct ACs were conducted. The timings, durations and primary data collection methods and volumes of each stage are shown in Table 5.3.2.

Table 5.3.2 AR cycles and data collected

XVs	AC1	AC2	AC3
Commenced	3 rd September 2018	7 th November 2018	5 th February 2019
Ended	5 th November 2018	23 rd November 2018	17 th March 2019
Duration	9 weeks	3 weeks	Elapsed 6 weeks (comprising 3 * 3–5-day engagements)
Data Collection	Unstructured and semi-structured interviews Participants' written reflections Direct observation and field notes Group meetings Video and Audio recordings Reflective Journal Entries Email and social media posts	Unstructured and semi-structured interviews Direct observation and field notes Group meetings Video and Audio recordings Reflective Journal Entries Social media posts	Unstructured and semi-structured interviews Direct observation and field notes Group meetings Reflective Journal Entries Social media posts
Total data collected	21 recorded semi-structured interviews (total 662 minutes of interviews) 25 Participant written responses to "My Focus and Motivation" 33 journal or notebook entries 26 video recordings of group meetings (total circa 600 minutes of content)	21 recorded semi-structured interviews (total 711 minutes of interviews) 40 journal or notebook entries	4 recorded semi-structured interviews (total 193 minutes of interviews) 12 journal or notebook entries
Description of Cycle	Training and preparation including 3 formal training camp weeks	Rugby World Cup Repechage Tournament – Marseille.	REIC Tier 2 Tournament including 4 international matches

5.3.5 Data types, collection and preparation

In line with the accepted disciplines of AR (Chowns, 2008; McNiff, 2017; Coghlan, 2019), this study collected multiple data types over the period of seven months. The primary data types include semi-structured interviews, direct observation, reflective journals, informal interviews and discussion, participant observation, social media ("WhatsApp") posts and video recordings from group meetings. Squad meetings and training sessions comprise a significant amount of the group

activity and researcher-accessible interactions and these therefore play an important role in the structured observations of group cohesiveness.

As highlighted by McNiff (2017) data and evidence are two different concepts; evidence is generated from the interpretation and triangulation of data. It is therefore important to identify and capture multiple forms of data at any given point in time in order that 'thin' data can be combined to form 'thick' data, and subsequently interpreted to generate meaning and insight.

5.3.5.1 Interviews

All face-to-face interviews were recorded using an Apple iPad Pro and an app called Alon Dictaphone. In addition, extensive interview notes were captured during each interview, specifically noting the interviewer's observations and interpretations of the interviewee's behaviours and intonations during the interview. Telephone interviews conducted at the end of AC3 were recorded using an Apple iPhone and an app called TapeACall Pro.

5.3.5.2 Field Notes and Journal Entries

A combination of methods was used to capture the author's observations and reflections, determined by circumstance and environment. Field notes were taken in both A5 and A6 notebooks, depending on whether the author was recording information outdoors during group activities and training, or indoors during interviews, group meetings or journaling. These written notes were subsequently read and dictated into Microsoft Word documents using the 'Dictate' function. These were then added to the data corpus in NVivo for coding and analysis.

5.3.5.3 Video footage

A significant volume of video footage was captured during the conduct of this study. This work was conducted by the DRV video analysts supporting the rugby coaches in each of the squads and made available to the author with the agreement of the head coaches on an ad-hoc basis. The purpose of the video footage was sport- and coaching-oriented and therefore did not seek to capture or highlight behaviours specific to the purpose of this study. However, such opportunistic video data has provided useful triangulation to support observations from other data. The video was captured using both GoPro and Sony Camcorders, and stored in MP4 format. Playback and data extracts were performed using native video software on an iMac running macOS Big Sur.

5.3.5.4 Written submissions from participants

In response to some specific questions and themes posed by the researcher to satisfy the Core Purpose of the study, participants provided written submissions. These were provided in a variety

of formats depending on the individual, including text messages, WhatsApp messages, emails and hand-written paper-based documents. During the action cycles of the study, these first-person narratives provided essential real-time insight for the researcher in both the ‘Diagnosing’ and ‘Evaluating Action’ phases of each cycle, as well as contributing significantly to the first-person reflections of the author during the engagements. These were not subsequently transcribed for coding but were retained in their original formats to provide triangulation in third-person analysis.

5.3.5.5 Social Media posts

In all three ACs, participants created WhatsApp groups for their own collective communication purposes. These groups allowed any member of the group to read or post content and comments for the whole group. The author was invited by the players and coaches to be a member of these groups for both practical and research purposes. These posts have not been transcribed but were used during the field-phase of the study to help evaluate both group and individual mindsets to allow the researcher to perform his coaching duties and identify needs and design interventions. Subsequently they have provided a rich source of triangulation for the third-person analysis. The data is stored on the author’s WhatsApp account only and is protected by password access on the author’s personal computing devices. The data has *not* been backed up to an external storage service, specifically to allow participants the right to delete posts at any time should they choose.

5.3.5.6 Presentations

During the field-phases of the study, formal communication to group members was primarily conducted in group meetings by way of presentations. These were created in Microsoft PowerPoint and provide a formal record of the researcher’s observations of the status of the group and its development needs. They were an essential part of the development of shared understanding and knowledge. Their purpose was to fulfil the “Planning Action” and “Taking Action” phases of each action cycle. Feedback from participants on these stages (“Evaluating Action”) took the form of unstructured meetings without formal presentations.

5.3.5.7 Interview transcription

A third-party service was used to conduct transcriptions of each interview. Transcribed scripts were uploaded into a secure cloud-based notation app called Notability, allowing the author to access and read the scripts from both iPhone and iPad on an ongoing basis, and to make notes within the app in real-time. These reflective entries provided information both during the field-stages of the study and also in the post-field analysis stage and augmented the field notes and journal entries created.

All scripts were also uploaded into NVivo on Mac for detailed coding and analysis.

5.3.6 Data Analysis

AR studies hold a unique position in the approach to the creation of knowledge. Traditionally, empirical research has focused on the third person; researchers doing research on third persons and writing a report for other third persons (Coghlan, 2019). In such studies, a data corpus is collected by the researcher (employing whatever approach is relevant to the research purpose and question) and is then subjected to retrospective analysis and interpretation using a variety of methods dependent on the study concerned. The researcher is therefore able to define a clear process-driven method of comprehensive analysis of the data to generate conclusions and theoretical contributions.

However, AR is referred to as an extended epistemology, where knowledge is created in multiple dimensions (experiential, presentational and propositional) and for multiple audiences (first, second and third person). It is the combination of these types of knowing and different audiences that has led scholars to refer to knowledge generated in AR as “*practical knowing*” (Heron and Reason, 1997:274).

The phases of each AC shown in Table 5.3.1 highlight that the researcher must take a continual and iterative approach to analysis of data in the field, drawing on their own sense-making and interpretations of the circumstances in real time (‘diagnosing’) in order to identify potential interventions (‘planning action’) in collaboration with participants – which is what leads to the collaborative second person generation of knowledge. Subsequent group reflection on the outcomes of ‘taking action’ (the interventions decided upon and implemented) is in itself a real-time form of data analysis in the second person.

What this means in terms of data analysis in the writing of this thesis is that the descriptions of each stage of each AC represent a significant part of the data analysis of the study. The purpose of the written thesis is to present to the reader a comprehensible explanation of the action study, as opposed to a comprehensive methodological analysis of every data element that could be considered in the course of a seven-months field-engagement. It is important to note that practical knowing is spontaneous (Coghlan, 2019); the collection of data used for third person analysis is only a fraction of the data that the researcher is experiencing, absorbing, rationalising, sharing, discussing and acting upon in real-time.

5.3.6.1 Second Person Data Analysis - Method

A summary to the background of each AC is provided in the introductions to the AC data analysis. Demographic analysis data for each AC is provided in the relevant appendices for reference. This provides the reader with contextual information from which to understand the subsequent *in vivo* analysis.

AR method encourages the researcher to undertake four key phases in each AC – ‘Diagnosis’, ‘Planning Action’, ‘Taking Action’ and ‘Evaluating Action’.

- i) **Diagnosis:** In this thesis ‘Diagnosis’ is offered as a series of evidence-based field-observations made by the researcher. These field-based observations were interpreted and categorised *in vivo* by the researcher for sharing with the participants as appropriate.
- ii) **Planning Action:** In the fieldwork phase, observations were discussed with the leadership group and grouped into themes such as “Negative” or “Positive” observations, or types of issue, and also ranked in terms of priority and type of intervention that might be required. These participant-determined interpretations formed the basis of the action plans, and are consolidated and expanded upon within this report.
- iii) **Taking Action:** Detail and evidence are provided regarding the implementation and execution of ‘Taking Action’.
- iv) **Evaluating Action:** This was a field-based activity whose purpose was to assess the efficacy of interventions and identify outstanding or new needs. This was an iterative, real-time process. The analysis provided herein captures the key indicators of change as they pertain to the research purpose and questions, as opposed to attempting to report on every action and intervention that occurred in a seven-months practical engagement in the sample.

Wherever possible, triangulation of data is provided including multiple data types to provide rigour in the analysis and AC interpretations of outcomes and impacts. In order to fulfil the requirements of “deep and rich” reporting in AR, extensive use of participant quotes is included. These data are incorporated with other data types (such as photographic, social media screenshots *et cetera*) to support the author’s assertions in all phases across the ACs.

5.3.6.2 First-person Analysis - Method

First-person reflection and learning are a core feature of AR method.

“At its core, first-person practice means that your own beliefs, values, assumptions, ways of thinking, strategies and behaviour...are afforded a central place in your action research practice. It involves attention to how you experience yourself in inquiry and action...” (McNiff, 2017:30)

This quotation from McNiff appears simple in its description but presents the researcher with a challenge: how to communicate to the reader the extensive and changing emotions and thoughts across a panacea of considerations that a human mind experiences in a moment – let alone over a protracted period.

“Reflective research, as we define it, has two basic characteristics: careful interpretation and reflection. The first implies that all references – trivial and non-trivial – to empirical data are the results of interpretation. The second element, reflection, turns attention ‘inwards’ towards the person of the researcher...Reflection can, in the context of empirical research, be defined as the interpretation of interpretation and the launching of critical self-exploration...” (Alvesson and Sköldbberg, 2009:9)

The first-person reporting within this paper combines McNiff’s guidance on the requirements for the researcher to actively capture the philosophical, axiological and emotional experiences and bias of the researcher, with Alvesson and Sköldbberg’s suggestion that the reflective process should be an “...interpretation of [the researcher’s in vivo] interpretations [of events]” (Alvesson and Sköldbberg, 2009:9). The approach taken in this analysis is therefore to present examples of reflections written at the time of the study, and to provide a reflective interpretation of that thinking within this paper.

Field-notes and journal entries were created throughout the study. These reflexive data provide content for both second person and first-person analysis. Each AC is concluded with a first-person reflection. AR seeks change and learning not only for the participants, but for the researcher also, and these reflections provide exploration of the impact that participation in the study was having on the researcher in consideration of his practitioner and academic roles, and also his personal circumstances. This study specifically examines the impact of personal motivation on the types of cohesion within groups, and therefore effort is made to reflect on the author’s personal cohesion to the group and its purpose, as well as how that aligned to his own shifting motives.

5.3.6.3 Third-person Template Analysis (TA) - Method

“Third-person inquiry or practice aims at creating communities of inquiry, involving people beyond direct second-person action. Third person is impersonal and is actualised through dissemination by reporting, publishing and extrapolating from the concrete to the general.” (Coghlan, 2019:7)

As described in section 5.2.2.1, AR offers a unique contribution to empirical research where knowledge is co-created with, and validated by, the participants of the study (Cassell and Symon, 2014). The aim of an AR study is to affect change; in the participants, in their environment, and in the researcher (Reason and Bradbury, 2012). The rigour of this emic process is measured by the acknowledgment of change by the participants from a starting point of their own perception of reality (abductive), by the triangulation of various data types collected during fieldwork, by observation of measurable practical outcomes, and by the self-reflection of the researcher on their own development as a researcher, a practitioner, a participant and as a person.

AR also seeks – where possible – to affect change externally to the sample, providing new empirical insight or theory *as a result* of the conduct of the study (Coghlan, 2019). Of significant importance and difference in AR third-person data analysis is the requirement to maintain the integrity of the philosophical premise of the abductive approach; to describe and understand social life “...*in the terms of the social actors’ meanings and motives*” (Blaikie, 2010:79). As described in Section 4.6.2, the purpose of third-person analysis in an abductive (AR) study is *not* to impose an *a posteriori* inductive analysis on the data corpus with a view to generating insight or meaning independent of, and separate to, that created and validated by the participants during the study. The purpose of the third-person analysis *is* to examine the first- and second-person learning, and to extrapolate interpretation of that reality from a theoretical perspective. It provides an interpretive lens to translate those *in vivo* analyses into a framework from which generalisable findings may be extrapolated in the context of relevant existing theory. Contributions to theory emerge when the analysis of the *in vivo* interpretations extends beyond the explanations that could be applied from current theory.

Applying this ontological and epistemological discipline to the execution of the third-person data analysis in practice means that rather than *inductively* analysing the data corpus of interview scripts, field notes *et cetera*, we must instead seek meaning from the knowledge created and validated by the participants *in vivo*. Therefore, this phase of the data analysis reviews the *observations and interpretations from the field-based analysis* as detailed in Section 6.2 and organises them into a framework from which themes have been derived that are relevant to the Research Purpose and

Questions. The study utilises an adapted form of TA to achieve the third-person impersonalised analysis of the participant-generated knowledge.

TA can be used within a 'contextual constructivist' position where it is assumed that there are multiple potential interpretations to be made of any phenomenon, dependent on the position of the researcher and the context of the research (King, 2014). This is of particular relevance for this study from an epistemological and ontological perspective; the first-person and second-person interpretations of social events and processes each offer different perspectives on the nature of the reality of the phenomenon experienced. TA allows for the incorporation of all of these contextual perspectives providing for explanation of the complex social processes observed. As highlighted by King (2014), this moves the emphasis away from coding reliability, and towards the importance of researcher reflexivity and – in this study – the reality perceived by the participants. In practical terms and for example, this means that independent intercoder reliability checks would be less appropriate to this study than the accurate and faithful second-person analysis which reflects the actual co-creation of knowledge and understanding by the participants in the study.

The nature of the research question and the literature review suggest several *a priori* themes, such as group cohesiveness, self-motivation, group interdependence, group purpose and others. This is consistent with the initial stages of TA, where the development of the template is informed deductively from the focus of the research project. In most TA studies, this *deductive* start to the template is then developed *inductively* through a series of first and second coding cycles of sub-sets of the data. Codes and themes are then refined iteratively until the template provides a sufficiently broad and deep codebook from which the dataset can be satisfactorily analysed in line with the research questions and purpose. TA is recommended for sample sizes of twenty to thirty participants (Cassell and Symon, 2014) and is therefore largely consistent with the profile of the dataset for this study.

However, unlike the *a priori* (deductive) and *a posteriori* (inductive) contribution usually employed in the development of the template, an AR study provides an alternative approach to the creation of the template being developed; the *in vivo* (abductive) interpretations of data formed during the study and captured in the second person reporting in the data analysis chapter. Combined with the flexible and iterative nature of TA, the third-person analysis in this study adds considerably to the rigour of the study, and the potential generalisability of any findings. The generation of the thematic framework has also identified themes which are not readily explained by existing theory, and which are therefore new contributions to knowledge.

The initial design of the TA template was informed from the combination of three contributory data sets:

- i) the first was from the gaps in literature identified in Chapter 3,
- ii) the second was from the *in vivo* observations from the diagnosis stages of the ACs, and
- iii) the third was from a *a posteriori* retroductive thematic analysis of the participant-validated AC processes of “Diagnosis”, “Planning Action”, “Taking Action” and “Evaluating Action”.

A first iteration of the template was deductively created based on the *a priori* conceptual themes indicated from the research purpose and questions. This was then revised by collating themes and observations from the *in vivo* field analysis provided in the second-person analysis in Section 6.2. This version of the template represented a view of themes as they emerged *during* the ACs. A four-month period of reflection was then undertaken by the researcher in consideration of the potential meaning of these themes and *in vivo* findings. Four extended *a posteriori* unstructured interviews were then conducted with senior members of the group, reflecting on their experiences and interpretations, and commenting on ideas and interpretations offered by the researcher during those interviews. The subsequent recordings were transcribed, and analysed, and additional themes identified, or existing themes amended or removed. This resulted in the generation of the final template in Section 6.3.3 which was used to inform the generation of findings.

5.3.7 Trustworthiness and validity

Halldórsson and Aastrup (2003) argue that even the most disciplined and rigorous qualitative research cannot be directly linked with the concepts of validity and reliability associated with the quantitative approach to research. Whilst there is no agreed ‘best’ way of evaluating qualitative research (Duberley, 2015), Guba and Lincoln (1989) propose an alternative called ‘trustworthiness’ to evaluate the research quality where trustworthiness is the combined attributes of credibility, transferability, dependability and confirmability. Creswell (2013) recommends researchers specifically reference their approach to providing credibility and assurance to their studies, highlighting eight different validation strategies:

1. Prolonged engagement and persistent observation
2. Triangulation
3. Peer review or debriefing
4. Negative case analysis
5. Clarifying researcher bias
6. Participant checking

7. Rich, thick description
8. External audit

In this study I have employed all of Creswell's recommended strategies.

1. Prolonged engagement and persistent observation

Starting on 3rd September 2018, the researcher was engaged with the sample group in a practitioner and academic role until 17th March 2019. This was an elapsed period of 117 days, and actual engagement of 70 days.

2. Triangulation

As described in Section 5.3.5 multiple data types from multiple participants were collected to support the practical and theoretical purposes of the study. This has allowed for the confirmation and disconfirmation of data analysis and interpretation.

3. Peer review or debriefing

During the period March 2020 to December 2020, the author has conducted a weekly conference call with two fellow DBA Research Associates review using Microsoft Teams. Peer 1 is conducting a qualitative multi-case study exploring contextual executive leadership and Upper Echelon Theory in the Middle East healthcare market, and Peer 2 is conducting a qualitative multi-case study exploring the role of narrative of acquiring executives on the emotional commitment of acquired middle managers in corporate acquisitions. These calls were conducted specifically to provide peer review of each other's research studies in the role of critical friends (when providing scrutiny of specific data, analysis and content), and as a validation group when involved in collective discussion and critique. This approach to trustworthiness is consistent with guidance provided by McNiff (2017). All calls took from one to two hours every week. Subject matters discussed included methodology, method, data analysis, thesis structure and research tools. In addition, topic, content, concepts and constructs developed by each researcher in their study were shared and reviewed by all three participants. Draft chapters or NVivo structures were shared for input and critique. This ongoing process also allowed for challenge and rigour, as well as support and motivation.

4. Negative case analysis

Specifically addressing the issue of credibility, the researcher has sought disconfirming evidence in the *a posteriori* analysis. As noted in the researcher's reflections, this technique was not employed rigorously enough in the fieldwork and could have provided valuable – and potentially significant – input to the core purpose, specifically affecting the second week of AC2.

5. Clarifying researcher bias

Chapter 1 provides detailed background information for this study and indicates researcher motivation, purpose and possible axiological considerations. Researcher bias during the field engagement is relevant to the *in vivo* observations and interventions. This bias was mitigated through the continual process of participant involvement and collaboration. In addition, daily meetings with the head coach (the project sponsor) ensured that interpretations and recommendations made by the researcher were challenged robustly and were evidence-based. Notwithstanding this, the core purpose of the group was shared by the researcher in his practitioner role, and therefore interpretations of social phenomena and processes were inevitably biased towards the desired collective instrumental outcome. This was mitigated by reflexive journaling.

6. Participant checking

The philosophical foundations of the research design and methodological choice demand an emic approach to the study; that is that the research is done *with* participants, rather than *on* them. AR requires the co-creation of knowledge with the participants. This study has followed this discipline rigorously, ensuring that the field work and ACs were conducted in full collaboration with participants. In addition, four post-study interviews were conducted with selected participants to capture their reflections and recollections of the period of the study, specifically exploring their thoughts regarding the cohesiveness in the group longitudinally and recalling any specific events or factors that they considered were important or relevant to the bonding and performance within the team. Selective observations made by the researcher were shared with the participants, eliciting both confirming and disconfirming responses. These were included in the third-person analysis and creation of the final coding template.

7. Rich, thick description

The second-person reporting and analysis of AR requires that a minimum of three ACs are conducted, with each cycle comprising four clear stages. In order to accurately describe the researcher and participant activities in each stage, a clear context must be provided. Therefore, each AC includes details of the AC core purpose, participant profiles, locations, dates, background and considerations. Within the analysis itself multiple data types are incorporated, including video and photographic records, along with extensive quotations from both participant interviews and researcher journaling and field notes. In addition, Chapter 2 provided detailed description both of the original phenomenon under investigation, as well as context and detail for both rugby as a team sport, and German rugby specifically. This was done to allow the reader to understand the motivations, group processes and behaviours of individuals in context to their personal realities and experiences leading into the study itself.

The importance of the depth of description included assists in the transferability and credibility of the study (Bloomberg and Volpe, 2018).

8. External audit

As highlighted by Bloomberg and Volpe (2018), the dependability and credibility of the study is enhanced by both peer debriefing and examination. This study and its author benefited from the close and active supervision of two esteemed and highly experienced professors, each of whom who have successfully supervised in excess of 30 doctoral students over more than thirty years. This continual assessment and audit of all the researcher's decisions and actions during the study has ultimately guided the execution of the study and the creation of this thesis. This provides the reader with confidence that the outcome meets the trustworthiness requirements of a study of this nature, and gives credibility to the assertions of theoretical, methodological and practical contributions offered herein.

5.3.8 Ethical Considerations

The principles of ethical standards in modern social research were established and published in the Belmont Report, 1979 (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). Summarised by Brydon-Miller (2008:201), the guidance for social researchers posits three key principles for any research project:

1. Respect for persons: Protecting the autonomy of all people and treating them with courtesy and respect and allowing for informed consent. Researchers must be truthful and conduct no deception.
2. Beneficence: "Do not harm" while maximizing benefits for the research project and minimizing risks to the research subjects.
3. Justice: Research should not unduly involve persons from groups unlikely to be among the beneficiaries of subsequent applications and informed consent must be given by participants.

These foundations govern the approach undertaken in this project. All participants were informed of the purposes of the study project and how data would be used, stored and reported, and where any subsequent report would be published. All participants were asked for their willingness to participate, and – if they were unwilling – their personal involvement in any subsequent data analysis would be removed. All participants were advised that their involvement would be anonymised in any subsequent reporting or development of theory.

The study was submitted for ethical approval of the University of Reading prior to the start of the study, and formal approval was gained accordingly (Appendix G).

Permission to engage with the group was provided by the Head Coach. However, verbal approval was provided by the President of the DRV prior to commencement of the study. It was considered that prior to submission of the thesis it would be useful to have this confirmed in writing. Therefore, Appendix L provides the written confirmation of permission for the execution of the study from the President of the DRV at that time.

The Participant permission form was produced for all participants and was signed accordingly by all members without exception (Appendix H).

5.4 Research Design: Summary

Chapters 4 and 5 provide a detailed description of the considerations in designing this research, extending from project genesis, through to construction and philosophical concepts and options, and to methodological options and choices, and finally to specific aspects of the method employed. An AR study was completed with an international rugby team (German Men's XV's) over a seven-month period, comprising 60 participants, competing in two international tournaments, with a total of three ACs. Data has been analysed using first-, second-, and third-person practice, employing abductive process and discipline for the field-based work, and a retroductive approach

to the third-person analysis required to inform findings. A critical realist approach has been employed throughout the study to encourage researcher depth of interpretation of the empirical data and observations, whilst maintaining the constructivist foundations of an AR abductive methodology.

Chapter 6 provides the analysis of data resulting from the application of this method.

6 Data Analysis

6.1 Introduction

Action Research seeks to create knowledge through three specific lenses of perspective; first-person inquiry, which reports on the personal development and understanding as experienced by the researcher; second-person inquiry, which is the co-creation of knowledge with the participants and reports on the shared experiences and learning; and third-person inquiry, where the research adopts a more traditional research role, organising and analysing data collected using accepted research techniques and methods (Reason and Bradbury, 2012; McNiff, 2017; Coghlan, 2019). Section 4.2 explores the important distinction between understanding, knowledge and theory; this distinction is especially relevant in an AR study, where the aim is to affect change in a social system in real-time, and to conduct both practitioner and scholarly analysis of data to create participant-driven understanding, and scholar-oriented knowledge and theory.

To meet these requirements this chapter provides a structured report of the field-based first- and second-person data analysis undertaken, and the *a posteriori* third-person template analysis described in Section 5.3.6. A framework has been developed to describe and analyse the activities in each AC, which allows the reader to follow a consistent path through what were complex and extended periods of engagement and immersion. It should be noted that the first- and second-person analysis in an AR study is written to reflect personal and collaborative learning respectively, and therefore the relevant perspective is used accordingly ('I' and 'We'). It is also important to recall that an AR study serves both a theoretical and a core (practical) purpose; the first- and second-person analysis must focus on how change was experienced by the practitioners from a core perspective, and therefore *in vivo* interventions are contextualised and described from that viewpoint rather than an academic one, albeit following rigorous academic process, discipline and ethical requirements. The theoretical requirements of academic contribution are satisfied in the third-person template analysis, and the overall contribution examined in the Findings and Discussion chapters.

The distinction between the in-field requirements and the thesis requirements are captured by Zuber-Skerrit and Fletcher (2007).

“The research and writing tasks are dissimilar in nature. Thesis writing must be clear and concise, with a logical and cogent argument that weaves a ‘thread’ through the thesis. Importantly for producing a

focused study with a tight argument, the writing must exclude what is not essential for developing the argument.” (Zuber-Skerrit and Fletcher, 2007:427)

Data analysed in this chapter includes semi-structured interviews, field notes and journal entries. Videographic, photographic, social media and presentational data is used to triangulate observations emerging from the analysis of the written data. This is reported in the second person and forms the narrative of the data analysis.

6.1.1 Unit of Measurement

The theoretical purpose of this thesis is to examine group cohesion. As identified in Chapter 3, this topic can be examined as either a group-level or individual-level construct (Beal *et al.*, 2003). The study seeks to understand group purpose and self-motivation as antecedents to group cohesiveness. Whilst a variety of factors at group-level were observed to assess the emergence of group cohesiveness (including types of interdependence, group identity and commitment and others), the examination of self-motivation as an antecedent dictated that the unit of measurement in this study is at an *individual-level*.

The scope of the participants included in the analysis includes all personnel involved directly in the group in each AC (players, coaches and support staff). This is because in the execution of a team sport such as rugby, the fifteen to twenty-three players who physically partake in the eighty minutes of competition represent only a fraction of the co-ordinated and significant effort required for success.

6.1.2 The Importance of Change and Learning in Action Research

Two specific features of AR are change and learning. The four stages in each action cycle – “diagnosing”, “planning action”, “taking action” and “evaluating action” involve the determination, implementation and assessment of interventions designed to facilitate change to meet the core purpose. The design and implementation of interventions, as well as the assessment of progress in the development and learning of the individuals and the group are key in AR studies. It is therefore important in the reporting of the field-based first- and second-person data analysis that the researcher identifies the type of change and learning required in each of the cycles. By doing so, the intentionality of subsequent interventions can be understood both from a practical and theoretical perspective.

In their seminal work of 1978, Argyris and Schön (Argyris and Schön, 1978) recognised that organisational change and learning broadly split between two different types; single-loop learning

where existing systems or processes are reviewed and changed to improve performance and outcomes, and double-loop learning where a re-examination of accepted processes, norms, beliefs or attitudes is required in order to improve efficacy.

Coghlan (2019) offers a development of Single and Double Loop Learning, proposing three “Orders of Learning and Change” as summarised below;

First-Order

Change effected within an existing way of thinking or doing, requiring examination of processes and identifying and implementing interventions accordingly. Typically used for solving everyday problems.

Second Order

Change that requires lateral thinking and challenge of the accepted processes and core assumptions associated with a situation or activity. Second-order learning may result in more structural change for an organisation, and the collaborative re-interpretation of need and requirement, and the subsequent organisational and process change necessary.

Third Order

Change that requires attitudinal, cultural, motivational or values-based examination at an organisational and/or individual level. Third order change implies that no amount of process redesign (First Order) or organisational restructuring (Second Order) on their own will provide sustainable and acceptable levels of required organisational or personal change. Interventions that require Third Order learning and change require active reflection of participants and organisations and a willingness to challenge established mental models and thinking.

The analysis of each AC uses Coghlan’s model to categorise the researcher’s interpretation of the type of change required at different times, and therefore explain the determination of specific interventions (i.e., Third, Second or First Order).

6.1.3 Structure of the Data Analysis Section

There are three main ACs in the study, referred to as AC1 (Section 6.2.1), AC2 (Section 6.2.2) and AC3 (Section 6.2.3) respectively.

The structure defined below is followed in each AC and provides a consistent reporting and analysis framework for the field-based activity in each action cycle.

1) Context and Purpose for the AC

- a) Summary description of situation
- b) Location and setting
- c) Core purpose of phase (from a case perspective, not researcher perspective)
- d) Duration (start and end point)
- e) Participant composition detail (provided in appendices)
 - i) Total number
 - ii) Participant attribute analysis

2) Second-person Analysis

- a) Stage 1 Diagnosing
 - i) Overall observations
 - ii) Specific observations regarding group cohesion, group purpose and personal motivation
- b) Stage 2 Planning Action
 - i) Categories, themes, and change and learning requirements (First, Second and Third Order)
 - ii) Intervention decisions (action and method) related to needs identified in Diagnosing
- c) Stage 3 Taking Action
 - i) Description and evidence of interventions implemented by researcher
- d) Stage 4 Evaluating Action
 - i) Evidence-based examination of impact of interventions

3) First-Person Reflection

6.1.4 Use of Theoretical Constructs in the Fieldwork and Data Analysis

This section refers to theoretical constructs described in detail in Chapter 3 (Literature Review). It should be noted that the constructs below formed part of the *a priori* preparation for the field study and were used in a) the researcher's cognitive appraisals of the groups, b) the individual participants, c) the core purpose as it related to both group and individual, d) communications with the coaches and players, and e) the intervention planning and evaluations. In the essential task of building trust and rapport all the participants, the researcher took time throughout the fieldwork to explain these constructs to individuals and the group, often using analogy to simplify the complexity of the relevant theories in order to help all parties to understand what we were

trying to achieve. The main theoretical constructs utilised in the fieldwork (and therefore in the data analysis) are listed below, along with a brief description of how they were explained to participants.

6.1.4.1 Group Cohesiveness

This was described to participants as “...*the bonding in the group that drives high performance*”. Utilising Feldman’s construction of group cohesiveness (Feldman, 1968), the researcher explained bonding as existing on four levels; 1) Interpersonal (player-player and player-coach/staff, coach/staff-coach/staff), 2) Task (how demonstrably committed individuals were to the group’s ambition/purpose), 3) Group pride in the XV’s national team, and 4) Group pride in the German Rugby Union (how committed individuals were to the organisation – split between the team itself and the overall organisation). In order to explain where we were and where we needed to get to, the researcher offered his subjective assessment of the state of the team at any given time as a “graphic equaliser” of four “sliders” in a scale of 1 – 10. Whilst this assessment was *not* empirically robust in research terms, it served as a useful measure for the participants in understanding what we needed to focus on to achieve the core purpose, and became a powerful tool in driving focus, commitment and buy-in from coaches, staff and players.

In the data analysis chapter group cohesiveness is referred to using Severt and Estrada’s multi-level dyadic construction (Severt and Estrada, 2015) offering cohesiveness as being either Instrumental (Task-focused), or Affective (Relationship-focused). This choice has been made because the researcher is comfortable from his experience in the field study that at an empirical analytical level, cohesiveness exists in multiple dimensions and levels, which can be grouped into two over-arching thematic constructs as above. This alignment helps to identify field-based interpretations and interventions as either instrumentally-, or affectively-focused. The two theoretical constructs from Feldman (1968) and Severt and Estrada (2015) are similar in concept and therefore are harmonious for translation from fieldwork to scholarly examination.

6.1.4.2 Self-Motivation

During this study the researcher has positioned personal motivation in the context of SDT (Ryan and Deci, 2018) and the differentiation between extrinsic and intrinsic motivation. Detail of this theory is covered in Chapter 3.

In communication with the participants and in trying to understand individuals, the researcher described these two concepts as “...*Extrinsic motivation is when an individual is driven by either reward, recognition, or perceived obligation,*” and “...*Intrinsic motivation is when an individual is driven by either*

autonomy, competence or relatedness.” In the practical application of these concepts, the researcher translated the three types of extrinsic motivation as respectively; “financial and winning”, “public and personal recognition of success”, and “duty, guilt or obligation”; and the three types of intrinsic motivation respectively as; “the personal freedom to take control of your own destiny”, “the personal satisfaction and quiet pride of being the best version of yourself that you can be”, and “the deep importance of relationships with family, friends, team-mates and others”.

In the data analysis the researcher has sought to find evidence of the six types of motivation described above, coding content accordingly.

6.1.4.3 Group Purpose

In the context of the fieldwork, the core purpose was defined and communicated to the group by the head coach at the beginning of each AC. This is provided for the reader at the beginning of the second-person analysis for each AC.

6.1.4.4 Group Stage Development

The active and committed engagement of participants is vital for the co-creation of knowledge in an AR study. It is equally essential for the development of a group. In order to articulate to the participants the likely stages that we would experience over the duration of our time preparing for and competing in the various competitions, the researcher used Tuckman’s model (Tuckman, 1965) to help both in sense-making for individuals, and as a measure of development and creation of urgency and commitment. Combined with the “graphic equaliser” assessment of the types and levels of group cohesiveness this gave the leadership group and the players the ability to understand where we were positioned at any point in time, what we still needed to do, and why needed to take certain actions at certain times.

6.1.4.5 Group Identity

Festinger *et al* (1950), Feldman (1968) and Severt and Estrada (2015) all highlight the importance of the need for individuals to feel pride in membership of a group, and the consequent positive impact on group cohesiveness. It is therefore essential that the group’s identity is clear to the participants, and that it creates personal pride for the individual. In communicating this with the participants, the researcher utilised words such as “our brand”, “the badge”, “the shirt”, “who we are” and similar phrases that evoked a sense of identity and membership. Looking at the larger organisational context, reference was made to “German Rugby” and “the DRV”. Theoretically, this leveraged group cohesiveness theories and Social Identity Theory (Tajfel and Turner, 1979).

It should be noted that group identity within the research sample group was not the same as the group identity of the parent organisation.

6.1.4.6 Taskwork

Salas *et al* (2008:28) describe taskwork as “...*the components of a team member’s performance that do not require interdependent interaction with other team members.*” In the context of the development of cohesiveness in a team sport such as rugby, it is essential for the efficacy of the group and the welfare and safety of individuals that group members attain high levels of competency in the skills and focus required to perform the individual tasks that can be expected of them. Examples of these for players might include tackling, kicking, passing and such, as well as power, speed and endurance in personal fitness. For coaches and staff, it is essential to the functioning of the collective group that as individuals they also perform their personal tasks to the best of their ability – whether that be financial management, food preparation, coaching planning and execution, leadership and motivation, physiotherapy, medical treatments, psychological support and so on.

Taskwork should not be confused with teamwork, which is described below and is significantly reliant on the commitment and execution of individuals’ taskwork.

6.1.4.7 Teamwork

Extending from taskwork, Salas *et al* (2008:30) describe teamwork as “...*the interdependent components of performance required to effectively coordinate the performance of multiple individuals.*” In the context of this research, the levels of interdependence were extensive in all aspects of preparation and competition. Fundamental to this is trust and communication. This description was used consistently with both sample squads for the duration of the engagements, and subsequent data analysis has sought to identify references to the same.

6.1.4.8 “Teamship”

As described in Chapter 3, on entering the fieldwork, “teamship” lacked a satisfactory scholarly description. However, this author described “teamship” as “...*the actions and behaviours of individuals that support and endorse the values, beliefs, traditions, expectations and standards implicitly and explicitly expected of members of the group.*” This explanation was provided to the groups early in the engagements and as described in this chapter. In both sample squads this led to a deeper level of active and collective reflection on these descriptors – essentially understanding and redefining their group identity. In the analysis herein, data that may suggest alignment to this description has been coded accordingly.

6.2 AC Data Analysis: First- and second-person

6.2.1 Overview

The period of study extended from September 2018 until March 2019, during which there were three ACs. AC1 incorporates the formation of a squad of players and coaches for the purpose of training and selecting a team to compete at the RWC19 Repechage play-off from 3rd September 2018 to 5th November 2018. AC2 reports on the individual, group and organisational behaviours and development of the selected competition squad during the RWC Repechage Tournament in Marseille, France from 7th November to 23rd November 2018. AC3 explores the group cohesiveness of the squad as it competed in the REIC in 2019 which took place over five different extended weekends from January until March 2019 and reports on observations and interventions for four matches in this tournament. In all three ACs the researcher held an active participant role as the mental excellence and “teamship” coach, as well as academic researcher. The following sections provide the first and second-person data analysis of each AC. Third person analysis of the second-person analysis is provided in Section 6.3.

Please note that for the purposes of anonymity, quotations are not attributed to named individuals. Participants are differentiated as either “Player” or “Coaching and Support Staff” and attributed with a number for the purposes of recognition of contribution from the same individual. The following abbreviations are applied:

Role

P: Player

C: Coach

6.2.2 Action Cycle 1 (AC1)

6.2.2.1 AC1 Context and Purpose of Cycle

A summary of the cycle is provided for contextualisation in Table 6.2.1.1. Demographic details of the participants are provided for reference in Appendix K.

Table 6.2.1.1 AC1: Cycle Context and Purpose

AC1	Summary of Cycle
Core Purpose of Cycle	<p>Pre-tournament training and creation of squad. Selection of tour squad. Prepare in all aspects for competition.</p> <p>Instrumental Purpose: “[Prepare to compete in and] win the RWC19 Repechage Tournament and qualify for RWC.”</p> <p>Taskwork - rugby skills, strength and conditioning (fitness), individual mental skills, support infrastructure and resources.</p> <p>Teamwork - game plans and plays, rugby training, cooperation in taskwork development.</p> <p>Affective focus: “Build a team” and “Be the best that you can be.”</p> <p>Interpersonal - horizontal and vertical inter-relatedness, conflict identification and resolution.</p> <p>Group Pride - group identity, behaviour, culture and values.</p> <p>Teamship - “Team and team-mates before self.”</p>
Location	Heidelberg, Germany
Duration	<p>3rd September 2018 – 5th November 2018</p> <p>Elapsed period - 64 days</p> <p>Actual time that the team was together – 39 days</p>
Context	<p>In consultation with World Rugby, the DRV appointed an internationally renowned and experienced head coach to lead and coordinate the efforts of the Men’s XV’s squad to compete in and win the RWC Repechage. The head coach appointed two senior coaches to support him prior to his arrival – an S&C coach and a Mental Excellence and team-function expert. He took responsibility at the beginning of</p>

	<p>September 2018 and inherited the incumbent rugby coaching team and ancillary support staff, with first game of the tournament to be held against Hong Kong (tournament favourites) on 11th November 2018. In terms of preparing an international team for a highly competitive tournament, eight weeks is an unrealistically short time for a coach to establish themselves and the team. However, to add to the challenge, the players had not played together as a squad since the issues referred to in Section 2.3 and many had declared their retirement from international rugby as a result. Also, players who were willing to play found themselves prevented from attending training camps in September and October by their domestic clubs under constraints in their professional contracts. Finally, the residual implications of the DRV-WRA conflict of earlier in 2018 had left many players disillusioned, untrusting and openly dissonant to the DRV, and with discord between different factions of the old squad. It was against this backdrop that the new coaching team took responsibility.</p> <p>The eight weeks of preparation available was planned in detail by the head coach, including three formal five-day training camps where player-release from domestic clubs was negotiated and agreed. In addition to these three weeks, training commenced on 3rd September 2018 for all available players. Initial attendance at the early stages was at low levels – just ten to fifteen players daily. However, this changed rapidly after the first week as attending players fed back to their colleagues about the new regime. Over the course of the eight weeks of AC1, a total of thirty-eight players were invited and attended preparation and selection training. In this time, the coaching team undertook the ambitious task of creating a squad of players with sufficient levels of skill, fitness, strength, game-plan knowledge, unity, determination and both collective and self-belief to compete in and win the RWC Repechage Tournament.</p>
--	--

6.2.2.2 AC1 Second-Person Analysis

6.2.2.2.1 Stage 1 Diagnosing

Semi-structured interviews were conducted with a cross-section of players, coaches and support staff (n=33). Participants were asked for permission to record these meetings and analyse the content for research purposes, of which twenty agreed. Each meeting was conducted in an office ensuring confidentiality and privacy and the meetings recorded

using an iPad and the Alon Dictaphone app. Interviews ranged from 30 minutes to 82 minutes. These data were subsequently transcribed and included in the data corpus for third-person analysis. Of the thirteen participants who opted *not* to have their meetings recorded, all thirteen agreed that the content of their meetings could be used to diagnose the development needs of the squad in relation to the core purpose of the engagement. The researcher wrote comprehensive notes in all meetings, including capture of participant views, and researcher interpretations and reflections.

This action cycle extended for a period of eight weeks and therefore ongoing data capture took the form of observations of individual and collective behaviour, informal discussions and meetings (with individuals and collectively), attendance and contribution to squad meetings and presentations, and extensive personal reflections.

Field-based data analysis was conducted in real-time and therefore informally, but consistent with the disciplines of First Cycle coding (Miles, Huberman and Saldaña, 2020), specifically utilising Descriptive, In Vivo, Process, Concept and Emotion coding. It was impractical during the field-work to create a formal code book because of both time-constraints and project momentum. Codes developed were captured in note-form in both field-notes and journal reflections. These codes were grouped into categories that subsequently formed the eleven observations described below.

These were shared with the appropriate participants based on the nature of the observation, the role of the participant and the potential sensitivities and interventions that might result from sharing of the observation. These observations formed the basis for intervention planning.

Observation 1: Animosity, resentment and distrust of the DRV from non-German participants.

The issues described in Section 2.3 affected players, coaches and support staff significantly, extending beyond the boundaries of their rugby environments, and impacting on personal and family financial security, accommodation and lifestyle, and mental wellness. In particular, non-German nationals who were specifically brought to Germany under playing contracts to play for WRA had found themselves unemployed, with themselves and families to support but with little or no support infrastructure to help them.

“Player: ... I’ve been struggling since we heard the news to find a new place to live.

Researcher: *What help have you had from DRV to help you find work?*

Player: *They've done nothing.*

Researcher: *So, you've been entirely on your own?*

Player: *Yes. I've been with Mo and my agent and they're trying to sort me out.*

Researcher: *Where are you going to live?*

Player: *Still working it out."*

(P1, 10th September 2018)

The resentment towards the DRV extended beyond the players, with support staff also affected by redundancy and also protective of the players.

"[] is deeply critical of the DRV. She sees first-hand the damage that had been caused to the team and to the individual players and is deeply distressed and concerned by this. She feels that the DRV does not care about its players or staff and highlights for example the significant distances that many players have to come to get to training on a daily basis. She also highlights the lack of money that those players have as a result of losing their professional contracts; even to the extent where players do not have a home to live in or sufficient income to eat healthily."

(Researcher Journal Entry, 13th September 2018)

The open conflict between senior directors in the DRV and Dr. Wild was played out in the public domain, with both press and social media coverage. Individual coaches and players were persecuted in both domains for their support of their employer, Dr. Wild.

"The situation just got crazy. [] [Director at DRV] and [] were openly insulting each other in public. Then the press got hold of it. It got a thousand times worse after the [player] strike; everyone blamed the players, particularly [] and [] [the captain and vice-captain]. They came in for a huge amount of personal abuse which affected them and their families – totally out of order. And then Total Rugby [German social media site] started being abusive about all the South African players in the squad. It's amazing that any of them want to play for Germany ever again."

(C1, 5th September 2018)

The lack of trust of the DRV from many of the senior players as well as the negative public opinion bias from the German rugby-public impacted on the actual and potential affective 'group-pride' function. As a 'lever' to increase group cohesion this was an obvious

requirement, but resolution required actions outside of the scope of control of the XV's squad.

"I think it is this interpersonal cohesion that is holding the squad together. Certainly, there is no task cohesion at this point in time and quite definitely no cohesion to the organisation. In fact, completely the opposite; any mention of the DRV creates division and negative response. It's going to be very important therefore that we build on the interpersonal cohesion both vertical and horizontal and use this as the foundation to build a team around."

(Researcher Journal Reflection, 14th September 2018)

Observation 2: Presence of In-groups and Out-groups based upon nationality, age, club membership, playing experience and both direct and indirect involvement in the DRV-WRA conflict.

At the earliest stages of the AC this manifested itself in four key ways. The first was in interviews with the researcher, where all participants noted the divisions within the squad based upon the criteria above. Secondly, during squad meetings participants naturally congregated to other group members of similar profile and background to themselves. Thirdly, during training sessions – particularly strength and fitness – elitist 'cliques' were obvious which excluded rather than included new members. Finally, after training sessions the separate cliques socialised in their own groups rather than as a larger squad or in new group structures. The strength of the bond within the South African players was also challenging for the new coaching staff.

"I sometimes feel a little intimidated by the strength of unity of the South African players and coaches. They've been through a lot together and have a depth of confidence and arrogance that can be scary. My role is the right hand to [the head coach] so I have a positional and age authority that commands their respect, but I notice the German players and the young and new players are timid and dominated by this powerful clique. This is my job to fix, and I need to work out quickly how to do it."

(Researcher Journal Entry, 7th September 2018)

Some players who had been involved on the periphery of the squad for some time had the potential to act as boundary-spanners between groups, and this potential for creating porosity was considered important in the intervention planning.

Player: There are definitely cliques. They always say that we are one but there is always that German group, then there is a South African group and there are a few that can mix in between. I'm kind of between because I speak fluent German, I get along very well with the Germans, and I get along with the South Africans... But there are a lot of guys who struggle to mingle or want to mingle. They find it easier to just chill with their group.

Researcher: What about between senior players and not senior players? Do you find there is a division there at all?

Player: There is quite a division. I feel it a lot with the way they treat the young players. I know the young players should have their roles in the team but it's kind of like a bullying system."

(P2, 17th September 2018)

However, whilst there were challenges to be overcome with integration, the players showed no animosity to each other and the Squad Room became a central point where barriers were broken down.



Figure 6.2.2.1 Heidelberg, Week 3: Squad Room (Source: DRV 2018)

Observation 3: Lack of commitment and focus regarding the core purpose.

A crucial element for any instrumentally-oriented group is acceptance of and commitment to achieving the core purpose. The ultimate goal for this group was to play in four international matches in the RWC19 against Italy, South Africa, New Zealand and Namibia in November 2019, and the route to that goal was by winning the RWC19 Repechage

Tournament in November 2018. Despite the reality of the upcoming play-off competition to achieve that purpose, many of the players were not mentally prepared at all for what opportunity and demands lay ahead. This psychological adjustment was critical to establish at a very early stage in order to ensure that the participants began to prepare in every aspect to the levels required to compete and win. The initial malaise was manifest in the mental-excellence interviews with the researcher as well as in the lack of personal preparation, effort and commitment for many of the players in the initial two-three weeks of training.

‘I don’t feel the urgency at the moment. I think there are one or two guys, like [Player X]. [Player X] sent a message to the whole squad; ‘32 trainings, how many days until our first game?’ And no one is writing back going, ‘Yes Boys! Let’s go, let’s put in the effort.’”

(P3, 11th September 2018)

The lack of preparation extended beyond the general team, and penetrated the most senior levels of the squad, as noted by the Captain.

‘I’m worried about [Vice-Captain] and his commitment to the programme. I understand he needs to go on holiday, and I understand he needs time with his family. He’s a phenomenal player so it’s OK for him to go on holiday. But players look up to him, he’s one of those guys who can do something special on a field and say something at the right time and we’re missing out on that.

Him not being here now and not really being, well, you know...I’m trying to start something in the group because guys are very quiet, they’re in their shells.”

(P3, 11th September 2018)

The conflict emotions towards the DRV almost overwhelmed the players, and undermined any potential for the new coaching staff to leverage group-pride at an organisational level. However, loyalty to the squad leaders was powerful and suggested a potential to create an identity that was isolated from the DRV.

‘Researcher: So, in terms of loyalty to the DRV, to the Union?

Player: There is nothing. If it wasn’t for [Director of Rugby] and [Coach] then I probably wouldn’t be playing now.”

(P1, 4th September 2018)

Observation 4: Low levels of personal preparation and commitment.

Teamwork requires that individual group members are committed and able to execute their personal taskwork efficiently and effectively. This requires personal dedication and preparation. Failure of individuals to prepare in a team-oriented environment indicates a selfishness and lack of respect or care for other group members, and has a significant impact on the trust and cohesion within the group. The early stages of the formation of the squad revealed a significant lack of personal preparation across the entire group. This had the potential to undermine any efforts of the coaching or leadership to create a high-performance culture and high levels of group cohesiveness.

“I think just some players are not showing the work ethic. It’s not doing the homework when you go home... when you’re training together and [a player] drops the ball because he’s not running in the right shape or in the right position. What are they doing when they get home? Are they actually watching the tapes that get sent out to us? Taking responsibility has been a real thing that we are trying to drive here.”

(P3, 11th September 2018)

However, we could see a growing change in focus with some players away from blaming the DRV for their situation, and becoming more self-aware and self-critical.

“Player: I’m struggling. I felt a little bit rusty today in terms of just my basic skills...I’ve also realised in the past week I probably could have done a bit more [preparation] myself. I’ve realised that I’ve fucking wasted two weeks. I’ve realised also that November is two months away and I can’t be running 5-28’s on the Broncho and dropping balls at training. I want to put more effort into that side.

Researcher: How do you feel about that?

Player: Not happy. Not happy because I know I’m not particularly fit. I haven’t played a game yet so my lungs haven’t got a proper bit out and I think I probably could have knocked ten seconds off if I was mentally ready to do that.”

(P4, 10th September 2018)

“Player: I’m struggling. I felt a little bit rusty today in terms of just my basic skills...I’ve also realised in the past week I probably could have done a bit more [preparation] myself. I’ve realised that I’ve fucking

wasted two weeks. I've realised also that November is two months away and I can't be running 5-28's on the Broncho and dropping balls at training. I want to put more effort into that side.

Researcher: How do you feel about that?

Player: Not happy. Not happy because I know I'm not particularly fit. I haven't played a game yet so my lungs haven't got a proper bit out and I think I probably could have knocked ten seconds off if I was mentally ready to do that."

(P5, 10th September 2018)

Personal preparation requires awareness and planning, and there was an alarming lack of even the most basic understanding of the group's purpose.

Player: "It's the first time and maybe the only time that Germany ever had a realistic chance. We are in a good position now and we can do it.

Researcher: Do you know the date of the first match in the rugby world cup?

Player: No.

Researcher: Do you know who you are going to play against?

Player: I think we're in the group with New Zealand.

Researcher: You don't know who the first match is against?

Player: No."

(P6, 11th September 2018)

Observation 5: Lack of collective group identity within the squad.

Affective group cohesion requires group pride, which in turn requires group identity. The informal segregation of the group into cliques based on nationality and club membership created a series of divisions within the squad. Existing 'branding' of the XV's squad based on activities of two years previously resulted in the team motto of "Einheit" ("Unity"). The image below is a screenshot of the opening slide of a presentation given by the captain (South African) in the first week of training. Translated it means "The Eagles" and "Unity". It is important because only a small proportion of the squad identified with it as a rallying cry, and it created division and exclusion with the remainder.

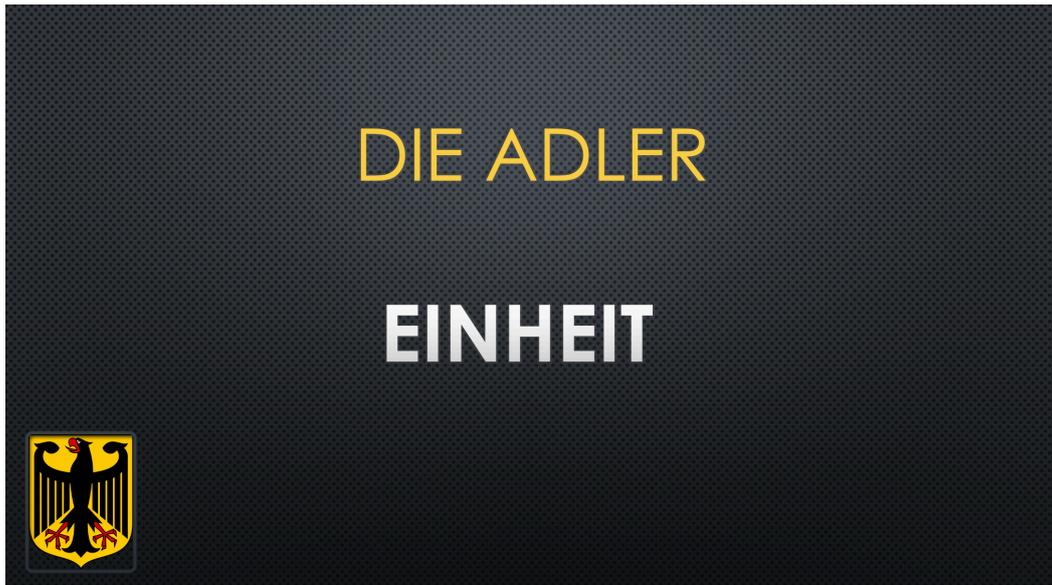


Figure 6.2.2.2 Original squad identity and branding - subsequently changed (Source: DRV 2018)

Whilst this had meaning and a powerful unifying effect on players involved at that time, it had an equally powerful negative impact on players who were not involved, and indeed who disagreed with the actions of players and coaches at that time. The leadership group in the squad comprised six senior players, all of whom were South African and all of whom had been contracted to the WRA and sided with Dr. Wild in his dispute with the DRV. The German players were more inclined to support the DRV argument in that dispute, and felt excluded from the brand of “Einheit”.

Player: I think I have the chance to represent my country in a world cup. I don't want money for that, that's like a, yes, that would be the biggest thing in my life. I'm maybe one of a few real amateurs in this team. So, I have to work 40 hours and have this life next to rugby. When I come in here for me it's like the biggest honour to represent my country and to train for that. Then you have a lot of foreign players from...it doesn't matter. You see that at the end of 2017 they go out to strike because they don't get support from the DRV. So, they don't play because they get no money for that. I think that's a big difference. It's really hard for players from outside, they are not in a professional environment so to come in and not to have the respect of other players because you are not a professional, you are amateur.

I think for a lot of players they have the objective [to play at] the World Cup to show themselves to the world to have the chance to go to a better club after and get more money. That's totally OK. That's not my objective.”

(P7, 11th September 2018)

The existence of delineated in-groups and out-groups had the potential to undermine any efforts to create a single and shared identity within the squad, and therefore prevent affective group cohesion and group pride.

“[Player] is a very proud German. He loves to represent his country and it’s a source of immense pride for his family and friends, and he is desperate to represent Germany at the Rugby World Cup. Earning money from the sport has no interest to him at all and indeed he seems to be quite negative about the non-German players who do have significant focus on the financial elements of playing. This indicates a very clear division and resentment between the German and the non-German players representing Germany.”

(Researcher Field Notes, 11th September 2018)

Observation 6: Conflicts and confusion within the coaching group and support staff.

High performance in team-based endeavour requires effective communication, cooperation and collaboration. Coaches’ meetings in the latter part of the first week of the engagement exhibited increasing levels of frustration, disagreement and anger between the existing coaches. These exchanges followed a theme; individuals were unclear about the boundaries of the scope of their area of coaching and were being protective of what they perceived their responsibilities and authorities to be. Not only was frustration felt about ‘treading on each other’s toes’, but the lack of clarity over roles and responsibilities was resulting in important activities not being undertaken by anyone – impacting on the preparation and conduct of training sessions.

[Physiotherapist] has been with the squad for more than four years. She has experienced first-hand the conflict and pettiness between the DRV and the XV’s squad and is appalled. She’s asked me to deal with an already open conflict between her and [the DRV doctor] about who is the decision-maker on player welfare. She believes it’s her because it always has been. He believes it’s him because he’s senior to her. This has the potential to get out of hand – and we can’t allow it because it affects player welfare and confidence so profoundly.

(Researcher Field Notes, 4th September 2018)

Examples of this included nobody preparing audio-visual equipment for squad briefing sessions, resulting in delays to squad meetings, and confusion in front of the players. Also, there were multiple instances of two coaches trying to brief and run the same skills session, resulting in frustration for the players, poor outcomes and undermining of credibility for the coaches.

“Thoughts/reflections on Week 1.

Chaos. The overriding view that I have is of utter disorganisation in every aspect. There is a total lack of urgency, need for action, strategy, plan or decision-making. Players, coaches and staff are confused, rudderless, lethargic, dissatisfied and disillusioned. [Coach A] and [Coach B] are continually bickering over who is in charge of what. It’s such waste of time in the coaching meetings, and they look idiots in front of the players. [Physiotherapist] and [Doctor] are in open warfare with each other about who makes decisions over the fitness-to-train of players. We have to fix this fast, or we don’t stand a chance...”

(Researcher’s Journal Reflection, 6th September 2018)

At the heart of this observation was a lack of clarity over roles and responsibilities.

Observation 7: Isolated pockets of high levels of interpersonal cohesion, “teamship” and selflessness.

Despite the divisions described above, within identifiable cliques, there were numerous examples of close relationships, positive social interaction and a willingness to sacrifice personal needs for those of a team-mate or the organisation.

“I’m really close with [Coach X]. I lived with him for three years when I came to Germany. So, it was me, [Coach X], his wife and [another player]. So, we were really close. If I have a problem, I will go to him.”

(P8, 5th September 2018)

This was an important observation as it highlighted that many of the participants were *not* selfish and self-centred individuals, but in fact were both willing and keen to be members of a cohesive whole.

“I had to move from my apartment this weekend because I haven’t got a contract after the Repechage and no money. [Three players] spent all of Sunday moving my gear out and making the apartment ready for the landlord’s inspection. I’ve moved in with [Senior player and his girlfriend] – sleeping on his couch for the next few months until I know what’s happening.”

(P1, 10th September 2018)

For the German players, their long-term friendships had resulted in a bond which was more akin to brothers than teammates, which - handled in the right way - could provide a

core to building an affective cohesion which was both interpersonal and group-pride based.

“...for example, ■■■ and ■■■; basically, I’ve known the guys since I was three years old, I’ve played rugby with them, went with them to [play professionally in] France, we were on our own. I feel like I’ve known them forever, I know everything about them, and they know everything about me, so we’re pretty close and we have a lot of guys on the team who know them for a long time and then we have, yes, I think it’s a good family.”

(P9, 11th September 2018)

Outside of the observation and structure of the training environment, the newly-introduced players were also creating bonds based on shared experience and circumstance, and overt selflessness.

“The last couple of days have revealed some interesting insights about how much some of these players genuinely care about each other. The new guys in camp who have just flown in and are staying in hostels have been looked after immediately by the other new guys. The players have very little money but are pooling their cash to go to the supermarket together so that they can cook up big, healthy meals together. A couple of players have had to move out of their apartments because they have no cash, and other players are taking them in – despite the fact that they are living with their wives or girlfriends. Guys are lending other players their bikes to get to training and walking in because they live closer. It’s humbling...”

(Researcher Journal Entry, 15th September 2018)

The combination of these different loyalties and clear willingness to sacrifice their own needs for those they identified with left the coaching team with real hope if we could harness the affective cohesion in the isolated groups and create a shared focus and purpose.

Observation 8: Positive relationships and trust with all members of the coaching, medical and support staff.

The vertical cohesion between players, coaches and staff was a significant strength for the team. The Director of Rugby had been in post for eight years, and all of the players had worked with him over that time. The researcher’s observations about his personal morale and focus implied that he was having a detrimental effect on the group; he was continually bad tempered, demoralised and gave an air of defeat. It transpires that this was directly as

a result of the personal toll that the DRV-WRA conflict had taken on him. However, loyalty to him was exceptionally high across the whole squad.

‘I’ve always had massive respect for [Director of Rugby] because he coaches Germany because he’s passionate. That’s the feeling I get. If anyone else was in his position I think they would have thrown the towel in. So, I think it’s good for the team because we have a coach or director of rugby who leads by example. We know he’s not here just because of money or just because of this [RWC19]; he’s here because this is his dream as much as it is ours and that I suppose is good for the team because he’s not talking empty words because he’s been through it all... I feel I can trust him totally.’

(P2, 10th September 2018)

Equally, the existing coaching and support staff enjoyed similarly strong bonds and loyalty with the players and with each other.

‘[Coach] has helped me a lot defensively in my line-outs as well. My lifting has got a lot better and my mauling. Obviously, he’s a bit of an inspiration as well because he played for England quite late and amateur rugby and all of that, so he has really worked hard for it.’

(P4, 10th September 2018)

This loyalty within the group, and the trust in its leaders, provided a significant foundation from which to build the overall group unity and cohesion.

‘[Against] Samoa I was out of contract. I played because [Director of Rugby] asked me to play. If he and [coach] are still involved, I’ll play it but if they’re not involved, I don’t think I’d have any loyalty to the DRV.’

(P1, 5th September 2018)

Observation 9: Excitement and positivity regarding the appointment of the new head coach, his coaching team and approach.

Whilst task-orientation is critical in the formation of any group or team, if the task itself seems unachievable it is unlikely that the group will unite and leverage their collective abilities in a co-ordinated manner to succeed. The appointment of the new Head Coach by World Rugby provided players, coaches and staff a belief in themselves that they had the potential to be successful.

“[Head Coach] [REDACTED]’s come in and because he’s been a professional for so long, he understands, he seems to know where the boundary is. Does that make sense? He is a player and a coach, and he puts that from the word go and I found it difficult to understand in the beginning. The first two sessions I was like, ‘I can’t put my finger on this’, and then you realise after two days you go ‘Wow, this is what professionalism is’. So, I’m impressed.”

(P10, 10th September 2018)

Informal comments made to the researcher during the first two weeks highlighted that the participants increasingly felt that for such a well-respected and experienced coach to put their effort and reputation into leading the German team, he must have believed that they could win. The clarity and professionalism exhibited by the head coach and his S&C coach made an impact on everyone immediately.

“I think when [Head Coach] and you arrived here last week when I go home on Monday I said, ‘Fuck you can’t get a better coaching set up what you get for this’. I was really pleased that we have [Head Coach] as a coach, [S&C Coach] is here, you are here.”

(P11, 12th September 2018)

Observation 10: Excitement and desire to participate and compete in the RWC 19 Repechage.

There was a confusing conundrum for the coaching team between the lack of personal preparation and readiness of players on commencement of the training programme, compared to the emotions that those same individuals felt.

“And I’m willing to do everything, I’m happy to do it. Fuck I love it! I’m a limelight person you can throw me there any time of the day.”

(P10, 12th September 2018)

This indicated that there was a feeling of disbelief and lack of sense of the reality of what they were about to be involved in. However, the genuine excitement gave the Mental Excellence coach the core emotional commitment from the players that was needed to inspire accelerated psychological and physical engagement and sacrifice.

“I love it. I think that’s one of my biggest motivations at the moment is if we go to the world cup we’ll be playing against South Africa and I might as well retire after that, because I just get goose bumps thinking about it.”

(P4, 10th September 2018)

The sense of national pride - whilst not aligned to pride in Germany alone - highlighted an intrinsic motivation for many of the players, irrespective of their home nationality.

“I’m German and it’s the biggest thing I can achieve as a person to represent my country at the world cup.”

(G-P9, 11th September 2018)

Observation 11: Personal pride of what selection to the squad means to participants’ families and friends.

In addition to loyalty, trust in leaders, desire and belief, the final observation in the diagnosis stage was the identification of the importance of their participation in the RWC to their loved ones.

Example 1. Player: “Every time I play, I play for my family. I play for my wife and son at home. They are the ones who put up with me and everything rugby has thrown our way. They are my rock, and I would love to do this for them.”

Example 2. Player: “The first people I’ll call when we win will be my wife, then my dad, then my two best friends.”

Example 3. Player: “Why do I play? Simple: I love the game; I love playing it. And I love playing with these guys. They are my brothers.”

Figure 6.2.2.3 Exemplar extracts from “My Focus and Motivation” submissions, September 2018

Aside from personal glory or reward, this observation accesses two powerful motivating factors; intrinsic-relatedness (the importance of deep-rooted relationships) and extrinsic-introjection (the external need to perform for obligation, pride or guilt).

“That for me is one of my main driving points, I maybe should have mentioned it, it’s my sister. I can’t describe to you how much it will mean to her if I play in Japan in the Rugby World Cup. She got diagnosed with a brain tumour four years ago, she’s had two operations as well to have that out. So, every

time I do wake up, every time I go on the pitch I'm going; 'Don't take this for granted, you're never going to get this opportunity again nor are you going to be in the position you are to have a healthy body and get through it'."

(P2, 12th September 2018)

From a practice perspective, this focus on emotional connection and motivation established personal purpose for each individual.

"It was always a way I could make people proud. I always was less of 'the talent' and then it was good to make people proud, especially back home with the family and stuff. I think that's pretty much the main point why I play and it's always just being in that team environment, that family feeling. It would make them unbelievably proud for me to play in the World Cup. I want that for my dad. He deserves that."

(P8 Interview, 5th September 2018)

Summary of Diagnosis Stage

As can be seen, the challenges facing the coaching team in creating cohesion with the group were significant. It was a newly formed group, where individuals' commitment and competencies to perform their taskwork was at a low level. There were also many significant hygiene factors that were effecting individuals and their personal welfare. In addition, recent events between the DRV and WRA had both emotional and practical impact on many players, who were still trying to resolve issues created by that conflict. Within the squad there was a mixture of division, cohesion, trust and tacit discrimination. However, across the whole squad there was excitement, desire, loyalty and trust with coaches, belief in the new head coach and both intrinsic and extrinsic motivation for all participants.

Stage 2 – “Planning Action” describes the decisions taken in order to address these observations.

6.2.2.2.2 Stage 2 Planning Action

The aim of AR is the co-creation of understanding and knowledge with participants. This aim is complementary to good practice in group work and problem-solving in groups, identifying challenges, sharing the findings with relevant group members and exploring and agreeing potential

solutions together. The 'Planning Action' stage therefore describes process, contributors and agreed interventions that address the observations from the 'Diagnosis' stage.

Process

1. The eleven observations were grouped into two categories; 1) negative issues that required resolution, and 2) positive sentiments that could be built upon and further strengthened or leveraged to assist in resolving the negative issues. These are shown in Table 6.2.1.2:

Table 6.2.1.2 AC1: Categorisation of Observations

Category	#	Observation Description
Negative Issues	1	Animosity, resentment and distrust of the DRV from non-German participants.
	2	Presence of In-groups and Out-groups based upon nationality, age, club membership, playing experience and both direct and indirect involvement in the DRV-WRA conflict.
	3	Lack of commitment and focus regarding the core purpose.
	4	Low levels of personal preparation and commitment.
	5	Lack of collective group identity within the squad.
	6	Conflicts and confusion within the coaching group and support staff.
Positive Sentiments	7	Isolated pockets of high levels of interpersonal cohesion, teamship and selflessness.
	8	Positive relationships and trust with all members of the coaching, medical and support staff.
	9	Excitement and positivity regarding the appointment of the new head coach, his coaching team and approach.
	10	Excitement and desire to participate and compete in the RWC 19 Repechage.
	11	Personal pride of what selection to the squad means to participants' families and friends.

2. The observations were then reviewed and re-categorised into themes under each of the category headings that were understandable and usable from a participant perspective, and also consistent with theoretical knowledge regarding group and team function. These observations, categories and themes were evaluated in accordance with the type of change (Coghlan, 2019) needed which then provided the foundation for agreeing actionable interventions with the participants. These themes are shown in Table 6.2.1.3.

3. These were then shared initially with the head coach, and subsequently with the full coaching team. Themes and categories were explained and discussed collectively and the background and evidence for each observation was challenged and validated based upon the researcher's data gathering. Individual coaches added their personal experiences, observations and interpretations to the researcher's. There were no re-categorisations requested or disagreements with either the data or the interpretations and subsequent groupings and definitions suggested.

4. In order to translate the requirements into a set of actionable interventions, the head coach led a re-summation of the themes into four simplified concepts that he judged would be easy to explain, would be remembered and adopted by the players, and that would provide anchors upon which daily activities and training could be related to. These concepts were applied as descriptions of required behavioural change. This was communicated in terms of the phrase "What this means is..." to the participants, ensuring that a common focus and understanding was created. The intention of this approach was to provide a clear shared purpose, establish a unique identity for this group, ensure inclusivity and unity, establish roles and responsibilities, as well as standards, expectations, and a culture that supported the shared purpose. These are detailed in Table 6.2.1.4.

5. Having established the four core concepts, the coaching group then agreed to implement them in all activities and in every aspect of preparation for the following ten weeks. This included everything from strength training in the gym, to fitness training and testing, to skills sessions on the pitch, through to planning for coaching sessions, timekeeping and discipline, communication, team meetings, mealtimes, socialising, preparation of kit for training and taking turns in setting up or clearing down the pitches, training rooms, squad room, changing rooms, gym and so on.

6. Two additional areas that were identified as critical to the development of the group, but that required specific external intervention were a) determination of roles and responsibilities within the extended coaching group, and b) the generation of a new identity for the squad that was unique to them and could be used in subsequent press communications. These two tasks were nominated for action by the mental excellence and "teamship" coach (this author).

Table 6.2.1.3 AC1: Re-theming of categorisation and type of change required

Category	#	Observation Description	Themes	Type of change required
Negative Issues	1	Animosity, resentment and distrust of the DRV from non-German participants.	Isolation and mistrust Resilience	Third-order (Attitude and Beliefs)
	2	Presence of In-groups and Out-groups based upon nationality, age, club membership, playing experience and both direct and indirect involvement in the DRV-WRA conflict.	Integration and Social Identity Stages of Group Formation	Third-order (Cultural, Attitude)
	3	Lack of commitment and focus regarding the core purpose.	Clarity of group purpose Lack of common purpose Roles and responsibilities Task and project planning	Third-order (Attitude)
	4	Low levels of personal preparation and commitment.	Sense of urgency Personal responsibility Accountability to peers Selfishness Personal pride	Third-order (Attitude)
	5	Lack of collective group identity within the squad.	Group pride Reputation Branding and identity Inclusion Values, standards, expected behaviours, rituals and culture Social Identity	Third-order (Values, Beliefs, Cultural, Identity)

	6	Conflicts and confusion within the coaching group and support staff.	Roles and responsibilities Taskwork Teamwork	Second-order (Organisational structure)
Positive Sentiments	7	Isolated pockets of high levels of interpersonal cohesion, teamship and selflessness.	Selflessness Teamwork Sacrificing own needs for others Trust Interdependence Intrinsic motivation (relatedness)	Change not required
	8	Positive relationships and trust with all members of the coaching, medical and support staff.	Trust Vertical bonding/cohesion	
	9	Excitement and positivity regarding the appointment of the new head coach, his coaching team and approach.	Belief Ambition Followership	
	10	Excitement and desire to participate and compete in the RWC 19 Repechage.	Desire Commitment Excitement and energy Extrinsic motivation Instrumental group purpose	
	11	Personal pride of what selection to the squad means to participants' families and friends.	Individual Purpose Pride in performance Pride in outcome Intrinsic motivation (relatedness, competence) Extrinsic motivation (introjection) Common purpose	

Table 6.2.1.4 AC1: Translation of themes, categories and observations into concepts for practise

Concept	Applied	Theoretical basis
“Fight”	<ul style="list-style-type: none"> - To be the best that you can be - For each other - For our standards - For your families and loved ones - Leave no stone unturned 	<ul style="list-style-type: none"> - Taskwork + Instrumental cohesion - Teamwork + Affective cohesion - Culture + Identity - Intrinsic-Relatedness motivation - Intrinsic-Competence motivation
“The Plan”	<ul style="list-style-type: none"> - To win the RWC Repechage - Improve your rugby skills - Improve your strength and fitness - Improve your mental skills - Improve your focus and commitment - Know your role and everyone else’s - Become One Team - Develop and know a simple and effective game plan that everyone understands 	<ul style="list-style-type: none"> - Common instrumental purpose - Taskwork + Intrinsic-Competence - Taskwork + Intrinsic-Competence - Taskwork + Intrinsic-Competence - Taskwork + Intrinsic-Competence - Teamwork - Social Identity + Teamwork + Culture - Instrumental cohesion
“Start”	<ul style="list-style-type: none"> - Having pride in self and others - Believing in self and others - Working harder and train harder than you’ve ever worked before - Working together and for each other - The countdown clock - Picturing the kick-off against Hong Kong 	<ul style="list-style-type: none"> - Affective cohesion-group pride - Intrinsic-Autonomy motivation - Intrinsic-Competence + Extrinsic-Introjection - Teamwork + Affective cohesion - Instrumental purpose - Instrumental purpose
“Be in the Now”	<ul style="list-style-type: none"> - Leave the past behind - Embrace every moment of every day - Don’t be distracted - Concentrate and prepare 	<ul style="list-style-type: none"> - Group Identity - Instrumental purpose - Teamwork + taskwork + motivation - Instrumental purpose

6.2.2.2.3 Stage 3 Taking Action

The previous stage resulted in the identification of three key interventions:

Intervention 1 – Apply the agreed four concepts to all activities.

Intervention 2 – Establish defined roles and responsibilities for the coaching and support staff.

Intervention 3 – Create a defined identity for the XV's squad.

The measure of the effectiveness of these interventions was agreed with the head coach to be informal and iterative reviews of the eleven observations from the “Diagnosis” stage.

This section therefore describes the specific actions taken to initiate change.

Intervention 1 - Apply the agreed four concepts to all activities

As detailed in Table 6.2.1.4 the ideals that these concepts represented needed to be present in all group and training activities. Unlike Interventions 2 and 3, this intervention was defined to address a broad range of behavioural and attitudinal issues at an individual group member level in order that those changes would then lead to performance improvements for individuals in their motivation, focus and alignment, and subsequently to provide the foundations for the development of the teamwork activities. The intention was that this in turn would lead to the generation of group processes that would allow a team to form.

We determined that we would implement the following changes with immediate effect from the commencement of Week 3 of the engagement (17th September 2018).

1) Clarity of Purpose

It was clear from the interviews that whilst players were excited about the opportunity of playing in the RWC in 2019, there was a considerable gap between that emotion and the reality of the timelines and task that had to be achieved to realise the ‘dream’. Therefore, the shared purpose of the squad was stated unequivocally; to compete in the RWC19. The route to achieving this purpose required winning the RWC Repechage Tournament in November 2018. To do that we needed to beat Hong Kong on 11th November, Canada on 17th November, and Kenya on 23rd November 2018. And to do that, we needed to arrive at the tournament hotel on 5th November fully prepared in all aspects and working as a seamless and powerful team.

This purpose was stated in each morning squad briefing and printed off and posted around the training facilities.

The intervention addressed the issues of focus, belief, urgency, shared purpose and personal responsibility.

2) Punctuality and time-keeping

A detailed weekly programme was produced by the head coach and shared to all group members using the shared WhatsApp group, as well as being displayed on notice boards and changing

rooms. Daily activities were agreed in morning coaches' meeting, and the timing and content of every evolution was defined and published (including all sport-related activity, as well as mealtimes, recovery times, physiotherapy, mental excellence clinics, squad meetings and press obligations). It was agreed that every individual involved in a particular evolution would be ready to start five minutes before the published time, wearing the correct clothing, being already warmed-up, or (in the case of presentations) with all presentation and AV equipment pre-tested and ready to start exactly on time.

Sessions were to be run in accordance with plan, with no over-running in any respect being acceptable. This required exceptional discipline from the coaches and concentration from players.

A timekeeper was appointed to every evolution with the responsibility to provide a continual commentary on time-remaining, and with the authority to end sessions on time if the coach was in danger of over-running.

This intervention was designed to address the issues of focus, confidence and personal responsibility.

3) Personal fitness and preparation

A fitness test was conducted of all players and the results published. The S&C coaches provided bench-mark standards for international players in the same playing positions. Individual S&C training plans were created and distributed providing finite detail of the targets for the individuals, including information such as what type of weight training to do done, in what sequence, with what weight and for how many repetitions. Players were informed when the next tests were to be held, and the levels that they needed to achieve at each stage.

This intervention was designed to improve self-discipline, focus, self-belief, taskwork and inclusivity. Inclusivity was created because the divisions and cliques in the group tended to be age oriented. We found that the younger and less experienced players were fitter and faster than the older players, but the older ones were stronger. The programme created a 'level-playing field' where everyone had significant pain to go through to meet their required goals. We therefore witnessed players helping each other in areas that they were strong, reciprocated by others accordingly.

4) Mental excellence and "teamship"

The development needs of the players extended from rugby skills, fitness and game plan knowledge and execution, through to the team-process concerns identified in the "Diagnosis" stage. However, in order to meet the levels of performance required in any of these areas, we

needed to address the issues of motivation, de-motivation, desire and concentration for each individual.

Therefore, every player scheduled private one-to-one sessions with the mental excellence coach as a matter of priority equal in importance to the sport-based coaching. This was a unique element that the head coach had introduced to this squad that they had not experienced before, and which the head coach had not tried before. Specific outcomes will be discussed later in this chapter, however the value to, and feedback from, group members was immediate and significant. External support to help individuals overcome performance anxieties, anger issues, distrust and historical concerns and focus on the social group processes accelerated engagement and focus, from which the other coaches were able to build.

5) Roles and Responsibilities – Players

It was clear from the confusion and conflict within the coaching group that the squad suffered from lack of clarity in this area, which manifested itself in disagreement, on pitch confrontations, disrespectful behaviour between individuals and repeated errors. Analysis of this with individuals in the mental excellence sessions revealed that many were unsure of their role on the pitch, nor of the expectations and standards of them off the pitch. The rugby coaches therefore sat with every player individually and discussed in detail the role of their position *in the context of this squad and the overall game strategy and plans being implemented by the head coach.*

This action reduced anxiety for individuals and gave them personal responsibility to understand and achieve excellence in their primary roles. It addressed the issue of taskwork and leveraged the intrinsic-competence and intrinsic-autonomy elements of self- motivation.

6) “Make it fun”

The intensity and time-limitations required to prepare for the competition could have led to an overwhelmed and unhappy group, exhibiting anxiety and lack of confidence. It was therefore agreed that we needed to make a conscious effort to ensure that the whole experience was enjoyed by all. Fortunately, within the established squad members there was one individual who consistently applied himself to building a team spirit and ensuring the welfare of individuals. He was referred by many of the players as “the beating heart of the team”. We approached this player and offered him a simple brief; to make sure that everyone had fun being part of the squad, and to build a culture and value-set that was shared by every one of the players.

This player embraced this responsibility with great enthusiasm and willingness. His efforts established group rituals (such as morning-meeting stories), values and standards (such as always

have clean kit and boots for training, and showering after training for everyone), links with families and loved ones (to be explained in detail in AC2), and both rewards and fines at the end of each week for excellent personal performance or the most hilarious gaff of the week.

Aside from these six specific actions, from the beginning of Week 3, the head coach's four concepts were woven into the every-day language of the coaches *without* explaining the context or meaning to the players. This was done in an attempt to create a subliminal awareness of the repeated words by the coaches. The repeated use of the terms in multiple settings began to be noticed by players and commented on. As can be seen from the focus on timekeeping above "Start" became a key word for everyone. "The Plan" became a mantra for encouraging personal discipline, engagement and preparation. "Fight" was used continually in every training session; "Fight for the ball", "Fight to get to the breakdown", "Fight for your teammates", "Fight for your place in the team", "Fight to get stronger" – the appropriation of this term began to epitomise and define the identity and culture of the squad.

In week four of this cycle a formal training camp was held, which was the first time that the full squad of players was able to attend. Of the total player participants of 38 in this cycle, 20 of them joined at this stage. Whilst this had clear disadvantages in regard to technical preparations, from the perspective of creating a culture and identity it proved to be beneficial. Within the two weeks from when these concepts were introduced, the four terms had become a common language within the group, and the standards of behaviour and rituals associated with them had been established. The new arrivals had to fit into this new culture and did so without question. However, it was during the welcome briefing to this training camp that the head coach formally introduced these concepts to the group and explained what he meant by them. The photograph below is a screenshot from that presentation, where the head coach addressed the whole squad together. His opening statement to the group is provided below, and the concentration of players shown in the image in Figure 6.2.2.4:

"In my head this is the start. This is the start of winning the competition in November. This is the start of your journey to the World Cup. I just want to tell you and show you how we're going to win, and I'm going to keep it really simple. There are three things; we're going to win by our fight – I'm going to tell you what that means. We're going to win by having a plan – I'll tell you what that means. We're going to win by the start – and I'll tell you what that means."

(Head Coach, October 2018)

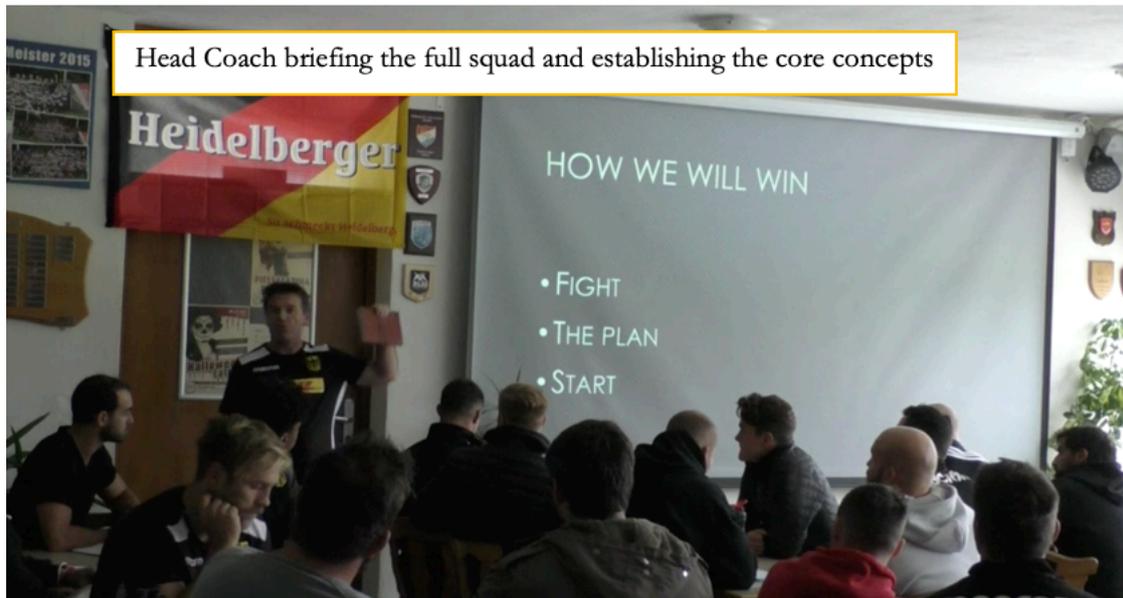


Figure 6.2.2.4 Squad briefing room: Player's attention and concentration on the foundations of the plan (Source: DRV 2018)

Intervention 2 – Establish defined roles and responsibilities for the coaching and support staff.

As described, the lack of clarity in roles and responsibilities created conflict and negatively impacted effectiveness and performance. It also undermined authority, credibility and confidence. A possible approach to dealing with this problem would have been for the head coach to have defined his requirements for each role and give these to each group member personally and insisted that they comply. The merits and concerns with this approach were discussed between the head coach and the author. The main benefits of the approach were the speed with which it could be implemented, and the certainty that the head coach would have that all the tasks that he needed managing had a defined and accountable owner. However, the potential problems with the approach were significant from the perspective of creating cohesion within the coaching and support staff group. We needed to avoid the risk that individuals felt that other group members were being given preferential treatment by allocating responsibilities that another group member desired. This would undermine trust and collaboration and may have resulted – at worst – in dissonant behaviours. Also, as newcomers to the group, we were unsure of what exactly the issues were, and where the misunderstandings and conflicts were really being created.

We decided therefore to adopt a different approach; we would ask each individual to tell *us* what they believed their role to be, and what specific responsibilities they felt that they needed to have in order to fulfil that role. Equally importantly, we would ask them what they felt they were *not* responsible for, and finally what they believed the primary purpose of their role was (described as

“Critical Outcome”). A simple template was developed and distributed to all coaches and support staff as shown in Figure 6.2.2.5:

Name	Role	Responsibilities	Not responsible for...	Critical Objective

Figure 6.2.2.5 Roles and Responsibilities Template

The completed template with all the participant submissions is provided at Appendix M. This exercise showed clearly where the overlaps and gaps were in responsibilities and identified what had caused the conflicts. The final phase of this process was to get individuals with overlapping roles to sit with each other to agree a single owner for each functional area. This was overseen and facilitated by the head coach, as he ultimately had to be sure that he had appropriate skillsets covering key functions and responsibilities. The final outcome was positively supported by all group members, and yielded an unexpected outcome, which was the proactive support for each other once the process was finalised. As a final note of surprise, the entire process was completed within 18 hours of sending the template out; the passion and importance of this to individuals resulted in every group member voluntarily completing their submissions immediately. It had actually taken a fraction of the time that it would have taken the head coach to write all the roles and responsibilities and delegate them accordingly and delivered a profoundly better outcome.

Once completed, the coaching group decided to share the detail with the players. It was felt that it would help resolve significant frustrations that the players had been feeling towards the coaches and reduce or remove much confusion in the direction being given by coaches. Accordingly, the final roles were transferred to a PowerPoint presentation and delivered to the squad by the Director of Rugby.

Figure 6.2.2.6 shows two slides from the presentation given to the players and shows how the individual roles had been differentiated and the responsibilities separated, summarised and simplified through a process of participant engagement and active collaboration. This process was effectively completed with all roles, resulting in clarity, harmony and focus.

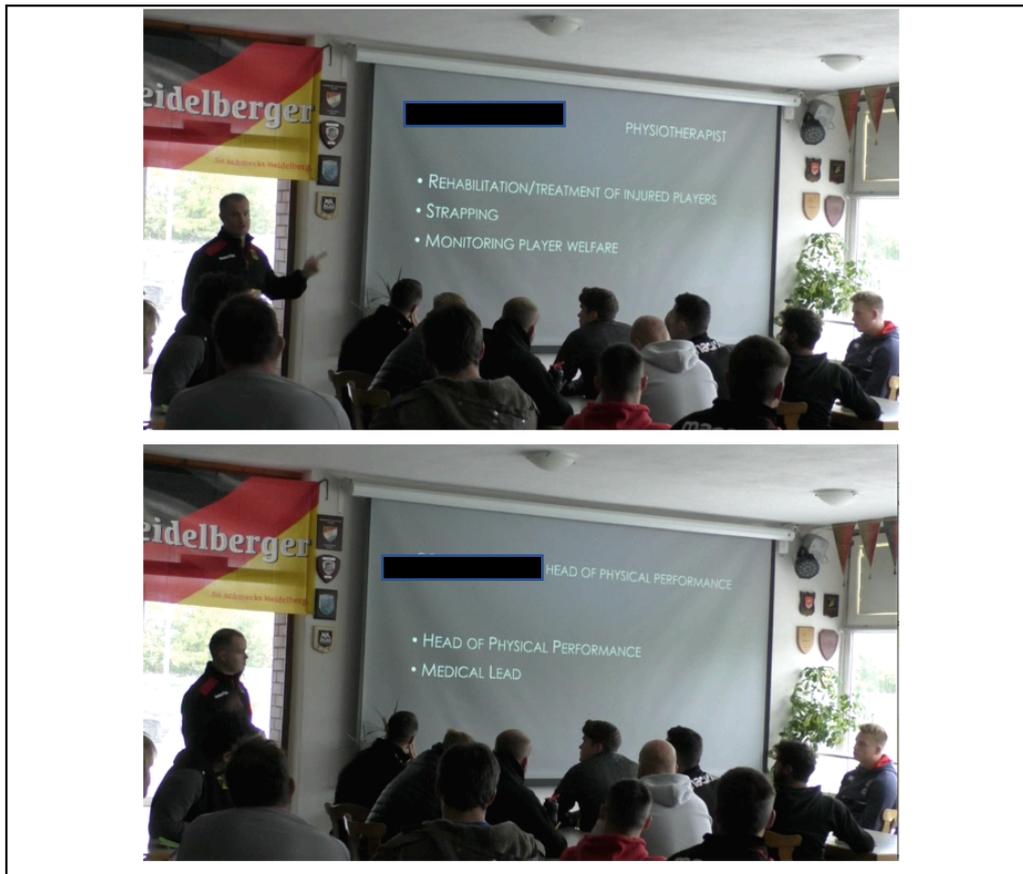


Figure 6.2.2.6 Roles and responsibilities presentation, 3rd October 2018 (Source: DRV 2018)

Observations 1 and 5 highlighted the issues facing the head coach in aligning the whole the group behind a single shared purpose and stimulating the emotional commitment and personal sacrifice needed for individuals to excel and for the collective whole to become more effective than simply the sum of its parts. We referred to this as *“getting all the wood behind the arrowhead.”* We faced two specific prejudices; the first was the collective rejection of the parent organisation (the DRV) for the reasons documented in Section 2.3 and 6.2, and the second was the exclusion effect of the existing XV's squad identity (*“Die Adler”* and *“Einheit”*).

Intervention 3 – Create a defined identity for the XV's squad.

We determined that isolating the group identity from *“the DRV identity”* would be likely to have a positive impact on cohesiveness with the group and help us to create a new identity. In addition, the active eschewing of the DRV would help us to establish a *‘siege-mentality’* within the squad, giving us *‘something to prove’* to *‘them’*. Also, by not attempting to impose an unacceptable identity on the group we a) showed respect for, and unity with, the collective and individual sentiment, and b) created a vacuum for a new and authentic identity that this group could embrace and own.

The second issue was more delicate; the South African contingent in the group were passionately protective of the identity that they had established over the preceding two years, but it was divisive within the new collective. To leave this in place would have resulted in an inequality in group members that had already been commented on by the German and English players. Equally, to reject it completely would risk dismissing and alienating the very important South African players. The mental excellence coach was tasked with resolving this problem as a matter of urgent priority; we needed a ‘flag to rally behind’ that was unique, embraced and owned by all.

Discussions were held with individuals and the group explaining the dilemma facing us. We decided to be open about the issue with the players, and explained the concerns above, using layperson language and examples, and gaining buy-in and credibility by referring to group cohesion and social identity theory. The outcome was positive. The players formed a small group of five members, including representation of younger and older, cross-nationality and experience-levels. The author took a facilitating role in the work, providing both practitioner and theoretical reference as required, and ensuring equitable contribution and collective decision-making. After three meetings, and subsequent references back to the whole group, the group decided on both a new name for the German XV's squad – which was ultimately enthusiastically adopted by both the press and World Rugby – and a motto that captured the ethos of the group.

The German National XV's Senior Men's squad was to be known as “Die Schwarzen Adler” – “The Black Eagles”. Their motto was “Kämpfen und Einheit” – “Fight and Unity”.

In addition, this work catalysed a focus within the squad on what this identity and ethos meant to the players – what it meant to be a “Black Eagle” and what “Fight and Unity” meant in terms of standards, behaviour and performance. This was the foundation of a unique social identity and the initiation of the development of values and behaviours that would epitomise the ethos of this group.

6.2.2.2.4 Stage 4 Evaluating Action (EA)

This section provides an evaluation of progress made on each of the six negative observations from the “Diagnosis” stage where interventions had sought to improve outcomes. For note regarding data collection, the latter stages of AC1 were immediately prior to the selection of the final Tournament squad and was a critical period in final preparations for the upcoming tournament. Whilst many one-to-one meetings were held with players and coaches, it was requested by the head coach that these interviews should *not* be recorded for research purposes as that may have created unhelpful mental distraction for the players as a critical time. However, the

researcher's reflections, observations and use of images were approved for inclusion as these were not intrusive in the final preparations for the players. In order to evaluate the efficacy of the interventions, the author had a one-to-one review with the head coach in the context of final preparations and to discuss our respective views.

EA - Observation 1: Animosity, resentment and distrust of the DRV from non-German participants.

This issue intensified during the eight weeks of training. Members of the DRV Präsidium (Board) were invited to attend training camps and meetings throughout the period, but - with the exception of the President of the Board (who attended training multiple times with great enthusiasm) - only attended on one occasion, when four Board members arrived together. During the two hours that they were at the training session they convened an informal Board meeting at the clubhouse and did not watch the training or engage proactively with the players or the coaches. This behaviour caused deep anger with the whole squad – including the head coach. However, the effect proved to be very positive, as we were able to channel that anger into an even deeper bond to the Schwarzen Adler identity, encouraging an even higher level of protection and pride in its uniqueness and isolation from the DRV. In addition, the openly disrespectful and uninterested manner in which the four Board members conducted themselves at the training camp was seen by *all* squad member – including the German players, who had struggled to accept the views of their team mates in regard to the DRV. This episode provided validation to the experiences of the players involved in the DRV-WRA issues of earlier in the year, and had the effect of creating higher levels of affective cohesion in regards to group pride and in both horizontal and vertical interpersonal cohesion.

EA - Observation 2: Presence of In-groups and Out-groups based upon nationality, age, club membership, playing experience and both direct and indirect involvement in the DRV-WRA conflict.

We found that Intervention 3 had an immediate and pronounced impact on this issue. Of note were simple changes such as where players sat in the morning briefings and during mealtimes, no longer being segregated demographically, but having transitioned to socialising with their 'workgroup' (players with similar roles on the squad). Interpersonal tomfoolery spanned demographics. Younger and less experienced individuals were able to initiate such

banter without issue, and a collective camaraderie was obvious. Other evidence of this included practical issues such as car-sharing to and from training, as well as the structure of social groups for dinner in the evenings. The photograph below is an amusing but important image captured towards the end of this action cycle. The two players on the left of the image are South African and German respectively. During the first week of training these two players had a significant disagreement about the DRV-WRA issues that resulted in both an on-field and off-field altercation which required management intervention. This photograph was taken just five weeks later. The removal of in-groups and out-groups indicated a new social identity that was collectively accepted, as well as the growing presence of affective group cohesion across the group demographic.



Figure 6.2.2.7 Altercations forgotten: Affective cohesion in previously hostile relationships (Source: DRV 2018)

EA - Observation 3: Lack of commitment and focus regarding the core purpose.

This issue related to the concerns that players were not consciously aware of the very short time-lines for the forthcoming tournament, nor showing focus on their competition. The extreme emphasis that we placed on the core purpose (playing in the RWC19) and the route to get there made a clear difference. The image in Figure 6.2.2.8 is a screen capture of a post sent out by one of the players on the group WhatsApp. It refers to comments

and preparations being made by our first opponent, Hong Kong in their own training facilities. By obtaining this image it shows that the player had started to actively seek information about their opposition – a critically important sign in assessing mental focus in competitive environment.



Figure 6.2.2.8 Players actively monitoring their opponents: Increasing group cohesion (Source: Men's XV's "WhatsApp" Group 2018)

From the same WhatsApp group, this message was sent by the captain to the squad, again highlighting both time and task (opposition). As can be seen in Figure 6.2.2.9, a significant shift to commitment to the task and the subsequent positive impact on instrumental group cohesiveness.

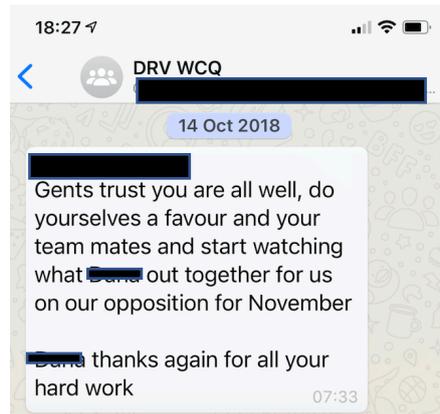


Figure 6.2.2.9 Captain’s message to the squad to increase focus and personal preparation (Source: Men’s XV’s “WhatsApp” Group 2018)

EA - Observation 4: Low levels of personal preparation and commitment.

Fitness levels were not at international sport levels at the beginning of the project. In order to attain the performance levels needed to compete, the players had to take regular fitness tests. The screen shot below was sent to the group in Week 8 of training by the Head of S&C. This sample shows bi-weekly improvements for almost all players. These changes may appear small, but the actual change in fitness to achieve multiple-second improvements on this test are significant. This only came from high levels of effort and dedication on a sustained basis.

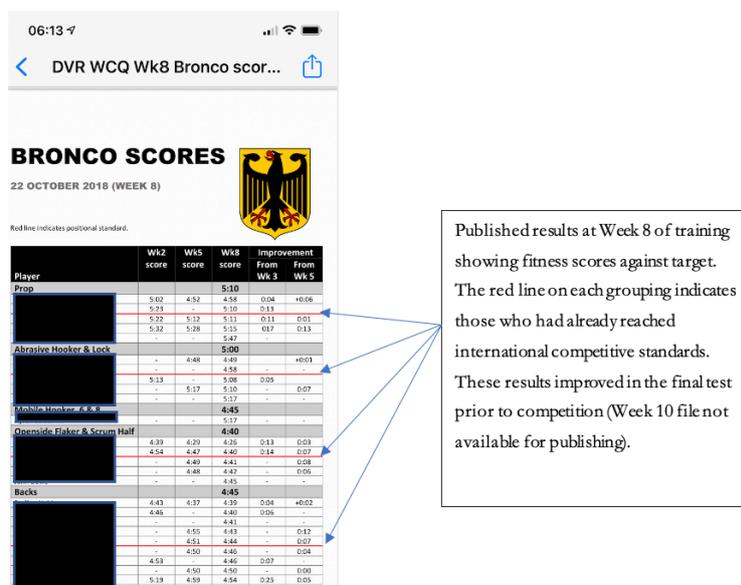


Figure 6.2.2.10 Enforcement and accountability: Task cohesiveness and team culture (Source: Men’s XV’s “WhatsApp” Group 2018)

By publishing these publicly the players felt personal responsibility to improve. Interestingly, as the results were published we witnessed players openly applauding each other's efforts rather than focusing on their own. The images below are of the second Bronco fitness test, and gives some insight into the commitment now being seen. The effect of this on the group was that – irrespective of results – every player was pushing themselves to their limits every day, and this had a significant effect on self- and collective-belief, task focus and affective interpersonal cohesion.



Figure 6.2.2.11 The start of the Bronco fitness test in soaring temperatures (Source: DRV 2018)

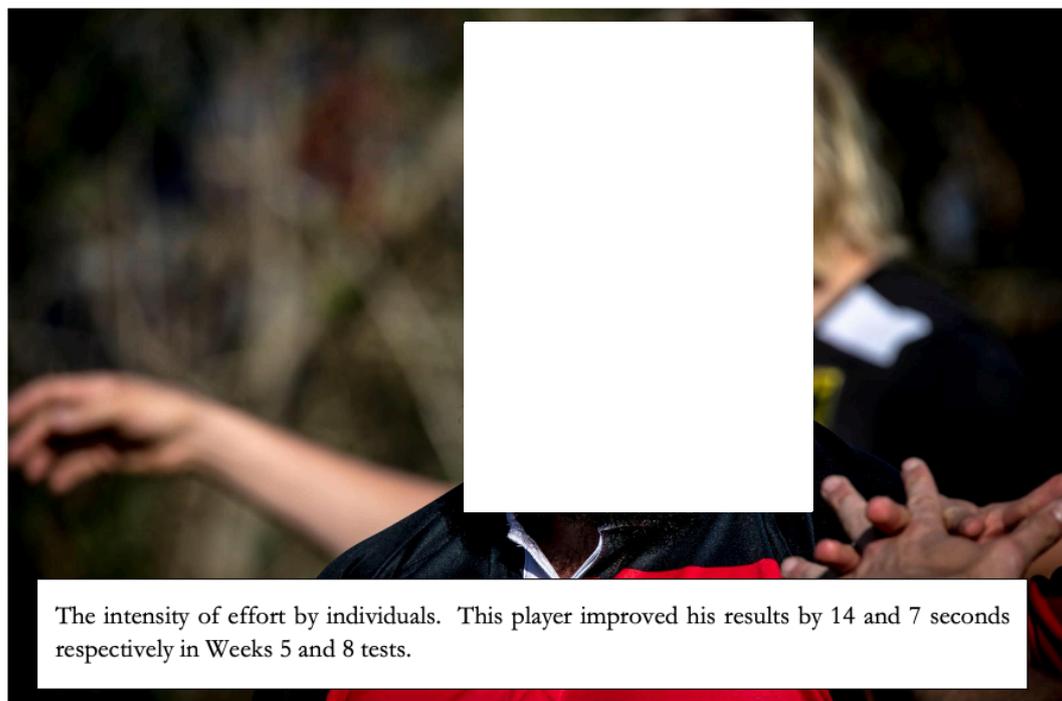


Figure 6.2.2.12 Commitment and determination to belong: Intrinsic motivation (Source: DRV 2018)

EA - Observation 5: Lack of collective group identity within the squad.

The outcome of the specific actions regarding team naming and motto also resulted in the creation of a new logo for the squad. The players arranged to have these printed as posters and added the dates and times of each game that we were playing, and displayed them around the training facilities, as shown below:

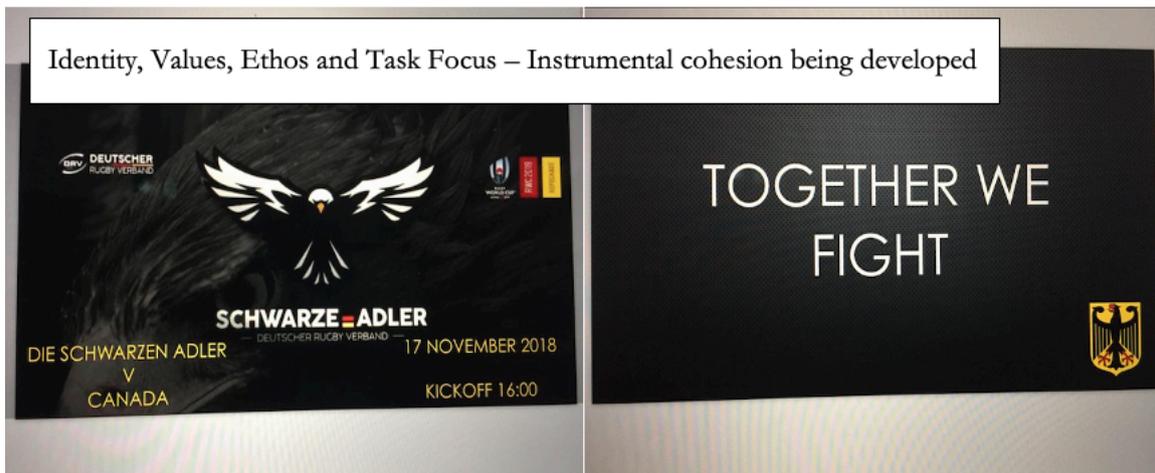


Figure 6.2.2.13 Group identity, task cohesion, group values, affective cohesion (Source: DRV 2018)

In addition, the group insisted that training sessions must be taken in national squad kit, not in personal training kit. The two photos below show the players in training kit in Week 1, and then in Week 3:

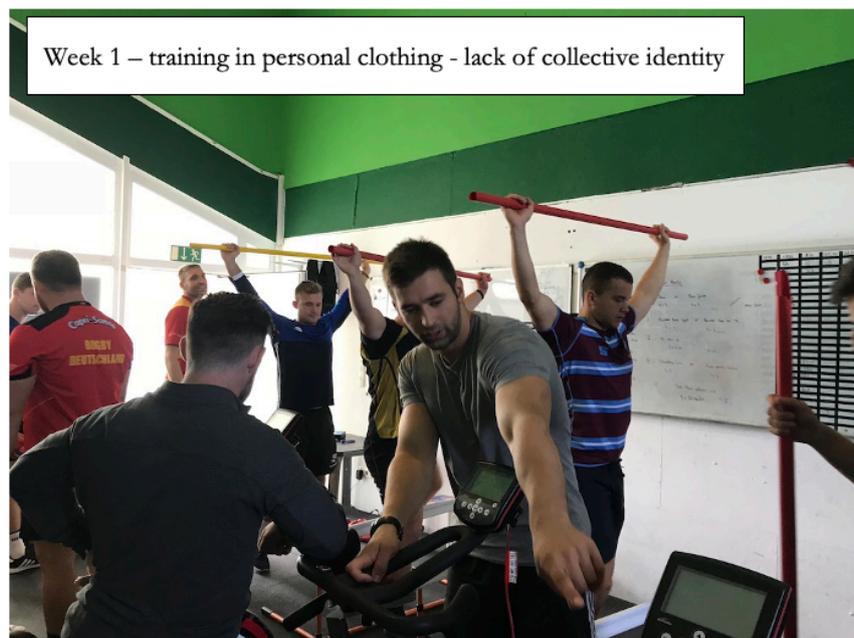


Figure 6.2.2.14 Individuality and lack of collective pride or identity (Source: DRV 2018)



Figure 6.2.2.15 Uniformity, group-pride, team standards and culture (Source: DRV 2018)

EA - Observation 6: Conflicts and confusion within the coaching group and support staff.

The clarification of roles and responsibilities facilitated collaboration and cooperation within the coaching group in both training sessions and in analysis and preparation. In addition, we decided that all coaches must also comply with the rule to wear only national squad training kits.

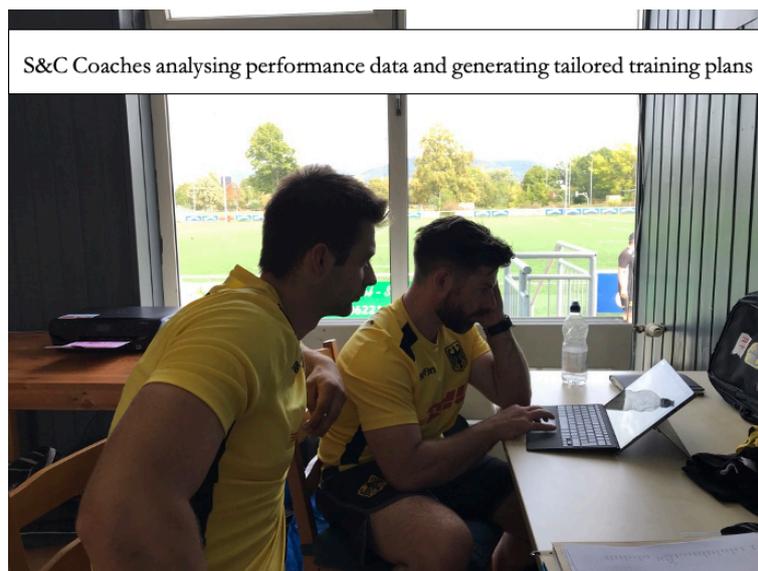


Figure 6.2.2.16 Collaboration and sharing: Reciprocal interdependence and teamwork in the coaching team (Source: DRV 2018)

We also arranged day trips for the coaches together on the non-training days. The picture in Figure 6.2.2.17 shows the Head Coach, Director of Rugby and two of the rugby coaches in a car with the author and the other rugby coach in the front of the car. Camerardie and affective horizontal cohesion can clearly be seen.



Figure 6.2.2.17 Affective interpersonal evolutions increasing group cohesiveness (Source: DRV 2018)

AC1 Evaluating Action Summary

The work completed in this phase was specifically intended to fulfil the core purpose defined by the project sponsor (head coach): to create a cohesive team that provided a foundation for all the rugby skills to be based upon. The conclusion of the Head Coach was that we had collectively achieved an extraordinarily high level of cohesion. The following is a quote from him addressing everyone in the final squad meeting before departure to the RWC19 Repechage Tournament:

“Lads. I’ve been playing rugby for a long time. I’ve coached with the England set-up, with Ireland and with the British Lions. But I have never seen a bunch of blokes so ready to fight for each other, to fight to be the best they can be. Now take that fight to Marseille and let’s win this tournament.”

(Head Coach Presentation, 5th November 2018)

6.2.2.3 AC1 First-person Reflection

‘I have now attended training with the German XV’s rugby squad three times - 3rd-7th September; 10th-13th September and 16th-18th September. I’ve missed one week of training from the 24th-27th September. During this time my partner had been heavily pregnant. I attended my MSc graduation ceremony on the 21st September which was warmly congratulated by the players coaches and staff.

On Saturday 22nd September my partner went into induced Labour and after 18 painful hours was finally taken for an emergency Caesarean operation at 07:00 on Monday the 24th September. My second son – [REDACTED] – was born at 08:44. He’s very healthy but [my partner] has struggled. I have attended hospital twice daily during this time and have been coping with the pressure personally of this. I announced the birth of my son to the German team on the WhatsApp channel and I received many, many messages of congratulations and warmth - most really personal. I feel a bond to these people which is difficult to articulate. I am torn between my want to stay here with my family and my commitment to this group of people who are going through such an extraordinary transition. It’s like having another family.’

(Researcher’s Journal Reflection, 26th September 2018)

I have selected this quotation as it captures so many of the positive themes that I had observed in the fieldwork. It provides insight into the significant personal pressures and emotions that I was feeling during the start of the engagement in this project. It highlights the integration between players and coaches – new and old. It demonstrates the use of social media as a collective method of communication. It shows both reciprocal care and pride. Many of the messages from players were moving – both in congratulating me for my university graduation, and then just three days later for the birth of my son.

In the second-person analysis of AC1 I highlight a rapid change in attitude and cohesion within the group during the initial three weeks of the project. Aside from my obvious feelings of guilt and worry about being separated from my partner in the last few weeks of her pregnancy, I too had engaged in the personal and emotional commitment to both the people and purpose of what we were endeavouring to achieve with our rugby team. As a fifty-year-old, I have close family and friends all of whom were delighted with my personal news, and yet my journal records that I had formed bonds with this group of people that I refer to as ‘another family’.

My study explores the human bonds that form between people working together to achieve a shared purpose. In group and team literature, ‘purpose’ is used interchangeably with ‘task’, ‘goal’, and ‘objective’. This suggests that the only ‘purpose’ that is relevant in a team would be ‘instrumental purpose’. The acceptance that the ‘purpose’ in teams can be assumed to be

instrumental has increasing importance to me in regard to understanding this phenomenon; if our group had been put together to achieve a task, how could the interpersonal levels of intimacy, care and trust have been created so quickly? Surely there must be other factors at play? Task Interdependence (Thompson, 1967) provides a workflow-based definition of group interdependence, but even its social construct does not explain the interdependence I have witnessed and experienced at an emotional level.

Whilst our squad had been formed to achieve an instrumental purpose - and the rugby and fitness training had sought to prepare the individuals and the group as well as possible to achieve that purpose – it simply doesn't explain the changes in individual and collective behaviours and commitments *to each other*.

Certainly, my own feelings towards the group, the individuals and our purpose had achieved a depth where – even with the birth of my child and the welfare and care needs of my partner – I was drawn and totally committed not just to the task, but to the people. I felt a sense of duty and responsibility to the collective and the individuals which was on a par with those to my own family. Even as I write this, I feel guilt and disloyalty to my partner and son; how can I compare my love and responsibilities to my family to those to a group of people I had never met until three weeks earlier?

As I seek to understand these feelings and questions, I become aware of emotions that I had not considered before in regard to this study; I had a sense of belonging and a role that mattered both at home and with this squad of people. I was clearly prepared to sacrifice my personal needs and those of my family in order to fulfil my promises to the people in the group. This level of sacrifice transcends simple 'task' orientation and perhaps challenges the assumptions in the accepted definitions of teams and groups. We had far more than a 'shared instrumental purpose'; we had a 'shared affective purpose' that had emerged in our preparations. At the core of that affective purpose was an unstated promise to each other to sacrifice our own needs for the collective good. Even as the researcher, I had affectively committed to the group members, our values and standards, and our instrumental purpose.

As I reflect on the intensity of the camaraderie and behaviours of all the members of the group as we progressed through to November and our departure for Marseille, I recall many small and almost imperceptible changes in how we all treated each other; at mealtimes players would no longer just get water or food for themselves, but instead would always get for their whole table – and go without if there was not enough to go around. Players would go to the launderette to wash

not only their own clothes and rugby kit, but their closest teammates too. Personal news (such as my own) was not just commented on but was *felt* by teammates.

We were put together for an instrumental purpose, and we chose to be there for our own personal reasons; but an affective purpose emerged which was at least as strong as the instrumental one and began to have a marked positive impact on performance and attitudes. I find myself asking if the emergent state of ‘affective purpose’ is what differentiates a ‘team’ from a reciprocally interdependent group?

6.2.3 Action Cycle 2 (AC2)

6.2.3.1 AC2 Context and Purpose for Cycle

A summary of the cycle is provided for contextualisation in Table 6.2.2.1. Demographic details of the participants are provided in Appendix N.

Table 6.2.2.1 AC2: Cycle Context and Purpose

AC2	Summary of Cycle
Core Purpose of Cycle	<p>Existential Purpose: <i>“Compete in and win the RWC Repechage competition.”</i></p> <p>Three international matches against Hong Kong, Canada and Kenya respectively. The overall winner qualifies to compete in the RWC 2019 in Japan. Results also affect World Rankings of each nation.</p>
Location	Marseille, France
Duration	<p>7th November – 23rd November 2018</p> <p>Elapsed period - 17 days</p> <p>Actual time that the team was together – 17 days</p>
Context	<p>The squad of total 43 people travelled from Heidelberg to Marseille on 6th November 2018. With the exception of 3 individuals who drove in order to carry essential rugby and training kit, physiotherapy, medical and AV equipment, all other participants flew as a squad. The squad was accommodated in an hotel in Aix-en-Provence, where they stayed for the duration of the competition. This hotel was shared with the Kenyan national team. It had been agreed collectively that no families or friends would be allowed to see their loved ones during this time, except in the case of emergency.</p> <p>Players were paired for room sharing. Coaches and support staff were provided non-shared rooms. Training facilities were a thirty minutes’ drive from the hotel. The tournament matches were held in a stadium in Marseille (Stade Delort), which was more than one hour from the hotel. The Hong Kong and Canada squads were each accommodated in separate hotels in the centre of Marseille, with training pitches local to their respective hotels, and the stadium close by.</p> <p>Germany’s matches were played on 11th November (Hong Kong), 17th November (Canada) and 23rd November (Kenya). Germany was the lowest seeded team in the</p>

	<p>tournament; Hong Kong was highest and favourites, followed by Canada, then Kenya. In order to win the tournament, the successful team had to finish top of the results table based on points awarded for wins, draws and losses. Realistically, it was expected – and proved to the case – that the tournament winner would need to win all three of their matches.</p> <p>Based on budget restrictions, Germany had only three days of preparation and training in Marseille/Aix before the first match. The structure of each day followed a consistent pattern; squad breakfast, squad morning meeting to review previous day and explain the detail of the current day, morning S&C training sessions (gym and pool), squad lunch, afternoon rugby training sessions, recovery and physiotherapy, squad evening meeting, squad evening meal, personal and group R&R, return to bedrooms and sleep. Within this structure, the medical and mental coaching staff held private clinics on an on-going basis.</p> <p>During the morning S&C sessions, and in the later afternoon recovery sessions, rugby coaching staff completed analysis and planning for the upcoming matches and took time to relax and play sport together.</p> <p>Results: Hong Kong vs Germany – 9-26 (Germany won); Canada vs Germany – 29-10 (Canada won); Kenya vs Germany – 6-43 (Germany won). Canada won all of their matches and won the competition. Germany was second placed overall. On losing their match against Canada, Germany could no longer with the competition.</p>
--	---

6.2.3.2 AC2 Second-person Analysis

This cycle represented a significantly different phase for the group. The transition from preparation in AC1 to competition in AC2 meant that the focus levels of every activity across the organisation became highly task-oriented. The planned schedule of every day extended from 0700 through to 2000. The focus on core purpose therefore impacted on the conduct of the research specifically in the manner in which data could be collected. All participant permissions remained valid throughout the study, so there was no ethical concern in data collection. However, at the request of the head coach the researcher was asked to ensure that all of his involvement with participants focused *only* on their personal readiness and the readiness of the team for the matches ahead. This meant that participant interviews were conducted only at the request of the individual, as opposed to at the request of the researcher. The interviews were therefore unstructured and concentrated on the needs of the participant. As in AC1, permission was requested to record these

interviews for both core and theoretical purpose. Where participants declined that permission, the discussion remained private, and the contribution excluded from the research data corpus.

A total of twenty-one unstructured interviews were undertaken. Data collection, preparation and analysis followed the same process and protocols as those in AC1. Extensive field-notes were recorded, as well as seven journal entries. Fourteen team meeting videos were made available for analysis and inclusion, as well as extensive photographic records. In the competition phase of the project, all coaches and staff were taken off the players' WhatsApp group and therefore those communications are not available as data. The coaches and staff had an independent WhatsApp group during the tournament, and this has been included in the dataset for analysis.

The field analysis of data was consolidated into observations and made available only to the head coach during this AC. The decisions on how to use the insights and disseminate information were made by the head coach, in consultation with the researcher in his coaching capacity. Interventions were determined and implemented accordingly.

6.2.3.2.1 Stage 1 Diagnosing

Observation 1: Collective and individual excitement and belief

The final two weeks of training in Heidelberg saw a significant change in the performance and cohesion of the whole squad. The team won a competitive pre-tournament training match against Portugal. The fitness and strength levels of the players were meeting the benchmark standards set by the S&C coach at the beginning of the project.



Figure 6.2.3.1 Setting the standards: Linking personal commitment to group purpose (Source: DRV 2018)

The improvement in fitness levels - measured against international performance standards - led to an increase in self-belief and growing confidence for individuals and the group. As a result they were able to perform at peak effort for the duration of a fully competitive match. The skills levels in all aspects of the game had improved notably, and as a result of this – combined with greater fitness – personal error counts were lower. This increased interpersonal respect and group confidence.

“Researcher: How are they all going? It looks like you are enjoying it.

Player: I am excited. Sunday is around the corner so I’m excited. I don’t think I’ve been this confident or excited in a while.”

(P12, 8th November 2018)

“Researcher: How are you feeling about playing? Are you feeling confident?

Player: Yes, I’m really excited. I’m confident that I can play at [this] level...I think I know my abilities and I’m confident... What I do is just remind myself of my strength and then the rest will come by itself.”

(P13, 9th November 2018)

In parallel with increased confidence was a heightened sense of concentration, focus and enjoyment. Task-cohesiveness was high, along with interpersonal cohesiveness, external motivation, and both internal-relatedness and internal-competence motivation.

“Researcher: Are you in the zone?

Player: Yes. I’m enjoying it at the moment.

Researcher: Yes, you are smiling a lot mate.

Player: I enjoy it.”

(P14, 8th November 2018)

“Researcher: Could they be more focused at the moment? Are there any distractions, anybody like, ‘Guys get your head in the game’?”

Player: I don’t think so...I think we are focused on winning; maybe Hong Kong is our obvious focus at the moment rather than qualification. But yes, I think the boys are looking ahead...”

(P8, 9th November 2018)

In addition, the detailed game plan and specific plays introduced by the head coach worked to great effect. Finally, mental skills techniques introduced to reduce individual anxiety levels, maintain composure and concentration during matches, and increase effective on-pitch communication proved to be highly effective.

Player: Basically, after we had that discussion and that whole mindfulness or just the breathing and taking in the acute concentration of your surroundings and everything. Yes, I don’t know for some reason I just feel at peace with myself. Since then, I’m more relaxed.

Researcher: ...Are you practicing the technique?

MP: I’ve done it two more times since we did it just to see if it, you know, where it puts me at in my mindset and my body set. Every time I’ve done it it’s put me nice and real mellow but aware of where I am. I did it on the plane when we were flying in just to see. And yes, like I could hear everyone on the plane, but I was just...in my zone.”

(P13, 8th November 2018)

“Researcher: So how is it going? You are obviously enjoying it. Since we last spoke you know when we chatted about [the mental skills for self-control taught to the player in AC1]. It looks like you are different on the pitch.

Player: Yes.

Researcher: My observation is it looks like you are playing with the same ferocity but more self-control?

Player: Yes, it’s been all good.

Researcher: Did it make a difference talking a bit about it?

Player: I think yes it does. I think it's like sometimes I have to hear things, honest and straight opinions and then just focus about myself like I know I can't control what others do so just control what I can do."

(P8, 8th November 2018)

In summary, the training interventions implemented by the head coach in the areas of rugby skills, strength and fitness, mental skills and team development, and rugby game plan had met the objectives set and communicated by the head coach. In addition, the four concepts defined of “Fight”, “The Plan”, “Start” and “Be in the Now” had been adopted universally across the squad in every activity and had become the mantras by which the team functioned, creating a culture and value-set for belonging to the group.

Success in the match against Portugal consolidated the trust and belief vertically between players and coaches and horizontally between players. The impact on group cohesion was an increase in affective cohesion (interpersonal, both horizontal and vertical, and group pride), and instrumental cohesion (task and social).

Observation 2: Independence and self-management within the playing squad

One key area of development that the head coach wanted to achieve with the squad was their ability to transition from reliance on the coaching staff to tell them what to do, how and when, to a position where the players were able to control and critique their performance and activities within the playing squad. This is consistent with the concept of self-managed teams (SMT).

“A SMT is a group of individuals with diverse skills and knowledge with the collective autonomy and responsibility to plan, manage, and execute tasks interdependently to attain a common goal” (Magpili and Pazos, 2017:4).

Decision-making under pressure and in real-time is an important capability for any team, and particularly so in sports or activities undertaken in extreme conditions with the risk of injury to participants. In sport not only does the team carry the usual pressures of executing correctly, but the opposing team are consciously endeavouring to undermine the team's processes and performance. It is therefore essential for team efficacy that there is both the confidence and competence for the group to be able to operate independently of the coaching and support staff and mechanisms.

The first indication that this break-away from coach-dependency was happening was when the players removed the coaching staff from their WhatsApp group. This highlighted that they no longer wanted or needed a high level of external intervention (Figure 6.2.3.2).

We also noticed that the team wanted less involvement from the rugby coaches during training sessions after arrival in France for the tournament, preferring instead to execute the session in accordance with the coach’s plan, but taking responsibility for performance, critique and standards through the leadership group within the team.

This observation was of critical importance to the assessment of the state and readiness of the group, and indicated the presence of several key team processes; we could see SMT behaviours were evident and effective; a collective standard of effort, preparation and conduct was implanted in the squad implying the emergence of a team culture and identity, and affective group cohesiveness (group pride); the culture and identity were embraced by individuals, indicating social identity behaviours; the trust and types of communications between individuals (horizontal and vertical) indicated affective group cohesiveness (interpersonal); and the determination to take control of performance within the group showed clear instrumental cohesion (social and task).



Figure 6.2.3.2 Breaking away from coach-control (Source: Men’s XV’s “WhatsApp” Group 2018)

Observation 3: Performance and expectation anxiety, and potential fracturing

Notwithstanding the positive observations regarding team processes and efficacy described above, there were still issues to be cognisant of and to address. It became evident through the training sessions in the days prior to the first match against Hong Kong that some players were struggling to manage their own expectations of their personal performance, and also the perceptions of their team mates. This manifested itself in an increase in errors during training.



Figure 6.2.3.3 Risk of group fracturing and fragmentation: The impact of performance anxiety (Source: DRV 2018)

Whilst this is not unusual for any group preparing for a performance, the impact on individuals was important to understand. The interventions regarding mental excellence and ‘pastoral support’ that had previously been implemented during AC1 became important at this time.

“Player: I think also the other thing I wanted to bring up was - I don’t know what it is but I think I’ve made, I think since we’ve started this camp, like this whole dropping balls has been something that’s never been part of my game and now it came in and I think it’s played on my mind a bit. Why am I dropping balls now? For the last two years I never dropped balls. Now all of a sudden, I’m dropping balls. It plays on my mind, ‘Oh maybe I’m getting too old’ and stuff like that, it starts playing on your mind. But then you are like, ‘Yes, but.’ That was the other mental thing that’s been going on in the background is ‘why am I dropping balls now?’ I never used to drop balls.”

(P15, 9th November 2018)

The author had numerous requests for one-to-one meetings from most players to discuss their increasing performance anxieties. Most of these are not permitted for inclusion in this thesis at the request of the individuals. However, several meetings were recorded with the participant's permission.

Player: It's the thing I really battle with myself in the last few weeks, but I know the situation when just before receiving a ball and from nowhere there's coming a thought, 'Oh fuck, don't drop the ball'. It's coming from nowhere.

Researcher: Is that recent? That's a recent thing or it's always been there?

Player: It was pretty often sometimes, also in training and then of course it happens...and that's why it was in my brain, and then I developed those thoughts and always just a millisecond before it came into my head and where is this coming from and then it happened."

(P16, 8th November 2018)

In addition to anxiety being experienced by the players making errors, we observed a marked increase in frustration with those individuals from other players. This again indicated higher levels of intensity and performance expectation within the squad. This necessitated intervention from the coaches during training to calm tempers and confrontation between players. The head coach was not unduly concerned about these issues having witnessed them multiple times before in his career, and considered this to be normal in the lead up to an important match. However, the author's one-to-one interviews with players after this training session revealed that the concerns with the preparation of certain individuals was a deeper problem than we originally perceived.

Player: ...on the rugby field today I got a little bit frustrated because 48 hours out and there's one or two guys making the same mistakes. It goes back to - I think in our first chat - where I questioned everyone's commitment to the cause.

Researcher: Yes, and the levels of preparation people are putting in.

Player: Yes, the effort being put in. I have tried my hardest throughout the whole build up to make sure it would be taken care of - and it wasn't... I think it might just have been 3 weeks ago where I asked them what was their excuse. I'm making up at 6am every morning, my son is teething, but I'm still

finding time to watch the videos, I'm still finding time to analyse stuff. We had a video session, and I was the only one who put my hand up. What are guys doing in their off time?"

(P3, 9th November 2018)

The perception from key individuals that other players were not putting the required effort into preparation and training may or may not have been reasonable. However, of much more importance was the potential implication to the overall cohesiveness of the group. In the final days leading to their first test match it was essential that there was no 'fracturing' of the cohesion within the squad. This was particularly concerning considering that a primary critic was the team captain.

Observation 4: Perceptions of favouritism and emerging interpersonal resentments and frustrations

In the last weeks of preparation for the tournament we had noticed a positive change in interpersonal behaviour, and a consequent step-change in morale, togetherness and performance; the emergence of selfless behaviours between players, examples of which were given in AC1. The unconscious personal decisions to put the needs of others before the needs of self increased the sense of unity, trust and personal security. In environments requiring high levels of teamwork behaviours and reciprocal interdependence, and where personal safety requires an implicit belief that your team mate will put their own welfare needs behind their perception of yours, these selfless behaviours are crucial. At the core of this selflessness is the acceptance that no one individual is better or more important than others, and that everyone is equal.

In rugby there is one playing role in particular that is pivotal to the performance of the group; it is called the 'fly-half'. This player has the on-field responsibility to link the efforts of the forwards to those of the backs. The fly-half has to make instantaneous decisions on how and when to attack or defend, and to communicate this to all players in real-time and ensure their alignment. In addition, this role also has to ensure that the strategic game-plan determined by the head coach is implemented, and all of the specific pre-planned 'plays' are selected appropriately in real-time and under immense pressure. It is a role that can be identified in almost any high-pressure and high-performance team environment, from medical teams to military units, and from emergency services to business teams. It is

a special role, requiring a special set of skills and abilities. However, as highlighted above, in a group where ‘everyone is equal’ and reciprocal interdependence and interpersonal trust is key, it is important that no one individual adopts a behavioural pattern that suggests to their team mates that they believe they are ‘special’ – or can act or be treated differently to others in the team.

There is an inevitability during preparation and training that the head coach must spend considerably more time with the fly-half than some other playing positions. He must also trust the fly-half as an individual within the group not to leverage that unique relationship to create the an air of elitism or favouritism. However, it emerged from both on-field behaviours and confrontations, and subsequent player one-to-ones, that this key player had started to adopt a superior and separated attitude, and felt that the rules that applied to the team did not apply to him.

“Player: I’m starting to worry about ■■■ a little bit.

Researcher: ■■■? That’s an interesting point.

Player: This is confidential, and I know this will stay... Because I think he’s been given too much, or it seems like he’s been given too much power... And he thinks he’s probably better than the game, better than us at the moment... He always disagrees with this things. Like I jokingly said to him this morning ‘You are late for the leadership meeting’, and he said, ‘What do you mean?’ I said, ‘It’s 28 minutes past’. He’s like ‘the meeting is at half past’. I said, ‘We’re always five minutes early’. So, I don’t know. I don’t know how to address that.”

(P3, 9th November 2019)

The potential for the behaviour of one key individual to undermine the group cohesion and morale highlighted that this group’s cohesiveness was fragile and still forming, and vulnerable to damage externally or from within.

“My observation about this team is that the cohesion is unbelievable right now. It’s unbelievable. The lack of ego within the team has been what makes it strong. So, there’s a common purpose, self-sacrifice. Until today I thought ‘There’s nobody thinking they are better than anybody else’ and that is one of the key strengths in the highest performing teams. New Zealand kick people out instantly if they start thinking they are bigger than the rest of the team. Just like that. ‘No dickheads’ [is the phrase they use]. ■■■ has put himself in the position of being a dickhead. He’s becoming the ego. It’s not just that it pisses

people off - the danger is it fractures what the main strength of this team is which is it's teamship. We've got to nip this in the bud. [We] can't do it before Hong Kong because it's distinctly possible that [redacted] could have a brilliant game."

(Researcher Journal Reflections, 9th November 2018)

Observation 5: Emergence of bullying

"Socialisation and training are claimed to underpin commitment, compliance, professional identity, group membership, character-building and bonding in both the army and paramilitary organisations like the police or fire service. These groups have high stress in common and a subsequent need for cohesion and comradeship. Furthermore, socialisation can provide the feeling of acceptance and affiliation; however misuse and abuse could cause physical and mental harm." (Alexander et al., 2012:1246)

Our squad had trained and played together for nearly three months without respite by the time we arrived in Marseille. We had successfully introduced and integrated players, coaches and support staff into a cohesive team, showing strong affective and instrumental group cohesion. In order to do this we had built a culture of trust and respect, but also of fun. Central to that was identifying and nurturing individuals who wanted to work with and for each other. The group process of socialisation – often referred to as ‘banter’ - is recognised as being important in groups such as rugby teams in establishing identity, belongingness and cohesion. We had therefore encouraged, participated in and been the recipients of interactions that included teasing, joking and ridicule. Within the confines of the culture of a group, these behaviours can have the effect of creating *inclusion* rather *exclusion*. However, there is a fine line between socialisation and bullying.

Einarsen and Skogstad define and delimit workplace bullying as;

"Being repeatedly subjected to negative acts. To be a victim of such bullying one must also feel inferiority in defending oneself in the actual situation. This definition is not limited to a predefined set of negative acts. It covers all situations in which one or more persons over a period feel subjected to negative acts that one cannot defend oneself against." (Einarsen and Skogstad, 1996:187)

During the first week of AC2 the author was approached by a player and asked for a one-to-one meeting. He wanted to talk about the effect that continued and increasingly aggressive and undermining teasing from a number of players and coaches was having on

him. The interview was not recorded at the request of the player. However, the extract below is from the field notes taken by the researcher:

“Just had a harrowing meeting with [REDACTED]. The continual [teasing] from everyone – including [REDACTED] and [REDACTED] – is really getting to him. He feels broken by it – so bad he’s almost on the verge of quitting and asking to fly home. This is bullying! I have to stop this urgently.”

(Research Field Notes, 10th November 2018)

The player concerned was young, taciturn, very good natured and an exceptional player. He was also generous in deed and spirit to everyone; a wonderful person to have in any team. However, he had a natural aversion to interpersonal confrontation, and was not as mentally sharp as many of his teammates. It was the combination of these two factors that made him a target and vulnerable.

Fortunately for the collective morale of the team, the player had not raised his concerns with anyone else, which would have potentially had a profound impact on the group’s cohesion – immediately before the first match of the tournament. We agreed that I would deal with the situation as a matter of urgency, but that I would do so in a way that did not undermine him or the team. Considering the seriousness of this issue for the welfare of the individual and the preparation of the team, the researcher spoke with the head coach immediately after the one-to-one meeting and interventions were agreed and implemented, as described in “Planning Action” and “Taking Action” below.

Observation 6: Collective focus on Hong Kong affected performance against Canada

Our collective performance had been focused on peaking for the Hong Kong match. Throughout the preparation we had set 11th November 2018 as our target date. The decision was a conscious one, made to create urgency, reality and a common purpose.



Figure 6.2.3.4 *Creating task-focus and cohesiveness #1: Purpose-focus was what should have been generated (Source: DRV 2018)*

From the perspective of motivation, it was clear from meetings with players prior to this match that the individuals were extrinsically motivated, driven to beat Hong Kong.

“Researcher: Could they be more focused at the moment? Are there any distractions, anybody like, ‘Guys get your head in the game?’

Player: I don’t think so. I’m not sure whether I think we are focused on winning, maybe Hong Kong is our obvious focus at the moment rather than qualification. But yes, I think the boys are looking ahead and they’re not [distracted].”

(P8, 9th November 2018)

This aligned to the instrumental-task cohesion required to meet the purpose. Indeed, the researcher and head coach had stimulated this level of focus continually through the preparation phases in the preceding ten weeks, continually re-emphasising the date and time of the Hong Kong match, and sharing imagery and information about the Hong Kong team. We had asked the players to download an app onto their phones called “Days” which provides a count-down clock to user-defined events.

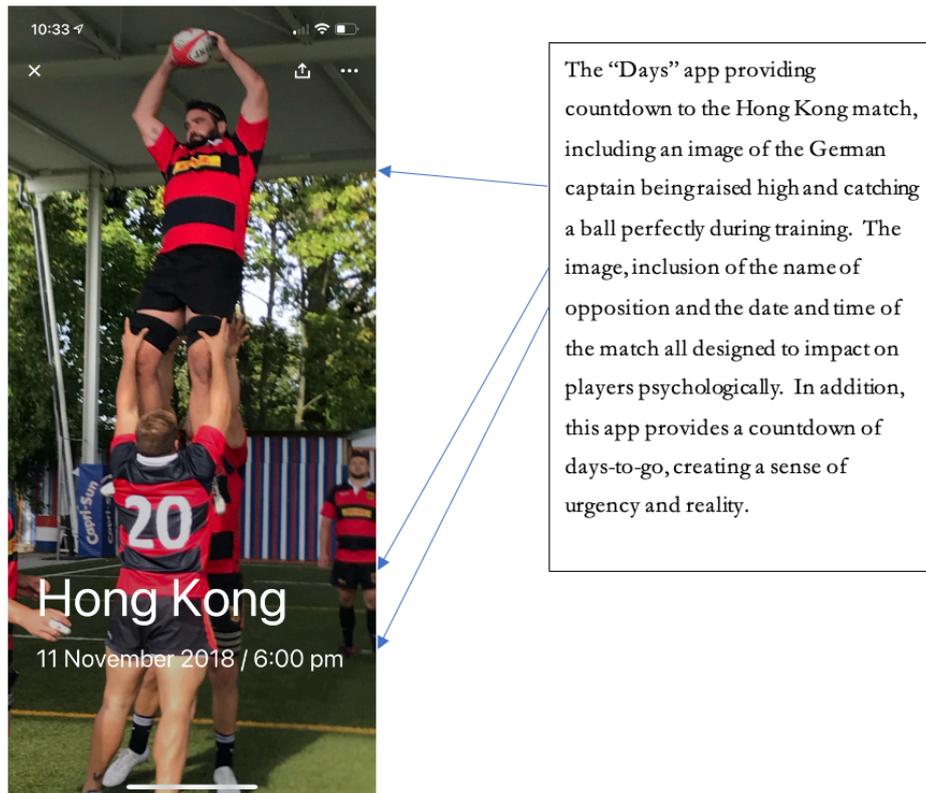


Figure 6.2.3.5 *Creating task-focus and cohesiveness #2: Purpose-focus was what should have been generated (Source: DRV 2018)*

However, our core purpose was to win all three matches. As we entered into the second week of the tournament having beaten Hong Kong and achieved our initial goal, there was a marked drop in energy and focus across the entire group – including coaches. This was not just a case of the hangover from a euphoric moment, it seemed more akin to a loss of purpose. It was noted by the researcher that in the days following victory, there was a marked decrease in requests from players for one-to-one meetings with the mental coach, resulting in less interview data.



Figure 6.2.3.6 Celebrating the first victory as though the Purpose had been fulfilled: The error of the mental coach (Source: DRV 2018)

The head coach specifically stated to the coaches and players in the team briefing on 12th November 2018 that he wanted the week to be less intense and for the players to get some rest and to recover from the Hong Kong match. The captain asked to speak with the mental coach on Tuesday 14th November to express his concern that the entire organisation had lost its energy, focus and drive. The meeting was not recorded. In turn, the mental coach spoke about the concerns with the head coach, who did not share the same view. In his experience this was a normal adjustment and would not affect performance or focus. On reflection it seems that the instrumental task had been achieved, and therefore the extrinsic motivation of the individuals had been fulfilled.

The performance of the team against Canada was disappointing for the squad; the emotions prior to the game were subdued, which we interpreted to be focus and concentration.

“Player: I think we built up a lot of excitement over that. With Canada it was more ‘proper teams’; excitement as well just to get a job done. That’s my point of view because Hong Kong came in and were arrogant and stuff and I think we built a lot of energy around that just to shut them down.”

(P8, 21st November 2018)

However, the passion to succeed was less than before. During the match when errors were made by individuals there was not the collective support from team mates that we had seen before, and this resulted in frustrations and disagreements between players, and a notable decline in confidence; evidenced by the style of play and error counts.

In the post-match Leaders' Meeting on 18th November with the coaches, these issues were highlighted by players.

“Disappointed [they feel] they let themselves down.

Small mistakes at crucial times.

Missed the START.

[Players] took too long to adjust to what Canada were doing.

Losing heads under pressure.

N.B. [redacted] turns up at 14:38 (15 minutes late for the meeting)!!

When under pressure in 1st 20 minutes, ‘Barcelona’ [a pre-planned play] and been called [but] [redacted] and [redacted] [the two players that the captain had expressed concern about in Observations 3 and 4] kicked rather than do the move (?panic, ?breakdown in cohesion).

...we then had [a] 10-minute period of total control and made 5 poor sets and completed just 1 (?cohesion, ?communication, ?concentration).”

(Researcher Field Notes, 18th November 2018)

Senior player interviews in the week following supported this interpretation of the task-focus change.

“Researcher: If you were to describe where the absolute, the laser focus was [in the lead up to the tournament]...

Player: It was winning against Hong Kong.

Researcher: How easy was it to shift target having achieved that?

Player: From Hong Kong to Canada.

Researcher: To Canada in a short turnaround time?

Player: It probably wasn't as easy as expected."

(P17, 21st November 2018)

Observation 7: Change of purpose affected type of cohesion from instrumental to affective and increased resilience and performance

Germany entered the tournament as a wild card entry as explained in Section 2.3 and as the lowest seeded nation. The victory against Hong Kong was followed by a lack of energy in the squad and diminishment of task focus and subsequent defeat against Canada, which meant that the core purpose – to qualify for RWC19 – had been lost. The implications to individuals were significant, with many now switching their attention to personal and domestic issues. As the team prepared for their final match against Kenya there was a real risk that the lack of instrumental purpose and extrinsic reward, combined with personal and public disappointment, and tensions within the squad resulting from multiple weeks together and collective failure to achieve the core purpose, could result in the fracturing of the group and a breakdown in cohesion. This would almost inevitably have resulted in a loss against Kenya.

"Player: I think the team is definitely a lot closer. Obviously now the third week the guys are, it's a bit like being in a submarine. At some stage the honeymoon period ends, and guys are not afraid [to speak up] or the guys are very quick to take each other down on certain things. You see that at the dinner table - especially at our table - it's turned into a taking the piss out of the guys like [redacted] or whoever and say, 'No come on, [this is] teaming up on each other' type of thing. I think as long as you pick the right guy it's not harmful. If you target one guy constantly for three weeks, then obviously he is not going to be in a happy space... So, I think guys have become a little bit more frustrated. Obviously, the results impacted upon that."

(P17, 21st November 2018)

However, this was not the case. Germany defeated Kenya 43-6, a resounding score line. In order to beat Kenya at all, any team needed to play with exceptional courage and cohesion; the Kenyan players were physically larger and more powerful than most of their opponents.

Figure 6.2.3.7 Kenya: To compete against them required courage, commitment and teamwork (Source: DRV 2018)

As we entered the final days of the tournament, a depth of unity and resilience became apparent that we feared had either been lost in the lead up to the Canada match, or indeed had never existed.

‘Player: It’s just as tight as it was. I think this [losing to Canada] made it a little bit tighter for lack of a better word simply because everyone was so dedicated to making that goal [winning the tournament]. Obviously, it didn’t turn out the way we wanted it to, but everybody was fixed on that one goal similar to how it was in the Challenge Cup - everyone was so focused, and we had a really close group, and everybody worked hard for each other even under shitty circumstances the boys still turned up and all grafted. Same things here; boys still grafted. And that’s not going to change playing Kenya. OK, yes, we’ve hit a low point, but the boys are still going to training, they are still motivated, still want to win.’

(P8, 21st November 2018)

The defeat to Canada was felt as a personal loss to every member of the squad. Not only was it the loss of a match, but also of the tournament, of the chance to compete in RWC19, of life-changing professional opportunities for players and coaches, of employment and income stability and growth, and of private and public recognition and reward. After a very quiet week for the mental coach leading up to the Canada match, in the three days after the defeat fourteen one-to-one meetings were requested by players and coaches. Players were seeking help to process their emotions about the loss, but overall, there was a sense of unity, a desire to win the final match for personal and collective pride, and residual determination not to allow Hong Kong to finish the tournament ahead of Germany – which we were in control of if we beat Kenya well.

Researcher: OK. What about for the Kenya game?

Player: For me personally it's not over ... One more run with the boys and I think what we've been saying is 'I only remember the last game anyway'. You can get a win and feel good about it, or we can lose and feel shit."

(P8, 21st November 2018)

It was clear that players felt that the focus and passion they had all felt before the Hong Kong match was missing for Canada match, and they consciously wanted to reignite their team values and identity in their final game.

Player: I think something that is important as well is to mention again guys like [redacted] and [redacted] that have left now; the messages that they're writing [in the players' WhatsApp group] you can see that they are sitting there going, 'Shit, I really wish I was there'. I know they appreciated it whilst they were here, but they've appreciated it even more since they've been gone whether it's been a week or two weeks or three days. Now they are saying, 'Shit I really wish I was there with you guys again whether I'm injured or not injured, or work or this or that. This is the environment that I want to be in, and I didn't really appreciate it whilst I was there, but now that I've left, I see exactly why it's so special'."

(P10, 21st November 2018)

These interviews suggested that whilst the team remained task-oriented, the cohesion in the group had altered and was significantly more affectively oriented, in both interpersonal and group-pride functions. The subsequent manner in which the team performed and won the Kenya match was the epitome of teamwork and camaraderie; a combination of reciprocal instrumental interdependence and a powerful reciprocal affective interdependence, founded on a shared purpose and shared values.

Researcher: And do you think there is a set of standards and behavioural standards?

Player: Yes, without then being explicitly listed I think we do have a set of values and standards. The values we spoke about previously with respect, belief, resilience was one of the big things and that was encompassed by unity or einheit. From the guys that are currently here now I think probably up to 85% or 90% sat through those meetings together as we established those years ago or two years ago, two and half years ago now. So, I think they appreciate it. For some other guys maybe it's just a few words that are on the paper. Maybe they don't live those values as the others do or as strongly as the others do, but I think the standards - and this is nothing to do with specifics on the pitch now - but I think your

standards, being on time, being disciplined and things like that everyone respects that. If you miss that out there are people willing to call you out on it as well.”

(P18, 21st November 2018)

Observation 8: Distraction of focus caused by post-tournament employment and income concerns

As players came to terms with the defeat at Canada, an emerging theme was the impact that the failure would have on individuals and their loss or lack of employment, income, accommodation and career.

Player: The main reason I wanted to talk to you is because tomorrow is probably my last game for Germany.

Researcher: Why?

Player: There are two main reasons. One was obviously the main goal was World Cup which we missed out now and the other one is that I have to find a new job now because after all the trouble with Wild now I'm unemployed, so I don't know what's going on. So, I decided to make a cut after the Repechage. I will start looking for a job next week.”

(P19, 22nd November 2018)

The issues were being discussed at length by all the players and some of the coaches. It is also important to note that the concerns were real and imminent; many players and coaches would be unemployed within two to five days of the end of the tournament, having sacrificed playing contracts and other work opportunities in order to participate.

Researcher: Where do you think the challenges and focus are? Who is not focused?

Player: I think some of the guys that don't know what's happening after this Friday [the Kenya match]. There are a lot of guys who don't have a job after Friday.

(P3, 21st November 2018)

There was a notable lack of energy and enthusiasm in the whole squad in the three days following the loss to Canada, and this situation risked undermining the entire cohesion and purpose within the group, as individual motivation shifted from self-deterministic (intrinsic and extrinsic) to humanistic (physiological).

Player: I was in a bit of a bad mood yesterday.

Researcher: Are you feeling any better today?

Player: Yes, much better today.

Researcher: Is it just worry?

Player: Just worry to be honest, just worry, just future uncertainties etc.”

(P10, 21st November 2018)

‘Player: I have to move on because I need a job in January and the last six/seven months were pretty tough for all of us because we didn’t know what was going on. For two months we were just sitting at home and didn’t know if we have a job in September or not because we all got fired. So, that’s it.’

(P1, 22nd November 2018)

The potential loss of concentration and the shared anxieties across the squad - including coaches and staff - was undermining the cohesiveness, suggesting that the primary bond of cohesion in this squad was the task; the interpersonal and group-pride cohesion emerged in support of the primary bond. Once the task bond was removed, the other bonds were weakened, and individuals reverted to their personal motivations.

Summary of AC2 Diagnosis stage

AC2 differed from AC1 inasmuch as the group was engaged in active competition rather than preparation. From an observational perspective, the researcher was required to affect interventions in real-time, primarily on an individual-by-individual basis, as opposed to designing interventions at a group level. From the head coach’s perspective, his requirement from the researcher was to focus on the mental performance and “teamship” coaching role; he wanted players to be mentally supported and prepared in the same way as he expected the medical team to deal with injury and health issues, and the physiotherapist to focus on physical preparation and recovery. In this vein, the mental coach provided real-time and daily updates to the head coach, in the same way as the team doctor and physiotherapist.

A reflection about this stage in AC2 was the level of trust and belief that the players showed in this new process (mental skills and team coaching). The extent of their engagement and the depth of the personal information and feelings shared in the meetings with the mental coach indicated the need for and importance of this service in high performance groups.

6.2.3.2.2 Stage 2 Planning Action

The identification and interpretation of issues requiring intervention, and the design and execution of effective interventions during the active task phase of any group endeavour is challenging. The collection of data from participants has to be done in a way that does not interrupt their concentration or confidence and focuses on the individual and collective needs ‘in the moment’. A useful way of looking at this is to consider the role of a physiotherapist before and then during a competition; before the competition the physiotherapist has time to examine physical problems and implement long term interventions and strategies that both treat and prevent the recurrence of the injury or discomfort. If the physiotherapist identifies a pattern of ailments across a group or recognises specific training activities that may lead to problems, they can suggest changes in training or recovery protocols to affect long-term change. However, during a match or competition, the role of the physiotherapist is to treat strains or injuries in real-time on an individual basis. If the physiotherapist identifies patterns of issues – for example high levels of fatigue across the group – their responsibility is to notify the head coach and suggest immediate change to training plans. The role of the mental excellence and “teamship” coach was very similar; to make sure that the players were mentally and emotionally patched-up and ready for battle and determine interventions collectively that made an immediate impact or addressed a real-time issue. The eight observations from the AC2 Diagnosis were therefore addressed in the field in this context.

Process

1. A summary of the eight observations and the respective themes is shown in Table 6.2.2.2.
2. Due to the action-oriented focus of this AC, and the need for real-time interventions, each of the eight observations were dealt *in vivo* as they occurred employing a consistent process of analysis as described below. An assessment was made by the author as to whether an observation; a) was an individual-level or group-level observation, or both, b) was a positive or negative observation in regard to group cohesion and performance, c) required intervention, and c) should be escalated to the head coach for awareness or action. The observations and the categorisations are shown in Table 6.2.2.3.
3. The six observations requiring intervention occurred iteratively on a longitudinal basis during the three weeks tournament. There was therefore no requirement to prioritise the list as the observations arose at different times. However, each observation requiring intervention was evaluated by the author regarding the type of change required. The positive observations were highlighted to the head coach with a view to assessing how these could be leveraged to increase

confidence, belief, pride and cohesion within the group. These assessments are shown in Table 6.2.2.4.

4. The type of change interventions was discussed on a case-by-case basis with the head coach. Suggestions were provided by the author as to how the observation might be addressed or leveraged, and the head coach agreed, amended or offered alternatives as he deemed appropriate. A summary description of the agreed interventions is detailed in Table 6.2.2.5.

Having agreed with the head coach on the interventions to be implemented, the mental coach was then asked to present the same to the coaching group, where each coach presented the issues and actions from their area of responsibility.

Section 6.2.3.2.3 explains the execution of the agreed actions.

Table 6.2.2.2 AC2 Summary of Observations and Themes

#	Observation Description	Themes
1	Collective and individual excitement and belief.	<ul style="list-style-type: none"> • Motivation (<i>Extrinsic/External + Intrinsic/Relatedness, Intrinsic/Competence + Extrinsic/Introjection</i>) • Purpose (<i>Group, Common, Shared, Personal</i>) • Cohesion (<i>Instrumental + Affective</i>) • Belief • Emotional commitment and anticipation • Stages of Formation (<i>Performing</i>) • Affective interdependence
2	Independence and self-management within the playing squad.	<ul style="list-style-type: none"> • Distributed leadership • Social identity • Culture (<i>Rules + standards</i>) • Roles and responsibilities • Reciprocal interdependence
3	Performance and expectation anxiety, and potential fracturing.	<ul style="list-style-type: none"> • Emotions (<i>Fear of failure</i>) • Taskwork • Interdependence (<i>Sequential and Reciprocal</i>) • Emotions (<i>Mental control and skill</i>) • Cohesion (<i>Affective/ Interpersonal - fragmentation, fracturing and collapse</i>) • Group formation (<i>Regression and diminishing from Performing to Storming</i>) • Effects of stress on group cohesion
4	Perceptions of favouritism and emerging interpersonal resentments and frustrations.	<ul style="list-style-type: none"> • Leadership behaviour • Trust • Culture (<i>Team first, self last</i>) • Culture (<i>Values, beliefs</i>) • “Teamship”

		<ul style="list-style-type: none"> • Selfishness • Motivation (<i>Extrinsic/Introjection</i>) • Motivation (<i>Power/ authority</i>) • Cohesion (<i>Fragmentation, fracturing and collapse – interpersonal</i>) • Identity (<i>Social, Group, Personal</i>) • Emotion (<i>Anger, aggression</i>) • Roles and responsibilities (<i>Boundary spanning/ breaching</i>)
5	Emergence of bullying.	<ul style="list-style-type: none"> • Identity (<i>Group and Social</i>) • Groupthink (<i>In-groups and out-groups + Mindguards</i>) • Culture (<i>Values, belief, rules, behaviours and trust</i>) • Motivation (<i>Extrinsic/Introjection/Ego</i>) • Motivation (<i>Intrinsic/Autonomy (loss of)</i>) • Power, control and dominance • Selfishness • Cohesion (<i>Affective/Interpersonal + group-pride</i>) • Interdependency (<i>Reciprocal, Affective</i>) • Instrumental Group Collaborative Process (<i>Teamwork + Taskwork</i>) • Mental health
6	Collective focus on Hong Kong affected performance against Canada.	<ul style="list-style-type: none"> • Purpose – Instrumental, Group, Shared • Stages of Formation – Adjourning • Cohesion – instrumental/task • Motivation – extrinsic/external + introjection • Cohesion – fracturing based on instrumental success
7	Change of purpose affected type of cohesion from instrumental to affective and increased resilience and performance.	<ul style="list-style-type: none"> • Group resilience • Purpose (<i>Shared affective, shared instrumental</i>) • Cohesion (<i>Affective/group pride + interpersonal</i>) • Identity (<i>Social, group, personal</i>) • Selflessness

		<ul style="list-style-type: none"> • Instrumental Group Collaborative Process (<i>Teamwork</i>) • “Teamship” • Culture (<i>Values, standards, rituals, rules, behaviours</i>)
8	Distraction of focus caused by post-tournament employment and income concerns.	<ul style="list-style-type: none"> • Motivation (<i>Humanistic/physiological</i>) • Cohesion (<i>Fracturing and regression (affective and instrumental)</i>) • Resilience (<i>Regression</i>) • Motivation (<i>Extrinsic/External/Reward + Punishment/consequence</i>) • Selfishness • Cohesion (<i>Affective/Group Pride - Diminish organisational trust</i>) • Cultural commitment (<i>Regression</i>) • Interdependency (<i>Reciprocal + affective</i>) • Instrumental Group Collaborative Process (<i>Taskwork + teamwork</i>) • Motivation (<i>Intrinsic/Competence + relatedness</i>)

Table 6.2.2.3 AC2: Categorisation of AC2 Observations

Category	#	Observation Description	Positive or Negative	Intervention Required	Escalation
Individual	3	Performance and expectation anxiety, and potential fracturing.	Negative	Yes	Yes
	8	Distraction of focus caused by post-tournament employment and income concerns.	Negative	No	Yes (for awareness only)
Group	1	Collective and individual excitement and belief.	Positive	Yes	Yes
	2	Independence and self-management within the playing squad.	Positive	Yes	Yes
	4	Perceptions of favouritism and emerging interpersonal resentments and frustrations.	Negative	Yes	Yes
	6	Collective focus on Hong Kong affected performance against Canada.	Negative	Yes	Yes
	7	Change of purpose affected type of cohesion from instrumental to affective and increased resilience and performance.	Positive	No	No
Group and Individual	5	Emergence of bullying.	Negative	Yes	Yes

Table 6.2.2.4 AC2: Intervention types of AC2 Observations

Category	#	Observation Description	Positive or Negative	Type of change required	To be leveraged
Individual	3	Performance and expectation anxiety, and potential fracturing.	Negative	First Order <ul style="list-style-type: none"> • Personal confidence • Motivation (<i>Intrinsic/Competence</i>) 	No
	8	Distraction of focus caused by post-tournament employment and income concerns.	Negative	<ul style="list-style-type: none"> • Not in the control of the coaching staff 	No
Group	1	Collective and individual excitement and belief.	Positive	First Order <ul style="list-style-type: none"> • Cohesion (<i>Affective/Group Pride</i>) • Motivation (<i>Intrinsic/Autonomy, Intrinsic/Competence</i>) 	Yes
	2	Independence and self-management within the playing squad.	Positive	Second Order <ul style="list-style-type: none"> • Cohesion (<i>Instrumental/Social</i>) • Motivation (<i>Intrinsic/Autonomy, Intrinsic/Competence</i>) 	Yes
	4	Perceptions of favouritism and emerging interpersonal resentments and frustrations.	Negative	First Order <ul style="list-style-type: none"> • Cohesion (<i>Affective/Interpersonal</i>) • Motivation (<i>Extrinsic/Recognition, Intrinsic/Relatedness, Intrinsic/Autonomy</i>) 	Yes
	6	Collective focus on Hong Kong affected performance against Canada.	Negative	First Order <ul style="list-style-type: none"> • Cohesion (<i>Instrumental/Task, Affective/Group pride</i>) • Motivation (<i>Intrinsic/Competence, Extrinsic/Reward</i>) 	Yes
	7	Change of purpose affected type of cohesion from instrumental to affective and increased resilience and performance.	Positive	<ul style="list-style-type: none"> • No 	No

<p>Group and Individual</p>	<p>5</p>	<p>Emergence of bullying.</p>	<p>Negative</p>	<p>First, Second and Third Order</p> <ul style="list-style-type: none"> • Cohesion (<i>Affective/ Group Pride, Affective/ Interpersonal, Instrumental/ Task Instrumental/ Social</i>) • Motivation (<i>Intrinsic/ Relatedness, Intrinsic/ Competence, Intrinsic/ Autonomy, Extrinsic/ Recognition, Extrinsic/ Introjection</i>) • Identity (<i>Group, Self</i>) • Culture 	<p>Yes</p>
------------------------------------	----------	-------------------------------	-----------------	---	------------

Table 6.2.2.5 AC2: Intervention Descriptions for AC2 Observations

Category	#	Observation Description	Type of change required	Intervention Description
Individual	3	Performance and expectation anxiety, and potential fracturing.	<ul style="list-style-type: none"> • First Order • Personal confidence • Motivation • Intrinsic/Competence 	<ul style="list-style-type: none"> • Mental coach to provide support to individuals in 1-1 sessions. • Mental coach to conduct squad ‘box-breathing’ and ‘centering’ sessions. • Captain to ensure ‘box-breathing’ during training and matches. • Mental coach to be present on pitch in all warm-up sessions prior to match, and to engage with all vulnerable players in a low-key manner.
	8	Distraction of focus caused by post-tournament employment and income concerns.	<ul style="list-style-type: none"> • Not in the control of the coaching staff 	<ul style="list-style-type: none"> • Maintain high levels of task focus and ‘centering’ in all preparations. • Actual issue not addressed.
Group	1	Collective and individual excitement and belief.	<ul style="list-style-type: none"> • First Order • Cohesion (<i>Affective/Group Pride</i>) • Motivation (<i>Intrinsic/Autonomy, Intrinsic/Competence</i>) 	<ul style="list-style-type: none"> • To be leveraged by the head coach in pre-match planning sessions and ‘Jersey Presentation’ ceremonies. • Caution to coaches and captain not to allow over-excitement and confidence to impact on focus and control.
	2	Independence and self-management within the playing squad.	<ul style="list-style-type: none"> • Second Order • Cohesion (<i>Instrumental/Social</i>) • Motivation (<i>Intrinsic/Autonomy, Intrinsic/Competence</i>) 	<ul style="list-style-type: none"> • To be leveraged by the head coach as a demonstration of the readiness and cohesiveness of the team. • Remove head coach from all but essential on-pitch interventions, delegating control to captains
	4	Perceptions of favouritism and emerging interpersonal resentments and frustrations.	<ul style="list-style-type: none"> • First Order • Cohesion (<i>Affective/Interpersonal</i>) • Motivation (<i>Extrinsic/Recognition, Intrinsic/Relatedness, Intrinsic/Autonomy</i>) 	<ul style="list-style-type: none"> • Decision was made <i>not</i> to intervene. The player concerned was in a crucial role, central to the success of the team. The head coach and mental coach assessed that this player would not take criticism well, and would either lose confidence or focus, or both.

	6	Collective focus on Hong Kong affected performance against Canada.	<ul style="list-style-type: none"> • First Order • Cohesion (<i>Instrumental/Task, Affective/Group pride</i>) • Motivation (<i>Intrinsic/Competence, Extrinsic/Reward</i>) 	<ul style="list-style-type: none"> • Came to light too late to impact the Canada match. • The ‘Hong Kong focus’ was leveraged in the match against Kenya to ensure that Germany won with maximum points and to ensure that Hong Kong finished behind Germany in the tournament. • Mental Coach to discuss with players in 1-1 meetings and also to address in the squad ‘centering’ session in the pre-match warm ups against Kenya.
	7	Change of purpose affected type of cohesion from instrumental to affective and increased resilience and performance.	<ul style="list-style-type: none"> • No 	<ul style="list-style-type: none"> • No
Group and Individual	5	Emergence of bullying.	<ul style="list-style-type: none"> • First, Second and Third Order • Cohesion (<i>Affective/Group Pride, Affective/Interpersonal, Instrumental/Task, Instrumental/Social</i>) • Motivation (<i>Intrinsic/Relatedness, Intrinsic/Competence, Intrinsic/Autonomy</i>) • <i>Extrinsic/Recognition, Extrinsic/Introjection</i>) • Identity (<i>Group, Self</i>) • Culture 	<ul style="list-style-type: none"> • Head coach to speak to bullied player 1-1 to offer apology and unmitigated support. • Mental coach to address the issue directly and without reservation on a 1-1 basis with all individuals involved in the bullying – including coaches.

6.2.3.2.3 Stage 3 Taking Action

The previous stage resulted in the identification of nine First Order, one Second Order and one Third Order interventions. The Third Order intervention was to be incorporated into the specific actions dealing with the instance of bullying.

The measure of the efficacy of these interventions was agreed with the head coach to be a) observable change in behaviours within the group, b) feedback from the mental coach on subsequent one-to-one meetings with participants, or c) feedback directly from players.

First Order Interventions (changing group processes, or individual behaviour and actions)

Intervention 1 - Mental coach to provide support to individuals in one-to-one sessions.

This intervention was in response to the anxiety and frustrations expressed by players. Following identification of the issue on 8th and 9th November 2018, the mental coach advertised daily “Mental Excellence” clinics. The first set of clinics were run the day before the Hong Kong game. The uptake from players was immediate. Of the twenty-three players competing the following day, fifteen meetings were held with players throughout the day and evening. Figure 6.2.3.8 shows the schedule that was sent to the squad for the first afternoon.

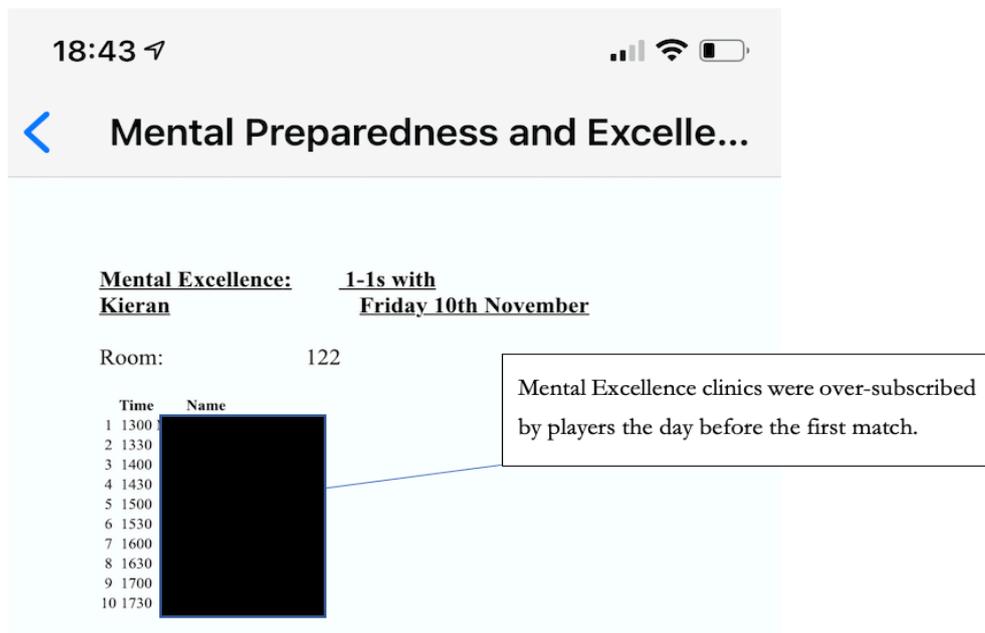


Figure 6.2.3.8 Mental Excellence Clinics: Over-subscribed (Source: Men’s XV’s “WhatsApp” Group 2018)

Whilst most of these clinics were confidential, the players were seeking to speak about their anxieties and pre-match nerves and looking for techniques to calm those emotions and remain focused.

‘Researcher: ...is there anything that’s worrying you, that you are thinking about or distracting you and you’re not sleeping or eating?’

Player: There is no real anything that’s affecting me in that way. I think I’m a bit nervous about what’s to come and maybe how to get prepared. I’m not really used to being on the bench and coming off the bench and trying to make an impact on the game...I think that’s the main thing is getting mentally prepared to come on and be impactful as soon as I come on like ‘mentally’.”

(P11, 10th November 2018)

These clinics continued for the remainder of the tournament, lulling in Week 2 of the tournament, and then being over-booked after the defeat to Canada.

Intervention 2 - Mental coach to conduct squad ‘box-breathing’ and ‘centering’ sessions.

We had introduced the box-breathing technique during the training camps in Heidelberg to help players to regain composure and calm nerves and follows a simple pattern of inhaling slowly and deeply, holding that breath, exhaling slowly and fully and then holding the lungs empty, and then repeating.



Figure 6.2.3.9 Box Breathing: Taught to the squad in Camp 1 (Source: DRV 2018)

It was universally embraced by the squad and increased concentration and calm in key moments. The majority of the playing squad – and coaches – requested personal training in these techniques.

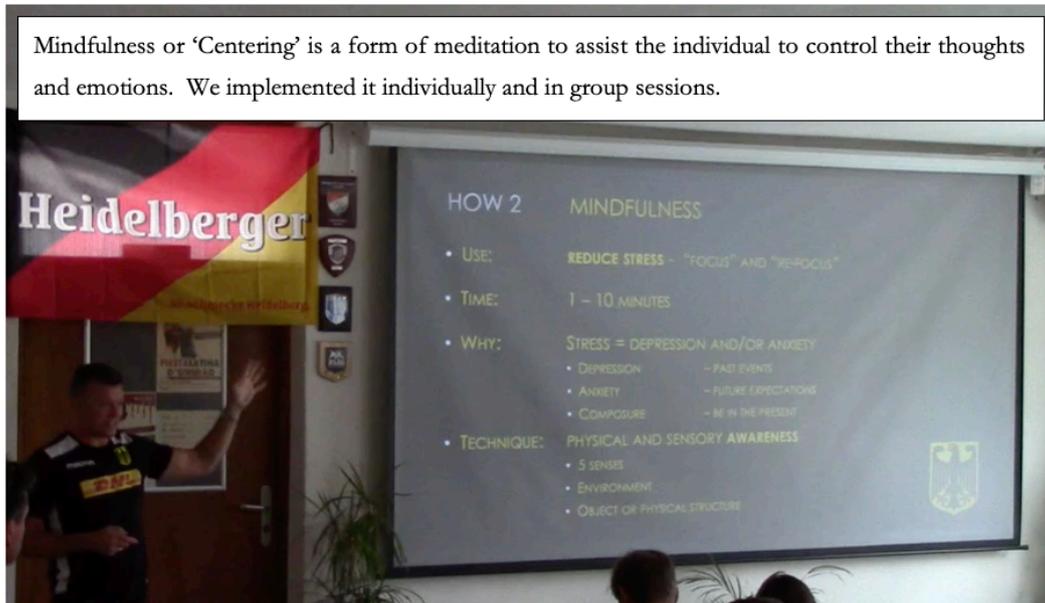


Figure 6.2.3.10 Centering and Mindfulness: Taught to the squad in Camp 1 (Source: DRV 2018)

Once everyone had been trained individually, we used the skills collectively as a whole squad for pre-match preparation.



Figure 6.2.3.11 Whole squad mindfulness session immediately prior to Hong Kong match (Source: DRV 2018)

Intervention 3 - Captain to ensure ‘box-breathing’ during training and matches.

We agreed with the squad that at key breaks in play – for example after scoring or conceding points – the team would briefly congregate into a huddle to re-focus. An abbreviated version of the box-breath would be led by the captain the huddle, after which they continued with the team talks. The hand-over of a core capability and new skill to the players represented a critical transition of autonomy to the squad and increased their confidence and self-management.



Figure 6.2.3.12 Captain leading squad “centering” and “box-breathing” prior to training (Source: DRV 2018)

Intervention 4 - Mental coach to be present on pitch in all warm-up sessions prior to match, and to engage with all vulnerable players in a low-key manner.

In order to assist in the ‘Start’ initiatives, we decided to conduct a centering session in the changing rooms just prior to the teams heading out to the anthems and match. Prior to this, teams have thirty minutes on the pitch to go through their physical and rugby warm-up drills. The mental coach was asked by the players to be on the pitch in the stadium with them to help with mental calmness and management of individuals’ pre-match nerves.

Intervention 5 - Head coach to leverage ‘Belief and Confidence’ in pre-match planning sessions and ‘Jersey Presentation’ ceremonies (relating back to “Fight” and cohesion with the group)

The image and quote below are from the head coach in the jersey-presentation meeting in the evening before the Hong Kong match. The full speech from the head coach

spoke about the depth of the unity between this group of players, and how every element of the squad contributed to the strength of the integrated whole.



Head Coach addressing the squad the night before the Hong Kong match – talking about belief, culture, affective cohesion, reciprocal interdependency and values.

Figure 6.2.3.13 Head Coach reinforcing the identity, culture and values of this team (Source: DRV 2018)

“We’ve been together a few weeks, and I’ve seen that commitment. I’ve seen your sacrifice. I’ve seen your drive, seen your determination - what it means to you guys and what it means to everybody here. Not on a lot of money. Not playing in the top leagues. But you’re showing more commitment, drive and sacrificing than I’ve ever seen. It’s a bond. I’ve seen a bond. We identified it on Day 1...and the driving thing was a bond you had together. We called – I called it – ‘Fight’. And I believe that bond is almost as strong as being a family – that’s what I see. A blood tie if you like; that’s how strong it’s been. You’re reliant on your teammates and they’re reliant on you to win.”

(Head Coach Presentation, 10th November 2018)

Intervention 6 - Coaches and captain to contain over-excitement and confidence not to allow it to impact on focus and control.

The emphasis in every aspect of final preparation was to focus the team on the processes of playing the game, and to execute the game plan. Over-excitement manifested itself during training with increased error-count, poorer interpersonal communication, reduction in execution of personal skills and tasks, and increased frustration and anxiety. To manage this, the rugby and S&C coaches established a set routine for every session, and ensured that the drills were completed in that same sequence, exactly on time, on a repeated basis.

In addition, the box-breathing technique was implemented immediately after and before any major on-field event. These techniques maintained concentration and calm.

Intervention 7 - The ‘Hong Kong focus’ was to be leveraged in the match against Kenya to ensure that Germany won with maximum points and to ensure that Hong Kong finished behind Germany in the tournament.

The affective cohesion (interpersonal and group-pride) was evident as we approached the final match. However, we were not sure that this was going to be enough to catalyse the level of on-pitch commitment required to beat a tough and dangerous opponent (Kenya). We debated highlighting the need to beat Kenya in order not to come bottom of the tournament. However, we concluded that this would instil a sense of ‘fear of failure’, rather than ‘striving for success’. Instead, we highlighted to the players that a resounding win against Kenya would mean that – irrespective of anything that Hong Kong might do in their final match – Germany would finish in second place in the tournament and Hong Kong would be behind us. It was decided that this should be initiated during the mental coach’s on-to-one sessions with the senior players, and to allow the team processes to facilitate the propagation of this concept within the playing group, which we hoped would create a sense of ownership from *within* the team (emic), rather than the concept being imposed *on* the team (etic).

Mental Coach: I don’t care about Kenya; I don’t care about Canada...I do care about Hong Kong. I do care about the arrogance that they approached this team with, and if we don’t take all the points against Kenya then they can still go home smug, [saying] ‘Yes we lost [to Germany] but we still beat them [overall]’.

I think our match is against Hong Kong again, and I think when we see the Kenyan shirts, and the Kenyan players, we do it with the same fury as we did with Hong Kong. We can just see it’s Hong Kong again and we’re going to beat them again and they’re [Hong Kong’s squad] going to sit on the touchline and watch this game, and they’re going to watch us score and score and score and know that not only are they not playing for first place, but they’re not even going to get second place. So, I’ve got the hairs sticking up on the back of my neck. Does it do the same for you?

Captain: It does get me revved up... It gives me something else to work on to get them fired up for the game as well.”

(P3, 21st November 2018)

Intervention 8 - Head coach to speak to bullied player one-to-one to offer apology and unmitigated support.

Despite not being implicated in the issue of bullying, the head coach was deeply concerned by the issue. He held himself personally responsible for the situation, asserting that the culture and conduct of the squad ultimately resided with him. As such, he wanted to share this sentiment with the player concerned. The meeting was conducted in private, and the details of the discussion were not shared beyond its two participants. However, the player approached the author immediately afterwards and thanked us for our support, confirming that he wanted to continue to be a part of the squad.

Intervention 9 - Mental coach to address the issue directly and without reservation on a one-to-one basis with all individuals involved in the bullying.

Three separate informal meetings were conducted with the three main aggressors. The tone of the meetings was clear but calm. Each individual was both ashamed and embarrassed, and offered no justification for their behaviour, only remorse for the hurt that it had caused, and the potential damage that it had done to the team. Without request, each individual left the meeting and immediately sought out the bullied player in private to offer unmitigated apologies.

The effect of this episode – which could have escalated and caused significant damage to the welfare and reputation of the player concerned and undermined the culture and unity within the entire programme - actually reinforced the importance of the values of the squad and highlighted to all the players and staff that the culture that we had created over twelve weeks was special, to be cherished and not to be taken for granted. This single event, which had caused such personal trauma, actually had the effect of enhancing the affective cohesion of the group, both in terms of group pride and interpersonally.

Second Order Interventions (Organisation and Structure)

Intervention 10 - Head coach to present to the squad that the coaches' jobs were completed, and that ownership and control of performance was now with the players, as a demonstration of the readiness and cohesiveness of the team.

In consultation with the captain, the head coach removed himself from the training pitches during sessions, and instead positioned himself in the coaches' seats in the stands, communicating to the on-pitch coaches by two-way radio as he would do during the tournament matches. This decision had three aims: 1. To simulate and test the real processes of communication that would be experienced in the matches, 2. To show to the

players that he felt enough confidence in them to not be present on the field in the final training sessions, and 3. To ensure that the interdependence for the playing squad gradually excluded the coaches so that they were confident to self-manage going forwards into the match. In the squad morning briefing on 10th November, he handed over conduct and execution of the briefing and the subsequent final training sessions to the players.

“Today is where we hand over to the players...We’ve done everything we can for the last ten weeks as coaches. We can’t do anything else for you guys now. We will be available. If something goes wrong in training today, we’ll pick you up again, but [Captain] and leaders, it’s over to you. In the training session there will not be a coach on the field. It’s over to you guys to execute. I want you to prepare for what’s going to happen on Sunday when the coaches are not there [in the match].”

(Head Coach Presentation, 10th November 2018)



Senior player presenting the Hong Kong game-plan to the squad. Head coach watches...

Figure 6.2.3.14 Team leaders take full responsibility for briefing: Assuring confidence, autonomy and accountability (Source: DRV 2018)

6.2.3.2.4 Stage 4 Evaluating Action

Unlike in AC1, the interventions in AC2 were less cultural, structural or organisational in nature, and instead were focused on relatively small adjustments in behaviour. The effectiveness of the third- and second-order interventions in AC1 were manifest in how those changes had become embedded into the group processed in AC2. The interventions in AC2 were all determined and designed to improve team-oriented behaviours and social processes that would facilitate high levels

of cohesiveness within the group, and mental strength and preparedness of individuals. The collective learning in AC1 and AC2 had created a unity and commonality of purposes that had transcended individual needs. We witnessed a consistent pattern of behaviours both on and off the pitch of players and staff sacrificing their own needs or comforts for those of their teammates. A collective focus had been attained and the adoption of accepted and expected daily rituals and team processes that were unique to this group and the identity that it had created for itself.



Figure 6.2.3.15 Team rituals and humour: Critical in creating culture, belonging and camaraderie (Source: DRV 2018)

The single instance of bullying was dealt with quickly and effectively and actually increased the accepted importance of our identity and values. The issue of perceived player-favouritism of one or two individuals was not resolved and the impact of this was felt in the match against Canada. It can therefore be deduced that our decision not to intervene was not the most appropriate course of action, and that this situation needed to have been addressed.

The efficacy of the interventions is probably most evident in the manner in which the team approached and executed the first match, and the resilience and re-focus seen in the lead up to the final match – when the tournament had already been lost. The camaraderie, courage and collaboration seen in that final game showed high levels of effective team processes and behaviours; a group of individuals with a clear identity collaborating effectively and putting collective needs before personal needs to achieve a common goal.

6.2.3.3 AC2 First-person Reflection

The overwhelming feeling that I experienced in this AC was a sense of belonging and trust. Balancing the practitioner and researcher roles created a feeling of disloyalty to the group; as a practitioner my efforts and energies contributed to the group's core purpose, but as a researcher they contributed only to my personal ambitions and purpose. This conflict was compounded by the responsibilities and defined outcome required of the practitioner role; to create a cohesive team whose members – for the short period of three weeks – would set aside their personal agendas and instead focus on the collective endeavour and needs. This paradox sits at the heart of this study; the exploration of the extrinsic motivations of individuals (introjection, reward and recognition) and their intrinsic motivations (relatedness, competency and autonomy), and how these align – or not – to the purpose of the group, and the necessary types of cohesiveness that need to evolve in order to achieve that purpose. As we entered the competition phase of the project, the cultural and attitudinal third-order interventions that we had implemented in AC1 were yielding the outcomes that we had hoped for, with collaboration, selflessness, and standards increasing exponentially, and the identifiable behaviours associated with culture development evident (branding and identity, group rituals, unspoken values). Not only had I initiated many of the processes to create these outcomes, but I became – by necessity and willingness – part of the group.

My passion and commitment to our team was authentic; it needed to be in order to build trust with the participants for our core purpose. I consistently ensured that every participant knew and understood the purpose of my research. Not only was this ethically necessary, but from the perspective of my personal integrity it was important to me that the players did not perceive an ulterior motive to my efforts. Many individuals were keenly interested to understand some of the concepts and theories that underpin team processes, and I had a number of lengthy discussions on the subject with both players and staff over the course of the three weeks. This openness strengthened trust and respect and resulted in participants being more open about their own ambitions and views. However, I did not wear my research role 'on my sleeve' or attempt to create emotional distance from the participants - very much the opposite. Indeed, as we became more immersed, insular and focused on our core purpose, I felt guilty about allowing my thoughts to become distracted to the research purpose and away from the shared purpose of the team. In some respects, I felt that this duality of role and emotional engagement was compromising my own integrity with the squad; I was not living the values that I was trying so hard to instil in them – to put aside any other distractions and to dedicate totally to the group and its shared purpose.

This conflict of identity between that of practitioner and academic is well-understood in ethnographic research methodologies – commonly referred to as ‘going native’.

In addition to the awareness of this transition and duality of identities, I also became aware of my own changing motivation. The motive behind my original approach to the organisation was to fulfil my research purpose; an extrinsic motivation, addressing both personal reward (completing my research study) and recognition (attaining the status of ‘Doctor’). As my contributions to group and to individuals increased, so too did their tacit and active acceptance and inclusion of me personally. I was made to feel valued, respected, needed, trusted and part of the team. This triggered a deeply intrinsic set of motivators for me that I have not felt since the beginning of my working life in the Royal Navy. I felt profound intrinsic relatedness. As time progressed and I overcame my fear of failure and imposter-syndrome, and as the guidance and support to individuals started to make a genuine impact on their happiness, welfare and performance, I realised that I was feeling happier than I had done for years. I was fulfilling my intrinsic-competence and autonomy motivators. My extrinsic drivers were of lessening importance to me.

As described in my reflection from AC1, the strength of this change in motivation and commitment to the group affected my family and home-life. With my third child being born on 24th September 2018, for the first two months of his life I was not focused on him or my partner, but on the team instead. Whilst my partner was fully supportive of this, it nevertheless created another level of personal identity and motivation conflict, and of guilt and disloyalty. For my partner, my selfish commitment to the group undoubtedly increased her anxieties, workload and exhaustion. Even as I write this, I question my motivation and judgement at that time, and whether I made the right decisions for my family or not. Notwithstanding that debate, it demonstrates the power of intrinsic motivation in driving the actions and sacrifices that an individual may make if their commitments to a group (intrinsic relatedness) are strong enough.

Taking aside my own identity and motivation conflicts, I also became aware that I had formed bonds of trust with the players individually and collectively. An action taken by the squad highlighted this to me and added further to my commitment and loyalty to them. As explained above, my partner was without me for the first two months of our son being born. Whilst I did not speak about this with the players, they were nevertheless aware of my guilt about being away from her, and of the sacrifice that she was also making on behalf of the squad. On 15th November the players filmed a video message for her, which they sent to her on WhatsApp. A screenshot of that video and the transcript of the message are shown below.

[Captain] “Hi Jackie,

The German National team send you lots of love and best wishes from Marseille, and we hope you get well soon.

[Collectively] “Get well soon!””

(Group Video Message, 15th November 2018)



Figure 6.2.3.16 The squad send a video message of support to the author's partner (Source: DRV 2018)

Whilst I had made a conscious decision in my research planning to immerse myself in the group, and to commit to the core purpose, I was not prepared for the changes in my emotional commitment that would result.

From a research perspective, there is a risk that this level of involvement has an impact on researcher bias. However, in order to fulfil the role of mental excellence and “teamship” coach, it was essential that I maintained professional objectivity. This requirement applied equally to all the professional staff in the group – including coaches, doctors and physiotherapists. Nobody fulfilling these roles could allow themselves to become biased towards individuals or the group in a manner that might impact on their professional assessments and interventions; my role was no different in this regard. Indeed, had I displayed any lack of objectivity in my analysis and recommendations, the head coach would have notified and corrected me accordingly. For this reason, I feel that my personal bias and relatedness to the group and its core purpose did not compromise my objectivity.

My final reflection on this AC is the positive impact that the experience had on me. Taking aside the emotional conflicts described above, I truly enjoyed every moment of the entire project, from 3rd September until 24th November 2018. I developed a sense of self-worth, belonging, interpersonal trust, shared experience and self-esteem that I had not felt in my professional life for nearly thirty years. It reconnected me with my values and identity, and made me reconsider my motivation and ambitions, and highlighted the importance of being part of a team to me. From a research perspective, I have been able to reflect on the multitude of ‘teams’ that I have worked in and with over the course of my career in business and compare it with the feelings that I had in this team. The differences are very clear to me and have helped me to make sense of what was happening in this particular group, and to identify the effects of different social processes on the emergence of a ‘team’ from a collection of individuals brought together as a group to attempt to achieve a common goal.

6.2.4 Action Cycle 3 (AC3)

6.2.4.1 AC3 Context and Purpose for Cycle

A summary of the cycle is provided for contextualisation in Table 6.2.4.1. Demographic details of the participants are provided for reference in Appendix O.

Table 6.2.4.1 AC3: Cycle Context and Purpose

AC3	Summary of Cycle
Existential Purpose of Cycle	<p>Organisation’s Existential Purpose for Group: <i>“Compete in REIC tournament.”</i></p> <p>Group-defined Existential Purpose: <i>“Fight for each other”</i> and <i>“Be the best you can be.”</i></p> <p>Matches against Belgium, Romania, Russia, Georgia and Spain. The target was to not finish bottom of the competition, which required winning at least one match of five. Core purpose was to maintain status as a Tier 2 Rugby nation.</p>
Locations	<p>Heidelberg, Germany</p> <p>Brussels, Belgium</p> <p>Botoşani, Romania</p> <p>Köln, Germany</p>
Duration	<p>9th February 2019 – 17th March 2019</p> <p>Elapsed period - 36 days</p> <p>Actual time that the team was together – 14 days</p>
Context	<p>Following the failure to qualify for RWC19, the DRV withdrew all support from, and engagement with, its Senior Men’s XV’s squad. This included all funding, any form of coaching or on-going medical and physiotherapy support, disputes and non-payment of legitimate personal expenses incurred by players and coaches in the course of the RWC Repechage campaign, and any form of communications with the players, coaches or staff. After the squad returned from Marseille on 24th November 2018, the DRV leadership did not acknowledge the performance or successes of the team or individuals, either in private or public. Individuals were left to disperse to their homes – in Germany and overseas – with nothing.</p> <p>Players with professional club contracts returned to playing for their clubs. Many players had lost their club contracts in order to represent Germany in the RWC Repechage.</p>

These players were now unemployed; many without any form of income or permanent accommodation. Coaches and support staff were treated similarly. Some players had been 'loaned' to the XV's effort from the 7s programme, and these players returned to that programme where they had full-time paid roles, and total infrastructure support (training and medical, income, subsidised accommodation and food, and personal support).

Notwithstanding the above, Germany was still recognised by World Rugby as a Tier 2 European rugby nation, with a playing and legal obligation to compete in the REIC in the winter and spring of 2019. The first match was to be played against Belgium in Brussels on 9th February 2019. The other matches were played over consecutive weekends until the final match against Spain in Köln on 17th March 2019. All other nations in the tournament had been preparing and training for tournament from the summer of 2018, with regular and funded training camps, full-time or dedicated coaches and support staff, and appropriate training and rehabilitation facilities. In addition, players and coaches received compensation for their attendance and for being selected to represent their nation. Despite the schedule – and the imminent first and second matches being played away against Belgium and Romania – the DRV leadership had not confirmed *any* plans, nor had sent *any* form of communication with coaches, staff or players by 2nd January 2019. The DRV did not appoint coaching staff or a team manager for the tournament until 17th January.

Eventually, the Head Coach from the RWC Repechage was re-appointed on 18th January 2019 to prepare and lead the squad through the REIC tournament. Players were notified that day and asked for their availability to both train and play in the five matches of the tournament. One additional rugby coach, an S&C Coach, a physiotherapist, the mental excellence coach and a team manager were also contracted for the duration of the tournament only. Players were asked to join a training camp on 3rd February to prepare for a full competitive international match just six days later (9th February). Players who had been flown in from overseas were advised that they would need to stay in Germany or with the travelling squad for the duration of the tournament, as the DRV would not pay for more than one return flight to their home country. They were advised that there would be *no* payment of any kind for their services for the duration of the tournament – neither for training nor matches. This meant that – for the elapsed six weeks period of the REIC tournament – many players would not be able to earn any salary at all. They were accommodated in Youth Hostels in and around Heidelberg, sharing dormitories with up to four men per dormitory, in single- or bunk-beds, designed for teenagers. It should be noted that these international rugby players ranged in height from 1.8 to 2.0

meters, and in weight from 88 to 125 kilogrammes. Food was basic and provided from the hostel canteens.

Many of the players who competed in the RWC Repechage were prevented from playing in the REIC by their professional clubs. Other players had returned to their home nations and were unable to play because of the financial implications, and the lack of travel budgets from the DRV meaning that they would be unable to see their families. This meant that eleven players from the squad that competed in Marseille were prevented from doing so in the REIC – including the captain, vice-captain, and three other senior players from the squad's leadership group. In addition, the DRV leadership prevented any players from the 7s programme being made available for the XV's programme, removing another two RWC players from the pool of available players.

Due to a serious dispute between the DRV leadership and the owners of the training facilities, access to gym equipment, changing rooms, shower facilities, coaches' and management rooms, briefing rooms and medical equipment was restricted. This meant that even when the coaching group and players were assembled, they were subjected to facilities that would be inappropriate for any level of high-performance sport. Germany played away matches to Belgium, Romania and Georgia. Budget restrictions meant that travel from Germany to these locations was booked using the lowest cost routes. This meant that – for the journeys to Romania and Georgia – the team were travelling for thirteen and twenty-two hours respectively *each way*.

The collapse of support, funding and a lack of high-performance environment for the German XV's squad came to the attention of World Rugby in January 2019. As a result, they sent one of their team to audit the safety of the environment and to assess whether player welfare was being put at such risk that Germany would be disqualified from competing in the tournament. They allowed Germany to compete, but the auditor remained in camp and on tour with the squad for a number of matches. The problems described above became public knowledge, and the other nations in the tournament planned accordingly. The REIC is an important tournament; the losing nation is relegated from Tier 2 rugby. Despite Germany's outstanding performance in the RWC Repechage only three months earlier, it was expected that Germany would lose all their matches in the REIC, with a lack of players, preparation, resources and facilities making meaningful competition unrealistic.

Despite very close games against Belgium and Russia, Germany lost all its matches in the REIC and were relegated from Tier 2 rugby as a result.

Researcher was present for three of the five games.

6.2.4.2 AC3 Second-person Analysis

AC3 differed from AC1 and AC2 in many aspects as can be understood from the description of context above, the most obvious being that this AC was for a different tournament. However, similarities existed too; 1) REIC is a recognised international competition as was the RWC19 Repechage, 2) Germany entered the competition as the lowest seeded nation, expected to lose, 3) the preparation time for Germany in both competitions was woefully short in comparison to the other nations competing, and 4) the DRV leadership were publicly and privately unsupportive of the XV's squad in both competitions.

In terms of conducting research and the theoretical purpose of this study, the author was asked *not* to formally interview players at any stage, nor to overtly collect data. This was for two primary reasons; the first was that with the contextual situation as it was, we felt that players may feel suspicious about the motives of any interviews considering that they were being subject to such appalling treatment by the DRV. The entire squad arrived in camp with a feeling of persecution and indignity, and we did not want to add any further suspicion or mistrust within the squad. The second reason was practical; we were starved of coaching resources, and with very little time available to prepare. With only three days of preparation time before competing, there was simply no chance of incorporating investigative one-to-one meetings. In addition, leveraging the strong bonds of trust that the mental excellence coach had built with players during AC1 and AC2, it was felt that the author's greatest contribution to the squad would be as an active coaching participant, with the express task of creating positivity and focus.

Data collection for AC3 was restricted to researcher field notes and journals, as well as photographic and social media records.

6.2.4.2.1 Stage 1 Diagnosing

Observation 1: Senior players from the WRC campaign causing negativity in the squad.

As described above, many of the senior and established players were unable to play in this tournament due to contractual, personal and financial reasons. However, their allegiance to the XV's squad was high based on the recent WRC experience and their long histories of playing in the squad. As a result, many of these players were drawn to the initial training camp even though they were unable to play. Their frustrations with the situation, facilities and conditions, and DRV behaviour was shared openly with other players both before and after training. This spread dissent and a reduction in morale across the squad – exacerbated by the positional and experiential authority that the individuals concerned held within the squad.

“Players are still arriving. Some of them we’ve never met and are being drafted in to cover for the lack of availability [of other key players]...[Captain] and [vice-captain] are hanging around spreading misery and dissent, and with no intention of playing. They’re totally right in what they’re saying, but it’s not helping at all.”

(Researcher’s Journal Entry , 4th February 2018)

Observation 2: The DRV leadership behaviours created even greater division between the Union and the XV’s squad.

The overt disregard of the entire XV’s organisation by the DRV leadership after the WRC Repechage was perceived by everyone involved as disrespectful, spiteful and insulting. The lack of care for the welfare needs of individuals was perceived as callous and immoral – and potentially also illegal. The failure of a key director of the DRV to communicate with players or coaches during December 2018 was irresponsible and potentially dangerous, as lack of training time and preparation could – and did - lead to serious injuries to players in the competition. The decision not to pay players, and to accommodate them in shared dormitories with insufficient food, was perceived by the entire group as a deliberate and considered affront, conceived to undermine morale and performance.

After the loss to Belgium on 9th February 2018, the director sent the following WhatsApp message to the Mental Excellence coach:



Figure 6.2.4.1 DRV Executive leader chose to watch a different national match to his own team (Source: Author’s WhatsApp message, 9th February 2019)

The director did not attend any of Germany's matches in the REIC, despite having responsibility for all international rugby in Germany, instead opting to commentate on television on other international matches being played on the same day.

“[Director] has let down all of German rugby by not being here, and the whole squad hate him for it. They know that he's expecting us to lose all the games – and we know we might – but they are not going to let him undermine our team anymore.”

(Researcher's Journal Entry, 9th February 2019)

Observation 3: There was no 'win' scenario for this group.

When looking at motivation and purpose for the group it was difficult to find a shared purpose that would unify and amplify the efforts of individuals. A common instrumental purpose had been a driving force behind the team for the RWC competition. However, trying to motivate the participants to an instrumental purpose which was essentially to “try not to lose all your matches” is inconsistent with the normally unifying effect of instrumental purpose – particularly when considered in the context of DRV behaviours at this time.

Capturing the comparison between the instrumental purposes of the two competitions, and how this aligned to the motivation of individuals, we identified three subtle but important distinctions: 1) the winner of the RWC Repechage would win a place in the higher level RWC19 tournament in Japan in 2019; the winner of REIC would not win any promotion to a higher level of rugby, as at this time there was no mechanism for Tier 2 nations to be promoted to the Tier 1 “Six Nations” tournament; 2) the loser of the RWC Repechage suffered no negative consequence for not winning the tournament; however, the losing nation of REIC would be demoted to Tier 3 status, with the consequent loss of significant funding from World Rugby, and the likely loss of sponsorship income for the losing nation; and 3) for all players, coaches and staff involved in Germany's involvement in REIC there would be no professional or financial benefit, and indeed, the competition would negatively impact their income, welfare and careers; if they were to succeed in winning one match and surviving in Tier 2, they would not be thanked, and if they failed – as was the case – German rugby would be humiliated, and those associated would be blamed. To add to this challenge, the nation that Germany had most chance of winning against was Belgium – the first match. Losing this match would almost guarantee that Germany would lose the tournament overall and have to play all remaining matches - against tougher opposition - with this knowledge.

The core purpose for the head coach was therefore simple; to win one game and not be relegated – a profoundly different purpose to that in RWC19 Repechage, which was to win all games and qualify for RWC19.

Observation 4: Low morale in the first week of training camp.

Observations 1, 2 and 3 were apparent within two days of the start of our training camp. The emotional response in all participants varied from anger through to resignation and pervaded from the players through to the coaches. The head coach was also impacted but managed his emotions with professionalism.

“Mike is in shock! He’s a total professional and knows that he has to lead these guys and get them ready for a match on Saturday, but if he had a choice, I’m sure he would leave tomorrow – as would I – but neither of us will let the lads down.”

(Researcher’s Journal Entry, 4th February 2019)

The report from the auditor acting on behalf of World Rugby resulted in the following letter being sent to the President and also the CEO of the DRV in May 2019 (Figure 6.2.4.2), highlighting the extreme concerns that they had in regard to the conditions under which the squad were endeavouring to prepare and compete.

“Findings from recent events

The above results are an indication of a significant downturn in the quality of the senior men’s 15s national team and high-performance programme in the past six months, both on and off the field.

On the field, the performance and results in the 2018-19 Rugby Europe Championship which led to a last place finish in the competition were extremely disappointing, especially when considering the positives that had been generated from the performance in the previous November test window in the RWC 2019 Repechage. **Our observations of the team camp and preparation in March showed that the level of the environment had dropped significantly below high performance, to the point where it was difficult to have the full squad attend training.**

The effect of the extent of the inappropriate conditions for the squad rapidly began to affect performance and relationships and had the potential to escalate and become unmanageable.”

Figure 6.2.4.2 World Rugby letter to DRV expressing concerns over conditions (Source: DRV 2018)

To receive such condemnation from the governing body of rugby globally was unsurprising. However, this retrospective assessment did not help the squad at the time of the competition, but

rather highlights the depth and reality of the conditions being experienced by the players and coaches.

‘I’ve only been here [for] two days and I’m drained already. The negativity and anger around the camp is pervasive. It is affecting everything. [Coach] and [Team manager] are openly bickering in coaches’ meetings. [Team manager] is horribly stressed. Training is lethargic at best – errors everywhere.’

(Researcher’s Journal Entry, 6th February 2019)

Whilst potentially destructive, the indignation and anger indicated passion and fight within the players and collectively across the squad. The sense of injustice and outrage were emotions that we could potentially leverage to create an intense affective-cohesion and consolidate our group identity and values.

‘I think...all those who played in Marseille...it was like ten steps back - way back - you know. We were the national team, but [then] coming back to the Six Nations [sigh] because I don’t know [sigh] it was completely, um, just shit to be honest. There were no players, there was nothing to work with.’

(P8, 21st August 2019)

Our greater concerns were with those who were spreading dissent, and those displaying lethargy and resignation. In addition, we had several new players to the squad from overseas who had not played international rugby before. For these players, the invitation to play Tier 2 rugby for Germany was an honour and exciting. As new people into the group they contained their enthusiasm and were confused and bewildered by the situation. Their positivity needed to be nurtured and harnessed, and we needed to engage the senior members of the squad to do this.

Summary of AC3 Diagnosis

The squad was unable to prepare at all for the REIC tournament. Poor communication from the DRV from the end of the RWC in November had eradicated any trust between the XV’s organisation and the DRV. Players and staff were once again left without support, and then at very short notice, expected to coalesce and perform on the international stage, against better prepared and resourced opponents. Morale was low, attention was distracted, and commitment was sub-optimal.

6.2.4.2.2 Stage 2 Planning Action

Process

1. The researcher reviewed each of the observations in the context of the themes present in the determination of the initial observation. These themes were then categorised by the type of change (Coghlan, 2019) required to address the observation. Considering the time-constraints and need to take immediate action, we decided to further categorise the observations into three types; 1) ‘Control’ – observations that were within our direct control on which to take action, 2) ‘Influence’ – those where we could implement interventions that may have an indirect influence on the issue, 3) ‘Neither’ – issues that we could not address in the timeframes required. Finally, a judgement was made as to whether it was possible to implement an intervention that might have a positive effect in the restricted time available. The results are shown in Table 6.2.4.2:

Table 6.2.4.2 AC3: Categorisation of AC3 Observations

#	Observation Description	Themes	Type of Change Required	Category	Intervention Possible
1	Senior players from the WRC campaign causing negativity in the squad.	Frustration Injustice Disappointment	First-order (Process)	Control	Yes
2	The DRV leadership behaviours created even greater division between the Union and the XV's squad.	Bullying Leadership Favouritism Discrimination	Third-order (Culture Leadership)	Influence	Yes
3	There was no ‘win’ scenario for this group.	Task-oriented purpose Unrealistic goals	Third-order (Purpose)	Influence	Yes
4	Low morale in the first week of training camp.	Physiological needs Physical needs Emotional needs Extrinsic motivation Intrinsic motivation	First-order (Facilities and welfare) Second-order (Organisation) Third-order (Purpose, Culture and Attitude)	Influence	Yes

2. The range of types of change required presented a challenge for the group’s leaders. First order changes could be affected relatively easily, but the second and third order changes identified were necessary because of factors outside of our control, and indeed caused by issues that could not be undone (i.e., the DRV actions towards to the XV’s squad over the preceding two months, and the lack of funding and resources available). However, the foundations of the group’s identity and values had been established in the previous competition (AC1 and AC2), and it was felt that we might be able to reconnect the squad to those values, and turn our focus *inwards* towards each other, and to artificially isolate the group from external issues and influences. We also needed to acknowledge that setting task-oriented objectives could back-fire; this tournament would take place over an elapsed six-weeks period, and failure to achieve early task-objectives could have the effect of fracturing any group cohesion totally. We therefore decided to make a radical decision for an international sports team; we would *not* set instrumental goals, but instead focus on affective considerations which were under the control of every individual, and not reliant on external factors.

The discussions with the head coach and coaching team regarding the observations resulted in the definition of seven main interventions. These are summarised in Table 6.2.4.3 aligned to the observation that they were conceived to address:

Table 6.2.4.3 AC3: Intervention Descriptions for AC3 Observations

#	Observation Description	Type of Change Required	Intervention #	Intervention Summary
1	Senior players from the WRC campaign causing negativity in the squad.	First-order (Process)	1	Remove all uncommitted or disruptive players from the squad preparations with immediate effect.
2	The DRV leadership behaviours created even greater division between the Union and the XV’s squad.	Third-order (Culture Leadership)	2	Re-establish the identity, narrative and legacy of the squad from AC1 and AC2.
			3	Leverage the Mental Coach’s dual role with the 7s squad to re-build inter-squad relations as a means of remediating perceived discrimination.

3	There was no ‘win’ scenario for this group.	Third-order (Purpose)	4	Re-define the group’s purpose from instrumental to affective.
			5	Establish a conscious link for every player between their personal motivation and the group purpose, to create a common and shared affective purpose.
4	Low morale in the first week of training camp.	First-order (Facilities and welfare)	6	Address physiological needs such as food, accommodation and medical support.
		Second-order (Organisation) Third-order (Purpose, Culture and Attitude)	7	Engage and leverage the enthusiasm and excitement of the new players to the squad.

6.2.4.2.3 Stage 3 Taking Action

The previous stage resulted in the identification of seven interventions. The measures of the efficacy of these interventions was agreed with the head coach to be a) confirmation that excluded players were honouring their commitment to limit their interactions with squad members, b) material changes in resources and hygiene factors for the players, c) the response from players to the focus on process rather than outcome, d) a change in energy, enthusiasm, training performance (rugby and fitness) and team performance in matches, and e) the team spirit and camaraderie in all aspects of our immersion in the competition (training, travel, preparation, socialising and competition).

The interventions are described as below, with a summary of the actions taken:

Intervention 1 – Remove all uncommitted or disruptive players from the squad preparations with immediate effect.

One-to-one meetings were held with all players who were unable or unwilling to commit to the tournament. They were asked to respect the need for the playing squad to prepare and concentrate

on the task ahead. The values of the squad were emphasised to the individuals, and they were asked not to attend the training environment in any capacity, and to limit their communications with players to encouragement only.

Intervention 2 – Re-establish the identity, narrative and legacy of the squad from AC1 and AC2.

On Day 3 of the initial training camp, a squad meeting was held. The issues that had been raised or observed were discussed directly by the mental coach with the group collectively. We acknowledged that the issues were real and relevant, and explained what specific actions we were taking to remedy them, but made no promises that they would be fixed, only that we would do our utmost to resolve them wherever possible. We then re-presented the presentation from the RWC19 campaign regarding the identity and values of the squad.

Intervention 3 – Leverage the Mental Coach’s dual role with the 7s squad to re-build inter-squad relations as a means of remediating perceived discrimination.

The Mental Excellence coach had been asked by the Director of High Performance Sport (DHPS) to assist the 7s programme in their preparations for their own competitions and had toured with the to South America in January 2019. We decided that we would try to leverage the trust and respect that had grown during this time and attempt to bridge the relationship gap between the DRV and the XV’s squad. This required explaining the depth of the problems being experienced in the XV’s to the individual who was consciously causing them, and gently persuading him to take actions to change or help the situation.

Intervention 4 – Re-define the group’s purpose from instrumental to affective.

Promoting an instrumental purpose (such as, ‘This is a must-win match’) was judged to be a risk; in the event that we created a high level of outcome-based focus, and the task was failed, we would struggle to keep any unity, commitment and belief from the players as individuals. The games later in the tournament were likely to be tougher and team processes would be essential. We therefore decided to eschew the outcome-based (extrinsic-instrumental) focus. Instead, we focused inwardly on the team itself, our relationships, processes, values and identity. We focused on two concepts; ‘Fight for each other’, and ‘Be the best that you can be’. These two concepts were in the personal control of every individual, and they promoted the essence of Affective Cohesion; Interpersonal and Group Pride. We had therefore replaced an Instrumental Purpose for the group with an Affective Purpose.

Intervention 5 – Establish a conscious link for every player between their personal motivation and the group purpose, to create a common and shared affective purpose.

The Mental Excellence coach issued a request to all players to message him with the reasons that they *wanted* to play in the tournament. These messages were leveraged to emphasise to the squad that every individual was part of the group by choice, driven by a common motivation to contribute *to* the group, and not for what they could take *from* the group. This aligned to the affective purpose now being promoted (‘Fight for each other’ and ‘Be the best that you can be’), and also to the identity and culture of the squad from the RWC19 tournament.

Intervention 6 – Address physiological needs such as food, accommodation and medical support.

The head coach and mental coach arranged to meet with the President of the DRV personally to explain the state of resourcing for the squad. We also asked the observer from World Rugby to document his professional assessment of the state of the High-Performance environment, highlighting the concerns for player welfare that were being communicated to the World Rugby executives. The President affected immediate interventions regarding room sharing, food provision and mandating the release of medical and physiotherapy supplies.

Intervention 7 – Engage and leverage the enthusiasm and excitement of the new players to the squad.

A coordinated approach was taken between the coaches and the senior players to incorporate and include the new players. It was essential that we established immediately which of the new players would integrate into the culture quickly, and which ones would be likely to cause disruption or disharmony. Assessments were made by the rugby coaches regarding skills, commitment, courage and capability, by the players regarding attitude, personality and ‘fit’, and by the mental coach regarding motivation, values, desire and resilience. These were fed back to the head coach, who incorporated these into his own observations of the players during the first two games.

6.2.4.2.4 Stage 4 Evaluating Action (EA)

This section assesses the impact of the interventions undertaken against the four observations in AC3.

EA - Observation 1: Senior players from the WRC campaign causing negativity in the squad.

Interventions 1 and 2 addressed this issue. The conversations with the players concerned were honest, dignified, unapologetic but sensitive to the individuals’ points of view and historic roles

and contributions to German XV's rugby. Without exception, the individuals accepted the request to remove themselves from the squad with humility and understanding. They all understood the need to allow the group to focus on preparation and were respectful and supportive of the values that we had all embraced and embodied over the previous four months. The squad appreciated the removal of these players, and importantly, the manner in which they had been asked to allow us to move forwards. The cohesion and determination of the team was apparent in the narrow defeat in Belgium and was commented on by the President of the Belgium RFU.

“We lost. Just. But the fight and determination were unbelievable. In the after-match dinner the President [of the Belgium RFU] made a speech and specifically commented on the unbelievable commitment and teamwork from Germany.”

(Researcher Journal Entry, 9th February 2019)

EA - Observation 2: The DRV leadership behaviours created even greater division between the Union and the XV's squad.

Intervention 3 attempted to initiate the reparation of communication and trust between the XV's squad and the DRV. Whilst working with the 7s squad in South Africa, the mental excellence coach encouraged the players and coaches in that squad to send messages of support and encouragement to the XV's players prior to their matches against Georgia and Russia. Whilst appreciated by the players, the effect was not wholly welcomed, as it highlighted the difference in conditions and resources for the two German squads, causing resentment and de-focus within the XV's squad. At that time, the 7s squad were training in state-of-the-art facilities in Stellenbosch, with a full coaching and support staff, and enjoying funded excursions whilst on tour, whereas the XV's squad were enduring the conditions and facilities described earlier in this AC. It was also commented on by the XV's players that all of the 7s players were being well paid on permanent contracts, whilst the XV's were playing for loyalty only. This resentment was further compounded by the comments, actions and favouritism being displayed by a senior director in the DRV. Whilst the intervention did not improve relations and collaboration, it did have the effect of creating a stronger affective cohesion within the XV's squad.

EA - Observation 3: There was no 'win' scenario for this group.

Interventions 4 and 5 were designed to address this challenge.

Intervention 4 reduced the emphasis on match results (outcomes) and focused on the team processes (inputs) instead. The result of this was significant; the group self-managed the standards and narrative within the squad, establishing behavioural codes of conduct in regard to negativism.

Interdependency – normally associated only with instrumental (or task) orientation – increased, with individuals contributing personally to the group’s needs (pooled interdependency), to the completion of group tasks (sequential interdependency), and in collaboration with organisational issues (reciprocal interdependency). Examples of each included personal preparation and research for training sessions; greater collective concentration, effort and accuracy in training and games; and collaboration in activities such as sharing transportation, assisting each other in skills and strength development sessions, and detailed review sessions within the squad. However, we also noted that as the adversity of circumstances increased – such as the travel and health issues to both Romania and Georgia – dyadic and collective *affective interdependency* emerged. Examples of this included the importance of humour and irony in coping with injury, loss, discomfort and deprivations; the sharing or sacrificing of food, pillows, seat allocations and even transportation priorities within both horizontal and vertical interpersonal interactions; and the willingness and commitment of individuals to risk their own safety for the protection of their teammates. This last point is an expectation of players in rugby, however – and in particular in the match against Georgia – the courage and camaraderie shown in the second half of that match was of a level not witnessed before by the head coach.

“I looked around the changing room at half-time and thought, ‘Christ, half of these blokes won’t be able to play in the second half. They were battered – I’ve never seen anything like it. Blood and bruises everywhere. Helping each other with treatments ‘cos the doc and [physio] were dealing with the worst stuff. It was like they’d been to war...I’ve never seen courage like it. Not one of those blokes took a backward step in the second half. Now that’s FIGHT. That’s what we stood for. We might not have won the match, but we were definitely the winners.”

(Head Coach, 10th March 2019)

Figure 6.2.4.3 shows a WhatsApp message from the doctor two days after the Georgia match. The full report provides injury and health issues for *sixteen* of the twenty-three players.

Intervention 5 was intended to evaluate if the players would be inspired and motivated by a non-instrumental group purpose. If the motivation of individuals was extrinsic (winning, reward, recognition, glory, self-oriented) it was unlikely that promoting an intrinsic purpose (“Fight for each other”, “Be the best that you can be”) would inspire or engage the players. However, our assessment was that – considering the already-accepted conditions in which we were engaged – the players were unlikely to be driven by extrinsic-success criteria.

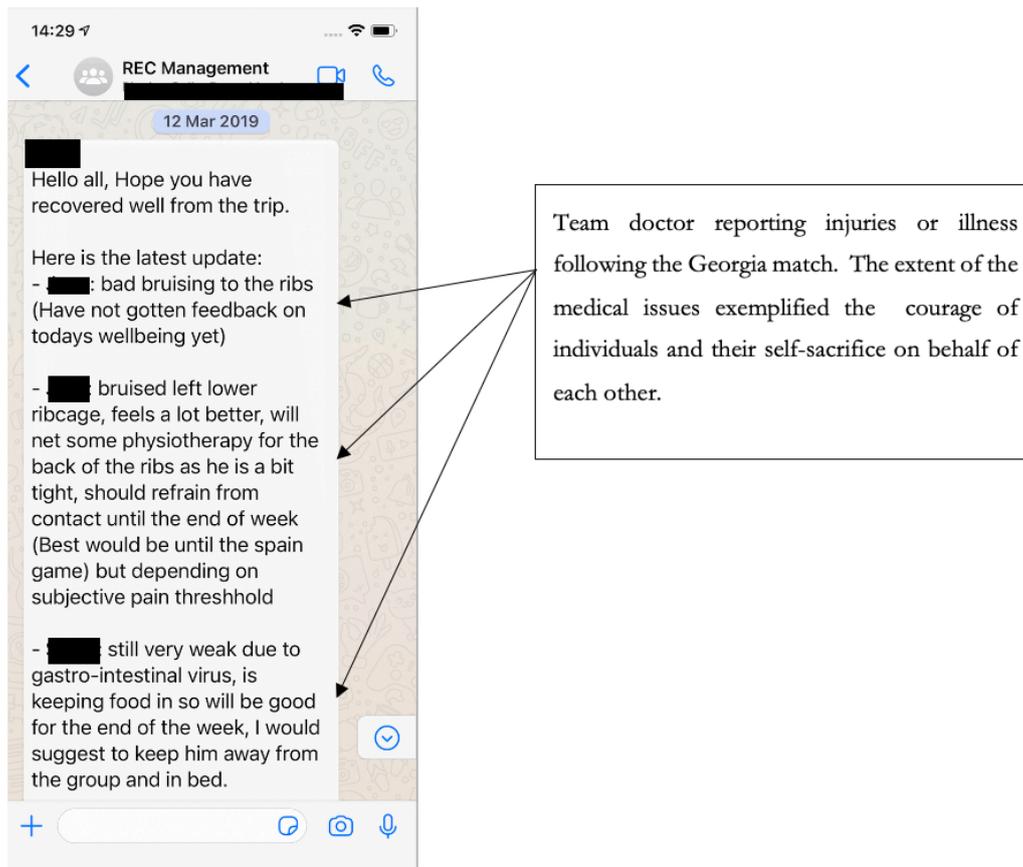


Figure 6.2.4.3 Team doctor report highlighting the extent of health concerns (Source: Coaches' WhatsApp Group 2019)

The consistent references from players regarding the desire to participate to be with their 'mates', to be the best that they could be, and being able and willing to choose to be there aligns with the intrinsic motivators of relatedness, competence and autonomy, and therefore provided the coaches with the affirmation to proceed with their decision to promote an affective purpose.

"It's about representing my country and to play with my mates I played with for ages. I sacrifice all my free weeks with the club and do a lot of travel to be able to play."

"It means a lot for me to represent my country and play alongside some very good and talented guys! I want to step up my game and be the best player I can be mentally and physically."

"It's an honour to play for Germany...The camaraderie is awesome – specially with the guys like [REDACTED], [REDACTED] and [REDACTED] because we went together to the hard times and the good times."

(Selection of player quotes from WhatsApp messages regarding their motivation to play in the REIC, February 2019)

The evidence provided from Intervention 5 suggests that there was a high degree of alignment between the affective purpose of the group and the intrinsic motivation of the individuals.

EA - Observation 4: Low morale in the first week of training camp

Interventions 6 and 7 were specifically defined to address the issue of morale. However, it is noted that all of the named interventions, along with general day-to-day engagement and positivity, were ultimately aimed at this aim.

Intervention 6 involved both the head coach and researcher meeting with the President of the DRV to explain the conditions under which the players were having to prepare. The aim of this thesis is *not* to explore the political intrigue within the organisation of the DRV itself. However, it is relevant to this study to note that the President was unaware of the actions and discrimination being exacted on the XV's squad by those in authority in the DRV. He was both appalled and sympathetic to the plight of the squad. His subsequent actions had a significant impact on the XV's organisation. After being briefed he requested that he be allowed to address the entire XV's squad. He showed both humility and courage by acknowledging and apologising to the whole group for the situation and their circumstances. He was honest in stating that he was unable to resolve all the issues, but that he would – with immediate effect – take action to improve the accommodation and victualling arrangements and ensure that the medical and physiotherapy team had the relevant supplies and resources released to them. He also committed to the squad that he would address the larger issue regarding the treatment of the squad with the CEO and Board of the DRV, with a view to ensuring the situation being experienced could not happen again.

In the immediate term, his actions regarding accommodation, food and medical supplies had a significant impact on morale. Whilst the group members were aghast that this situation was previously unknown to the DRV President, they also had respect for his courage to face the music in person and apologise. It was commented by players that he seemed to share the same values as those in the XV's squad. The actions taken by the DRV President provided a foundation from which the mental excellence coach was able to create focus on the group's purpose as opposed to the conditions and associated indignation.

Intervention 7 was somewhat easier to affect, particularly following the actions of the DRV President described above. The new members to the squad were from a variety of nationalities, backgrounds, experience and age. Fortunately, within the group of new players and coaches there were three individuals with very positive, confident and entertaining personalities. Their immediate contribution to the group was not only in their skills and capabilities in their individual roles (“taskwork competence”), but equally in the contribution to the social structure and

interactions in the group. For a group that was suffering from a loss of self-confidence, these individuals marked a step-change in attitude and self-belief. Combined with the head coach's decision to establish an affective purpose for the squad, there was a tangible lightening of mood in camp. Training and game performance improved as a result.



New player adds humour and positivity to the established squad.

Figure 6.2.4.4 The positive impact of new squad members to group cohesion #1 (Source: Lees, 2019)



New players receive their first international caps in a team ceremony prior to playing Romania. These players – along with a new S&C coach – added energy, enthusiasm and self-belief to the group and catalysed group-pride and interpersonal cohesion.

Figure 6.2.4.5 The positive impact of new squad members to group cohesion #2 (Source: Lees, 2019)

AC3 Evaluating Action Summary

AC3 represented a profoundly different environment to AC1 and AC2. The observations highlighted deficiencies in resources and facilities, active discrimination and isolation of the squad, and as a result – a lack of realistic competitive capability for the forthcoming tournament. The interventions designed ranged from First- to Third-order change initiatives. The most profound of these was the decision by the head coach *not* to try to motivate the team by setting outcome-based goals. Failure to achieve such goals when the environment for preparation was so poor would have been unlikely to have resulted in greater cohesion and determination, and we felt would actually risk causing fragmentation and collapse of the team processes.

The attempts to change the attitudes and collaboration within the DRV overall were unsuccessful. The personal intervention of the DRV President was tactically successful and highly valued, but ultimately made no difference to the larger political problem in the DRV.

Our results in this tournament suggest a profound failure; we lost all the matches, and Germany was relegated from Tier 2 to Tier 3 international status. However, the collective commitment in the whole group, the willingness to sacrifice personal needs for the collective need, and courage to continually fight for each other – on and off the pitch - meant that score lines were close, and we were by no means humiliated. This is perhaps summarised most poignantly during a reflective interview with one the senior players in August 2019:

Researcher: ...but then we come into the [REIC]. It just couldn't have been a more different level of preparation and resourcing. We still had the same group with the exception of a few individuals. But actually, something quite extraordinary happened...We were losing matches [but] the tightness, the courage, the selflessness within the team got stronger and stronger.

Player: Yes.

Researcher: Do you agree with that statement?

Player: Yes...And that focus was all the way up until the end because we still had that belief no matter what we went through, and we realised that we had this job to do.

'Researcher: So, in that environment when all hope is lost, what do you think was driving people to continue to fight to the level that they were?'

Player: I think it's pride and doing it for each other... That's what I think. There's not a hell of a lot deeper to go [than] where [sic] guys are fighting for each other because we'd all decided to stick this through and stick it out. And we just kept on pushing for each other."

(P10, 22nd August 2019)

6.2.4.3 AC3 First-person Reflection

This was the first action research project that I have undertaken. It was also my first involvement with an international or professional sports team and was the first time that I have had real-time coaching responsibility for personal and team development. With so many 'firsts' the fear of failure was significant; fear that I would fail to conduct my research method accurately, fear that I would let people down who were relying on me to help them at such a significant time, fear that I didn't know enough practically to provide the necessary support, and fear that I was in a role that I had no right to fulfil. As explained in the previous reflections, I also felt continual anxiety and personal conflict about my family's needs whilst I was away working and conducting my research, combined with guilt because I was enjoying the demands in participation.

I have reflected on my methodological execution continually both during and since the project. I collected a significant amount of data during the project, of various types. The questions I ask myself are should and could I have gathered more, and should I have analysed it with more academic rigour and process in real-time during the engagement? Regarding data collection, the answer is 'yes' and 'no'. Hindsight is a wonderful tool for self-flagellation – castigation for not doing what you now know would have led to better outcomes at the time. However, I feel that the important point is not self-criticism, but self-critique – having the objectivity to reflect on what I might do differently next time, not what I wish I had done last time.

As this pertains to the data collection, if I were to conduct a similar study again, I would take the same approach regarding engagement with the participants, the conduct of the interviews, and the use of social media and video evidence. I would endeavour to take more photographs on a continual basis of random events throughout the engagement, as these images capture real-time human emotions and interactions that are powerful in recollection for the researcher and in explanation for the reader. The areas that I would make significant change in are the content and frequency of my field notes, and the structure of my journal writing.

My field notes tended to be relatively long reflections of my observations and interpretations, with not enough 'one-liner' comments about events in real-time (such as, "Person X and Person Y just had a heated exchange of words regarding lack of preparation/commitment/teamwork"). Had I

done more of this type of note-taking my reflections and interpretations would have been more powerful and easier to triangulate with other data collected.

I have never kept a diary. Therefore, the personal discipline and structure of journaling has been difficult to establish. My journal entries tended to be unstructured and meandering. This has merit from an exploratory perspective, but it missed the benefit of establishing a repeatable structure of content capture in specific areas, such as observations, ideas and interpretations to be further examined (which would have directed my data collection or focus on future interactions), ‘mood and climate’ (which would have encouraged me to specifically reflect on my own mood and that of the group), or content specific to the detail of the research questions. In any future study I would seek to lay-out the structure of my journal with these headings in order to consistently prompt reflection and aid recollection and holistic reflexivity.

Regarding my insecurities as a practitioner in this study and the core role that I held in the group it was essential that I exuded calm confidence at all times. As the mental excellence and team coach every member of the group looked to this individual for emotional support and as a paragon of the virtues expected of membership to this group. Indeed, I also became the emotional crutch for the head coach (group leader) throughout the engagement, providing him with a sounding-board for his ideas, observations, frustrations and assertions. Leadership can be a lonely place, and the trust established meant that the head coach was able to make decisions with more certainty and consideration. This was never more obvious than when he decided not to set an instrumental purpose in AC3, but instead to focus on the team and individual processes and provide an affective purpose. His instinct and experience guided him to this conclusion based on the circumstances, lack of preparation time, and relative inexperience of the new squad members. He felt that expecting to win based on rugby execution and fitness dominance would be futile and that exposing the players to failure in this way would undermine personal and collective confidence and unity. He felt that our greatest strength was our ‘togetherness’ and willingness to fight for each other, and that by *not* placing emphasis on winning, we were more likely to succeed. My role was to assess whether we had the levels of group cohesion in place that would sustain that position, and I was able to leverage my theoretical understanding across a range of group and team theories to help in this understanding. Also, as a practising leader in both the military and in business, my own experiences had relevance and transferability to this situation. It appears that I executed my practitioner role appropriately based upon the evidence of our performances and the feedback from players and coaches. Indeed, in the role that he has held since leaving German rugby, the head coach continues to ask advice and guidance on a regular basis.

Reflecting on my understanding and interpretation of the circumstances during AC3 – and AC1 and AC2 – I feel that I developed materially over the period of time, and the application of theoretical knowledge allowed me both objectivity and insight into the group processes that existed, as well as those that we needed to enhance. Group cohesion is a complex concept and construct. Action research drives the co-creation of new knowledge with the participants, and it is therefore logical that they should have some understanding of the areas of development that we are seeking. Theoretical knowledge regarding group cohesion needed to be translated into a simple and meaningful concept to which everyone could relate. The description of the structures of group cohesion as a ‘graphic equaliser’ (Section 6.1.4.1) allowed participants to engage with the process of change, and to seek assessments of progress, as well as to understand why certain interventions were being implemented – everything we did related to increasing the ‘sliders’. Participants were keen to contribute to the ‘volume increases’; indeed, so successful was this as a method of sense-making and progress-checking, we also used the concept to review development of rugby skills, strength, fitness, mental excellence and ‘team’ overall. The players were excited to make their own assessments of where we were on the scales, and to know those of the coaching staff.

My interpretations of progress and advice were generally accurate, and the interventions had the effect that we sought. However, I feel that I missed a significant shift in attitude, focus and cohesion after the Hong Kong match, and with hindsight I could – and should – have predicted the problem and have taken earlier steps to ensure it didn’t happen. The euphoria that followed the win against Hong Kong should have been a red flag of warning to me. The error that I had made was to establish that game as the instrumental purpose and absolute focus of the preparation with the squad in AC1. Having achieved it, the energy and direction of the group was lost for a few critical days. We were unable to attain the same focus for the second match and it had not featured in our instrumental purpose and planning. Regarding team processes, I had unconsciously undermined the group purpose of winning *all* our matches in the tournament. I was able to learn from this in the diagnosis phase of AC3 and advise the head coach to consider the instrumental purpose and its potential impact, versus taking the radical decision to establish an affective purpose.

My final reflection from AC3 was a shift in my own role and engagement with the squad. Following the unexpected performance improvements in the XV’s squad in the RWC19 Repechage preparation, in October 2018 the DHPS asked me to engage with the 7s squad and help them to improve their team processes and individual mental skills. As a result of this, I travelled with that squad to Uruguay and Chile in January 2019, and South Africa in February 2019. This meant that

I was not with the XV's squad for four weeks of their tournament and missed their games against Georgia and Russia. Aside from any performance impact that this may have made, I felt that I had been disloyal to the team for not being there in the tough times – particularly Georgia. Literature highlights that success in groups increases – and often catalyses – group cohesiveness. This assumes therefore the generally accepted concept that groups and teams are formed to perform tasks, and that the successful completion of that task leads to bonding. However, my observation in re-joining the squad *after* the Georgia match was that adversity had created an even tighter bond for everyone that had lived through the experience. By not being with them, I felt like an outsider for the first time since joining the XV's in September 2018 – I was unable to share in the same way as I had before. This detachment highlights to me the strength and importance of affective cohesion in the development of teams and makes me question the accepted understanding that teams form to perform tasks; my overriding experience across all three ACs is that *groups* form to perform tasks, and the *teams emerge* from groups based upon affective cohesion.

6.3 Third-person Analysis

6.3.1 Initial Template

The initial template was developed deductively from the ITA themes of the pilot study, insight from the *a priori* Literature Review in Chapter 3 and an *a posteriori* inductive first-cycle process and concept coding of the diagnosis observations of AC1 the second-person analysis. The purpose of this approach was to develop an initial coding template from which the *in vivo* analysis from the fieldwork could be incorporated. This initial coding template is shown in Appendix Q.

6.3.2 Second Iteration of Template

The second iteration of the template was developed with the inclusion of observations and themes derived from the *in vivo* second-person ‘Diagnosis’ analyses from each AC detailed in Section 6.2. These observations and themes are shown in Appendix P. AC1 generated eleven themes, AC2 generated eight themes, and AC3 generated four.

The entries in Appendix P were then mapped against the codes and themes from the Initial Template, and where required, additional themes, categories or sub-categories were created, and existing codes consolidated. References for evidential quotations and triangulation of the *in vivo* observations and themes are provided in the relevant sub-sections of Section 6.2. Appendix R displays the resultant second iteration of the coding template.

6.3.3 Final Iteration of Template

The second coding template represents the analysis of all data collected *during* the action cycles of the study. However, in order to assist in the requirements of trustworthiness in an AR study – particularly credibility – interviews were conducted with four participants four months after completion of AC3. These interviews offered the participants the opportunity to reflect on their experiences and learning, and to comment or critique on the researcher’s interpretations of events and group processes. They have been coded using the second iteration template above, and where needed, additional codes have been incorporated. Participant quotes are also provided to evidence the inclusion of new codes and themes. Observations and themes from the template analysis of the four interviews is summarised in Appendix S.

The incorporation of new themes and codes from this final analysis resulted in the final version of the coding template shown in Table 6.3.3.1.

Table 6.3.3.1 Final Coding Template

	Level 1	Level 2	Level 3	Level 4
1	Group Cohesiveness	Instrumental	Task	
			Social	
		Affective	Interpersonal	
			Group Pride	
2	Self-Motivation (Self-Determination Theory)	Extrinsic	External	Reward
				Punishment
				Consequence
				Compliance
				Guilt
				Duty
				Obligation
		Introjected	Ego	
			Pride	
			Recognition	
			Self-esteem	
			Self-worth	
		Identified	Instrumental self-fulfilment	
		Integrated	Instrumental self-determination	
Intrinsic	Autonomy			
	Competence			

			Relatedness	
3	Purpose	Organisational		
		Group		
		Personal		
		Common		
		Shared		
		Collective		
4	Stages of Group Formation	Forming		
		Storming		
		Norming		
		Performing		
		Adjourning		
		Affective		
6	Interpersonal Behaviour	Selfishness		
		Selflessness		
7	Identity	Personal		
		Group		
		Social		
8	Interdependence	Pooled		
		Sequential		
		Reciprocal		
		Affective/emotional		
9		Taskwork		

	Instrumental Group Collaboration Processes (ICGP)	Groupwork		
		Teamwork		
10	Culture	Shared values		
		Behaviours		
		Standards		
		Rules		
		Rituals		
		“Teamship”		
		Enforcement		
11	Types of Groups	Primary		
		Social		
		Collectives		
		Categories		
12	Resilience			
13	Groupthink	Cohesion		
		Insulation		
		Homogeneity		
		High stress		
		Low esteem		
		Stereotypes		
		Mindguards		
		Oppression of dissenters		
		Illusion of unanimity		

		Collective rationalisation		
14	Roles and responsibilities			
15	Power	Authority		
		Control		
		Status		
16	Leadership	Unity		
		Example		
		Care		
		Authenticity		
		Confidence		
		Inspiration		
		Equality/fairness		
		Transparency		
		Direction		
		Empowerment		
		Delegation		
Affective and instrumental goaling				
17	Emotions	Commitment		
		Belief		
		Respect		
		Loyalty		
		Jealousy		
		Resentment		

18	Cognitive dissonance			
19	Definition of a Group (Primary characteristics)	Instrumental purpose		
		Instrumental cohesion		
		Extrinsic motivation	External	
			Introjected	
		Structural interdependence		
		Selfishness/Self		
20	Definition of a Team (Primary characteristics)	Affective behaviours		
		Affective cohesion		
		Social/behavioural interdependence		
		Selflessness/others		
		Affective group purpose	Shared process	
			Shared outcome	
		Culture		

6.3.4 Summary of Third-person Analysis

The final coding template identifies twenty themes from the analysis of the three action cycles and the post-study reflections of four of the senior player participants. These themes reflect a variety of group and individual processes, some of which are well-understood within existing literature, and others which suggest alternative perspectives on existing knowledge. The template provides a cross-sectional interpretation of the emic learning and knowledge experienced during the action research process. The second-person analysis provides a longitudinal placement of these insights. The combination of these perspectives provides a kinetic insight into the changing nature of cohesiveness in the group and how that correlates with observed group processes and individual motivation and behaviours. These findings are examined in Chapter 7 (“Findings and Discussion”).

7 Findings and Discussion

7.1 Introduction

The purpose of this AR study was to examine self-motivation and group purpose as antecedents to cohesiveness in groups. The researcher believed that a better understanding of how these three factors interact in a group setting might provide insight into why certain groups in society emerge to achieve high performance, whereas others do not. This insight could give organisational leaders a better understanding of factors that should be considered in determining the formation of groups and teams, including but not limited to, the group's purpose, its organisational design, member selection, and issues such as identity, bullying, culture and groupthink. This chapter therefore presents the key findings obtained from the analysis of the three action cycles with the German Rugby Men's XV's in the period September 2018 to April 2019.

The findings have been determined from a synthesis of the third-person template established in Section 6.3, which in turn was derived from the second- and third-person data analysis in Section 6.2. The retroductive process involved in developing the template resulted in the identification of themes emergent from the study, some of which were not directly related to the specific research questions. The findings examined in this chapter are only those that directly address the research problem and questions in this study. Themes excluded from this stage of analysis are highlighted for future research in the recommendations in Chapter 9. For reference in this chapter:

- For 'self-motivation', I refer to SDT (Ryan and Deci, 2018) which identifies personal motivation in three dimensions; amotivation (lacking in motivation), extrinsic (motivated by factors external to the individual) and intrinsic (motivated by the satisfaction of non-external factors).
- For 'group purpose' for the *a priori* and *in vivo* stages of this study (design and data analysis) I have assumed the generalised use of the term in group and teams literature, where it is interchangeably used with "group task", "shared task" and other similar terms as described in Section 3.6. The problems in literature and findings from this study suggest an alternate conceptualisation of "purpose" which is discussed in Section 7.3.
- For 'group cohesiveness' I refer to a modified version Severt and Estrada's Integrated Model of Cohesion (Severt and Estrada, 2015:9) which identifies the function of group cohesiveness for participants in two primary dimensions; affective (emotional) and instrumental (task), and the structure of group cohesiveness as four facets; interpersonal

(affective), group pride (affective), social (instrumental) and task (instrumental). For the needs of this study I have not identified “instrumental-social” in the analysis as the concept was not easily understood by the participants, and therefore made it frustrating for them to relate to and thus challenged the value of the concept in the co-creation of knowledge.

The chapter is structured as follows:

- Summary of all Findings from the first, second and third person analysis.
- Mapping of the Findings against the Research Questions for the study.
- Description and explanation of each Finding.
- Thematic grouping of the Findings into four themes.
- Discussion of the implications of the Findings.

7.2 Summary of Findings

Eight major findings emerged from the study:

1. Group cohesiveness is a fluid multi-dimensional emergent state constructed at an individual level and observed at a group level where the facets of its structure (task, interpersonal and group-pride) emerge as primary, secondary and tertiary bonds *from* each individual and which co-exist depending on the group’s existential purpose and the personal motivations of the group member. These bonds can also be longitudinally fluid.

This challenges current theory which conceptualises group cohesiveness as either a static group-level construct (either uni- or multi-dimensional) (Beal *et al.*, 2003; Grossman *et al.*, 2015; Salas *et al.*, 2015; Severt and Estrada, 2015), and adds to current knowledge by identifying a) the co-existence of the multiple facets of cohesiveness; b) that these facets are formed at an individual level, implying that the emergence of cohesiveness is an individual-level construct; c) that the facets develop sequentially and can therefore be ranked in order of emergence; d) that the primacy of the bonds may be fluid; and e) that this fluidity of primacy is linked to the fluidity of changes in the self-motivation and priorities of the individual.

2. The cohesiveness of a group is accelerated when the self-motivation of individual group members are aligned to the group’s purpose. The opposite is also true.

This adds to current knowledge of the mechanisms that affect the emergence of cohesiveness in groups.

3. High levels of affective cohesion within a group can obviate the need for an instrumental group purpose and allow the adoption of an affective group purpose, implying that a group or team can be either 'instrumental' or 'affective'. This finding leads to the conceptualisation of "purpose" in groups as a multi-level, multi-functional construct.

This adds to current knowledge regarding the conceptualisation of group purpose, and suggests that purpose is a multi-level, multi-dimensional construct with defined functional and structural properties, and that this conceptualisation has significant implications in understanding of group cohesion, individual motivation and group efficacy.

4. Commitment to group endeavour by individuals does not necessarily indicate commitment to a 'shared outcome'. Individuals may commit to group processes associated with team efficacy, but be committed to personal outcomes, not group entity-level success. This highlights a problem with the conceptualisation of group purpose as 'shared', 'common' or 'collective', and has significant implications for collective efficacy, and both group and individual welfare and safety.

This clarifies the interchangeable and often misinterpreted uses of common-, shared- and collective- in association with purpose in groups and teams and assists in a clearer differentiation in the definition of the concepts of 'group' and 'team'.

5. A "team" is an emergent group state, characterised by the presence of selfless behaviours between group members in support of both the instrumental and affective needs of the group.

This adds to knowledge in the definition of groups and teams by delimiting those conceptual definitions with empirically measurable personal behaviours that support task interdependence processes and the affective support mechanisms.

6. A fourth type of interdependence has been identified; Affective Interdependence, which manifests when group members extend beyond instrumental task interdependence, and exhibit emotionally-supportive behaviours which address intrinsic motivational needs.

This adds to group interdependence literature and supports the emergence of new knowledge regarding affective groups and teams (as suggested in Finding 3) and the conceptualisation of Primary, Secondary and Tertiary bonds of multi-dimensional cohesiveness (as suggested in Finding 2).

7. Group development comprises both emergent stages and states and is a recursive construct, with the potential for either instrumental or affective purposes (as suggested in

Finding 3), forming sequentially through a series of six identifiable stages with manifest characteristics of; increasing cohesion and collaboration between group members, the development of group identity and culture, and self-determined selflessness of individuals in favour of group or other member needs.

This adds to the literature regarding GSD and provides a delimited typology of groups and teams based upon their existential purpose, efficacy and type of cohesion, and the self-motivation of its members (as suggested in Findings 1 and 2) and identifies signs and potential risks for group collapse at any stage in development based upon misalignment of the triadic relationship between purpose, cohesion and motivation.

8. “Teamship” is an emergent behaviour where an individual willingly exhibits behaviours and attitudes consistent with the nature and interdependence characteristics of the existential purpose and cultural norms of the group.

This adds to the extant literature on group and team member participative behaviours and provides clarification of the term in regard to the functions and behaviours of effective group members.

The findings of this study address the research problem and all eight of the research questions posed, summarised in Table 7.2.1. The remainder of this chapter provides a rich and detailed description of each finding (Denzin, 2001; Geertz, 1973), along with conceptual models developed for each one. Discussion of the relevance in implications for each finding in relation to existing knowledge is included and leads to contributions in Chapter 8.

Table 7.2.1 *How the Research Questions are addressed by the Research Findings*

Research Questions		Research Findings
Primary Research Question	What effects do the personal motivation of individuals in a team have on the group's cohesiveness in the context of the purpose of its existence?	Findings 1, 2, and 3 identify that there is a triadic and co-dependant relationship between the three concepts of personal motivation, group purpose and the type and strength of cohesiveness in a group. It is observed that groups tend to be formed to achieve a task, and therefore group members must be extrinsically motivated to that task in order to be aligned to (and instrumentally cohesive with) it. It is further observed that the greater the reward and recognition associated with achievement of the task, the more requirement there is for the individual to exhibit strong extrinsic-external and -introjected motivation. However, where the task requires extensive collaboration, teamwork and reciprocal interdependency – and therefore higher levels of affective cohesiveness - members developed intrinsic motivators along with their extrinsic drivers.
Sub-question 1	What roles do common purpose, shared purpose and collective purpose have in differentiating a 'group' from a 'team'?	Findings 3, 4 and 5 address this question. The study identifies the importance of clarity in the understanding of purpose assigned to group endeavour. Finding 3 posits that purpose is a multi-level, multi-dimensional construct comprising three functions and that group purpose can be either instrumental or affective in nature. Finding 4 highlights that 'process' and 'outcome' functions in Finding 3 are relevant to the understanding of shared purpose, identifying that the needs of shared process does not automatically equate to the assumption of shared entity-level outcome. Finding 5 expands on these findings, offering delimiting moderators that indicate the differences between groups and teams, including the accurate understanding of shared purpose as it pertains to group process and outcomes.

Sub-question 2a	Does organisational purpose have to be instrumental in nature to create a team, or	In this study, Findings 1 and 2 identify the importance of the clarity of communication of the instrumental existential purpose in aligning the motivation and efforts of the group members, and the subsequent positive impact on group cohesiveness and other group processes which led to the emergence of team behaviours.
Sub-question 2b	Can a team develop when the organisational purpose is affective?	Findings 3, 4 and 7 identify that a group exhibiting high levels of affective cohesiveness can transcend from an instrumental purpose to an affective one, and that group development can continue. The researcher's experiential bias supports the notion that a team can be <i>formed</i> with an affective purpose (from his early-career experience with the Royal Navy and Royal Marines) and this assertion is supported by the affective group purpose defined for AC3, and the subsequent exceptional levels of affective (and subsequently, instrumental) cohesiveness observed during the REIC of AC3.
Sub-question 3	To what extent does the extant body of knowledge on group cohesiveness support the notion that cohesiveness exists on a continuum?	Findings 1 and 2 identify that the functions of group cohesiveness (Affective and Instrumental) <i>may</i> exist on a continuum, but in this study were found to co-exist rather exist in dyadic opposition as would be suggested in a continuum. The triad of structural properties of group cohesiveness – interpersonal, group pride and task – were also found to co-exist, but in a triangular relationship of three inter-related continuums. The review of literature for the study does not identify this triadic co-existence of the structural facets, and therefore the study has provided an original insight into this question.
Sub-question 4	What influence do intrinsic and extrinsic personal motivation have on an individual's choices in regard to group membership, and	Findings 2, 4, 5, and 7 address the questions of the alignment between self-motivation of individuals, the group purpose, and the cohesiveness of the group. The development of group identity and culture determines 'cultural fit' of individuals and their desire to contribute to the group purpose and processes. Finding 8 (Teamship) specifically captures in a single word the alignment of the individual to the specific group.

<p>Sub-question 5</p>	<p>Are there any identifiable individual or collective behaviours, values, rituals, rules, rites, or beliefs that emerge in groups that experience high levels of group cohesiveness?</p>	<p>Findings 3, 4, 5 and 6 highlight the development and impact of group identity and culture in concert with changes in the motivation of individuals, and how this impacts the multiple types of cohesiveness longitudinally. The stages of group development identified – particularly the ‘Tightly Coupled’, ‘Integrated’ and ‘Affective’ stages, as well as the identification of the concept of Teamship – provide strong evidence of the links between cohesiveness and culture in groups.</p>
<p>Sub-question 6</p>	<p>How do isolation, insulation, adversity and threat affect group cohesiveness?</p>	<p>Finding 6 posits that there is a type of interdependence not covered in current theory – Affective Interdependence – that exists in a highly affectively-cohesive group, and that this emotionally and psychologically supportive interdependence mechanism serves to provide resilience and unity within groups. This is further supported in Finding 7 where the emergence of group identity can be accelerated by adversity and insulation.</p>

7.3 Description of Findings

Finding 1 Group cohesiveness is a temporally fluid multi-dimensional construct

The multi-dimensional structures of group cohesiveness (task, interpersonal and group pride) emerge temporally and are constructed at an individual-level as primary, secondary and tertiary bonds from each individual and which co-exist depending on the group's purpose and the personal motivations of the group member. These bonds can be temporally fluid.

The three action cycles of this study incorporated the initial formation of a group and the assembly of its participants, through stages of personal and group preparation and development (AC1), then to a performance stage, followed by dispersal and adjournment (AC2), and then onto a reformation of the group with partial continuity of membership and a new existential purpose, followed by a final termination (AC3). The access to the participants afforded to the researcher has provided for a unique perspective and depth of understanding of individual participants' changing feelings influenced by circumstances, events and the evolution of the group. Personal relationships were observed and discussed with participants. The practitioner role of the researcher required that issues relating to the emotional and mental preparation of individuals, and the collaborative function of the group were identified and discussed, and interventions determined, implemented and assessed. Finding 1 is therefore based upon a deep immersion into the concepts it addresses – the emotional states of individuals, the group social processes evident from day to day, and the progress towards the attainment of the core purpose of the group.

Primary bond

The evidence described in Section 6.2.1.2.1 (AC1: Diagnosis) identified that the group was assembled with a clear purpose: To win the RWC19 Repechage and qualify for RWC19. However, despite choosing to participate, in the first weeks of the preparation it was clear that players had not mentally prepared for the task in hand; they were drawn to the opportunity of personal glory, but not to the specific detail of the task, nor of the requirements of them as individuals to contribute to it. The interventions implemented in regard to clarifying purpose, timeframes, roles, responsibilities and expectations were effective in addressing this issue. It can be seen therefore that the first requirement – to establish an understanding of, commitment to, and sense of urgency

for the group purpose – was fulfilled. This supports the assertion that individual cohesiveness to the task emerged longitudinally (albeit rapidly), and the technique employed to achieve this was a combination of group level communication, and individual level exhortation of extrinsic-external and extrinsic-introjected motivators. This supports the notion that individuals demonstrated a **primary bond** with the task-oriented group purpose.

Further examples of the increase in task-orientation of individuals, and the influence that this had on group sentiment is demonstrated in the content of messages sent out to the collective WhatsApp group.

“This time in 1 month we are waking up with sore bodies but 1 match closer to our end goal after beating Hong Kong.”

(P8, WhatsApp post, 12 October 2018)

It can be seen that the instrumental group purpose had catalysed a reaction with individuals which indicated extrinsic motivation, which was then socialised by those individuals to influence the emotional responses of other group members. The examples in Figures 7.3.1.1 and 7.3.1.2 demonstrate the link between a) an instrumental group purpose, b) extrinsic personal motivation, and c) the resulting cohesion to the group.

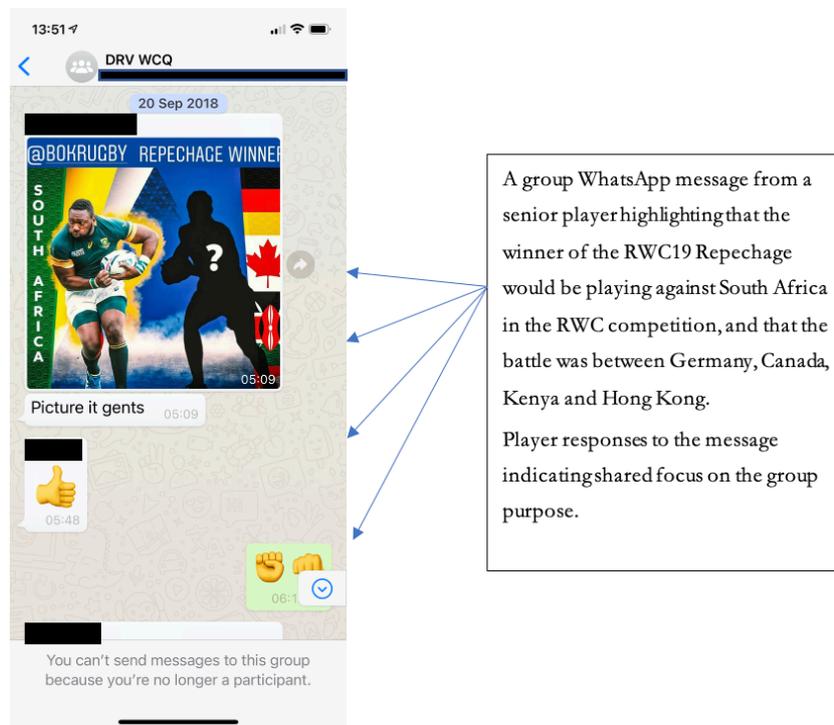


Figure 7.3.1.1 The Primary Bond #1: Player communications highlighting task (Source: XV's Players' WhatsApp Group 2018)

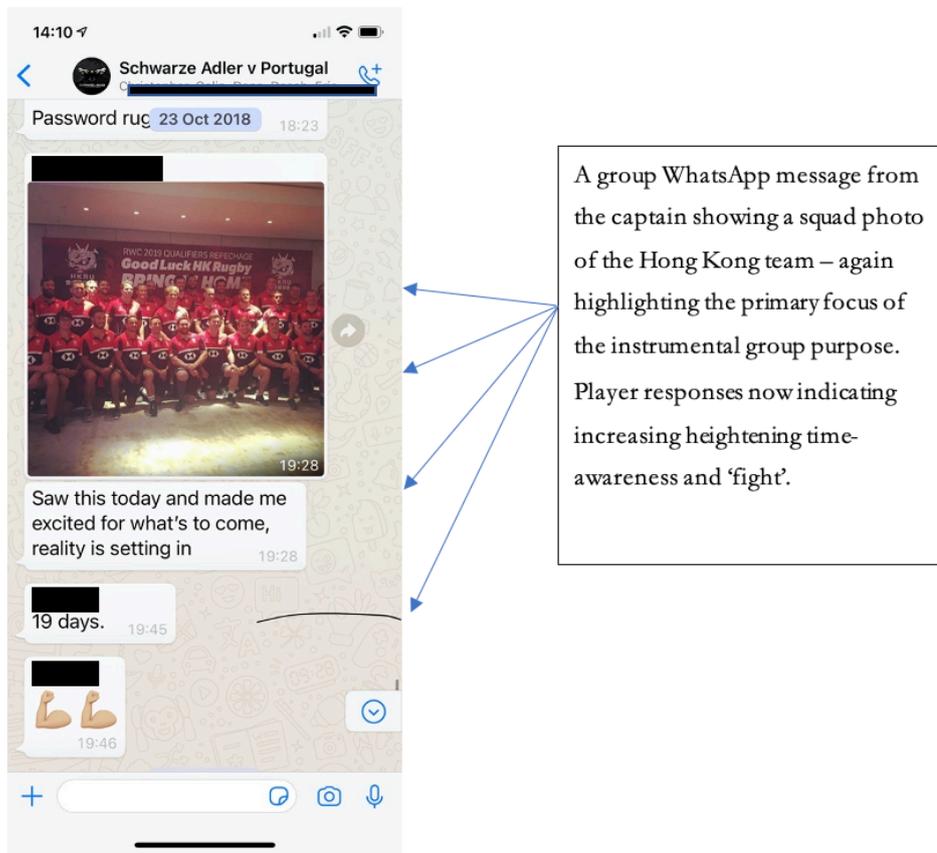


Figure 7.3.1.2 *The Primary Bond #2: Players sharing images of their opposition (Source: XV's Players' WhatsApp Group 2018)*

This primary bond is *not* a group-level process; it is a uni-directional connection between the individual and the group's purpose. Also, it is *not* a bond with the group's identity/entity, nor a bond between the individual and other individuals in the group, supporting the assertion that an instrumental-task cohesion only. The socialisation of the primary bond *is* a group process, and helps to establish group identity, but the primary bond itself is from the *individual* to the *group purpose*.

'I'm good, yes. I'm really excited. I try not to get over excited. Last week I was thinking about how next week is going on. I was seeing the trailer on the internet, and I was really happy. The morale is good because we all know there are things depending on this what is happening now. So, when we qualify it's great for us, it's great for the team and it's great for German rugby.'

(P13, November 2018)

Individual player interviews and written submissions from individuals (“My Motivation and Focus”, Appendix J) support the assertion that individuals were bonded to the purpose. An example is shown below.

My Motivation and Focus: Written response

A: I want to leave a legacy and lead this team to greatness.

Q: Why do I want to participate in the Repechage tournament?

A: One step closer to achieving our greatest goal.

Q: Why do I want to WIN the tournament?

A: [To qualify for RWC] Japan 2019...[To] End my career in Japan against the All Blacks on the 4th Oct 2019.

Q: What does winning this tournament mean to me?

A: EVERYTHING...

Q: What am I prepared to sacrifice to WIN?

A: EVERYTHING...

(P3, October 2018)

Figure 7.3.1.3 provides a conceptual framework representing the formation of the bond *from* the individual *to* the group’s existential purpose.

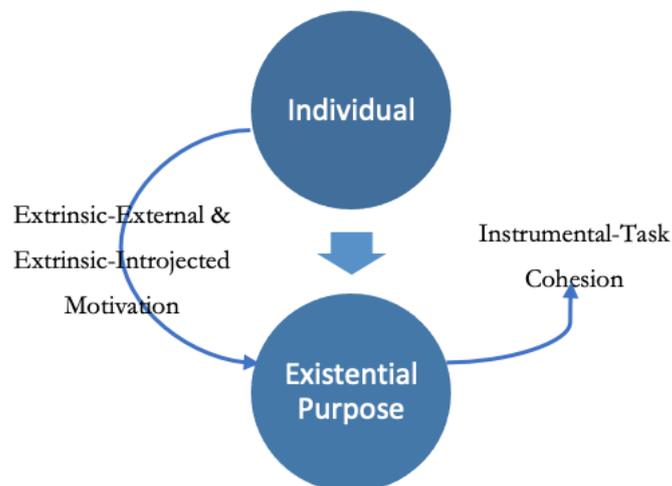


Figure 7.3.1.3 Primary bond of cohesiveness for individuals in this study: Instrumental-Task

Secondary Bond

As evidenced in Section 6.2.2.2.4 (AC1: EA, Observation 5), interventions implemented to address lack of group identity (AC1, Observation 5) proved to be successful, resulting in the enthusiastic support for the group's branding, culture and standards by individuals and the group.

"I think training was really good this week. It's the first time we've come together so we can really build on this, and we know each other very long, I'm here in the team for three years. The others they know each other for much longer but I think it's one community, one close team."

(P13, November 2018)

As the squad progressed beyond the initial group formation phase (September 2018), and into the second month of preparation and training, individuals increasingly referred and related to the team as an entity with a unique identity, and to their personal commitment and association with it.

"...once we're in camp and [for example] we have a meal together, then we should be representing the country, representing the team, whether that's all in black or we are all in different colours but we [all] have a piece of clothing on that shows that we are still a united front."

(P18, November 2018)

This individual association with the group identity extended beyond AC1 and AC2, and into AC3, reflected on by senior players in the reflexive discussions held in August 2019.

"I think again that's testament to a group that understood each other, to a bond that was grown through adversity, through uncertainty and through the leadership and guidance I think of what was given from the top."

(P10, August 2019)

These data indicate that a **secondary bond** had emerged for individuals *in addition to* the primary bond. There was affective cohesion *from* the individual *to* the group identity which linked to the intrinsic motivation of the individual for relatedness (the need for emotional connection, social identification and security) as defined by Ryan and Deci (2018) and demonstrated affective-group pride cohesion.

Again, it is important to note that this was also *not* a group process; this **secondary bond** was created at an individual group member level and reflected a uni-directional commitment and association with and to a notion of identity and meaning associated with the group as an entity (not with its members). Figure 7.3.1.4 provides a representation of this construct.

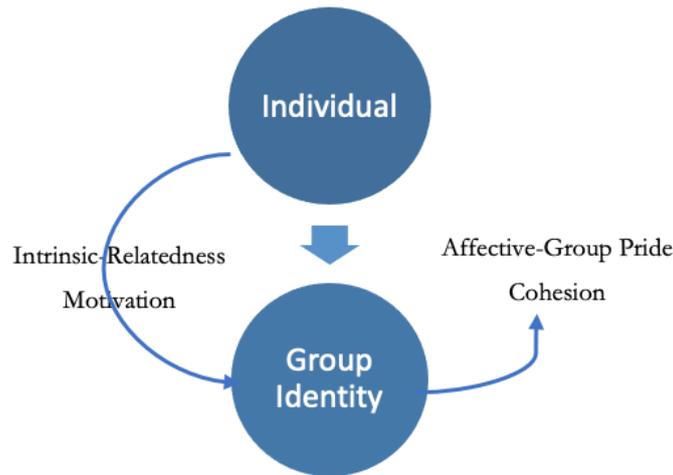


Figure 7.3.1.4 Secondary Bond of Cohesiveness

Tertiary Bond

Finding 1 also identifies that a third level of cohesiveness developed longitudinally in the early stages of AC1 and continued to strengthen throughout AC1 and AC2; a **tertiary bond**. This final type of bond emerged as the most powerful motivation across the group and transcended the initial instrumental group purpose and primary bond. It was the development of intense interpersonal bonds between individuals horizontally and vertically within the group, and which catalysed permeation of boundaries between in-groups and out-groups observed at early stages of the group formation (AC1: Observation 2).

My Motivation and Purpose: Written response

Q: Why do I want to be in this squad?

A: These are my brothers that I have played with for a while now and have been through a lot in our time here.

(P20, October 2018)

My Motivation and Purpose: Written response

Q: Why would I want to participate in the repechage tournament?

A: I want to be out there with my teammates.

(P16, October 2018)

The interventions in AC1 had a positive effect and observable change was seen in the breadth and depth of interpersonal relationships between group members – including between coaches and staff members. Interventions such as definitions of roles and responsibilities, and the collective determination of group standards of behaviour, preparation and performance facilitated this change. It was also observed that the increase in individual engagement with the instrumental group purpose (interpreted to be a result of heightened extrinsic-external motivation within individuals in the group) also contributed to self-esteem and confidence, and by reflection, to the collective-esteem and group identity. This third emergent level of cohesiveness indicates an affective-interpersonal bond *between and within* group members (horizontally and vertically), which met the intrinsic-relatedness and intrinsic-competence motivation needs of individuals.

It can be seen that this **tertiary bond** is also *not* a group level process, but one that exists on a dyadic basis between individuals. However, unlike the “individual-to-purpose” and the “individual-to-group-pride” bonds, the “individual-to-individual” bond is a bi-directional reciprocating bond, requiring mutuality. The strength of this bond also appeared to have endurance that extended beyond the primary and secondary bonds in this group, and to be contributory to group resilience and fortitude, with players commenting on bonds growing through “adversity and uncertainty”. Of note is that unlike the primary and secondary bonds – which were to notional concepts – the interpersonal bond forms between sentient beings. It is also noteworthy that selfishness of individuals highlighted in Section 6.2.2.2.1 (AC2: Observations 4 and 5) caused significant disruption to group harmony and cohesiveness, and – as seen in Section 6.2.4.2.1 (AC3: Observation 1) - the presence of dissonant behaviour has the ability to cause fracturing and fragmentation in a group. The mutuality and bi-directional nature of affective-interpersonal cohesion is shown in Figure 7.3.1.5.

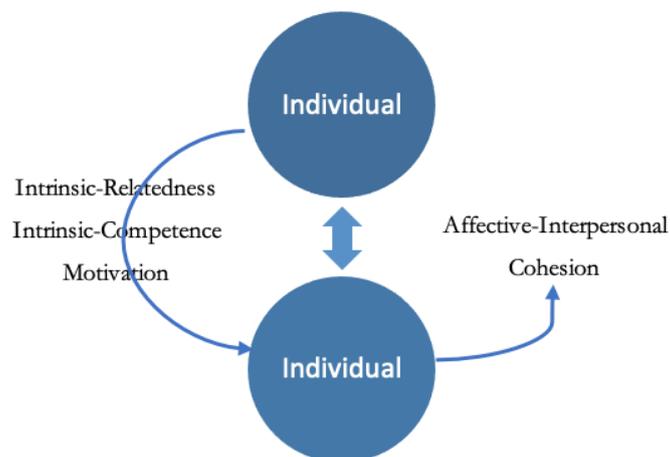


Figure 7.3.1.5 Tertiary Bond of Cohesiveness

Temporal fluidity of primary, secondary and tertiary bonds

Section 6.2.2.2.1 (AC2: Observation 7) identified that – following the defeat to Canada and the resulting failure to achieve the instrumental group purpose– the group needed to change the focus of purpose for the final match; whilst the task was to win the match against Kenya, the coaches extolled that the reason for putting “bodies on the line” to win was no longer for ultimate glory, but for group pride and for each other. In terms of group cohesiveness and group purpose, a new – but still task-oriented – purpose had been established. However, the emphasis was on the affective bonds of group pride and interpersonal relationships, and the strength and depth of intrinsic-relatedness, -autonomy, and -competence motivation. This means that the primary bond for the group was now group pride, the secondary bond was interpersonal, and the tertiary bond was task.

The temporal fluidity of the bonds of group cohesiveness are affected at an individual level and manifest in changes in group processes. This is an important realisation and consideration in the efficacy of group endeavour; groups that lack or lose collective pride and interpersonal commitment can only bond to the task. When the task focus needs to alter, groups that are comprised of individuals who are only extrinsically motivated to the achievement of the task will struggle to adapt, adjust or display resilience to change. Figure 7.3.1.6 provides an integrated theoretical framework for the conceptualisation of group cohesiveness as a temporally fluid multi-dimensional emergent state with primary, secondary and tertiary bonds of cohesion, constructed at an individual-level.

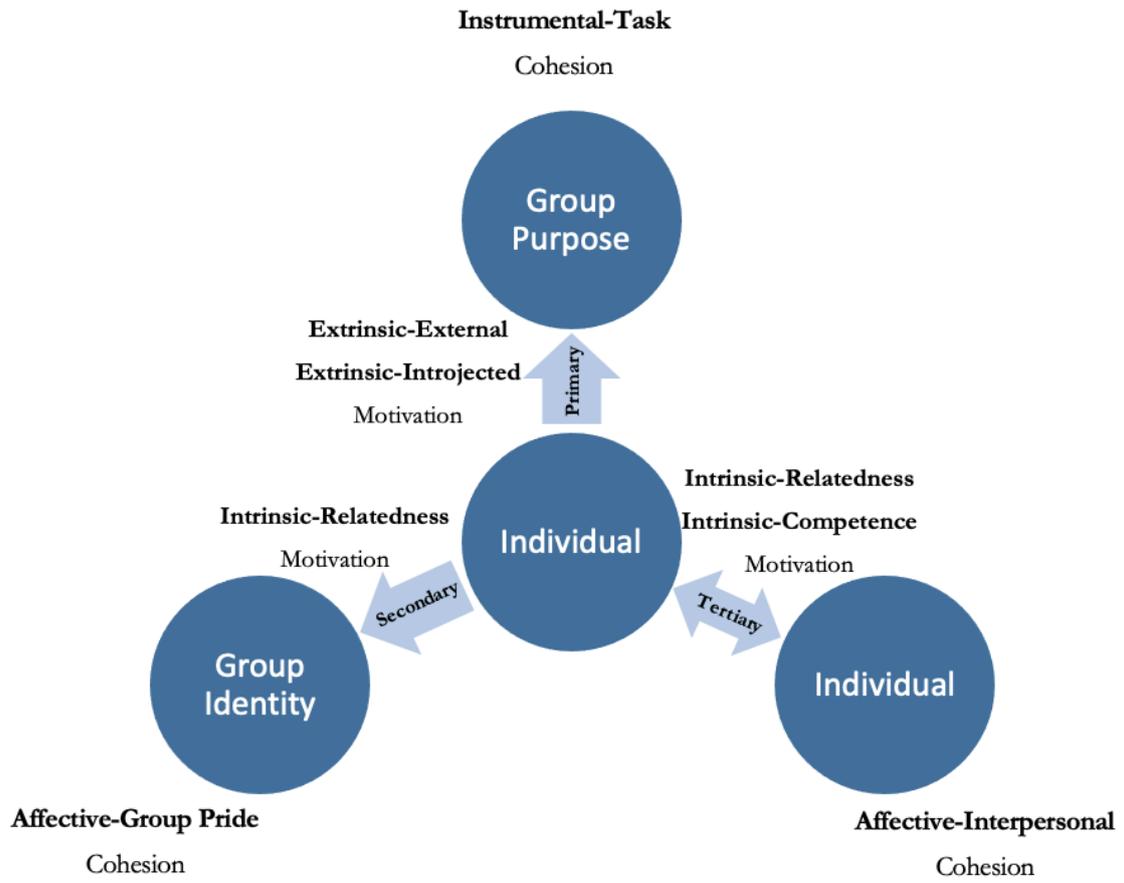


Figure 7.3.1.6 Group Cohesiveness as a temporally fluid multidimensional construct

Finding 2 Alignment of group purpose and self-motivation accelerates cohesiveness in groups

The cohesiveness of a group is accelerated when the self-determined motivations of individual group members are aligned to the group purpose. The opposite is also true.

The second-person data analysis showed four key elements regarding this finding.

1. When the instrumental group purpose was explicitly stated, and where it aligned specifically with the extrinsic-external and external-introjected personal motivation of individual group members, collaborative social processes (such as teamwork and development of group culture) were accelerated.
2. Individuals developed affective-group pride and subsequently affective-interpersonal bonds of cohesion longitudinally, which co-existed with the initial instrumental-task cohesion.
3. The strength of the affective bonds increased over time, and ultimately were able to replace the bond with the instrumental group purpose for certain individuals, but not others.
4. When the personal motivation of individuals shifts away from that of the other individuals in the group, fracturing and fragmentation of the overall cohesiveness of the group occurs. Specifically in this study, when individuals became more focused on their own status and personal gain (extrinsic-introjection), but the other group members were still aligned to group processes, disruption in unity resulted.

Section 6.2.1.2.4 (AC1: EA, Observations 3 and 4) provides evidence of the increase in extrinsic-external (task) motivation of individuals, demonstrated by an increase in their personal commitment and effort in preparation for the instrumental group purpose. It was found that an individual who is motivated by competition, winning, reward, recognition, ego or status (extrinsic factors) will bond more readily to a group purpose if it is highly task-oriented and where achievement of that task results in a material reward or recognition for the individual and the group. The concept of the existence of an initial cohesion between the participant and the group is referred to notionally in these Findings as the **primary bond**. In AC1 the primary bond was formed by each individual with the group's instrumentally-focused purpose. In AC3 the group purpose was defined as being affective (i.e., "...for the players to be the best that they could be, and to fight for each other and the pride of the group"). The primary bond in AC3 was therefore

interpersonal, with a secondary bond to the group identity. AC3 had an *implicit* instrumental purpose of participation and competition, but it was not leveraged as the emotional focus for the participants. It was seen from the manner in which the players competed in AC3 that their primary bond was to the notion of the group's identity (affective-group pride), and the secondary bond was to each other (affective-interpersonal). The instrumental purpose existed and acted as a tertiary bond (instrumental-task).

It was also found – particularly demonstrated in AC3 Observation 1 (the dissonant presence of uncommitted players) – that the cohesiveness of the group was undermined by individuals whose self-motivation was not aligned to the group purpose. In this example, senior players who expected greater recognition, resource and compensation for their continued involvement felt unable to commit to the reality of circumstances in AC3. This lack of alignment between motivation and purpose was identified to be causing significant fracturing within the squad and fragmentation of historic in-groups from the existing group identity and social identity. The removal of these individuals from the group allowed the consolidation of the affective group purpose, alignment to an affectively cohesive state, and leveraging/supporting individual intrinsic-autonomy and intrinsic-relatedness motivation needs. A similar issue occurred in AC2 (Observations 4 and 5) with consistent impact on group cohesiveness caused by the same misalignment between individual motivation and the revised group purpose. The impact on group cohesiveness was the same (fracturing), and the interventions taken similarly halted the breakdown and increased affective cohesion (in protection of the culture and social identity, and the individuals concerned). Figure 7.3.2.1 provides a conceptual representation of the nature of the relationship between the type of group purpose, the self-motivation of the individual and the predicted type and strength of cohesiveness from the individual to the purpose.

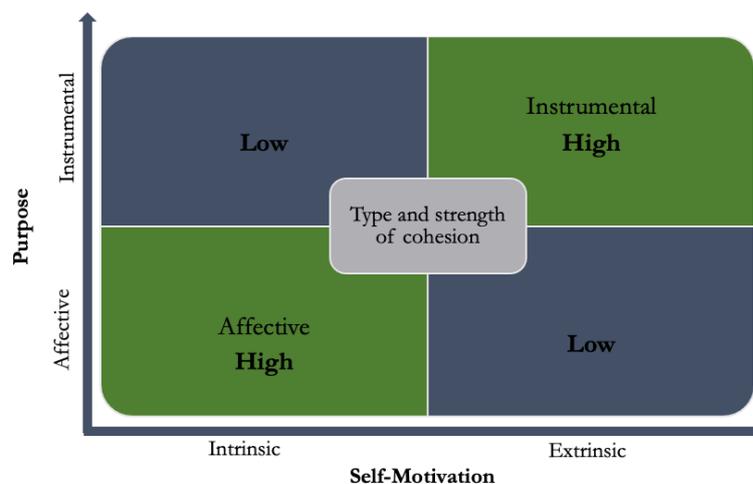


Figure 7.3.1.7 Conceptual representation of the relationship between Purpose, Motivation and Cohesion

Finding 3 Group purpose is a multi-level, multi-functional construct

High levels of affective cohesion within a group (interpersonal and group pride) can obviate the need for an instrumental group purpose and allow the adoption of an affective group purpose, implying that a group or team can be either 'instrumental' or 'affective'. This finding leads to the conceptualisation of "purpose" in groups as a multi-level, multi-functional construct.

At the beginning of each AC, the purpose of the phase was established by the head coach in consultation with his coaching team. This was referred *in vivo* as the "core purpose". This described a measurable aim for the squad, and therefore provided a focal point for the application of effort of all resources – human and material – to achieve. It described "What" we were trying to achieve. Below are the three "Core Purpose" statements as detailed in Sections 6.2.1.1, 6.2.2.1 and 6.2.3.1 respectively:

- i) AC1: "Prepare to compete in and win the RWC19 Repechage Tournament and qualify for RWC19."
- ii) AC2: "Win the RWC19 Repechage Tournament and qualify for RWC19."
- iii) AC3: "Fight for each other and be the best that you can be".

As explained in Chapter 6, the decision to have a non-task-oriented Core Purpose in AC3 was based on an assessment that the resources and preparation for the squad meant that setting an instrumental outcome-based purpose was likely to have a detrimental effect on individuals and the group, which would undermine belief, relationships and outcome. When viewing the juxtaposed core purposes above, it is clear to see the differentiation of an instrumental purpose as opposed to an affective one. The *change* in core purpose introduced in AC2 after the loss to Canada and implemented against Kenya – which was to "Fight for each other and be the best that you can be" (the same as that used for AC3) - provides evidence that this group had both instrumental and affective purposes designed to inspire their efforts and cohesion. The efficacy of the utilisation of an affective group purpose is evidenced by victory against Kenya and the results in the REIC which – although lacking in victories – resulted in the squad outperforming expectation, as highlighted in one of the reflexive interviews:

"...[the fight for each other and the team] carried on all the way up until we almost beat Portugal at home, when in all honesty we never deserved to win that game. Retrospectively - and when you look at it objectively - like we didn't deserve to be in that position [nearly winning]. We never deserved to be even

close to that. The Portugal side had been preparing [for months]. [They] had national training sessions Mondays and Thursdays. We had a week.”

(P10, August 2019)

According to SDT, when an individual decides – under their own volition – to take actions that may improve their capabilities, they are exhibiting intrinsic-autonomy and intrinsic-competence motivation. As evidenced in the second person data analysis of AC1, as individuals embraced and committed to the existential purpose, their efforts to improve their own capabilities and performance increased. Applying Cognitive Evaluation Theory (CET) (Ryan and Deci, 2018) we would expect that rather than exhibiting internally regulated motivation, each individual’s desire to belong to this group, to compete and win, and to be recognised and rewarded for that success implied that individual regulation was not internal, but external. CET further suggests that strong external regulation inhibits the development of intrinsic motivation. Following this theory, we would deduce that individuals were *not* intrinsically motivated, but were exhibiting extrinsic-external and extrinsic-introjected motivation – the critical determinant being that behaviours changed as the individual embraced the *group purpose*. However, if this were wholly true, then once the existential purpose had expired (in this study on the loss to Canada), it would follow that self-motivation would evaporate, and the impact on group cohesiveness, and both individual and collective performance would also decline. As evidenced in Section 6.2.2.2.1 (AC2: Observation 7), the opposite was true; the expiry of the group purpose had no negative impact on the commitment or performance of the players. Indeed, their performance in their final match against Kenya exhibited exceptional determination, cohesion, and self-sacrifice. It can be concluded therefore that the motivation of individuals *evolved* over time, and that their commitment to and cohesion with the group increased. This also suggests that the **primary, secondary and tertiary bonds** changed over time; initially individuals were extrinsically motivated to the primary bond (an instrumental existential purpose), but as time progressed the strength of personal commitment to the secondary and tertiary bonds (affective-group and affective-interpersonal respectively) increased, to a point where the affective bonds were strong enough that the instrumental bond could be removed, and the team would continue to exist. This implies that a team *can exist* and function highly effectively *without* an instrumental purpose, and just an affective purpose.

This assertion is supported by the observations made in AC3, where the existential purpose imposed on the group was *not* instrumental but was *affective* (Section 6.2.3.2.3; AC3: Intervention 4). Following the structure offered above, by asking the players to focus on “Being the best that they could be”, and “Fighting for each other”, the head coach appealed to intrinsic motivators of

competence and relatedness and placed their destiny in their own hands (intrinsic-autonomy). This affective focus established a **primary** cohesive bond for individuals to a non-instrumental existential purpose, which was tightly aligned – and indeed leveraged – the established commitments (‘bond’) to the group entity and each other (**secondary** and **tertiary** bonds of roughly equal weighting).

These assertions have potentially significant implications for our understanding of the definitions of groups and teams. They also have implications to our understanding of group cohesion as an emergent state, and as personal motivation as a static state; it may be more accurate to recognise that group cohesion is a continually evolving state, and that personal motivation also evolves in response to environmental changes, and that multiple types of self-motivation can co-exist within an individual, with different facets taking primacy at different times.

The *in vivo* analysis of data collected in Week 3 of AC2 and Week 1 of AC3 (Section 6.2) shows that the foundations for the leadership to be able to make this decision were based on the high levels of affective-interpersonal and affective-group pride cohesion evident, as well as the tacit and explicit intrinsic motivation of group members. The evidence shows that as individuals, the players and coaches were more bonded to each other and the group than they were to a specific task, and that they *chose* to commit totally – and put their personal safety and welfare at risk – for each other and the reputation of the team. Individual group members who were not prepared to commit themselves if there was no extrinsic reward were rejected by the group (Section 6.2.3.2.1; AC3: Week 1). Indeed, it was this conflict between the intrinsic motivation of some and the extrinsic of others that highlighted the strength of the affective cohesiveness in the group, and the need to establish a credible and relatable purpose for the group. In this regard, Finding 3 is supported by the empirical evidence.

However, examined through a critical realist perspective, it is possible to draw further conclusions. As stated above, the empirical reality is that players demonstrated behaviours in AC2 Week 3 and AC3 Week 1 that implied that they were intrinsically motivated (relatedness, competence and autonomy) and that the group was affectively bonded by the individual loyalties to each other and the group identity. Notwithstanding this, it could be strongly argued that the group’s reason for existence (its existential purpose) was purely instrumental; in AC1 and AC2 it was to win the RWC19 Repechage, and in AC3 it was to fulfil the contractual and legal obligations of the DRV to World Rugby. This implies that irrespective of the explicitly agreed purpose *within* the group the *real* purpose of its existence was that which had determined by the parent organisation (DRV). To support this assertion, at an *actual* level, even though the players in AC3 and in AC2 for the

match against Kenya were affectively bonded and driven to play ‘for each other and for the group’, their *actions* were to play rugby with the implied intention of winning (which they successfully did against Kenya). This shows three levels of reality; the ‘empirical’ which supports Finding 3, the ‘actual’ which does not, and the ‘real’ which also counters the finding. Despite these contradictory interpretations, the individuals in the group were *inspired and motivated* by the empirically determined affective purpose, and it was that focus which catalysed the individual and collective behaviours, which in turn allowed the group to bond in a way that credible group action could be undertaken (in these cases to compete in multiple matches against overwhelming odds).

It can be seen therefore that Finding 3 suggests more than simply that a group or team can be instrumental or affective – albeit this is the clear assertion. It is clear that ‘purpose’ has been used to describe ‘what’ a group is attempting to achieve (an outcome-based instrumental purpose), and/or ‘how’ a group is operating (a social process-based affective purpose). It is also clear that a group’s purpose may be viewed differently from the parent organisation’s perspective to that held and promoted within the group; this was particularly clear with AC3. However, it could also be argued that “purpose” should be used to describe *why* a group exists – not what its aims are (outcome), nor how it might function to achieve them (process). Certainly, in professional military and emergency services, individuals are selected and trained to be able to fulfil a multitude of tasks in innumerable scenarios (instrumental outcomes). However, to be awarded formal membership of these services, individuals must have consistently displayed loyalty to the organisation and each other, and it is this loyalty that bonds the group (affective processes). It is exactly this ‘esprit de corps’ that suggests a ‘higher purpose’ for members that extends beyond specific tasks and defines ‘why’ the group exists and ‘how’ its members are expected to behave...and is what was observed in the rugby squad in AC2 and AC3.

This Finding therefore opens up a debate on the meaning and use of ‘purpose’ in defining groups and teams. The evidence supports the following assertions:

1. “Group purpose” is a multi-level concept, constructed at three levels: 1) Organisation, 2) Group, 3) Individual.
2. The function of “purpose” is multi-dimensional, addressing either “Why” the organisation or group exists (existential purpose), “What” its goals are (instrumental outcome), or “How” it functions (affective and instrumental social processes).
3. These three levels of “functional purpose” can also be considered as; 1) Organisational-level, which determines the **existential purpose** for the group; 2) Group-level, which defines the

- operational purpose**; and 3) Individual-level reflects the **operationalisation** of the operational group purpose, determined by the group leadership.
4. In order to motivate participation, an instrumental (outcome) based purpose may be replaced by an affective (process) based purpose by the organisation or group leadership respectively.
 5. Group endeavour can be focused on an affective purpose if the primary and secondary bonds of cohesiveness (conceptual definitions as suggested in Finding 1) are strongly affective.
 6. Alignment of purpose at all levels assists in allocation of resources and effort and increases efficacy.
 7. The group processes required to achieve the purpose (i.e., types of interdependence) can be determined based on the functional purpose established.

Table 7.3.3.1 conceptualises “group purpose” as a multi-level, multi-functional construct, with functional and structural properties.

Table 7.3.3.1 *An integrated model of the multi-level functions and structure of Group Purpose*

Level	Function of Purpose	Functional Properties	Structural Properties	
			Facet	Level
Organisation	What (Outcome) How (Process) Why (Existential)	Instrumental	Task/Goal	In-level Vertical
Group				Affective
Individual		Group pride	In-level Vertical	

Finding 4 Shared purpose comprises shared processes and outcomes

Commitment to group endeavour by individuals does not necessarily indicate commitment to a 'shared purpose'. The determination of shared purpose as "shared process" and "shared outcome" is essential in identifying alignment of self-motivation of members to the needs of the group.

In addition to the problem with the conceptualisation of group purpose described in Finding 3, Finding 4 identifies a second and important problem with the understanding of "purpose" in groups, which is the interchangeable and undefined use of the descriptors of "common", "shared" and "collective" in regard to the social and psychological integration of a purpose at both/either group and individual level respectively, and the assumption of "whole group" or "individual" achievement and commitment in regard to that purpose.

Finding 1 explains the development of group cohesiveness in relation to individual motivation, observing the link between extrinsic-reward and extrinsic-introjected motivation and instrumental-task cohesion, and asserts that a primary bond forms from the participant to the group task. Finding 1 further posits that both self-motivation and the type of cohesiveness may change longitudinally, facilitating the satisfaction of both the group's aim and the individual's motivational needs. Finding 1 assumes therefore two facets to the conceptualisation of the term "shared purpose"; firstly, that the *outcome* of the group endeavour is an entity-level success or failure; and secondly that the *process* of achieving the outcome requires interdependent collaboration. The assumption is also that no group participant can achieve success if the group entity does not. It is this alignment of individual self-motivation to the success of the entity that supports the personal and interpersonal changes necessary to increase the efficacy of the group processes.

Finding 2 identifies that selfish, disruptive or dissonant behaviours from individuals within a group caused fracturing and fragmentation in the group. In this study, such behaviours compromised the efficacy of the group interdependence processes *and* the potential for the group entity to achieve its instrumental purpose/outcome. These fracturing behaviours were contributory to the failure to meet the group [instrumental] purpose of AC1 and AC2. Finding 4 identifies that where there is misalignment between the nature of the group shared purpose and the willingness for self-sacrifice of the individual, the processes necessary for group efficacy may be compromised. This was evidenced by the emergence of bullying and favouritism (Section 6.2.2.2.1; AC2: Diagnosing, Observations 4 and 5), which resulted in damage to the mental welfare of a group member, and the physical safety (and injury) of players during matches when their teammates did not commit

to the physical support needed. The opposite was also observed in AC3 where self-sacrifice – based on high levels of affective cohesiveness – were observed.

This study is not limited by the bounds of the fieldwork only; the examinations of literature comprise formative contributions to the research. Chapter 3 examined the role of group cohesiveness in relation to groupthink, highlighting the commercial climbing disaster on Mount Everest in 1996 and the assertion that group cohesiveness may have been a contributory factor (Burnette, Pollack and Forsyth, 2011). Finding 4 supports this notion but adds an important insight; the groups climbing Everest exhibited high levels of both affective and instrumental cohesiveness, as well as exemplary interdependence process efficacy, and taskwork, groupwork and teamwork. With such levels of co-dependency and collaboration, it would seem natural to consider these groups had a shared purpose. However, this was clearly not the case; some group members summited Everest, descended safely and fulfilled their life ambitions. Other group members summited and died, and others did not summit and still died. It is clear therefore that – despite extraordinary teamwork – the group did not have a shared purpose; they had shared *individual-level* purpose that required shared team processes, but they did not have a shared *entity-level* purpose. Importantly, the organisational-level existential purpose was commercial which manifested as an outcome-driven group-level operational purpose.

This distinction between process and outcome in regard to group endeavour clearly has implications for efficacy, but also for safety. The link to self-motivation is clear; if extrinsic satisfaction can be achieved independently of group outcome, the assumed structures of teams may be compromised. Finding 4 therefore challenges much of the group and team literature which broadly defines a team as “...a bounded and stable set of individuals interdependent for a common purpose” (Cohen and Bailey, 1997). Katzenbach and Smith (1993) assert the essential role of ‘task-focus’ in their examination of teams offering that “A team is a small number of people with complimentary skills, committed to a common purpose, set of performance goals and approach for which they hold themselves accountable” (p.112). Wageman, Gardner and Mortensen (2012) summarise the multiple interpretations and scholarly definitions structurally by asserting simply that, “...teams have two required elements: membership and a collaborative task” (p.305). It’s clear that literature places “task” orientation at the centre the definitions of the groups and teams, but assumes only a single property to the concept, accepting that applying the descriptor of “shared”, “common”, “collective” or “collaborative” is sufficient in explaining the concept. Finding 4 therefore leads to an additional conceptualisation of group purpose asserting that it comprises both “process” and “outcome” properties. In understanding the nature of the purpose for a particular group – and therefore the social processes, measures and controls that might be associated with it – it is necessary to understand a) if the

outcome required for the group is at an entity-level, or if individuals may achieve their component irrespective of the entity-level outcome, and b) if the attainment of the entity- or individual-outcome require collaborative social and group processes.

This classification of what is actually “shared” is summarised in Figure 7.3.4.1 below. The importance of this distinction is relevant to Findings 5 and 7 and to the practical understanding of how groups and teams may be formed, led, motivated and managed.

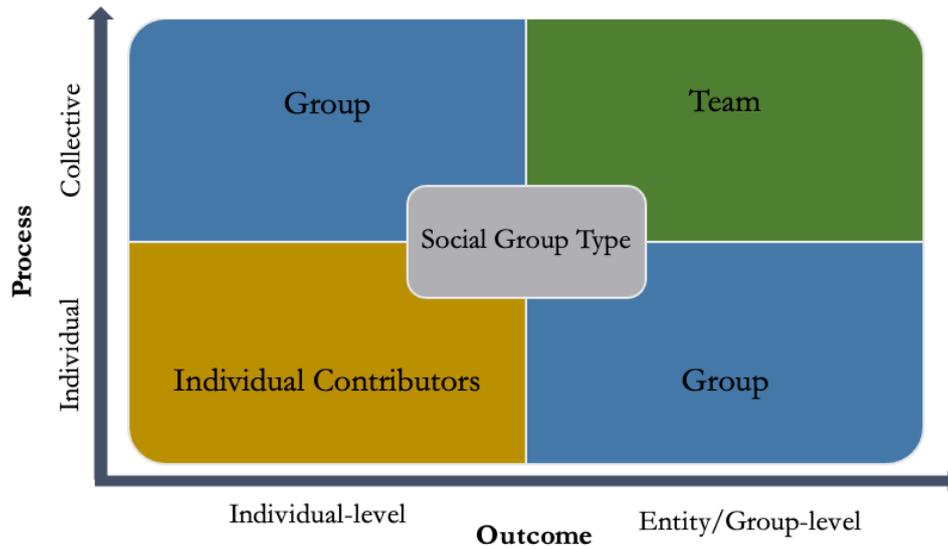


Figure 7.3.4.1 Classification of Groups and Teams based on communality of process and outcome

Finding 5 A team is an emergent group state identifiable by selfless member-behaviours

'Teams' and 'Groups' can be differentiated based on the nature of the group purpose, the types of interdependence required to fulfil that purpose, a defined group identity, group self-regulation and the selfish or selfless behaviours of group members which are linked their self-motivation needs.

Finding 3 conceptualises group purpose as a multi-level, multi-dimensional construct, with three functions and both instrumental and affective functional properties, which structurally operate vertically through levels, or only within a level. Finding 4 addresses the operationalisation of group-level purpose and identifies that as well as serving either instrumental or affective functions, the *nature* of that group-level purpose needs to be classified in terms of group process and outcome parameters. Findings 1 and 2 identify that there are multiple emergent bonds to group cohesiveness which are longitudinally fluid and highlights the emergence of affective cohesiveness based upon individual intrinsic motivation and a willingness of individuals to sacrifice personal needs for group or other member needs. This Finding 5 utilises the earlier findings and the observations from the *in vivo* analysis to suggest that there is an empirical difference between the concepts of groups and teams, and that difference relates to the nature of the purpose described in Finding 4, the type of collaboration required to meet that purpose and the self-motivation of its participants.

Group Purpose

In this study there was a specific period when the social processes within the group altered significantly, and when the actions of individuals indicated a shift in state of the group from a collection of individuals (and sub-groups) to an integrated collective, where individualism became subordinated to collectivism. This was observed in AC1 Week 4 after the implementation of the three groups of interventions described in Section 6.2.1.2.3. Core to this change were the clarity of group-level purpose, the explicit determination of a branded identity for the whole group, implementation and consistency of individual roles and responsibilities, emergence of standards and values, and establishing a sense of self-determination collectively and individually. These interventions resulted in attitudinal and behavioural change observable at an individual level, and performance and morale changes observable at both group and individual level, as described in the evaluation of interventions detailed in Section 6.2.1.2.4. It was during this time that participants exhibited higher levels of effort and preparation, that selfishness was replaced by

selflessness, that teamworking increased, that reciprocal interdependence became dominant in group processes, that care for each other's welfare became habitual, that group rituals and identity were established, and that the group members started to take pride and ownership for maintenance and growth of the group as an entity and the standards and performance collectively. This is described in Finding 1 in context of the emergence and strength of the secondary and tertiary bonds. From a practitioner perspective, it felt that the squad had changed from being a functioning group, to a team; a time when individuals consistently put the group's needs ahead of their own.

Social Identity

The presence of in-groups and out-groups based on nationality, experience and age, as described in Section 6.2.1.2.1 indicated the presence of strong intra-group boundaries. This is consistent with the concept of Positive Distinctiveness defined in Social Identity Theory (SIT) (Tajfel and Turner, 1979). However, as the collective focus increased on the group purpose, and the individual participant's extrinsic motivation increased, the in-group boundaries became permeable, allowing individual mobility from an out-group to an in-group. As this coincided with active interventions by the "teamship" coach to re-define the group identity, it could be argued that the boundaries between groups were removed entirely, and a new in-group – comprising all individuals who were extrinsically motivated to achieve the group purpose – was formed. This strengthened the affective-interpersonal cohesiveness as a result of the increasing competence of individuals to contribute to the attainment of the group purpose. Along with this cohesiveness came trust, identity, self-esteem and belief. This in turn improved the performance of individuals and in turn the performance within the group, which added to the group self-esteem and the affective-interpersonal cohesion.

Increasingly, as group members began to not only extrinsically commit to the notion of winning the competition (the instrumental-task cohesion to the instrumental purpose), but to *believe that they would collectively succeed in achieving it*, affective-interpersonal cohesion increased. Along with this, the identity of the group was consolidated and established with emergent culture-forming activities (daily rituals, new-joiner rituals, standards of preparation, commitment and effort, behavioural norms, shared humour, and so on). The desire of individuals to belong to the group, and the self-belief that a) their destiny was in their own hands, and b) that their membership of the group was in part determined by their own commitment and ability, highlights all three aspects of intrinsic motivation being activated within individuals – autonomy, competence and relatedness (Ryan and Deci, 2018). As intrinsic motivation increased, collective performance also improved, which further enhanced the extrinsic-external motivation of individuals, which further consolidated the

focus on the group purpose. These factors consolidated and enhanced the unique identity of the group and increased the attractiveness and associated importance that individuals placed on membership – a foundational tenet of SIT.

Culture

Interestingly, it was observed that as intrinsic motivation and extrinsic-external motivation increased in individuals, extrinsic-introjected motivation (that being egotism and selfishness or focus on personal aggrandisement and recognition) decreased. Indeed, the occasional emergence of introjected behaviours was viewed very negatively across the group and was observed by the researcher to create fracturing of the group's cohesiveness as described in Section 6.2.2.2.1 (AC2: Observation 4). Further evidence supporting this assertion is provided below:

*“...it was an issue during that time. I think [REDACTED] was, you know, I hate to say it but obviously I was privy to videos and stuff and after the first game [REDACTED] **already had a clipped file of his entire clips down on the computer.** So, you think that ‘Guys of course you want to benefit out of it, I don’t say you need to, but I think that that comes afterwards. I think **instead of worrying about what your clips are I think you need to worry about bringing other people with you and teaching them the ways of how professional rugby works or how we should have been preparing**’. I think had other people taken more responsibility at that point especially those that were able to be in those positions I think it was a different story.”*

(P10, August 2019)

This section does not seek to explore group culture overall, but to highlight that unacceptable behaviours had been established within the group – specifically in this case ego-centric selfishness driven by extrinsic-introjected motivation. This indicates that the group as an entity was establishing a culture and identity partly based on acceptable self-motivation. This aligns to the SIT assertions above.

Interdependence

Adopting the notion of a **primary bond** and acknowledging that on formation, the group was assigned an instrumental purpose, membership to the group for individuals depended on their ability to contribute effectively to the group purpose. This meant that every group member – including coaches and staff – needed to be able to fulfil their core role and responsibilities to a level of competence acceptable for continued membership.

Group Interdependence Theory (Thompson, 1967; Van De Ven, Delbecq and Koenig, 1976) highlights the relationships that exist between individuals within a group, and the dependence that each has on the other's task-oriented competence. Increased competence improves interdependence efficiency and efficacy within a defined social system and process. Therefore, heightened self-motivation to improve competence in line with the group purpose inevitably has a positive impact on interdependence.

Taskwork

Marks *et al* (2001) distinguish between taskwork and teamwork as the difference between *what* it is that a group is doing (taskwork) and *how* they are doing it with each other (teamwork). McEwan *et al* (2017) expand upon this differentiation, identifying that "...*taskwork involves the execution of core technical competencies within a given domain.*" (p.23) and providing the example of the "...*synergy between a quarterback and receiver [in American Football] to complete a play [teamwork], rather than their respective skillsets related to throwing or catching a football [taskwork]*" (p.23). It can therefore be understood that where the alignment of individual motivation to group purpose (when the latter is instrumental leading to the former becoming extrinsic), the resulting improvements in individual task competence inevitably leads to greater efficacy in group taskwork. As highlighted by McEwan *et al* (2017), an improvement in taskwork efficacy by individuals allows group focus to turn to interdependence processes as highlighted above. Again, we are able to see how alignment of personal motivation to group purpose improves instrumental and affective cohesion, and that group cohesiveness emerges and evolves over time.

As this relates to 'purpose', the transition described occurred when individuals began to embrace that the group purpose was to *win* the Repechage and play in the RWC19 – not simply to *compete* in the Repechage. This required self and collective belief that winning was a realistic possibility – and this occurred because of the behaviours of the head coach and his team, as described in Section 6.2.1.2.1 (AC1: Observation 9). This belief catalysed a fundamental change in the collaborative group process both on and off the pitch, accelerating reciprocal interdependence and teamwork. Of note is the emergence of mutual care and consideration between group members (horizontal and vertical levels), and the tacit emergence of behaviours expected of group members as part of this team and what it stood for (its identity). These two observations extend beyond the instrumental boundaries of Task Interdependence theory, suggesting an emergent *affective* interdependence, and that behaviours of individuals that were supportive of and consistent with the social identity of the group were essential in the functioning and membership of the group.

It is posited therefore that a group becomes a team when; a) the group's identity is clearly established in terms of processes, culture and expected behaviours; b) that members consistently exhibit selflessness within the group; and c) that the group exhibits self-regulation towards its purpose, identity and efficacy.



Figure 7.3.5.1 Factors differentiating "Groups" from "Teams"

Finding 6 Affective Interdependence is an emergent behaviour in teams

A fourth type of interdependence has been identified; Affective Interdependence, which is present in the “Affective” emergent group states defined in Finding 7.

A change in the interpersonal cohesion across the group was identified in AC1 Week 3 (as described in Finding 5), where group members demonstrated not only task-oriented reciprocal interdependence and heightened levels of teamwork, but also that group members exhibited caring and selfless behaviours towards each other. This was noticed initially as an off-field phenomenon by the researcher (Section 6.2.1.2.1; AC1:Observation 7) and developed over time. The emergent secondary and tertiary bonds of affective cohesiveness described in Finding 1 provide further evidence of the development of this cohesion, and the description of the affective purpose in AC3 and its effect further support the observation. As the intensity of the environment increased – including isolation from families and loved ones during the three weeks of the Repechage tournament – the inter-reliance on team-mates for emotional and psychological support emerged as increasingly important. In the evaluation of interventions in AC3, Observation 3 (Section 6.2.3.2.4) the alignment of a) an affective group purpose, b) intrinsic motivation of individuals, and c) affective group cohesiveness is demonstrated. The behaviours of individuals that supported this alignment were demonstrably more than simply “task-oriented reciprocal interdependence”; it was clear that participants were providing emotional (or affective) interdependence also.

This finding supports the consideration of ‘selflessness’ in Finding 5, and the assertion of affective purpose in Finding 3. This study identifies that as group collaboration processes improved – based on the emergence of the factors highlighted in Finding 5 and the changes in cohesiveness identified in Finding 1, the types of interdependence also changed, with the higher levels of “reciprocal” and “affective” interdependence providing supportive indicators of the transition from “Group” to “Team”.

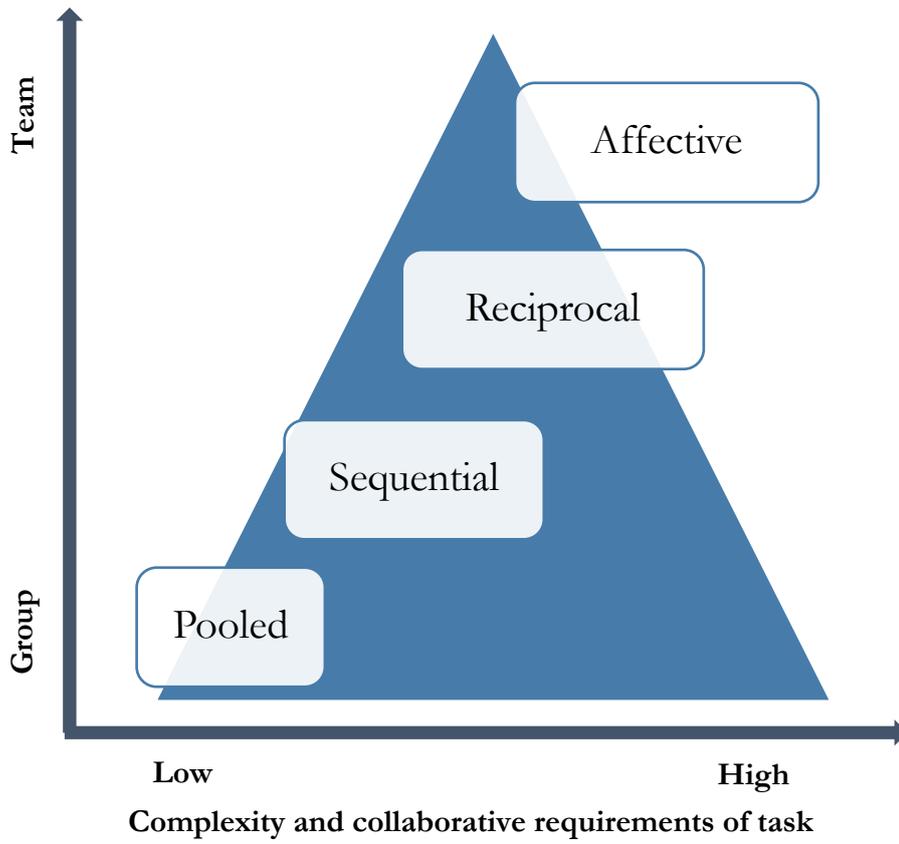


Figure 7.3.6.1 *Affective Interdependency: Signifying the emergence of "Team" state*

Finding 7 GSD is a recursive emergent state of identifiable group types

GSD is a recursive emergent state with the potential for either instrumental or affective group purpose, forming sequentially through a series of six identifiable stages with manifest characteristics of increasing cohesion and collaboration between group members, the development of group identity and culture, and self-determined selflessness of individuals in favour of group or other member needs.

This study was conducted with a single group over a period of seven months, and comprised three distinct phases, captured as AC1, AC2 and AC3. During this time a total of 60 individuals participated in the activities of the group. The original 53 participants in AC1 were reduced to 43 in AC2 (19% reduction). AC3 had a total of 37 members, of whom 30 members were present in AC2 and seven were new to the group (19% new members). This provides a stable and continued membership of 81% in each AC population. This stability within the group allows for the evaluation of the development of the group as an entity across the whole longitudinal period of the study. Also, the stability of membership allows evaluation of changes in self-motivation of individuals in each of the phases, and in response to group performance. Finally, the evolving nature of the group purpose as described in Chapter 6 – from instrumental to affective – allows evaluation of how group cohesiveness evolved accordingly. Finding 1 - regarding the co-existence of multiple forms of cohesion, changing primacy of those cohesion types, and the observable behaviours of participants that allowed for interpretation of self-motivation - can be applied to the circumstantial antecedents referred to above.

Core elements of Finding 7

This interpretation has led to the identification of six stages of development within this group as described below. In order to provide a visual representation of the development stages of the group, a series of infographics have been developed. The detailed design of each component has specific meaning, which are explained in footnotes.

Stage 1 – Pre-Assembly

This stage is where the existential purpose of the group has been determined by the parent organisation and the members selected, notified and assembled.

It should be noted that prior to the Assembly phase, a catalyst for the existence of a group must have occurred. In this study, the catalyst for AC1 and AC2 was a known future requirement (i.e., the RWC19 competition). The organisation initiating the formation of the group (the DRV

Executive) had determined the existential purpose, as well as determining a high-level strategy, allocating budgets and identifying leadership and resources. However, the political in-fighting between the DRV and the XV's organisation meant that this pre-Assembly phase for AC1 had been conducted poorly. In AC3 it was worse, and there was no DRV planning. The catalyst for AC3 had been the obligation and demand from World Rugby for Germany to fulfil its contractual and moral obligations to compete in the REIC. The researcher was not party to the DRV pre-Assembly processes, and they therefore do not comprise part of this study. Figure 7.3.7.2 summarises the organisational-level processes that resulted in the assembly of the group-level components indicated in Figure 7.3.7.1.



Figure 7.3.7.1 Pre-‘Assembly’ Organisational processes

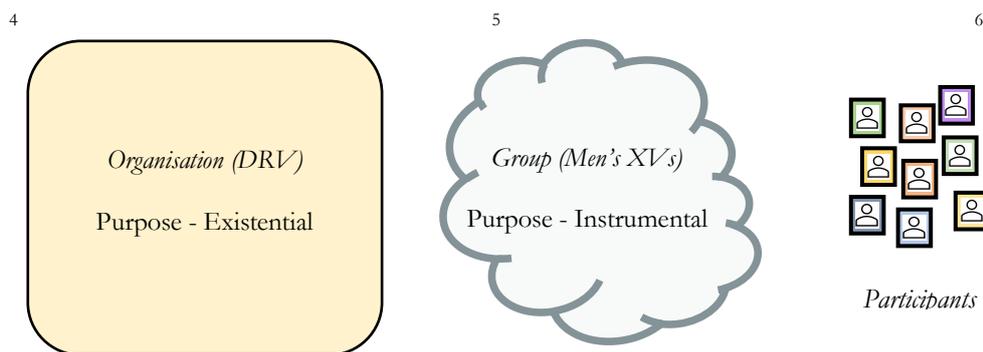


Figure 7.3.7.2 Group Development Stage 1 – “Pre-Assembly”

⁴ The parent organisation. It carries specific properties of a) a defined identity, denoted by its colour and black border, and b) a designated purpose for the formation of the Group.

⁵ The XV's Squad. The ‘cloud’ border and neutral colour denotes that the entity has no identity other than its functional descriptor (Men’s XV's). Its purpose is determined by the Organisation.

⁶ The group members. Each participant has their own unique background and identity as represented by different colours. Similar colours denote demographic similarities may exist. The black borders for each member denote that motivation and behaviour for each participant is self-oriented. The number of participants is for graphical representation purposes only.

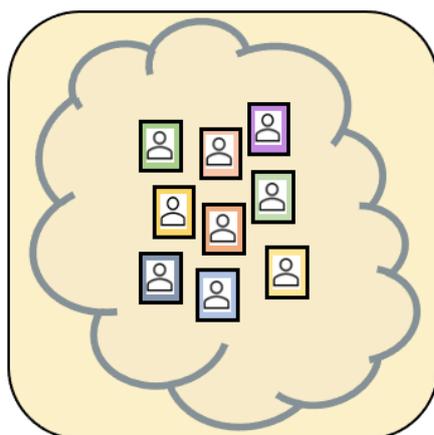
Stage 2 – Assembly

The Assembly stage includes engagement of the group leader, identification and gathering of group members, allocation of resources and loose definition of roles within the group (such as ‘Head Coach’, ‘Physiotherapist’, ‘Kitman’, ‘Video Analyst’, ‘Player’ and so on). During this stage all members behaved as discreet individual entities. Where individuals had worked together previously (at either international competition or domestic club level) in-groups were seen to exist. The lack of clarity in any aspect of the group organisation and purpose implies that there was no coordinated group structure, and that the distinctions of activities was blurred or unformed.

“Chaos. The overriding view that I have is utter disorganisation in every aspect. There is a total lack of urgency, need for action, plan, strategy, resource or decision-making. Players, coaches and staff are confused, rudderless, lethargic, dissatisfied and disillusioned.”

(Researcher Field Notes, 6th September 2018)

Both AC1 and AC3 initially presented with a lack of clarity of purpose or preparation organisationally and individually. Group members primarily exhibited self-oriented behaviours and both interviews and observations indicated little intrinsic motivation, but extensive suggestions of extrinsic-external and extrinsic-introjected motivation. Cohesion across the group entity was initially non-existent, but pockets of cohesiveness were present within demographic groups. This stage therefore represents the group formation in AC1, Week 1, noting that the group resides within the parent organisation structure but with no defined structure or observable unique identity.



Assembly

Purpose: Parent organisation level only.

Motivation: Extrinsic (External and Introjected). Anticipatory from individuals rather than informed.

Cohesion: None

Group processes: In-groups and out-groups based on historical relationships and experiences only.

Group Identity: None. Parent organisation culture and history wholly pervasive.

Figure 7.3.7.3 Group Development Stage 2 - “Assembly”

Stage 3 – Loosely Coupled

This description highlights an initial – but uncoordinated - level of collaboration and cooperation between individuals to perform tasks as instructed or deemed necessary. This was observed in the latter parts of Week 2 and early in Week 3 of AC1.

“Strength session. Noting a marked change in happiness in all squad [members]. Attitude is great. Players are beginning to push themselves towards PBs [personal bests]. [redacted]’s professional and thorough approach is giving the guys confidence and inspiring them. Cohesion is tight: Smiling, [mutual] encouragement, working together, spotting, etc.”

(Researcher Field Notes, 18th September 2018)

Confusion over roles and responsibilities was manifest during this stage, resulting in disagreements, frustration, anger and poor outcomes. Examples included the duplication of activities of coaches, as well as the omission to attend to critical tasks that had been unassigned and assumed to be ‘someone else’s job’. AC1, Observation 6 provides specific examples of this. However, this stage also displays the emergence of team processes and collaborative behaviours. At an individual level, the instrumental group purpose had been acknowledged and accepted. However, many individuals in the group had not internalised the personal commitment, effort and sacrifice that would need to be shown in order to attain the existential purpose, indicating a lack of both intrinsic and extrinsic motivation.

The presence of in-groups and out-groups was apparent in this stage of development, and boundaries to in-groups were non-porous. Whilst an instrumental group purpose was clear within the coaching group, it was not equally shared across the group, nor the interdependencies necessary understood or acknowledged by most participants. The group overall had no unique identity (AC1, Observation 5) and as a result there were no defined group processes, culture or membership.

However, this stage was also defined by the presence of pockets of teamwork and collaboration, and instances of selfless behaviour (AC1, Observation 7). In addition, there was belief in the new leadership group and emerging excitement about the group purpose (AC1, Observations 8, 9 and 10). The result of these positive emotions was an improvement of team-based performance in training, and a demonstrable improvement in effort and commitment to personal task-based skills and capabilities such as fitness, strength and core rugby skills. This stage was when taskwork improved, driven by extrinsic-introjected motivation. The lack of internalisation of the extrinsic

purpose indicates extrinsic-external motivation (reward and achievement) was not a primary driver of personal behaviour.

It can be understood therefore that this stage demonstrates the emergence of individual taskwork focus, group collaboration processes (but without a group identity), and individuals maintaining personal motivations and demonstrating self-oriented behaviours. Relating this to the emergent state of group cohesiveness in Finding 1, it can be interpreted that a **primary bond** was developing, but that the **secondary** and **tertiary** bonds were not yet evident. Relating this stage to Finding 2 (acceleration of group cohesiveness based on an alignment of personal motivation and group purpose), it was evident from the increasing extrinsic-external (reward) motivation expressed by individuals, along with their increased intrinsic-competence motivation – manifested in improvements in pooled and sequential interdependence and taskwork efficacy – that group cohesiveness was improving in line with the assertions of Finding 2. The importance of Finding 3 regarding group purpose (multi-level purpose alignment, instrumental function and structural impacts) was now taking effect, and catalysing changes in individual-level behaviours and group functions and processes.

Figure 7.3.7.4 provides a visual representation of this stage and summarised description of its properties.

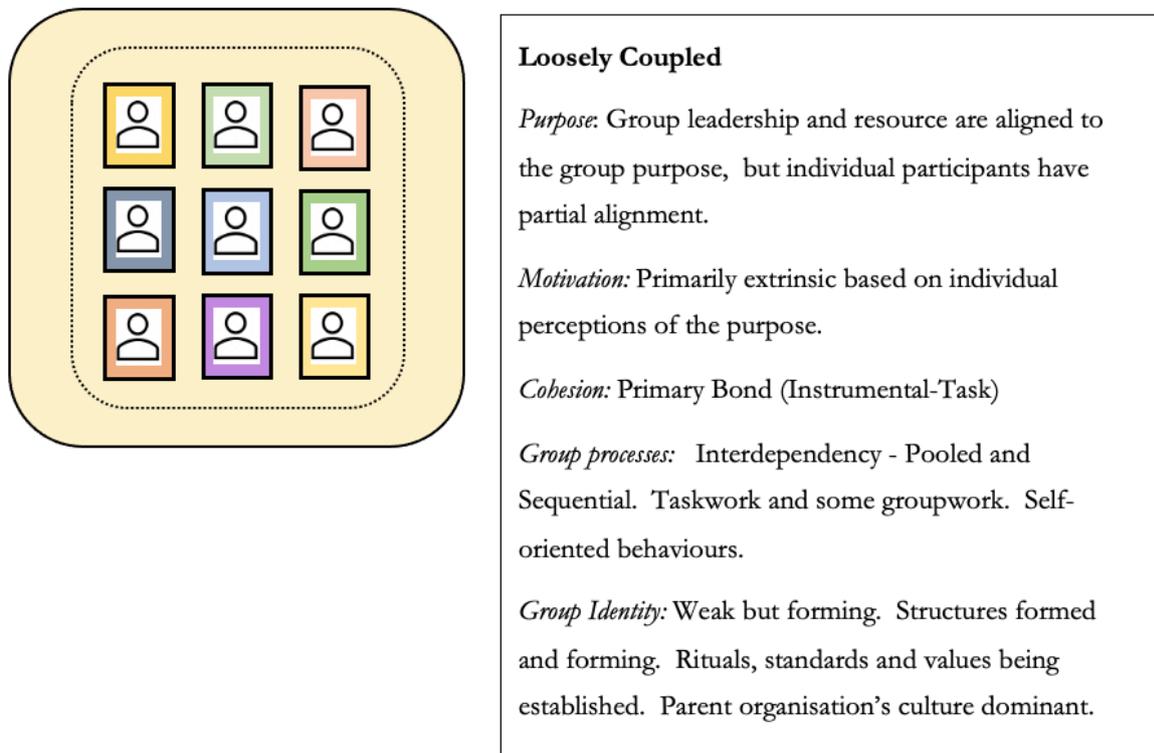


Figure 7.3.7.4 Group Development Stage 3 – “Loosely Coupled”

Stage 4 – Tightly Coupled

Where Stage 3 was characterised by individualism, taskwork, groupwork and both pooled and sequential interdependence, Stage 4 signifies the emergence of collaboration, teamwork, heightened communication and increased group efficacy. Purpose was common at all three levels (organisation, group and individual), facilitating optimisation of resources and effort. This stage of formation was observed in AC1, Week 3 and Week 4. Cohesiveness was strongly task-oriented (Instrumental) and was the clear **primary bond**. Initial buds of an identifiable group identity were developing, albeit mainly at an individual level. This stage was demarcated by clarity from the leadership on the group purpose, the plan to achieve it, the roles and responsibilities of all participants and the standards of personal preparation required. In addition, task and group level activities were planned and communicated in detail.

This clarity allowed individuals to understand and embrace their roles, contribution, value and self-worth. This was a significantly important phase in the group development. Whilst individuals were extrinsically motivated to the instrumental goal, the clarity given about personal requirements ignited intrinsic-competence and intrinsic-autonomy motivation for individuals. At an individual level there was a realisation of the personal levels of commitment and effort needed, and both explicit and tacit commitment to the group collaboration required (interdependence and teamwork) - evidenced in the behaviours described above and in detailed in Section 6.2.1.2.4 (AC1 Evaluating Actions).

“People like ■ were very physical in training. Everyone is going half [effort] and he’s going full out; but you step up to that level. I don’t look at it as a negative; I look at it as room to grow. So, my mindset has changed in that sense.”

(P4, 20th September 2018)

The alignment of purpose, roles, responsibilities and standards provided a framework within which everyone could function. Sequential and reciprocal interdependencies were clear, which increased communication on and off the field, improving collaboration, standards and outcomes. This in turn impacted positively on individual and collective self-belief (Section 6.2.1.2.4; EA: 3, 4 and 6) which in turn increased the internalisation of the potential of realising the instrumental purpose.

Figure 7.3.7.5 shows the tight alignment of individual efforts behind a clear group purpose, but where the culture of the group was still ostensibly determined by the parent organisation.

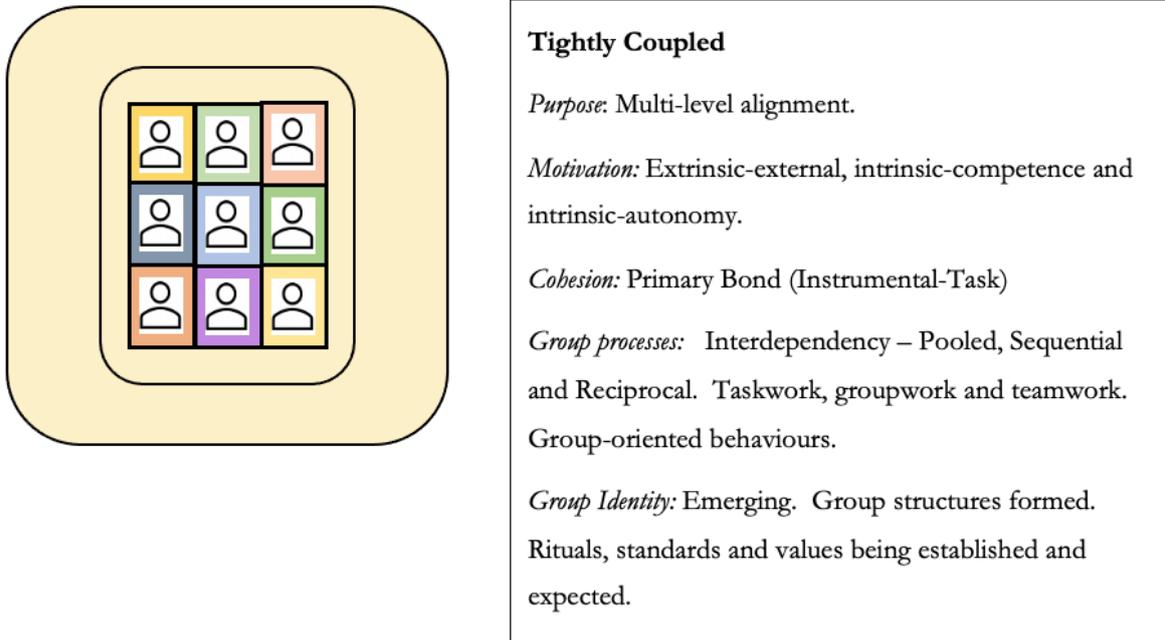


Figure 7.3.7.5 Group Development Stage 4 – “Tightly Coupled”

Stage 5 – Integrated

Where Stage 4 was characterised by alignment of individuals and the group to the group purpose, Stage 5 was characterised by consolidation of the **primary bond** of instrumental cohesion, the emergence of **secondary and tertiary bonds** of affective cohesion, changes in behaviours of individuals suggesting the growth of intrinsic motivation and stronger extrinsic-external motivation, increasing collaboration, instrumental interdependence and the consolidation of the unique group identity. This stage of formation emerged in AC1, Weeks 4, 5 and 6. The term “Integrated” for this stage highlights the integration of purpose, participants, resources, efforts and culture into a *unique and identifiable group entity*.

The alignment of individual motivation and effort to the instrumental group purpose was evident, and with it the emergence of group identity, standards and rituals. Both individual and collective efficacy improved, evidenced by improvements in fitness and strength tests, and successful completion of various training evolutions.

“Reflection – Day 3 [of Training Camp 1]. In the sessions yesterday there was a noticeable increase in concentration levels and support for each other. Communication was louder and from more people. Performance was greatly improved. Concentration was high even when fatigued and resulted in an

outstanding set of drills...no balls dropped! Trust and commitment high. Coaches and players celebrating 100% performance. Great teamwork, and the supportive behaviours indicate growing cohesion and focus. Values and standards now being demanded of each other... The group are establishing their own TEAMSHIP standards and behaviours...

(Researcher, Field Notes, 5th October 2018)

In this ‘integrated’ stage supportive behaviours for both instrumental *and* affective needs were observed, both during formal group activities (training) and during informal group activities (social). There was a collective acceptance and *ownership* of the group purpose at both a group and individual level, and support from the DRV organisation suggests that there was multi-level alignment to the purpose.

This stage was demarcated by the formalisation and consolidation of the identity and branding for the group which had been co-created with all participants. This identity had both name (“Schwarze Adler”) and icon/logo (Figure 7.3.7.6). The significance of this stage transition was the emergence of the **secondary bond** of cohesion which was affective-group pride. Social Identity Theory provides clarity on the importance of membership to a group for an individual, it therefore follows that the establishing of unequivocal properties of identity for the group as an entity is a key transition point for any group. In this study, that identity was established collectively by the group – including its name and logo – and therefore provided a very strong bond of cohesion for members.

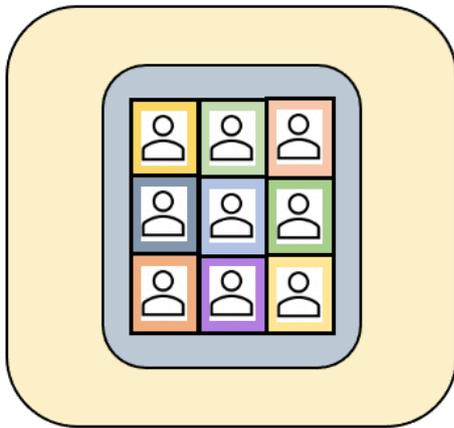


Figure 7.3.7.6 Formalised branding of the Men's XV's Rugby Squad for RWC19

The group rituals seen across the organisation, and the adoption of standards of an emerging social identity - including the commonality of training kit, hygiene, timekeeping, preparation and so on – indicated the rapid development of a unique group culture, in tandem with the physical tokens

of group identity (name, logo, uniform/kit). The emergence of a new group identity also facilitated the permeability – and ultimate re-definition – of in-groups and out-groups, allowing the initialisation of the integration of all group members into a single, new group identity. Establishing a common social identity for all group members improved collaboration, commitment and teamwork. As highlighted by the researcher quote above, behaviours of participants that supported the group purpose, identity and culture could be referenced as exhibiting “teamship”.

It can be seen therefore that this stage includes the consolidation of the primary bond of cohesion to the instrumental-task purpose, the emergence of the secondary and tertiary bonds which were affective-group pride and affective-interpersonal group cohesiveness respectively, and the emergence of “teamship”.



Integrated

Purpose: Multi-level alignment.

Motivation: Extrinsic-external with emergent intrinsic-relatedness and -competence.

Cohesion: Primary bond - Instrumental-Task (strong).
Secondary bond – Affective-Group Pride (growing).
Tertiary bond - Affective-Interpersonal (emerging).

Group processes: Interdependency – Pooled, Sequential and Reciprocal. Taskwork, groupwork and teamwork. Self-oriented and selfless behaviours. Teamship.

Group Identity: Established and consolidating. Rituals, standards and values becoming habitual, expected and enforced. Group identity replacing organisation identity.

Figure 7.3.7.7 Group Development Stage 5 – “Integrated”

Stage 6 - Affective

Stage 5 (Integrated) marked the importance of the group and social identity, and the effects these had on group processes and individual motivation and behaviours. Interdependence was functioning at all three levels, and teamwork was effective and efficient. Values and standards were established that were unique to this group, and social structures and mechanisms were informally introduced which maintained and enforced those cultural indicators. Purpose was

common on all three levels suggested in Finding 3. Individual motivation and group purpose were aligned and becoming optimal as posited in Finding 2. Group Cohesiveness was strongly established on two levels – instrumental-task as the primary bond, and affective-group pride as the secondary bond as defined in Finding 1. Stage 6 was characterised by the consolidation and strength of the final bond of cohesiveness – the **tertiary bond** – which in this group was the affective-interpersonal cohesion. This manifested in the group by changes in individual behaviours between players and acts of selflessness, care, kindness and courage. These are reflected on by the author in Section 6.2.1.3.

“I recall many small and almost imperceptible changes in how we all treated each other; at mealtimes players would no longer just get water or food for themselves, but instead would always get for their whole table – and go without if there was not enough to go around. Players would go to the launderette to wash not only their own clothes and rugby kit, but their closest teammates too. Personal news (such as my own) was not just commented on but was felt by teammates.”

(Author, Reflections: Section 6.2.1.3)

Finding 1 highlights the potential strength of the interpersonal bonds as they represent a mutuality and reciprocity dyadically between individuals. Interpersonal bonds require trust; trust that another person will be there for you when you need them, irrespective of their own needs. This willing subordination of one’s individual needs for another individual or the benefit of the group indicates a significant change in personal motivation, type of group cohesion, and potential positive impact on group purpose. In addition, the emotional trust and reliance between individuals supports the assertion of Affective Interdependence in Finding 6.

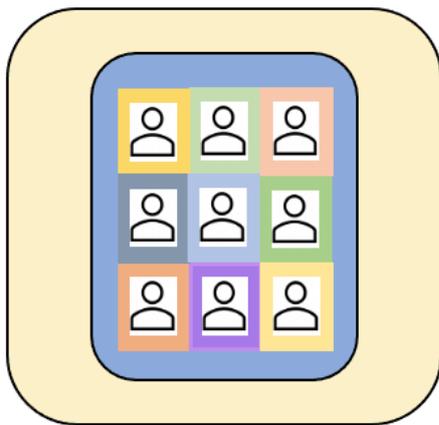
Personal motivation: selflessness indicates that intrinsic-relatedness is the primary driver of individual behaviour. In this study it was clear that in AC2 and AC3, group members who exhibited selfish behaviours undermined the cohesion of the group, and the values on which it was built. It was equally clear that selflessness (courage, care, kindness) consolidated the binding within the group.

Group cohesiveness: selflessness accelerates and underpins interpersonal trust. As individuals collectively exhibited selflessness, the affective-interpersonal cohesion extended beyond simple ‘liking’ or ‘friendship’, but emerged as ‘brotherhood’, ‘family’ and ‘love’. This level of cohesion was evident at the end of AC1, in Weeks 1 and 3 of AC2, and in all of AC3 except Week 1.

Group purpose: the strength of the affective cohesiveness – both interpersonal and group pride – allowed this group to transcend the loss of the instrumental group purpose, and embrace an

affective group purpose, maintaining all of the group's identity, processes and culture. This is supportive of Finding 5.

This final stage of group development satisfies the criteria defined in Finding 5 for the differentiation between groups and teams, by the clear identification of the importance of the willingness of individuals to sacrifice their needs for others. It is important to note that individuals don't sacrifice their personal identity or motivation, simply that their motivation is satisfied by a sense of belonging, of self-worth and value, and of contribution. Figure 7.3.7.8 highlights the absence of personal borders in an Affective Group (or 'team').



Affective

Purpose: Level 2 and Level 3 alignment (Group and Individual).

Motivation: Intrinsic-relatedness, intrinsic-autonomy, intrinsic-competence and extrinsic-self-determination.

Cohesion: Primary bond – Affective-Interpersonal.

Secondary bond – Affective-Group Pride. Tertiary bond - Affective-Interpersonal.

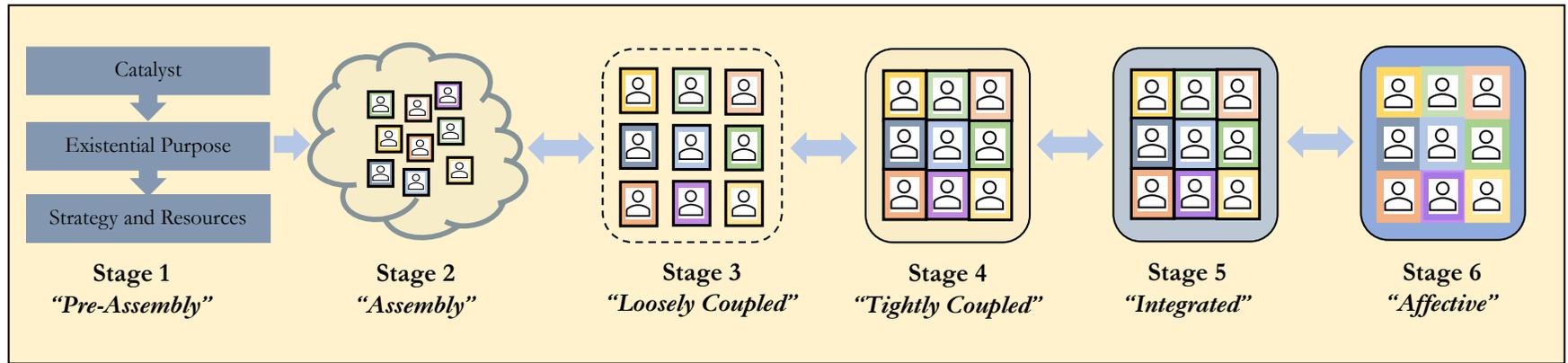
Group processes: Interdependency – Pooled, Sequential, Reciprocal and Affective. Taskwork, groupwork and teamwork. Self-oriented and selfless behaviours, Teamship.

Group Identity: Established. Rituals, standards and values established and enforced. Group identity only.

Figure 7.3.7.8 Group Development Stage 6 – “Affective”

Summary of Finding 7

Finding 7 identifies six stages of group formation, determined by the nature of the purpose of a group, and how that purpose influences the motivation of participants and their behaviours, and the subsequent impact that this has on the types and strengths of cohesiveness in groups. Finding 7 utilises the other Findings in this study to make sense of the changes in social processes and structures in this group and provides a process of evolution and development in the formation of groups based upon group purpose, personal motivation and group cohesiveness. The entire process is summarised in Figure 7.3.7.9.



Group Purpose	Level 1 – Instrumental	Level 1 – Instrumental Level 2 – Instrumental Level 3 – n/a “Partially Aligned”	Level 1 – Instrumental Level 2 – Instrumental Level 3 – Partial “Partially Aligned”	Level 1 – Instrumental Level 2 – Instrumental Level 3 – Instrumental “Aligned”	Level 1 – Instrumental Level 2 – Instrumental Level 3 – Instrumental “Aligned”	Level 1 – Externalised Level 2 – Instrumental Level 3 – Affective “Not Aligned”
Personal Motivation	N/A	Extrinsic- Introjection Extrinsic - External	Extrinsic- Introjection Extrinsic – External Intrinsic - Competence	Extrinsic - External Intrinsic – Competence Intrinsic - Autonomy	Extrinsic- Introjection Extrinsic - External Intrinsic - Competence	Intrinsic – Relatedness Intrinsic-Autonomy Intrinsic – Competence Extrinsic - External
Group Cohesiveness	N/A	Primary (Forming)	Primary (Emerging) Secondary (Forming)	Primary (Strong) Secondary (Emerging) Tertiary (Forming)	Primary (Strong) Secondary (Strong) Tertiary (Emerging)	Primary (Strong) Secondary (Strong) Tertiary (Strong)
Group Processes	N/A		<i>Interdependency</i> – Pooled + Low Sequential Taskwork + Groupwork	<i>Interdependency</i> – Pooled, Sequential, Reciprocal Taskwork, Groupwork, Teamwork	<i>Interdependency</i> – Pooled, Sequential, Reciprocal Taskwork, Groupwork, Teamwork	<i>Interdependency</i> – Pooled, Sequential, Reciprocal, Affective Taskwork, Groupwork, Teamwork
Group Identity	ID - Organisation	ID – Organisation Culture – Organisation Values and Standards – N/A	ID – Forming Culture – Forming Values and Standards - Forming	ID – Emerging Culture – Emerging Values and Standards - Established	ID – Established Culture – Established Values and Standards - Enforced	ID – Established Culture – Established Values and Standards - Enforced

Figure 7.3.7.9 Stages of Group Development and Group Typology

Finding 8 “Teamship” describes the self-determined behaviours of individuals consistent with Self-Categorisation Theory

“Teamship” describes the self-determined behaviours of members that willingly support the group’s purpose, culture and norms, consistent with the conceptualisation of depersonalisation in Self-Categorisation Theory (Turner et al., 1987; Turner and Onorato, 1998) and Social Identity Theory (Tajfel, 1974; Tajfel and Turner, 1979)

Finding 2 suggests that alignment of the self-motivational needs of members to the purpose of the group accelerate the emergence of cohesiveness in groups. Finding 1 identifies that cohesiveness is a fluid multi-dimensional emergent group state, wherein bond-types align to stages of development of the group as suggested in Finding 7 (GSD and group typology). Finding 5 posits that a “team” is an emergent state in the development of a group, recognisable by a defined group identity, the self-regulation of the group to maintain the facets of its identity, and the willing selflessness of members to exhibit behaviours and take actions that support and consolidate the group identity and norms.

This study identified three key points of progression and regression of the group into and out of the emergent “team” state.

- 1) In Section 6.2.2.2.1 and 6.2.2.2.4 (AC1) the redefinition of the group’s identity, the determination and group regulation of its culture and norms, and the recognition of selfless behaviours within the group was observed. In addition, clear roles and responsibilities were established for all members. It became clear from one-to-one interviews that a change in self-motivational needs was evolving as the group developed, and individuals were voluntarily adjusting their behaviours to support the group’s identity, which in itself was developing to meet the group purpose. This transitional phase - recognisable by the three factors described in Finding 5 - marked a progression in the emergence of a “team”.
- 2) In Section 6.2.3.2.1 and 6.2.3.2.4 (AC2) selfish behaviours were observed from certain individuals that manifested as bullying, self-centeredness and perceived favouritism. These behaviours undermined the group’s values and expected behavioural norms, and conflicted with the group identity established in AC1. This marked a regression in the stability of the “team” state, and impacted in cohesion and subsequently on group efficacy and performance outcomes.

- 3) In Section 6.2.4.2.1 (AC3) selfish behaviours were also observed at the beginning of the AC which inhibited the development of the group. Once the individuals concerned were removed from the group, selfless behaviours from the remaining group members rapidly became the norm - reinforcing the group's identity, culture and norms, and allowing the group to progress towards a strong "team" state, supported by an affective purpose, affective bonds of cohesiveness and affective interdependence.

Social Identity Theory (Tajfel, 1974; Tajfel and Turner, 1979) refers to the ways that people's self-concepts are based on their membership in social groups. It addresses the ways that social identities affect people's attitudes and behaviours regarding group membership. It is suggested that social identities are most influential when individuals consider membership in a particular group to be central to their self-concept and they feel strong emotional ties to the group. Affiliation with a group confers self-esteem, which helps to sustain the social identity. Self-Categorisation Theory (Turner *et al.*, 1987; Turner and Onorato, 1998) explains the processes by which an individual forms cognitive representations of themselves and others in relation to different social groups. The underlying premise is that people place themselves and others into social categories on the basis of underlying attributes that are particularly salient, and this process of self- and social categorisation shapes attitudes, emotions and behaviours.

The data observed within this study - and summarised above - provides clear and unequivocal evidence of behavioural change from individuals in support of their choices to be aligned with the emergent identity of this social group. This is consistent with both Self-Categorisation and Social Identity theories. The links between these self-determined behaviours, the group's purpose and the cohesiveness in the group has also been demonstrated, with the subsequent assertions regarding a team being an emergent group state, typified by selfless behaviours in support of the team's identity and norms. The suggestion of the notion of "teamship" made by Woodward (2004), and supported by individuals experiencing the emotions of "teamship" - both in themselves and others - (Greenwood, 2004; Johnson, 2004; Dallaglio, 2008; Wilkinson, 2012; Woodward, 2019) is consistent with the experiences of this researcher as a participant in this study, and with the evidence generated across the three ACs.

It is therefore posited that "teamship" can be conceptualised as a description of the team-supportive behaviours of individuals in the emergent group-state of "team", in line with the processes of depersonalisation explicit in Self-Categorisation Theory (Turner and Oakes, 1986), and the voluntary group association and alignment defined in Social Identity Theory (Tajfel, 1974;

Tajfel and Turner, 1979). “Teamship” is not therefore a theoretical construct in its own right, but a useful description of the behaviours detailed in these two theories.

In lay-terms, this study proposes that “teamship” be used to describe the behaviours, attitude and actions of a team member that support the identity and culture of a group, and its stated purpose.

7.4 Discussion of Findings

For the purposes of discussion, the eight findings have been grouped into four themes as shown in Table 7.4.1.

Table 7.4.1 Four Themes from Findings

	Theme	Findings included in Theme
Theme 1	Group Cohesiveness is an individual-level construct which is a multi-dimensional and fluid emergent state with primary, secondary and tertiary bonds which evolve temporally.	Findings 1 and 2
Theme 2	Group Purpose should be reconceptualised as a multi-level, multi-functional construct with existential, process and outcome properties, which has significant importance regarding the function, structure and efficacy of social groups.	Findings 3 and 4
Theme 3	Group Development may be reconceptualised based on the requirement for, and development of group cohesiveness, determined by the existential purpose, and its adoption and interpretation at group and individual levels. A six-stage recursive typology of the Stages of Group Development is defined. In addition, this theme posits that “team” should be reconceptualised as an emergent state of a group.	Finding 5 and 7
Theme 4	Group and Team Processes are mapped against the proposed stages of group development and types of group cohesiveness, identifying that teams can be established with affective purpose, that affective interdependency exists in highly cohesive teams, and that efficacy of individuals in a cohesive team can be described as ‘teamship’.	Findings 6 and 8

Discussion Theme 1 – Group Cohesiveness

Through a longitudinal research design, this study sought to understand the influences that group purpose, when considered along with personal motivation, have on the multi-dimensions of group cohesiveness, addressing issues in literature regarding the lack of consideration of temporality (Tziner, 1982a; Casey-Campbell and Martens, 2009; Hall, 2015; Santoro *et al.*, 2015) and antecedents to group cohesiveness (Kozlowski and Ilgen, 2006; Casey-Campbell and Martens, 2009).

The findings support the seminal work of Festinger (1950) which asserts that group cohesiveness is the result of all the forces acting on an individual to remain in a group, which depend on the attractiveness or otherwise of the prestige of the group, its members and the activities in which it [the group] is engaged. Feldman's (1968) conceptualisation of the multiple dimensions of group cohesiveness (Normative, Functional and Interpersonal) is supported by the findings of this study, represented in this thesis respectively as Group Pride, Task and Interpersonal cohesiveness. These descriptions are consistent with scholarly references to the multi-dimensionality perspective (Hackman, 1976; Carron, 1982; Tziner, 1982a; Zaccaro and Lowe, 1988; Zaccaro and McCoy, 1988; Zaccaro, 1991; Beal *et al.*, 2003; Severt and Estrada, 2015; Serban and Roberts, 2016).

The analysis of data provides evidence that group cohesiveness is an emergent, co-existent, multi-dimensional, fluid and potentially recursive state within a group and not a group process, supportive of the assertion made by Severt and Estrada (2015). The difference between a process and an emergent state is that a) a process describes interactions between group members, while b) an emergent state is defined as a “*collective structure that results from dynamic interactions among lower level elements*” (Kozlowski and Klein, 2000:15 in Severt and Estrada, 2015:12; emphasis added). This study provides evidence that could be interpreted to support the notion that group cohesiveness is a process; interactions between group members are voluminously described as they related to cohesiveness and collaboration, which is consistent with the conclusion that group cohesiveness is a process. However, the dynamic interactions between group members *resulted in* observable changes in group processes such as interdependence, culture, group norms and performance. This suggests that the lower-level dynamic interactions contributed to the development of a collective group structure, supporting the notion that group cohesiveness is an emergent state. This is important as the conceptualisation of group cohesiveness as an emergent state means that lower-level elements and group processes that contribute to its emergence can be described and empirically measured. The evidence suggests that the observable structures of group cohesion (Interpersonal, Group-Pride and Task) are not group-level constructs at all, but are constructs

formed at an individual unitary level, which collectively contribute to group sentiment and behaviour. This interpretation supports the assertion that group cohesiveness is an individual-level construct, which manifests at a group-level. This in turn has implications for the study of group cohesiveness; designs that wish to examine how group member behaviour influences the development of group cohesiveness should consider an individual-level unitary construction, whereas when the research purpose is to examine the effects of group cohesiveness on group processes and outcomes, it should be considered a group-level construct.

In consideration of the investigation of group purpose and self-motivation as antecedents to group cohesiveness, the data show a clear relationship between group purpose, self-motivation, and the resultant impact on both the function and structure of the cohesiveness within the group, addressing gaps in literature regarding the lack of examination of antecedents to group cohesiveness (Beal *et al.*, 2003; Evans and Dion, 2012; Salas *et al.*, 2015). In addition, this study finds that the multi-dimensional structures associated with group cohesiveness *co-exist* within a group, and *emerge longitudinally*, resulting in the notion of the development of primary, secondary and tertiary bonds. This addresses problems in literature that highlight the cross-sectional designs of many studies, and the lack of consideration of temporality (Tziner, 1982a; Casey-Campbell and Martens, 2009; Hall, 2015; Santoro *et al.*, 2015). This study also asserts that the mutuality of interpersonal cohesion, and its foundation in intrinsic-relatedness motivation, as well as the understanding that it exists not between an individual and a notional concept, but between two sentient beings, indicates that the presence of strong interpersonal bonds increases resilience, selflessness and a sense of belonging.

The model proposed in Figure 7.3.1.4 places the individual in the centre of the relationship between themselves and the concepts of “group purpose” and “group identity” and the physical entity of other individuals in the group. It highlights that bonds form *from* the individual to those conceptual and physical entities – not the other way around – and that these bonds are emergent and fluid. These last two points could only be determined by a field-based research design over a prolonged period of time. This is perhaps why this study has revealed the temporally dynamic nature of cohesiveness in groups.

Discussion Theme 2 – Group Purpose

The originating phenomenon for this study asserted that “teamship” contributed to ultimate team success, alluding that the term “teamship” describes the willing behaviours of individuals within a group to commit to the group’s purpose and goals. The study has therefore been designed to examine the understanding and importance of “shared purpose” as an antecedent to the

inspiration it provides to the individual in addressing their self-motivation needs, and the impact that these two antecedents subsequently have on group cohesiveness.

The analysis of literature identified problems in literature both with the understanding of “purpose” (Singelton, 2014) and “shared” (Campion, Medsker and Higgs, 1993; Wageman, Hackman and Lehman, 2005; De Dreu, 2007; Mathieu *et al.*, 2008).

The findings of this study support the assertions of Campion, Medsker and Higgs (1993) and De Dreu (2005) that “shared” comprises two concepts: 1) collective responsibility for the outcome and 2) outcome interdependence. This is captured in Finding 7, with this author’s definition of an “Interdependent Group” and “Affective Group” as being team states that are characterised by the requirements for shared group processes to achieve group-level outcomes. This study also supports the distinction between “purpose” and “task” as defined by Katzenbach and Smith (1993), highlighting that “purpose” describes affective considerations such as “meaning” for the group’s existence, whereas “task” defines measurable expected outcomes (Adler and Heckscher, 2018; Black *et al.*, 2018). The importance of this differentiation was shown in AC2 in preparation for the match against Kenya, and in AC3 in preparing for a series of matches in the REIC where winning was an unrealistic expectation (measurable task-outcome), but where focus on purpose and affective values was highly motivational.

Finding 3 conceptualises purpose in organisations as a multi-level construct. The importance of this is highlighted in this study in the comparison of the difference in alignment of that multi-level purpose between AC1 and AC3. In AC1 the parent organisation defined an existential purpose (“To qualify for RWC19”) which was consistent with the group-level purpose from the outset. This ensured that resources and cross-level communications were focused on the same desired outcome. The individuals who joined the group were initially *not* wholly aligned to the other levels – players were excited to play at the RWC19 Repechage but were not focused on the actual purpose. Once this problem was identified in the field work, interventions were affected to address the issue, resulting in rapid changes in group efficiency and effectiveness across a range of group-level processes. In AC3, a very different reality existed. At an organisation level, the real purpose for the formation of the group was to avoid a heavy fine from World Rugby for breaking a legally binding contractual agreement. The result was that once the DRV had fulfilled their purpose (met the terms of the legal commitment) they did not provide resource or support for the group beyond the absolute minimum. The group leadership was not aware of the true organisation-level purpose and were therefore left bemused, frustrated and angry as they were faced with achieving an *assumed* purpose (to win matches in the REIC), but without essential

resources. Initial promotion of an instrumental, outcome-based purpose to the players resulted in rejection of the purpose by some individuals (based on their perception of the organisational support, resources and recognition coming from the organisation) and their subsequent removal from the squad; they were neither motivated by, nor believed in the achievability of the group-level purpose. It can be seen therefore that there was misalignment at all three levels, resulting in dysfunctionality in all areas. It was the realisation of this problem by the group leadership that led to the decision to redefine the group purpose to be affectively determined. This leveraged the strength of the affective cohesiveness established within this group and was successful in pulling together the participants to create a highly functional group. This shows that whilst there remained misalignment of purpose between the organisational and group levels, the alignment between group and individuals facilitated efficacy. Indeed, the determination of an affective purpose for the group heightened the affective cohesiveness bonds which became essential for protecting welfare, safety and performance.

However, it should be noted that the creation of an “affective team” which is able to determine its own instrumental goals and can work without organisational resource or accountability is not necessarily beneficial in every circumstance. The level of commitment to group values, identity and pride when they are *different* to the parent organisation can lead to a level of independence and autonomy that may be difficult for the parent organisation to guide or control. This could lead to groups who start to function *outside* of the acceptable parameters of the organisation – groups that become “rogue”. This is a high-risk situation for any organisation. Whilst this research study identified the issue within a rugby squad within a rugby union, it is easy to draw parallels in other organisation settings, perhaps when subsidiary businesses or acquired businesses are isolated from the parent company but have enough affective cohesion and motivation to break-away and operate as rogues. Other examples might include military units, project teams, political groups – the list of potential implications is extensive. It is for this reason that the conceptualisation of purpose as multi-level and multi-functional (instrumental or affective, and process or outcome) is potentially so important.

In addition to the above, the identification in Finding 4 that “shared” needs to define whether it is the processes or the outcome (or both) which is shared has significance in regard to efficacy and safety. The assumption that a “shared purpose” means that every participant will consistently commit their efforts to an entity-level binary outcome is clearly not correct. In a rugby team the desired instrumental outcome is [usually] to win a match. From this perspective, a team endeavour such as rugby requires shared processes to achieve a shared entity-level outcome. However, the example of the Everest disaster provided in this thesis shows the genuine danger of the sweeping

assumption of “shared” to describe both process and outcome. For scholars this differentiation has importance to the understanding and definitions of groups and teams. Of greater consequence to this reconceptualization of the term “shared” is the potential for re-interpretation of much research into the functioning of groups. By removing the assumption of motivation of individuals being aligned to an entity-level outcome, a swathe of group research would need to be reconsidered; from group cohesiveness, to group formation, to psychological contracts in teams; this list is endless. It may be that this differentiation between group process and group outcome in regard to the multi-levels and multi-functions of purpose in groups could catalyse new approaches and insights to group research.

Discussion Theme 3 – Group Formation and Development

Concerns over the cross-sectional designs in empirical group-cohesiveness studies, and lack of consideration of GSD in historic case analysis in both groupthink and group cohesiveness literature were identified from the literature review (Tziner, 1982b; Esser, 1998; Casey-Campbell and Martens, 2009; Rose, 2011; Hall, 2015). This was considered in the design parameters for this study, with the selection of an AR approach not only facilitating close access to the participants to observe the impact of purpose, self-motivation and group cohesiveness, but also allowing a longitudinal examination of the changes in those constructs.

Whilst this study did not set out to examine the stages of development of a group, the temporal nature of the research meant that the group was under observation from its original formation, through to its performance (competition) phase, through an adjournment, a re-formation and then through a second cycle of performance and adjournment. During this time the researcher held a central role in the group, responsible for its functioning as an entity and for the alignment and mental focus of its participants. The stages of group formation identified in Finding 7 capture definable changes in the functioning of the group, and have been determined based upon (a) the application of purpose as a multi-level construct as defined in Finding 3; (b) the interpretation of personal motivations as expressed by participants throughout the study; (c) the application of group cohesiveness as defined in Finding 1, particularly noting the emergence of types of bonds and the fluidity of these bonds temporally; (d) the emergence of the group’s identity and culture, and how that impacted individuals and collective behaviours and standards in concert with the emergent cohesiveness and purpose alignment, and; (e) the development of group processes and participant interdependence temporally. The model identifies a stage *before* the group is assembled (Stage 1 – “Pre-Assembly”) as the determination of existential purpose is defined prior to the group’s formation. In the conceptualisation of group formation offered in this study, it is essential

that this stage is recognised as the clarity and alignment of the multiple levels of purpose forms a primary contribution from this study.

The identification of a novel GSD framework as proposed in this study inevitably draws comparison with Tuckman's model (Tuckman, 1965) and other published models (Van De Ven, Delbecq and Koenig, 1976; Tuckman and Jensen, 1977; Gersick, 1988; Sheard and Kakabadse, 2002; Akrivou, Boyatzis and McLeod, 2006). A critique of these models is provided in Chapter 3, along with a review of more recent developments. As highlighted in the review, these models assume a single type of group in all examples, and do not consider the complexity of task or interdependence required to achieve it. It should also be noted that - without exception - all of these models assume an instrumental group purpose (i.e., a group task) with a shared process and outcome. Such sweeping considerations undermine the important subtleties regarding "purpose" and "task" discussed in this thesis, as well as the important distinction required between shared processes and shared outcomes. A second problem with these models is that they all assume a uni-directional progression for their GSD structures; Tuckman (1965, 1977) assumes a linear progression, Gersick (1988) a punctuated progression, and Akrivou *et al* (2006) a recursive, cyclical progression. The GSD framework proposed in this thesis defines a recursive, bi-directional (progressive and regressive) model, where progression from one state to another is not only defined by group processes and behaviours, but *also* by the requirements dictated by the group purpose (as defined using the conceptualisations provided in this study). Within these cycles of GSD the models suggested by the aforementioned authors may co-exist; for example, for a group formed to perform a task requiring pooled interdependence only (Thompson, 1967), the processes in Gersick's (1988) Punctuated Equilibrium model may be observed, but the group state would be "Loosely Coupled" as defined by this author's GSD framework. Equally, for a group such as the rugby team examined in this study, we could identify progression through all six of the GSD stages proposed herein, each one of which may have exhibited the recursive developments proposed by Akrivou *et al* (2006). This implies that the GSD model proposed in this study is *complementary to* as opposed to *alternative to* existing constructs.

Discussion Theme 4 – Group and Team Processes

The focus in this study on the examination of member self-motivation and the identification of factors that indicated group cohesiveness revealed observations that extended beyond task-efficacy analysis, typical in much organisational performance literature (Barnard, 1938; Simon, 1946, 1947; Tuckman, 1965; Thompson, 1967; Hackman and Morris, 1975; Wageman, 1995; Tesluk and Mathieu, 1999; Poole *et al.*, 2000). The review of literature in areas such as group interdependence

and group purpose revealed an instrumental-orientation to much management literature, where workflow and exogenous organisational design has dominated (Hackman, 2012; Wageman, Gardner and Mortensen, 2012). Subsequent theoretical constructs and assumptions have largely ignored the “human-factor” in organisational performance and design, with endogenous opportunities for improvements in efficacy and organisational understanding being missed (Hackman, 2012; Puranam and Raveendran, 2013; Raveendran, Silvestri and Gulati, 2020). This study has revealed the importance of understanding that by re-focusing on *purpose* and identifying when affective group cohesion is strong, groups can endogenously define their own goals and processes, leveraging affective mechanisms to apply to task interdependent requirements.

As described in Finding 6, the emergence of emotional interdependence in AC2 and AC3 has been referred to as “Affective Interdependence” and describes a level of mutual interpersonal trust where members not only trust the instrumental competence and reliability of their colleagues, but they also trust and care about each other’s emotional and psychological capabilities and needs. In this study there were frequent recorded and unrecorded examples of the use of “brotherhood”, “family”, and “love” as descriptions from players about their teammates. Not only were these words used, but the behaviours and actions that supported the sentiment manifested in self-sacrifice, putting oneself in harm’s way to protect a teammate, and countless gestures of kindness and care that extended beyond instrumental achievement, and deeply into affective bonding. The author personally experienced this as described in his reflections described in Sections 6.1.2.3 and 6.2.2.3. The reason that Affective Interdependence should reside in the task-oriented structures of Interdependence Theory is that the levels of trust and self-sacrifice that it indicates allow a higher level of task-performance to exist, as individuals not only trust each other’s instrumental excellence, but know that they can take higher levels of risk to their own physical or psychological safety, in the knowledge that their teammates will protect them.

This study also offers a challenge to the accepted understanding that groups and teams exist to fulfil an instrumental outcome. Existentially that assertion is accepted by this author; it can be argued that every social group of every type exists to fulfil some instrumental purpose. Indeed, this argument sits at the heart of the philosophical and theological debate of the meaning of life. However, at the level of group and team research it is possible to focus this debate into an understanding that groups can be formed and/or maintained for an *affective* purpose. This study provides evidence on two occasions that – not only is it possible for a group to exist with an affective purpose – but that in groups that have attained a highly affective level of cohesion (described as an Affective Group in Finding 7 of this study) the determination of an affective purpose creates resilience and increases both group efficiency and effectiveness. The study

highlights that such purpose was determined at a group level to fulfil a higher-level (organisational) instrumental purpose. However, the group members *did not know this*. They were bonded to an affective purpose. This insight supports the significant importance of conceptualising purpose as a multi-level construct and recognising that group cohesion can indeed be affectively motivated. This in turn supports the notion that a group or team can be formed for an affective purpose, not just an instrumental task or goal.

Finding 5 – differentiating “groups” from “teams” - is an evidence-based conclusion to the core observations regarding group cohesiveness as a fluid, emergent and multi-dimensional construct, influenced by the multi-level, multi-functional nature of the group’s purpose, and how this affects individual group members’ motivation and desire to belong and contribute to the group and what type of interdependency is required to meet the purpose. By using these factors to define different types of groups, it becomes easier to see when a group might be required, and when a team is likely to be necessary.

On the surface, this may not seem too important; who really cares whether we classify as a “group” or a “team” so long as the task gets done? This question sits at the very core of the challenge of organisational design and leadership; by *not* understanding this foundational question when creating a social group, errors can be made in every aspect of its formation, population, leadership, resourcing, reward, recognition and measurement.

Finally, in Finding 8 the notion of “teamship” has been determined to be a useful descriptive term to capture the concepts defined in SIT (Tajfel, 1974; Tajfel and Turner, 1979) and SCT (Turner *et al.*, 1987; Turner and Onorato, 1998) regarding member-behaviour in support of a group’s culture and norms. It is proposed that the simplicity of this term has benefits for both practitioner and scholarly understanding of the alignment of self-motivational needs of group members, the purpose of the group, and the subsequent impact on the emergence and stability of cohesion within groups.

Summary of Findings and Discussion

The interpretivist approach to the design of this study, combined with the abductive nature of an AR study has provided the opportunity for the identification of several potential contributions to existing knowledge, and has addressed problems and gaps that were identified in the literature review. The longitudinal perspective, spanning two complete cycles of group formation to dispersal, but with a core of participants who were common to both situations, has allowed for the observation of temporal changes in group cohesion - both progressive and regressive - and a

deep understanding of the motives and needs of the participants. The exposure to the parent organisation and the understanding of the characters holding leadership positions in the DRV Executive, along with insight into the external views of the organisation from WR has allowed for the identification of purpose as perceived at different levels of an organisation, and this insight has provided the reconceptualisation of purpose as a multi-level construct. The fluid changes in group cohesion, when contextualised with the multi-level purpose and understanding of self-motivation needs in participants - revealed through the specific practitioner role held by the researcher - has resulted in a unique perspective into the construction of cohesiveness in groups. Finally, the recognition of the transition of selfish to selfless behaviours as the group developed has allowed for the identification of affective interdependence, as well as the assertion that teams are an emergent type of group, defined by affective intergroup behaviours.

Chapter 8 identifies the specific contributions to knowledge from this study, reconciling the findings against gaps in current literature, as well as highlighting limitations and areas for further study.

8 Contributions, Limitations and Recommendations

This study is unique in a number of ways in regard to empirical research examining group and team cohesiveness; a) it has looked at group purpose and self-motivation as antecedents to group cohesiveness, b) it has observed a group through all stages of formation, and c) it has involved the researcher in the emotional experience of being a participant in this journey. The findings regarding group cohesiveness have therefore been drawn from an authentic and prolonged engagement and considered in the context of multiple antecedent and environmental factors. The issue of researcher bias is important for the reader to consider, and indeed the paper has been written with depth and breadth of evidence in order to mitigate this limitation in the reporting and interpretation of the data.

This study makes contributions to theory, methodology and practice as detailed below. In addition, this chapter highlights limitations in the study design and execution, as well as identifying areas for further research.

8.1 Contributions to Theory

The findings from the study provide support for literature across the various topics covered. However, a number of unique insights have emerged from the findings which constitute new contribution to knowledge. These have been categorised into four topic areas as detailed in Figure 8.1.1. Descriptions of each contribution is subsequently provided in this section.

Cohesiveness	Purpose	Type and Development	Processes
<ul style="list-style-type: none"> • Individual-level construct • Temporally fluid emergent state 	<ul style="list-style-type: none"> • Multi-level, multi-functional construct • Shared purpose is either/and process and outcome 	<ul style="list-style-type: none"> • Typology and stages of development 	<ul style="list-style-type: none"> • Affective interdependence • Teamship

Figure 8.1.1 Summary of contributions to theory

Contributions are presented within topic areas and are numbered sequentially for ease of reference.

8.1.1 Group Cohesiveness

The findings contribute to the literature on group cohesiveness with three specific conceptualisations:

1. *Group-cohesiveness is constructed at an individual unitary level, and manifests at a group-level.*

This addresses the gap in literature identified in Chapter 3 regarding inconsistency in empirical studies regarding the unitary construction of group cohesiveness. Studies that seek to measure the impact of group cohesiveness on group outcomes should examine the construct at a group-level. Studies that seek to understand the development of the multiple dimensional functions and structures of group cohesiveness should conceptualise and design at an individual level.

2. *The structures of group-cohesiveness (task-cohesion, interpersonal-cohesion and group-pride cohesion) develop temporally as bonds extending from the individual to the structures of the group (its purpose, members and identity), and these bonds have a hierarchy of primacy determined by a) the interdependence requirements of the tasks required to fulfil the purpose, and b) alignment of self-motivational needs to group purpose.*

This addresses the gaps in literature regarding the temporal construction and development of group-cohesiveness, the importance of exogenous task-interdependence determination in organisational and group design, and the dearth of empirical studies examining the antecedents of group cohesiveness measured at an individual unitary-level.

3. *Group-cohesiveness is a temporally fluid emergent state.*

This addresses the gap in literature that positions group cohesiveness as a linear emergent state with stable bonds of both functional and structural facets of cohesion. The study identified that group cohesiveness is both a progressive and regressive group state, and also that the bonds of cohesion change in primacy over time, influenced by the self-motivation of members, and both the purpose and identity of the group. This is an important contribution to the literature on group cohesiveness.

8.1.2 Organisational and Group Purpose

The findings offer two specific contributions to the literature on group purpose and on groups and teams definitions:

-
4. *Group Purpose is a multi-level, multi-functional construct defining the reason for existence of a group, whose functional and structural properties can serve to provide clarity of group type, structure and process requirements.*
-

This addresses the issue identified in group and team literature regarding the lack of differentiation and importance between “purpose” and “task”. This contribution clearly positions “purpose” as a higher-level construct in group design, providing meaning to the group and its participants. The review of literature highlighted the dominance of exogenous, task-oriented definitions and conceptualisations of teams in the 20th Century, also identifying a need for change in these perspectives in the modern, interconnected, distributed and socially-altered global environments in the 21st Century (Hackman, 2012; Wageman, Gardner and Mortensen, 2012; Puranam and Raveendran, 2013; Raveendran, Silvestri and Gulati, 2020).

The concept of “purpose” as a multi-level, multi-functional construct as suggested in this paper is considered to be an incremental contribution to literature and knowledge, providing scholars with focus on examination of “meaning” as it is perceived, interpreted and embraced at each level of an organisation.

-
5. *“Shared purpose” in groups incorporates both shared process and shared outcome, and is an important consideration in determining group membership, processes, member-motivation and outcome expectation.*
-

This addresses the ubiquitous use of the terms “shared-”, “common-” and “collective-” in regard to purpose in the definition of groups and teams which can be misleading and problematic, and adds to the exhortations of other scholars for the need to define “shared” more concisely in group and teams work (Adler and Heckscher, 2018; Black *et al.*, 2018).

An integrated model of the functions and structures of group purpose has been offered, incorporating both vertical and horizontal importance and application of the framework.

8.1.3 Group Type and Development

-
6. *Groups develop temporally through a series of six reciprocal stages, representative of different group types as determined by the group purpose and interdependence requirements of group tasks.*
-

A major contribution of this study is the definition of a novel framework for GSD, comprising both developmental stages *and* group types based upon group purpose, exogenously determined interdependence requirements, observable group cohesiveness and self-motivation needs. A recursive model has been offered which does not assume linearity or the need for all stages of development to be necessary for all groups. The model identifies the transition from “group” to “team” based upon affective cohesion and behaviours. This model is considered to be complimentary to existing models of GSD.

This contribution addresses three key issues in current literature: a) the assumption made in current models of the ubiquitous application of suggested models, irrespective of group type or group purpose and tasks; b) the assumption in existing models of a progressive flow through all stages of development; and c) the problems with temporal linearity in the frameworks offered by Tuckman (Tuckman, 1965; Tuckman and Jensen, 1977) and derivative GSD frameworks (Sheard and Kakabadse, 2002).

Finding 7 offers a recursive model for GSD which provides for both progressive and regressive interpretation of group development, and is complimentary to existing models, which can still be used to evaluate group development *within* the progression of each stage of development in this model.

8.1.4 Group Processes

This study contributes to groups and teams process literature in three specific areas:

-
7. *Affective Interdependence is an additional type of group interdependence extending beyond instrumental types.*
-

Finding 6 identified that in groups displaying high levels of affective cohesiveness, selfless behaviours and a clear *shared purpose*, affective interdependence can emerge between group members which has a positive effect on task achievement.

This adds to the current task/workflow literature and models which focus on instrumental activities in group interdependence as opposed to affective activities (Thompson, 1967; Pennings, 1975; Van De Ven, Delbecq and Koenig, 1976). This contribution is different to the assertions of social mechanisms and collaboration in group interdependence (Deutsch, 1949; Wageman, 1995, 2001) in so much as its suggestion that attainment of high levels of selfless and emotionally supportive behaviours reflect a development beyond reciprocal and intense transactional interdependence suggested in existing models.

8. *A “team” is an emergent group state, identified by the presence of selfless behaviours, group identity and group self-regulation of group culture and norms.*

This contributes to the complex body of literature that seeks to differentiate between groups and teams. The interpretations from Finding 5 suggest that the notion of “team” is determined by the endogenous behaviours of its members, as opposed to the exogenous designs of its architects and leaders.

9. *“Teamship” is a term that can be used to capture the descriptions of member behaviour associated with SIT (Tajfel, 1974; Tajfel and Turner, 1979) and SCT (Turner and Onorato, 1998) where members willingly and selflessly exhibit behaviours that support the group’s identity, culture, norms and purpose.*

Finding 8 addresses the problem in literature where this term is currently undefined, and not associated with existing theoretical constructs, and therefore has an assumed meaning. The determination of “teamship” in this context therefore does *not* suggest that the concept is a novel insight into group and member behaviour, but instead places the term clearly in context of existing social and psychological theory and provides a useful “single-word” description of group member behaviours and attitudes associated with the aforementioned theories.

8.2 Contributions to Method

Three contributions to AR method have been identified. These are summarised in Figure 8.2.1.

AR Method
<ul style="list-style-type: none"> • Retroduction in third-person analysis • Critical realism in second-person in vivo analysis • Post-study reflexive interviews for trustworthiness and methodological integrity

Figure 8.2.1 Summary of contributions to AR method

-
- 1. Applying a retroductive approach to third-person data analysis ensures the integrity of the abductive co-creation of knowledge required in Action Research studies*
-

A specific challenge for AR studies is how generalisable theory can be created from the third-person analysis of data whilst maintaining the philosophical integrity of the methodology (Blaikie, 2010; Easterby-Smith, Thorpe and Jackson, 2015; Saunders, Lewis and Thornhill, 2016; McNiff, 2017; Coghlan, 2019). Adopting recognised inductive data analysis of raw data would result in an interpretation of meaning and learning from the study that was abstracted from and separate to the meaning defined by the participants. This separation of knowledge from the participants would mean that findings of the study could no longer be considered co-created knowledge (McNiff, 2017; Coghlan, 2019). However, the paradox for AR scholars is how to extract generalisable theoretical knowledge from in vivo practical knowledge *without* compromising the ontological and epistemological integrity of the AR study. This problem was overcome in this study by adopting a retroductive approach to the third-person data analysis. This means that the *raw data* were not inductively re-coded to create themes. Instead, the *2nd Person* data analysis (which was the reality as validated by the participants *in vivo*) was used to create themes from the data, which informed the generation of findings and contributions. This means that all of the interpretations are grounded in the co-created knowledge, maintaining the evidential sequence and integrity. It should be noted that this approach to third-person analysis requires detailed and extensive second-person analysis to provide for the trustworthiness required for the scholarly standards expected (Heron and Reason, 1997; Creswell, 2013).

2. *The practical application of a critical realist epistemological position in an AR study allows the researcher to extend beyond the extensive observational data and personal researcher bias and uncover other explanations for observed social phenomena.*

A major theoretical contribution from this study is the assertion the group purpose is a multi-level construct. This finding has illuminated several other important insights and contributions as described in the preceding sections and chapters. These insights emanated from the application of a **critical realist** approach to examining how “purpose” was affecting the individual participants and the resultant group cohesiveness at the beginning of AC3. Considered through a critical realist lens, this showed an *actual* reality for the participants with regard to purpose. As detailed in the study, adopting a critical realist stance revealed an observable, an actual and a real perspective of “purpose”. This led to a breakthrough in understanding of the dynamics across vertical and horizontal levels and allowed for the generation of understanding and subsequent theory.

3. *Post-study reflexive interviews with group participants allows for the completion of the Evaluating Action phase of the final AC, provides a participant-check of researcher interpretations, ensures the integrity of the abductive foundations of the AR methodology and provides a form of intercoder reliability checking that enhances the trustworthiness of findings and contributions from the study.*

A challenge for AR scholars is how to maintain the integrity of the abductive approach to the study during the writing-up stages whilst also meeting the trustworthiness requirements of a doctoral thesis (Coghlan, 2011; Creswell, 2013; McNiff, 2017). Involving third-parties to conduct inter-coder reliability checks would introduce an inductive and objective interpretation of the data and would be inconsistent with the epistemological foundations of the AR approach. This research incorporated post-study interviews with selected participants which allowed (a) reflection of the individuals to a series of questions posed by the researcher that had emerged as potentially significant in addressing the research problem, and (b) opinion and validation to be offered from the participants of the researcher’s developing interpretations and theorising. This ensured that the knowledge being created retained its necessary co-creation with the participants, whilst also moderating the potential researcher bias.

8.3 Contributions to Practice

In this study, selflessness and affective cohesion emerged as central themes in the development of the team. The desire of the individual to be part of a selfless group has provided the insights into their alignment – or misalignment – to the purpose of the group, which in turn has highlighted how purpose is conceived and perceived at multiple levels, as well as revealing the “sharing” of a purpose can be dangerously misinterpreted. It was clear that the group studied attained a level of cohesion that extended beyond task-orientation to an affective state, which became inherently self-managing, efficient and effective in its process, and provided satisfaction for its members by meeting their self-motivational drivers. The longitudinal design allowed the recognition of various stages of development when assessed through lenses of purpose, processes, motivation and cohesion. This in turn – when linked to the importance of “purpose” – led to the realisation that an organisation that can match the existential purpose to the likely group processes needed to achieve it can design their group and its membership, leadership and resourcing accordingly.

The contributions from this study are core to rugby and sport. However, the nature of the findings suggests a generalisability beyond sport in-line with the gaps in literature which were not limited to sport. Figure 8.3.1 shows the multiple levels of practice-based contributions and generalisability.

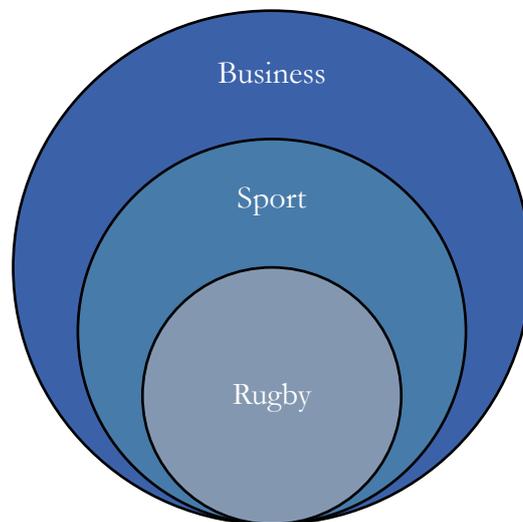


Figure 8.3.1 Multiple levels of practice-based contributions

The main contributions to practice from this study are:

1. Differentiate between “purpose” and “tasks”

The findings from literature and the fieldwork clearly identify that “purpose” provides meaning, and “task” defines activities. In traditional exogenous organisational design approaches, the workflows/processes and both input and output dependencies are pre-defined, and the resources are applied to the model. This occurs in professional and international sport as it does in non-sporting organisations. Whilst this approach may appear to be efficient - and indeed may be so for highly predictive and repeatable task-oriented processes - in environments of uncertainty where high levels of collaboration, problem-solving and communication are required, the exogenous imposition of process-design and task-definition is less appropriate. In this study - where the nature of rugby requires high levels of teamwork and *in vivo* adjustment - it is appropriate to allow the endogenous determination of interdependence needs, based upon real-time evaluation of circumstance. Whilst task-flow pre-determination may provide help, it is more likely to cause inflexibility and an inability to adapt. However, by focusing groups on “purpose” in such environments, they can be given the flexibility to problem-solve and improve efficacy in real-time based upon actual constraints and opportunities.

The contribution from this study of conceptualising “purpose” as a multi-level, multi-functional construct can guide practitioners to consider how meaning is understood and interpreted at each level, and to evaluate how this aligns with self-motivational needs of members, as well as the resourcing and supervision requirements at the group-level.

The recommendation for practitioners to distinguish between shared processes and shared outcomes in a group’s purpose allows leaders to identify member motivation that is consistent with the group’s needs, and management processes that are most suited for both efficacy and safety.

Recommendations for Practitioners

There are three key elements for practitioners to consider from this contribution; 1) the important distinction between “purpose” and “task” (where “task” can be assumed to be interchangeable with “goal”, “aim” or “objective” or “outcome”); 2) the acknowledgement that “purpose” may appear to be consistently applied and interpreted in a group, but in reality may have different interpretation and perceived implications at the organisational, group and individual group-

member level; and 3) that “shared” in the context of either “purpose” or “task” comprises two different components - the group processes needed and the whether the nature of the outcome can be experienced only as a collective achievement, or as a collection of individual achievements.

The first consideration - differentiating between “purpose” and “task” - is suggested by this author as foundational in group design and leadership. It may help practitioners to re-frame these words as “meaning” and “activities”. When establishing a group in any context, the leader can determine whether it is more important that the members understand the “meaning” of the group (i.e., a more philosophical understanding of “why” it has been formed and what social contribution it hopes to make) as opposed to the specific activities and outcomes that are required (i.e., the determination of “what” must be achieved and “how”). In groups where the outcome requires high levels of pooled, sequential or even reciprocal interdependence, a leader may decide that “meaning” is not a pre-requisite to successfully satisfying the reason for the formation of the group. In such circumstances, the group would be focused on instrumental activities, instrumental cohesion, and the efficacy of workflow and task performance. However, in groups that are formed to achieve more complex outcomes, which require high levels of affective-cohesion and affective interdependence, leaders may consider that their role is to determine and communicate the “purpose” (“meaning”) of the group’s role, allowing members to sense-make its existence and their individual and collective roles within the group. The subsequent identification of tasks required to fulfil the purpose, and the most effective processes and allocations of resources and skills can then be a more collective endeavour, which in turn fosters both individual and collective commitment, ownership, accountability and pride.

The second consideration - that purpose exists on multiple levels - has potentially significant implications in regard to group efficacy, member commitment and motivation, and member safety and welfare. This study showed that purpose exists at 1) an organisational level, defining the reason for the formation of the group; 2) at a group level, where the purpose may have been translated as a “task”, or have been re-framed to provide instrumental focus; and 3) at a group-member level, where individuals re-interpret the purpose in context of its implications to themselves and their conscious or unconscious self-motivational needs. Whilst the purpose may be interpreted differently at each level - determined by the motivating factors external to the group in each level - the important consideration is that the multiple-levels of purpose are aligned and support the fulfilment of purpose as interpreted at each level. This study showed how purpose was both common (i.e., “the same”) and aligned (i.e., “different”, but complementary) at the three levels in AC1 and AC2, resulting in the development of the multiple types of group cohesion, and the subsequent positive impact on group performance (and therefore the fulfilment of the

motivational needs of all three levels). This study also showed what happens when purpose is both *different* and *not aligned* at the various levels, and the implications to all three levels of such misalignment. In this group, the strength of the bonds of affective cohesion allowed the group leadership to re-define the group purpose from an instrumental outcome to an affective outcome, which created alignment vertically across the group and group-member boundary, and horizontally within each level. Practitioners engaged in non-functioning groups and teams should consider how “purpose” is interpreted at each of these three levels and seek to identify if a) the purpose is common, and/or b) if it is aligned.

The third consideration proposed for practitioners in regard to purpose is the clarity of determination of the nature of the “sharing” of the purpose or task. This study clearly identifies the difference and importance of shared processes and shared outcomes. “Teamwork” is a term that most people understand as the collaborative and cooperative efforts of group members to achieve an outcome. It is generally *assumed* that this implies that the outcome is also “shared”. However, this is a flawed and potentially dangerous assumption. The groupthink case study of the 1996 Everest disaster examined in this thesis highlights this issue. In that scenario, the processes required to successfully climb Mount Everest requires exceptionally high levels of teamwork and collaboration. However, the ultimate goal of each individual (their “purpose”) was *not* to ensure that every group member successfully summited the mountain together. Their purpose was to attain a selfish, individual goal, which could be attained irrespective of the outcomes to their fellow group-members. In this case study, the implications were profound, with the deaths of many groups members resulting from a collective abandonment of a perceived shared group purpose in favour of individual ambition. The “teamwork” necessary to achieve the selfish goal was nothing more or less than each individual “using” each other to meet their own needs. This type of misinterpretation of collective and shared purpose is observable across every aspect of society - whether in “Executive Teams” where colleagues collaborate to achieve organisational performance requirements, but where individuals are rewarded, recognised and promoted irrespective of their colleagues’ needs or attainments, or in political parties, many individual sports (such as motor racing, cycling, *etc.*) through to classwork for students, or university faculties and departments. This list is endless. By understanding the nature of “shared” in the context of the group purpose and endeavour, a leader can select members, define group processes and roles, and implement group control and oversight that both mitigates and leverages the differences between individual-level and group-level ambition.

2. *Understand that groups are formed, but that teams emerge.*

The expectation - or requirement - to create “teams” to fulfil purposes and tasks assumes a potentially significant management and supervisory overhead, which often may not be required. Well-directed, organised and aligned groups are often appropriate for repeatable, predictable and non-complex tasks, where workflows and resources are predictable and interdependence between workflows is minimal (for example in “pooled” and “sequential” task interdependence). This does not mean that social discourse, interaction and bonding are not appropriate between group members, simply that collaborative teamwork and reciprocal interdependence may not be needed, and should not necessarily be invested in. Understanding that “teams” emerge temporally, and are dependent on member-selflessness, interdependent emotional (affective) support, defined culture and self-regulation of the same, and a shared purpose, highlights that creating an effective “team” is required only in specific circumstances. It is also likely that the management and leadership skills and style are different for the different purpose and task interdependence types.

By taking time to understand the group purpose it is possible to determine the requirement for a group or team to achieve it, and subsequent organisational design decisions can be made accordingly.

Recommendations for Practitioners

This research asserts that a “team” is typified by the temporal development of affective-interpersonal and affective-group pride as the primary bonds of cohesion within a group, as well as a task that requires high degrees of interpersonal collaboration, communication and coordination. It is also found that “teams” are differentiated from “groups” in that individual group members willingly put their own personal needs or wants behind those of their fellow group members. The implication of this is that tasks undertaken by “teams” in this proposed re-conceptualisation of the term require shared endeavour and processes in order to achieve the desired outcome. However, in practice this is often not the case. A significant number of group tasks in any environment may require the *contributions* of multiple individuals in order to achieve the goal, but it does not necessarily mean that those individual tasks require collective action, but rather that they require appropriate coordination. Indeed, in many circumstances the distraction of affective-interdependence and selflessness may negatively impact on the performance of a group member from the successful completion of their own task-contribution requirements. Therefore, fostering a culture of overt affective cohesion and selflessness in many circumstances may prove

counter-productive to the existential purpose of the group, and undermine the efficacy its performance.

Acknowledging the importance of this, practitioners should invest appropriate effort in the design of their group to understand the nature of the outcome requirements of the purpose, and also of the individual and group processes that may be required to achieve it. If it is identified that the outcome is likely to be achieved by the successful execution of a series of pooled, sequential or reciprocal task-interdependent activities, there may be no requirement to invest in the activities of “team-building”, but instead to focus on the individual interdependent processes, and the coordination of the interfaces between individuals in the workflow transitions.

Equally, where the conclusion of the analysis of the type of group indicates that affective-cohesion and interdependence *are* necessary (such as those in a rugby team, or perhaps in emergency services, medical teams or military groups), leaders need to be cognisant that the structures of affective behaviours cannot be *imposed* or *expected* on the individuals or the group. These are emergent behaviours based upon the findings regarding interpersonal and personal behaviour detailed in this study. The role of the leader in this situation is to create an environment in which these bonds and behaviours can form, including such considerations as; member selection based on individual self-motivation needs; clarity of definition of both shared outcomes and processes; development of a unique group identity, culture and norms; recognition and reward for personal behaviours that support the group’s norms (as opposed to rewards for individual outcome achievement); and the proactive avoidance, identification and intervention to selfish or egotistical behaviours in any group member (including the leaders). Focus on these considerations may assist in creating a climate within a group from which a team may emerge. It follows therefore that leaders cannot *force* the formation of a team; a team develops if the purpose requires that level of interdependence, and the environmental considerations described above are nurtured and encouraged by the leader and the group members.

-
3. *By understanding the type of group required in “2” above, it is possible to predict the need and type of group cohesiveness that may be necessary to meet the group purpose or task, which in turn allows identification of individuals who are genuinely self-motivated to contribute positively to the group endeavour.*
-

This sits at heart of this study; alignment of group purpose and self-motivational needs to the emergence of group cohesiveness, which in turn contributes to group outcomes. This study

identifies group cohesiveness as an individual-level construct of three bond types which emerge and change temporally. This means that group leaders should be focused on understanding *in depth* what the personal motivations of their group members are and ensuring that those needs can be met by membership of the group. In higher-risk, extreme environments this alignment can have critical impact on safety and welfare. Traditional group-level leadership behaviours and actions may satisfy the self-motivational needs of the *leader*, but such collective interventions may isolate or exclude group members, at the cost of the overall group cohesiveness and subsequent efficacy.

Recommendations for Practitioners

Leaders often invest significant time, resource, budget and energy into multiple activities designed to develop their “teams”. In practice, these extend from teambuilding training and courses, through to team social events, corporate communications and briefings, organisational branding and promotion, individual personal development, coaching and training, leadership skills development, compensation and benefits plans designed to reward team collaboration. The list of both established and innovative approaches to developing a “team” is extensive. However, the recognition of group cohesiveness as a temporally fluid and emergent state, with three distinct and identifiable types (task, interpersonal and group-pride), which serve two different functions (instrumental and affective) allows leaders to a) determine what type of cohesiveness they are likely to require in the context of the purpose (as defined in this study), b) recognise what types and strengths of cohesion currently exist in their group, c) identify what needs to be developed in the group to meet the purpose, and d) determine intervention plans that are most likely to develop the types of group cohesiveness required.

-
4. *The combination of a) accurate determination of group purpose, b) identification of group type or requirement for a “team”, and c) interpretation of the levels and types of group cohesiveness and member-profile needed leads to the potential to use this study’s proposed model of GSD to monitor and support group development to the appropriate stage.*
-

Existing GSD models, such as Tuckman’s (1965) Forming, Storming, Norming and Performing are well-understood and adopted. By using such models to monitor development of this study’s reciprocal model of stage development and group typology, practitioners can assess a) what type of group they need to have, and b) how they are progressing based upon the empirical suggestions

made in this model in combination with the knowledge of generalised group development stages in other frameworks.

Recommendations for Practitioners

The GSD model defined in this study has potentially significant implications for practitioners. Its determination has been based on the observation of *two complete cycles* of group formation to dispersal. The nature of the purpose in rugby requires that a team *must* be formed to compete successfully (in accordance with the definition of “team” determined in this study; that being shared group-processes to achieve a shared group-outcome, with affective cohesion and interdependence, defined group identity and norms, and selfless behaviours of group members). This means that this study has empirically captured the stages of development of a group from its initial assembly, all the way through to its performance phase. Based upon the analysis of observations regarding self-motivation, group purpose, team processes (interdependence, taskwork, teamwork), emergent types of instrumental and affective group cohesion it was possible to isolate specific phases of development, and what each of those phases offered in terms of those observed factors. This leads to a model which not only shows a recursive development cycle, but also recognises that *each of these stages in its own right may constitute an appropriate group state requirement* dependent on the group’s purpose.

For example, if we were examining the type of group required in a finance department to deliver a group purpose of consistently accurate and compliant fiscal control and reporting, we would identify that there are multiple specialist financial processes that must each be completed in sequence, and for which the next stage of financial control is dependent. This implies a sequential interdependence. In such environments, one might deduce that instrumental (task) cohesion is necessary, but that there is little *requirement* for any affective relationship or cohesion. It may be determined therefore that a finance department would be either a loosely-coupled or tightly-coupled group.

However, if we were to examine a project management leadership group, where each member has specific accountability for their own projects, resources, outcomes and performance, we might define this as a loosely-coupled group at a leadership-group level, but within each project group, we might need high levels of selflessness, trust, collaboration and both affective and instrumental cohesion and interdependence. We might therefore define the project team as either an Integrated Group, or an Affective Group.

A key consideration in determining the *desired* group type - especially in the Integrated and Affective Groups - is the level of affective cohesion and selflessness present in an Affective Group.

This implies that the interpersonal relationships are a key factor, which in turn has implications for the introduction or loss of members and the subsequent impact on group efficacy. It is the opinion of this author that the planned development of Affective Groups should be carefully considered in the context of their flexibility to change in membership or purpose, and the potential for the strength of the affective bonds to overwhelm both the organisation's instrumental purpose, and the becoming totally independent from the organisational culture, values, standards and norms. Also, it could be argued that groupthink is far more likely to emerge in Affective Groups than in any other group type.

8.4 Summary of Contributions

Overall, this study posits nine contributions to theory, three to methodology, and four to practice, based on a rigorous execution of the research design, and a comprehensive review of relevant literature. However, the limitations of generalisability of AR method in a single case is of significance in this thesis. The following sections examine those limitations, delimitations and consequent areas for further research.

8.5 Limitations and Delimitations

8.5.1 Limitations

This study contains certain limiting conditions some of which are related to the common critiques of qualitative research methodology in general and some of which are inherent in this study's research design. Careful thought has been given to ways of accounting for these limitations and to ways of minimising their impact. Unique features of qualitative research methodology present potential limitations in its usage. Because analysis ultimately rests with the thinking and choices of the researcher, qualitative studies in general are limited by researcher subjectivity. Therefore, an overriding concern is that of researcher bias, framing as it does assumptions, interests, perceptions, and needs. One of the key limitations of this study is the issue of subjectivity and potential bias regarding the researchers' own participation and engagement in the core purpose of the sample organisation. The role assigned to the researcher by the head coach required a level of immersion, subjectivity and *in vivo* interpretation of factors covered by this research study; specifically, personal motivation, shared and common purpose, the need for instrumental success, and the requirement for the researcher to be a trusted participating member of the organisation being investigated.

A related limitation based on the role the researcher in this study was the potential that other participants may have had difficulty adjusting to the dual role of the researcher as both a key member of the leadership and coaching team, and also as an objective academic researcher. There was possibility that individuals may have provided responses during and after the study designed to impress or influence the researcher. This phenomenon is referred to by Maxwell (2013) as *participant reactivity*. Whilst this limitation may have existed at early stages of the project, the prolonged engagement and commitment of the researcher to the role in practise resulted in an openness and trust with the participants that provided support for them emotionally and practically during the engagement. As shown in the participant responses during interviews the role of mental excellence coach was valued highly by the individuals, and it is interpreted that any limitation regarding the research role was mitigated by both longevity and context of the engagement.

In addition to the measures described above and in recognition of these limitations the researcher also took the following measures. First, the research purpose of the project was explained to individuals and the group at the beginning of engagement, by both the researcher and the research sponsor. It was emphasised that this academic purpose was to investigate group social processes as opposed to individual assessment, highlighting that there was no risk or potential gain to any individual. In addition, all interviews and references were anonymised, and participants were advised of this accordingly. Secondly, the coaching role of the researcher was explained and endorsed in detail, and the scope of that role was documented and sent to all participants for their review and comment, as well as being promulgated on notice boards in the training facilities. This role description is included in Appendix I.

Finally, a further potential limitation of the study was the importance of the practitioner role held by the researcher in regard to the overall performance of the group and of the individuals. There is a potential risk that weaknesses or errors in the researcher's execution of this role could be masked in the reporting. This limitation is mitigated through the extensive use of data triangulation of different data types in the second-person analysis. In addition, the post-study reflexive interview with participants was conducted to gather participant reflective sense-making and recollection of key events, as well as to illicit challenge to the researcher's interpretations. The researcher has endeavoured to provide an objective critique of his personal performance in the first-person reflections included in each AC.

8.5.2 Delimitations

A major delimitation of this study was that the research design restricted the sample choice to a high-performance sports team, which in itself constrains the demographic generalisability of any findings; namely that the research was conducted with the men's rugby team in Germany where the age of the playing participants was in the range of 21 to 36 years old and comprised individuals who were consciously motivated to participate in a competitive team sport at an international level. It could therefore be argued that this group is not representative of most social settings outside of this particular sporting situation. Whilst this delimitation is present as a result of the design of the study, the author has attempted to mitigate its impact in three specific ways. Firstly, within the data analysis the author has attempted to provide thick and rich description, as well as detailed information regarding the context and background both to the study the organisation and the situation. Secondly, the data analysis has been conducted to seek observations regarding social behaviour and not only sports related observations. Thirdly, the author has endeavoured to relate observations to current theory and literature in order that third parties may generalise social activities and behaviours into other environments.

8.6 Areas for future research

The limitations and delimitations of this study highlight the potential constraints of generalisability of the findings and contributions. The abductive research strategy on which AR is based aims to construct theories from social actors' language, accounts and real-world events to generating meaning and interpretation (Blaikie, 2010). AR specifically involves the participants in this sense-making process with the intention of affecting intervention-driven change. The employment of a retroductive approach to the third-person analysis has provided a level of objectivity to the findings whilst maintaining those findings as an interpretation of the participant reality. Potential researcher bias has been highlighted throughout the thesis, along with description of actions taken to mitigate this bias. These processes provide for both trustworthiness and authenticity to the study's claimed contributions. However, the proposed contributions now require examination through the execution of other scholarly study.

Recommendation 1 – Re-use the research design in alternative populations to examine the same research questions.

The research problem identified a lack of empirical research into the influences of purpose and motivation on group cohesion. The design (including research questions), methodology, method

and approach to analysis in this study should be applied into other populations and environments that address the delimited constraints defined in Section 8.4.2.

Recommendation 2 – Examine the two “Purpose” theories.

Two theories relating to organisational and group purpose have been proposed. These require deductive examination in a range of different environments to support or disprove the assertions made in this study.

Recommendation 3 – Explore the proposed Typology and Group Stage Development.

The study proposes a novel definition of GSD which incorporates a typology of groups. The two constructs need to be explored or tested on a longitudinal basis, incorporating all the proposed stages of development, and in consideration of the factors identified in the proposed model.

Recommendation 4a – Examine the fluid formation of primary, secondary and tertiary bonds of cohesiveness.

Literature highlights the challenges of creating experimental conditions that allow the formation of genuine affective cohesiveness. This suggests that examining this concept will require a longitudinal study. It is likely that to identify the emergence of these bonds, a researcher would need to execute a longitudinal observation approach to any research design. Selection of sample should include consideration of the purpose of the group, and whether that purpose requires group processes that would necessitate or instigate the generation of affective bonds of cohesion. This implies that sample selection should require reciprocal interdependence.

Recommendation 4b – Examine the temporal change in self-motivation of group members at the different stages of development of the group and of emergent cohesiveness.

Examination of self-motivation could employ a longitudinal survey instrument, or observation, and/or both structured and semi-structured questioning. This opens up a range of research designs but delimited by the design requirements highlighted in 4a and 4b.

Recommendation 5 – Review the thematic template and additional findings to initiate further studies.

Themes in third-person analysis in Section 6.3 emerged from the data analysis of Section 6.2 which have *not* been examined further in this paper as the concepts were out of the scope of the purpose

and questions posed by this study. Examples include (1) leadership behaviours, (2) power, (3) resilience, (4) groupthink, and (5) emotions. The detail of each of these themes requires further analysis and may be considered for future research design into group cohesiveness, for example, exploring how leadership behaviours impact the development of the stages of groups, or how different leadership behaviours inhibit or enhance group interdependence and cohesiveness.

9 Conclusion

This study was inspired by the researcher's desire to understand "teamship"; a term increasingly being used in practitioner references for teams, but without scholarly examination or definition. The journey of exploration over seven years of Master-level and Doctoral-level research has resulted in a clear understanding and definition of the term. "Teamship" is an individual-level concept, and it describes the voluntary behaviours and actions of a team member that support the purpose, culture and norms of a group or team. The field work provided extensive evidence of the emergence of "teamship" over the duration of the study, and in this group, "teamship" not only included task-oriented behaviours, but – more importantly for the efficacy of the teams – affective-oriented behaviours. This outcome satisfies one aspect of a DBA study, which is the need to contribute to practice. However, the study has also been successful in determining that the notion of "teamship" is consistent with depersonalisation of group member motivation and behaviour supportive of group norms and identity described in SIT (Tajfel, 1974; Tajfel and Turner, 1979) and SCT (Turner *et al.*, 1987; Turner and Onorato, 1998). This places the notion of "teamship" within the group and teams literature as a useful addition to knowledge, allowing future researchers to refer to the term with context and theoretical confidence.

The iterative line of inquiry of literature that informed the design of this study identified three major issues associated with group cohesiveness; 1) the lack of examination of its antecedents, 2) inconsistency in the unit of measure in empirical and case studies, and 3) a lack of temporal considerations in the corpus of research purporting to offer conclusions on the primacy of types of cohesiveness in groups. The design of this study has involved the researcher in two full cycles of assembly to dispersal in two different tournaments, allowing temporality to be comprehensively considered. This has led to the identification of the emergence and fluidity of group cohesiveness and has allowed observation of internal and external factors that support its formation, or catalyse its fragmentation, leading to the conclusion that group cohesion is an emergent state, which is regressively and progressively fluid, with bond types developing and changing in primacy longitudinally. This is an important contribution to current literature and knowledge.

The critical realist approach and the abductive design of the AR study has encouraged both deep researcher reflection and inspired the examination of potential layers of reality in the lived-experience. The outcome of this philosophical and methodological rigour was the recognition of multiple-levels of interpretation of purpose between the vertical layers of the organisation, resulting in the reconceptualisation of purpose. This has relevance to scholars in all areas or

organisational and group research, and to practitioners with organisational and group responsibilities.

The longitudinal engagement has not only allowed the determination of group cohesiveness as a fluid state but has resulted in a clear identification of demarked stages of development of this group, summarised in this study, and delimited by group purpose, task interdependence, self-motivational needs, observable group cohesion and group identity. The model of GSD also defines a group typology for each stage and recognises that not all groups need to go through all stages. It is also identified that GSD is a recursive process, with both progression and regression in the contributing factors and the resultant stages of development.

The access to participants was unrestricted in this study, and the researcher's practitioner role was beneficial to the individuals and the group. This allowed deep insight into the motivation, emotions and frustrations of the participants, facilitating a trustworthy interpretation of the individual-level association between self-motivational needs, group purpose and group cohesiveness. This has resulted in the suggestion that a "team" is an emergent group state, based upon the establishment of group identity, selfless affective group-member behaviours, and group self-regulation and maintenance of group culture and norms.

The purpose of this study was to examine the influence of group purpose and self-motivation on cohesiveness in groups. The findings from the study offer nine specific contributions to theory as a result of the research design and execution. In addition, four core contributions to practice have been suggested, along with three contributions to AR methodology which this researcher believes will be of benefit to future AR scholars in their research planning and execution.

The study was inspired by an interest in a notion of "teamship" and the dearth of existing literature examining the concept. The conclusions offered in this thesis provide the foundations for future researchers to explore the concept further and to investigate the proposed association of "teamship" with group cohesion, affective interdependence, self-motivational needs, Self-Categorisation and group purpose.

References

- Adair, J. (1986) 'Effective Teambuilding'. Gower, Aldershot.
- Adler, M. and Rungta, S. (2002) 'Integrating new members into an ongoing therapy group: The Life-Line technique', *Group*, 26(4), pp. 283–296.
- Adler, P. and Heckscher, C. (2018) 'Collaboration as an Organization Design for Shared Purpose', in Ringel, L., Hiller, P., and Zietsma, C. (eds) *Toward Permeable Boundaries of Organizations?* Chichester: Emerald Publishing Limited (Research in the Sociology of Organizations), pp. 81–111. doi: 10.1108/S0733-558X20180000057004.
- Akindayomi, A. (2015) 'Customized Assessment Group Initiative: A complementary approach to students' learning', *Accounting Education*, 24(2), pp. 102–122. doi: 10.1080/09639284.2015.1015148.
- Akrivou, K., Boyatzis, R. E. and McLeod, P. L. (2006) 'The evolving group: Towards a prescriptive theory of intentional group development', *Journal of Management Development*, 25(7), pp. 689–706. doi: 10.1108/02621710610678490.
- Alderfer, C. P. (1977) 'Organization Development', *Annual Review of Psychology*. Annual Reviews, 28(1), pp. 197–223. doi: 10.1146/annurev.ps.28.020177.001213.
- Alderfer, C. P. (1980) 'The methodology of organizational diagnosis', *Professional Psychology: Research and Practice*, 11(3), pp. 459–468. doi: 10.1037/0735-7028.11.3.459.
- Alvesson, M. and Sandberg, J. (2013) *Constructing research questions: Doing interesting research*. 1st edn. London: SAGE.
- Alvesson, M. and Sköldbberg, K. (2009) *Reflexive methodology*. 2nd edn. London: Sage Publications.
- Anderson, L. et al. (2015) *A guide to professional doctorates in business and management*. 1st edn. London: SAGE.
- Antonsich, M. (2010) 'Searching for Belonging – An Analytical Framework', *Geography Compass*. John Wiley & Sons, Ltd, 4(6), pp. 644–659. doi: <https://doi.org/10.1111/j.1749-8198.2009.00317.x>.
- Argyle, M. (1972) *The social psychology of work*. London: Pelican.
- Argyris, C. and Schön, D. A. (1978) *Organizational Learning: A theory of action perspective*. 1st edn. Reading, MA: Addison-Wesley.
- Astley, W. G. and Zajac, E. J. (1991) 'Intraorganizational Power and Organizational Design:

- Reconciling Rational and Coalitional Models of Organization', *Organization Science*. INFORMS, 2(4), pp. 399–411. doi: 10.1287/orsc.2.4.399.
- Babington Smith, B. and Farrell, B. (1979) *Training in small groups: A study of five methods*. Oxford: Pergamon.
- Baer, M. *et al.* (2010) 'Win or Lose the Battle for Creativity: The Power and Perils of Intergroup Competition', *Academy of Management Journal*. Academy of Management, 53(4), pp. 827–845. doi: 10.5465/amj.2010.52814611.
- Barnard, C. I. (1938) *The functions of the executive*. Cambridge, MA: Harvard University Press.
- Baumeister, R. F. and Leary, M. R. (1995) 'The need to belong: Desire for interpersonal attachments as a fundamental human motivation', *Psychological Bulletin*, 117(3), pp. 497–529.
- Beal, D. *et al.* (2003) 'Cohesion and performance in groups: A meta-analytic clarification of construct relations', *Journal of Applied Psychology*, 88(6), pp. 989–1004.
- Beal, D. J. (2015) 'ESM 2.0: State of the Art and Future Potential of Experience Sampling Methods in Organizational Research', *Annual Review of Organizational Psychology and Organizational Behavior*. Annual Reviews, 2(1), pp. 383–407. doi: 10.1146/annurev-orgpsych-032414-111335.
- Bernthal, P. R. and Insko, C. A. (1993) 'Cohesiveness without groupthink: The interactive effects of social and task cohesion.', *Group and Organizational Management*, 18, pp. 66–87.
- Bhaksar, R. (1998) *A realist theory of science*. 3rd edn. London: Routledge.
- Bjerke, M. B. and Renger, R. (2017) 'Being smart about writing SMART objectives', *Evaluation and Program Planning*, 61, pp. 125–127. doi: <https://doi.org/10.1016/j.evalprogplan.2016.12.009>.
- Black, J. *et al.* (2018) 'Self-efficacy and emotional intelligence: Influencing team cohesion to enhance team performance', *Team Performance Management*, pp. 100–119. doi: 10.1108/TPM-01-2018-0005.
- Blaikie, N. (2007) *Approaches to social enquiry*. 1st edn. Cambridge: Polity Press.
- Blaikie, N. (2010) *Designing social research*. 2nd edn. Cambridge: Polity Press.
- Bloomberg, L. D. and Volpe, M. (2018) *Completing your qualitative dissertation: A road map from beginning to end*. 4th edn. Thousand Oaks, California: SAGE.
- Bonebright, D. A. (2010) '40 years of storming: A historical review of tuckman's model of small group development', *Human Resource Development International*, 13, pp. 111–120. doi: 10.1080/13678861003589099.

- Bowles, S. *et al.* (2007) 'Coaching leaders in middle and executive management: goals, performance, buy-in', *Leadership & Organization Development Journal*. Emerald Group Publishing Limited, 28(5), pp. 388–408. doi: 10.1108/01437730710761715.
- Boyatzis, R. E. (1999) 'Self-directed change and learning as a necessary meta-competency for success and effectiveness in the 21st century', in Sims, R. R. and Veres, J. G. (eds) *Keys to Employee Success in the Coming Decades*. Westport, CT.: Greenwood Publishing Group.
- Boyatzis, R. E. (2001) 'How and why individuals are able to develop emotional intelligence', in Cherniss, C. and Goleman, D. (eds) *The emotionally intelligent workplace: How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations*. San Francisco: Jossey-Bass, pp. 234–253.
- Bozeman, B. (2011) 'The 2010 BP Gulf of Mexico oil spill: Implications for theory of organizational disaster', *Technology in Society*, 33(3), pp. 244–252. doi: <https://doi.org/10.1016/j.techsoc.2011.09.006>.
- Brady, A. (2015) 'Groupthink - dealing with conflict or maintaining the status quo: Implications for higher education', (November), pp. 117–136. Available at: https://www.researchgate.net/publication/239585500_GROUPTHINK-Dealing_with_Conflict_or_Maintaining_the_Status_Quo_Implications_for_Higher_Education/download.
- Bravo, R., Catalán, S. and Pina, J. M. (2019) 'Analysing teamwork in higher education: an empirical study on the antecedents and consequences of team cohesiveness', *Studies in Higher Education*. Routledge, 44(7), pp. 1153–1165. doi: 10.1080/03075079.2017.1420049.
- Breitsohl, J., Wilcox-Jones, J. P. and Harris, I. (2015) 'Groupthink 2.0: An empirical analysis of customers' conformity-seeking in online communities', *Journal of Customer Behaviour*, 14(2), pp. 87–106.
- Van den Broeck, A. *et al.* (2016) 'A Review of Self-Determination Theory's Basic Psychological Needs at Work', *Journal of Management*. SAGE Publications Inc, 42(5), pp. 1195–1229. doi: 10.1177/0149206316632058.
- Brunkhorst, H. (2020) "'Everything is now in order" – Groupthink, ideology and practical-critical activity in the European financial crisis and beyond.', *Journal of European Public Policy*, 27(9), pp. 1406–1423. Available at: <http://10.0.4.56/13501763.2020.1773515>.
- Brydon-Miller, M. (2008) 'Ethics and action research: Deepening our commitment to principles of social justice and redefining systems of democratic practice', in Reason, P. and Bradbury, H.

- (eds) *The SAGE handbook of action research: Participative inquiry and practice*. 2nd edn. London: SAGE, pp. 199–210.
- Buchanan, D. and Bryman, A. (2007) ‘Contextualizing methods choice in organizational research’, *Sage Publications*, 10, pp. 483–502.
- Burnes, B. and O’Donnell, H. (2011) ‘What can business leaders learn from sport?’, *Sport, Business and Management: An International Journal*. Emerald Group Publishing Limited, 1(1), pp. 12–27. doi: 10.1108/20426781111107144.
- Burnette, J. L., Pollack, J. M. and Forsyth, D. R. (2011) ‘Leadership in extreme contexts: A groupthink analysis of the May 1996 Mount Everest disaster’, *Journal of Leadership Studies*, 4(4), pp. 29–40. doi: 10.1002/jls.20190.
- Burns, T. E. and Stalker, G. M. (1961) ‘The Management of Innovation’, *University of Illinois at Urbana-Champaign’s Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*.
- Burton, R. and Obel, B. (2018) ‘The science of organizational design: fit between structure and coordination’, *Journal of Organization Design*, 7. doi: 10.1186/s41469-018-0029-2.
- Butler, R. (1989) ‘On the psychological meaning of information about competence: A reply to Ryan and Deci’s comment on Butler (1987)’, *Journal of Educational Psychology*, 81(2), pp. 269–272.
- Callaway, M. R. and Esser, J. K. (2006) ‘Groupthink: Effects of cohesiveness and problem-solving procedures on group decision making’, *Social Behavior and Personality: An international journal*, 12(2), pp. 157–164. doi: 10.2224/sbp.1984.12.2.157.
- Cambridge Dictionary (2020) *Theory*, *Cambridge Dictionary*.
- Campion, M., Medsker, G. J. and Higgs, C. A. (1993) ‘Relations between work team characteristics and effectiveness: Implications for designing effective work groups’, *Personnel Psychology*, 49(2), pp. 823–847. doi: 10.1111/j.1744-6570.1993.tb01571.x.
- Carman, A. L. (2015) ‘The Journey toward Voluntary Public Health Accreditation Readiness in Local Health Departments: Leadership and Followership Theories in Action’, *Frontiers in Public Health*, p. 43. Available at: <https://www.frontiersin.org/article/10.3389/fpubh.2015.00043>.
- Carron, A. V. (1982) ‘Cohesiveness in sport groups: Implications and considerations.’, *Journal of Sport Psychology*, 4, pp. 123–138.
- Carron, A. V. and Chelladurai, P. (2016) ‘The dynamics of group cohesion in sport’, *Journal of Sport*

- Psychology*, 3(2), pp. 123–139.
- Casey-Campbell, M. and Martens, M. L. (2009) ‘Sticking it all together: A critical assessment of the group cohesion-performance literature’, *International Journal of Management Reviews*, 11(2), pp. 223–246. doi: 10.1111/j.1468-2370.2008.00239.x.
- Cassell, C. and Symon, G. (2014) *Essential guide to qualitative methods in organizational research*. 1st edn. London: SAGE. doi: 10.4135/9781446280119.
- Caya, S. (2015) ‘Groupthink Phenomenon as a Common Occurrence in Juvenile Gangs’, *Procedia - Social and Behavioral Sciences*. Elsevier Ltd, 190(Proceedings of 2nd Global Conference on Psychology Researches (GCPR-2014) 28-29 November 2014, University of Barcelona, Barcelona, Spain), pp. 265–268. Available at: <http://10.0.3.248/j.sbspro.2015.04.945>.
- De Charms, R. (1968) *Personal causation: The internal affective determinants of behavior*, *Personal Causation: The Internal Affective Determinants of Behavior*. New York: Academic Press. doi: 10.4324/9781315825632.
- Chowns, G. (2008) ‘No - You don’t know how we feel!: Collaborative inquiry using video with children facing the life-threatening illness of a parent’, in Reason, P. and Bradbury, H. (eds) *The SAGE Handbook of Action Research: Participative Inquiry and Practice*. 2nd edn. London: SAGE, pp. 562–572.
- Coghlan, D. (2011) ‘Action research: Exploring perspectives on a philosophy of practical knowing’, *Academy of Management Annals*, pp. 53–87. doi: 10.1080/19416520.2011.571520.
- Coghlan, D. (2019) *Doing action research in your own organisation*. 5th edn, *Organizational Research Methods*. 5th edn. London: SAGE. doi: 10.1177/1094428106289253.
- Coghlan, D. and Shani, A. B. (2018) *Conducting action research for business and management students*. 1st edn. London: SAGE.
- Coghlan, D. and Shani, A. B. (Rami. (2017) ‘Inquiring in the present tense: The dynamic mechanism of action research’, *Journal of Change Management*, 17(4), pp. 1–17. doi: 10.1080/14697017.2017.1301045.
- Cohen, S. G. and Bailey, D. E. (1997) ‘What makes teams work: Group effectiveness research from the shop floor to the executive suite’, *Journal of Management*, 23(3), pp. 239–290. doi: 10.1177/014920639702300303.
- Collins Dictionary (Online) (2020) *Theory*, *Collins Dictionary*. Available at: <https://www.collinsdictionary.com/dictionary/english/theory> (Accessed: 31 March 2020).

- Conger, J. A. and Pearce, C. L. (2003) *Shared leadership: Reframing the hows and whys of leadership*. 1st edn. London: SAGE.
- Cordery, J. and Tian, A. (2017) 'Team design', in Salas, E., Rico, R., and Passmore, J. (eds) *The psychology of team working and collaborative processes*. 1st edn. Chichester, pp. 105–128.
- Courtright, J. A. (1978) 'A laboratory investigation of groupthink', *Communication Monographs*, 45(3), pp. 229–246. doi: 10.1080/03637757809375968.
- Creswell, J. W. (2013) *Qualitative inquiry and research design*. 3rd edn. Thousand Oaks, California: SAGE.
- Cummings, J. N. and Haas, M. R. (2012) 'So many teams, so little time: Time allocation matters in geographically dispersed teams', *Journal of Organizational Behavior*. John Wiley & Sons, Ltd, 33(3), pp. 316–341. doi: <https://doi.org/10.1002/job.777>.
- Dallaglio, L. (2008) *It's in the blood: My life*. 1st edn. London: Headline.
- Dansereau, F., Graen, G. and Haga, W. J. (1975) 'A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process', *Organizational Behavior and Human Performance*, 13(1), pp. 46–78. doi: [https://doi.org/10.1016/0030-5073\(75\)90005-7](https://doi.org/10.1016/0030-5073(75)90005-7).
- Darwin, C. (1859) *On the origin of species by means of natural selection, or the preservation of favoured races in the struggle for life*. London: John Murray.
- Deci, E. L. (1971) 'Effects of externally mediated rewards on intrinsic motivation', *Journal of Personality and Social Psychology*, 18, pp. 105–115. doi: 10.1037/h0030644.
- Deci, E. L. and Ryan, R. M. (1985) *Intrinsic motivation and self-determination in human behavior, Intrinsic Motivation and Self-Determination in Human Behavior*. New York: Plenum Press. doi: 10.1007/978-1-4899-2271-7.
- Deci, E. L. and Ryan, R. M. (1994) 'Promoting self-determined education', *Scandinavian Journal of Educational Research*, 38, pp. 3–14. doi: 10.1080/0031383940380101.
- Denzin, N. K. (1989) *The research act*. 3rd edn. Englewood Cliffs, NJ.: Prentice-Hall.
- Denzin, N. K. (2001) *Interpretive Interactionism*. 2nd edn. Thousand Oaks, California: SAGE Publications Inc.
- Deutsch, M. (1949) 'An Experimental Study of the Effects of Co-Operation and Competition upon Group Process', *Human Relations*. SAGE Publications Ltd, 2(3), pp. 199–231. doi:

10.1177/001872674900200301.

- Doran, G. T. (1981) 'There's a S.M.A.R.T. way to write management's goals and objectives.', *Management Review*, 70(11), pp. 35–36.
- De Dreu, C. K. W. (2007) 'Cooperative outcome interdependence, task reflexivity, and team effectiveness: A motivated information processing perspective', *Journal of Applied Psychology*, 92(3), pp. 628–638. doi: 10.1037/0021-9010.92.3.628.
- Driskell, T., Salas, E. and Driskell, J. E. (2018) 'Teams in extreme environments: Alterations in team development and teamwork', *Human Resource Management Review*. Elsevier Inc., 28(4), pp. 434–449. doi: 10.1016/j.hrmr.2017.01.002.
- Duff, G. (1994) 'Current practices in strategic partnerships.', *Australian Journal of Public Administration*. Wiley-Blackwell, 53(1), p. 29. Available at: <http://10.0.4.87/j.1467-8500.1994.tb01854.x>.
- Dunkley, S. (2012) 'Disastrous decisions: The human and organisational causes of the Gulf of Mexico blowout', *Journal of World Energy, Law and Business*, pp. 366–372. doi: 10.1093/jwelb/jws029.
- Durkheim, E. (1964) *The rules of sociological method*. First publ. Glencoe, Ill.: Free Press.
- Dyer, J. L. (1984) 'Team research and team training: A state of the art review', in Muckler, F. A. (ed.) *Human factors review*. Santa Monica, CA: Human Factors Society, pp. 285–323.
- Easterby-Smith, M., Thorpe, R. and Jackson, P. R. (2015) *Management and Business Research*. 5th edn. London: Sage Publications.
- Ellis, C. C. *et al.* (2014) 'The importance of group cohesion in inpatient treatment of combat-related PTSD.', *International journal of group psychotherapy*. England: Routledge, 64(2), pp. 208–226. doi: 10.1521/ijgp.2014.64.2.208.
- Emerson, R. M. (1976) 'Social Exchange Theory', *Annual Review of Sociology*, 2(1976), pp. 335–362.
- EPCR Home (2020). Available at: <https://www.epcrugby.com> (Accessed: 20 July 2020).
- Esser, J. K. (1998) 'Alive and well after 25 years: A review of Groupthink research', *Organizational Behavior and Human Decision Processes*, 73(2), pp. 116–141.
- Esser, J. K. and Lindoerfer, J. S. (1989) 'Groupthink and the space shuttle challenger accident: Toward a quantitative case analysis', *Journal of Behavioral Decision Making*, pp. 167–177. doi: 10.1002/bdm.3960020304.

- Evans, C. R. and Dion, K. L. (2012) 'Group Cohesion and Performance: A Meta-Analysis', *Small Group Research*. SAGE Publications Inc, 43(6), pp. 690–701. doi: 10.1177/1046496412468074.
- Feldman, R. A. (1968) 'Interrelationships among three bases of group integration.', *Sociometry*, 31(1), pp. 30–46. doi: 10.2307/2786478.
- Festinger, L. (1950) 'Informal social communication', *Psychological Review*, 57, pp. 271–282. doi: 10.1037/h0056932.
- Festinger, L., Schachter, S. and Back, K. (1950) *Social pressures in informal groups; a study of human factors in housing*. Stanford, CA: Stanford University Press.
- Fisher, C. W. and Kingma, B. R. (2001) 'Criticality of data quality as exemplified in two disasters', *Information and Management*, 39(2), pp. 109–116. doi: 10.1016/S0378-7206(01)00083-0.
- Fisher, M. L. (2007) 'Bob Hayes: Forty years of leading operations management into uncharted waters', *Production & Operations Management*. Wiley-Blackwell, 16(2), pp. 159–168.
- Flick, U. (2018) *An Introduction to Qualitative Research*. 6th edn. London: SAGE.
- Flippen, A. R. (1999) 'Understanding groupthink from a self-regulatory perspective', *Small Group Research*, 30(2), pp. 139–165. doi: 10.1177/104649649903000201.
- Flowers, M. L. (1977) 'A laboratory test of some implications of Janis's groupthink hypothesis', *Journal of Personality and Social Psychology*, 1, pp. 288–299. doi: 10.1037/0022-3514.35.12.888.
- Fodor, E. M. and Smith, T. (1982) 'The power motive as an influence on group decision making', *Journal of Personality and Social Psychology*, 42, pp. 178–195. doi: 10.1037/0022-3514.42.1.178.
- Forsyth, D. (2020) 'Group-Level resistance to health mandates during the COVID-19 pandemic: A groupthink approach', *Group Dynamics: Theory, Research, & Practice*, 24, pp. 139–152. Available at: <https://doi.org/10.1037/gdn0000132>.
- Frese, M. (2011) *Errors in organizations, Errors in Organizations*. Taylor and Francis. doi: 10.4324/9780203817827.
- Gadamer, H. G. (1984) *Truth and Method*. New York: Continuum.
- Gagné, M., Ryan, R. M. and Bargmann, K. (2003) 'Autonomy support and need satisfaction in the motivation and well-being of gymnasts', *Journal of Applied Sport Psychology*, 15, pp. 372–390. doi: 10.1080/714044203.
- Galbraith, J. R. (1973) *Designing complex organizations*. Reading, Mass.: Addison-Wesley.
- Galbraith, J. R. (1974) 'Organization Design: An Information Processing View', *Interfaces*.

- INFORMS, 4(3), pp. 28–36. Available at: <http://www.jstor.org/stable/25059090>.
- Galbraith, J. R. (1977) *Organization design*. Reading, Mass.: Addison-Wesley Pub. Co.
- Gartenberg, C. M. (2021) *Purpose-driven companies and sustainability*. Philadelphia.
- Geertz, C. (1973) ‘Thick Description: Toward an Interpretive Theory of Culture’, in *The Interpretation of Cultures: Selected Essays*. New York: Basic Books, pp. 3–30.
- Gehman, J. *et al.* (2018) ‘Finding Theory–Method Fit: A Comparison of Three Qualitative Approaches to Theory Building’, *Journal of Management Inquiry*, 27(3), pp. 284–300. doi: 10.1177/1056492617706029.
- Gersick, C. J. G. (1988) ‘Time and Transition in Work Teams: Toward a New Model of Group Development’, *Academy of Management Journal*. Academy of Management, 31(1), pp. 9–41. doi: 10.5465/256496.
- Glassner, B. and Tajfel, H. (1985) ‘Social Identity and Intergroup Relations.’, *Contemporary Sociology*. doi: 10.2307/2069233.
- Gould, D., Dieffenbach, K. and Moffett, A. (2002) ‘Psychological Characteristics and Their Development in Olympic Champions’, *Journal of Applied Sport Psychology - J APPL SPORT PSYCHOL*, 14, pp. 172–204. doi: 10.1080/10413200290103482.
- Graen, G. B. and Uhl-Bien, M. (1995) ‘Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective’, *The Leadership Quarterly*, 6(2), pp. 219–247. doi: 10.1016/1048-9843(95)90036-5.
- Graen, G., Novak, M. A. and Sommerkamp, P. (1982) ‘The effects of leader—member exchange and job design on productivity and satisfaction: Testing a dual attachment model’, *Organizational Behavior and Human Performance*, 30(1), pp. 109–131. doi: [https://doi.org/10.1016/0030-5073\(82\)90236-7](https://doi.org/10.1016/0030-5073(82)90236-7).
- Greenwood, W. (2004) *Will*. 1st edn. London: Century.
- Gren, L., Torkar, R. and Feldt, R. (2017) ‘Group development and group maturity when building agile teams: A qualitative and quantitative investigation at eight large companies’, *Journal of Systems and Software*, 124, pp. 104–119. doi: 10.1016/j.jss.2016.11.024.
- Griffin, S. (2020) ‘Covid-19: Chaotic decision making and failure to communicate undermined government response, says report’, *BMJ*, 371, p. m4940. doi: 10.1136/bmj.m4940.

- Gross, N. and Martin, W. (1952) 'On group cohesiveness', *American Journal of Sociology*, 57(6), pp. 546–564.
- Grossman, R. *et al.* (2015) 'What matters for team cohesion measurement? A synthesis', in Salas, E., Vessey, W., and Estrada, A. X. (eds) *Team Cohesion: Advances in Psychological Theory, Methods and Practice*. 1st edn. Bingley: Emerald Group Publishing Limited, pp. 147–180.
- Gulick, L. and Urwick, L. (1937) *Papers on the Science of Administration*. New York: Institute of Public Administration.
- Gunnell, K. E. *et al.* (2014) 'Goal contents, motivation, psychological need satisfaction, well-being and physical activity: A test of self-determination theory over 6 months', *Psychology of Sport and Exercise*, 15(1), pp. 19–29. doi: <https://doi.org/10.1016/j.psychsport.2013.08.005>.
- Hackman, J. R. (1976) 'Group influence on individuals', in Dunnette, M. D. (ed.) *Handbook of industrial and organizational psychology*. 1st edn. Chicago: Rand-McNally, pp. 1455–1525.
- Hackman, J. R. (2002) *Leading teams: Setting the stage for great performances*. Boston, MA: Harvard Business Press.
- Hackman, J. R. (2012) 'From causes to conditions in group research', *Journal of Organizational Behavior*. John Wiley & Sons, Ltd, 33(3), pp. 428–444. doi: <https://doi.org/10.1002/job.1774>.
- Hackman, J. R. and Morris, C. G. (1975) 'Group Tasks, Group Interaction Process, and Group Performance Effectiveness: A Review and Proposed Integration' Preparation of this report was supported in part by the Office of Naval Research (Organizational Effectiveness Research Program, Contract No. N', in Berkowitz, L. B. T.-A. in E. S. P. (ed.). Academic Press, pp. 45–99. doi: [https://doi.org/10.1016/S0065-2601\(08\)60248-8](https://doi.org/10.1016/S0065-2601(08)60248-8).
- Hale, H. C. (2012) 'The Role of Practice in the Development of Military Masculinities.', *Gender, Work & Organization*. Wiley-Blackwell, 19(6), pp. 699–722. Available at: <http://10.04.87/j.1468-0432.2010.00542.x>.
- Hall, T. (2015) 'Does cohesion positively correlate to performance in all stages of a group's life cycle?', *Journal of Organizational Culture, Communications and Conflict*, 19(1), pp. 58–71.
- Harlow, H. F. (1958) 'The nature of love', *American Psychologist*, 13(12), pp. 673–685. doi: 10.1037/h0047884.
- HarperCollins Publishers (2021) *Definition of Purpose, Collins English Dictionary*. Available at: <https://www.collinsdictionary.com/dictionary/english/purpose> (Accessed: 21 February 2021).

- Harré, R. (1972) *The Philosophy of Science: An Introductory Survey*. 1st edn. London: Oxford University Press.
- Harrison, A. A. and Connors, M. M. (1984) 'Groups in exotic environments', in Berkowitz, L. (ed.) *Advances in experimental social psychology*. New York: Academic Press, pp. 49–87.
- Haußmann, C. *et al.* (2011) 'A Summary and Review of Galbraith's Organizational Information Processing Theory', in, pp. 71–93. doi: 10.1007/978-1-4419-9707-4_5.
- Hempel, C. (1966) *Philosophy of Natural Science*. Englewood Cliffs, NJ.: Prentice-Hall.
- Hermann, A. and Rammel, H. G. (2010) 'The grounding of the "Flying Bank"', *Management Decision*, 48(7), pp. 1048–1062.
- Heron, J. and Reason, P. (1997) 'A Participatory Inquiry Paradigm', *Qualitative Inquiry*. SAGE Publications Inc, 3(3), pp. 274–294. doi: 10.1177/107780049700300302.
- Hessel, V., Cortese, B. and de Croon, M. H. J. M. (2011) 'Novel process windows – Concept, proposition and evaluation methodology, and intensified superheated processing', *Chemical Engineering Science*, 66(7), pp. 1426–1448. doi: <https://doi.org/10.1016/j.ces.2010.08.018>.
- Hofman, W. H. A. and Hofman, R. H. (2011) 'Smart Management in Effective Schools: Effective Management Configurations in General and Vocational Education in the Netherlands', *Educational Administration Quarterly*. SAGE Publications Inc, 47(4), pp. 620–645. doi: 10.1177/0013161X11400186.
- Hogg, M. A. and Abrams, D. (2006) *Social identifications: A social psychology of intergroup relations and group processes*, *Social Identifications: A Social Psychology of Intergroup Relations and Group Processes*. doi: 10.4324/9780203135457.
- Hogg, M. A., Abrams, D. and Brewer, M. B. (2017) 'Social identity: The role of self in group processes and intergroup relations', *Group Processes and Intergroup Relations*. doi: 10.1177/1368430217690909.
- Hogg, M. A. and Hains, S. C. (1998) 'Friendship and group identification: A new look at the role of cohesiveness in groupthink', *European Journal of Social Psychology*, 28, pp. 323–341.
- Holian, R. and Coghlan, D. (2013) 'Ethical Issues and Role Duality in Insider Action Research: Challenges for Action Research Degree Programmes', *Systemic Practice and Action Research*, 26(5), pp. 399–415. doi: 10.1007/s11213-012-9256-6.
- Hood, B. (2020) *What is teamship and why does it matter?*, *Verosa*. Available at: <https://www.verosa.co.uk/what-is-teamship-and-why-does-it-matter> (Accessed: 11 February

- 2021).
- Hotz, R. L. (1999) 'Mars probe lost due to simple math error.', *Los Angeles Times*, p. A-1.
- Hung, S.-W. *et al.* (2020) 'Inclusion in global virtual teams: Exploring non-spatial proximity and knowledge sharing on innovation', *Journal of Business Research*. Elsevier Inc. Available at: <http://10.0.3.248/j.jbusres.2020.11.022>.
- Ito, J. and Brotheridge, C. M. (2008) 'Do teams grow up one stage at a time? Exploring the complexity of group development models', *Team Performance Management*, 14(5/6), pp. 214–232. doi: 10.1108/13527590810898491.
- Janis, I. L. (1972) *Victims of Groupthink: a psychological study of foreign-policy decisions and fiascoes*. 1st edn. Boston: Houghton Mifflin.
- Janis, I. L. (1983) *Groupthink*. 1st edn. Houghton Mifflin.
- Johnson, M. (2004) *Martin Johnson*. 1st edn. London: Headline.
- Jordan, M. (1994) *I Can't Accept Not Trying: Michael Jordan on the Pursuit of Excellence*. 1st edn. San Francisco: Harper.
- Katzenbach, J. R. and Smith, D. K. (1993) 'The discipline of teams.', *Harvard Business Review*, (March-April), pp. 111–120.
- Keller, S. and Meaney, M. (2017) 'Leading Organizations: Ten Timeless Truths', *McKinsey Quarterly*. 1st edn, June, pp. 1–7.
- Ketelhut, J. A. (1999) 'Managing team activities toward success.', *Hospital materiel management quarterly*. Amgen, Inc., USA.: Aspen Publishers, 21(1), pp. 27–30.
- Kiessling, T., Harvey, M. and Moeller, M. (2009) 'Small and medium-sized firms top management teams' decision-making in global acquisitions.', *ODLUČIVANJE NAJVIŠEG RUKOVODSTVA MALIH I SREDNJIH PODUZEĆA U GLOBALNIM AKVIZICIJAMA*. University of Zagreb, Faculty of Economics & Business, 21(1), pp. 95–117.
- King, N. (2014) 'Using Templates in the Thematic Analysis of Text', in Cassell, C. and Symon, G. (eds) *Essential Guide to Qualitative Methods in Organizational Research*. 1st edn. London: Sage Publications, pp. 256–270.
- Kluwer, E. S. *et al.* (2019) 'Autonomy in Relatedness: How Need Fulfillment Interacts in Close Relationships', *Personality and Social Psychology Bulletin*. SAGE Publications Inc, 46(4), pp. 603–616. doi: 10.1177/0146167219867964.

- Koffka, K. (1935) *Principles of Gestalt Psychology*. London: Lund Humphries.
- Kozlowski, S. *et al.* (2009) 'Developing adaptive Teams: A theory of dynamic team leadership', in Salas, E., Goodwin, G. F., and Burke, C. S. (eds) *Team effectiveness in complex organizations*. Chicago: John Wiley & Sons, pp. 113–154.
- Kozlowski, S. W. J. and Ilgen, D. R. (2006) 'Enhancing the Effectiveness of Work Groups and Teams', *Psychological Science in the Public Interest*. SAGE Publications Inc, 7(3), pp. 77–124. doi: 10.1111/j.1529-1006.2006.00030.x.
- Kozlowski, S. W. J. and Klein, K. J. (2000) 'A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes', in Klein, K. J. and Kozlowski, Steve W.J. (eds) *Multilevel theory, research and methods in organizations: Foundations, extensions, and new directions*. San Francisco:CA: Jossey-Bass, pp. 3–90.
- Kübler Ross, E., Wessler, S. and Avioli, L. V. (1972) 'On Death and Dying', *JAMA: The Journal of the American Medical Association*. doi: 10.1001/jama.1972.03200150040010.
- Kuhn, T. S. and Hawkins, D. (1963) 'The Structure of Scientific Revolutions', *American Journal of Physics*. doi: 10.1119/1.1969660.
- Kulik, C. T., Oldham, G. R. and Hackman, J. R. (1987) 'Work design as an approach to person-environment fit', *Journal of Vocational Behavior*, 31(3), pp. 278–296. doi: [https://doi.org/10.1016/0001-8791\(87\)90044-3](https://doi.org/10.1016/0001-8791(87)90044-3).
- Lawrence, P. R. and Lorsch, J. W. (1967) 'Differentiation and Integration in Complex Organizations', *Administrative Science Quarterly*. [Sage Publications, Inc., Johnson Graduate School of Management, Cornell University], 12(1), pp. 1–47. doi: 10.2307/2391211.
- Leana, C. R. (1985) 'A Partial Test of Janis' Groupthink Model: Effects of Group Cohesiveness and Leader Behavior on Defective Decision Making', *Journal of Management*. doi: 10.1177/014920638501100102.
- Lee, T. C. (2020) 'Groupthink, Qualitative Comparative Analysis, and the 1989 Tiananmen Square Disaster.', *Small Group Research*, 51(4), pp. 435–463. Available at: <http://10.0.4.153/1046496419879759>.
- Lees, K. (2015) *Exploring the Potential for Sir Clive Woodward's 'Teamship' to be Applied in Non-Sport Organisations to Drive Cultural and Organisational Change*. University of Southampton.
- Lees, K. (2018a) *Pilot Study: A case study analysis exploring antecedents affecting the performance of groups operating in extreme environments*. University of Reading.

- Lees, K. (2018b) *Research Proposal: A collective case study exploring the effects of group cohesiveness, stage of formation and motivation in groups operating in extreme environments*. University of Reading.
- Leo, F. *et al.* (2016) 'Exploring direction between cohesion and collective efficacy and relationships with performance of football teams', 38, pp. 113–126.
- Levi, D. (2017) *Group Dynamics for Teams*. 5th edn. Los Angeles: SAGE.
- Lewin, K. (1997) 'Action research and minority problems', in Lewin, G. (ed.) *Resolving Social Conflicts: Selected Papers on Group Dynamics*. 1st edn. Washington DC: American Psychological Association, pp. 144–154.
- Locke, E. A. (1968) 'Toward a theory of task motivation and incentives', *Organizational Behavior and Human Performance*, 3(2), pp. 157–189. doi: 10.1016/0030-5073(68)90004-4.
- Lott, A. J. and Lott, B. E. (1965) 'Group cohesiveness as interpersonal attraction: A review of relationships with antecedent and consequent variables', *Psychological Bulletin*. doi: 10.1037/h0022386.
- Maharaj, R. (2008) 'Corporate governance, groupthink and bullies in the boardroom.', *International Journal of Disclosure & Governance*. Palgrave Macmillan Ltd., 5(1), pp. 68–92. Available at: <http://10.0.4.33/palgrave.jdg.2050074>.
- Manz, C. and Sims, H. (1982) 'The Potential for Groupthink in Autonomous Work Groups', *Human Relations*, 35(9), pp. 773–784. doi: 10.1177/07399863870092005.
- Marks, M. A., Mathieu, J. E. and Zaccaro, S. J. (2001) 'A Temporally Based Framework and Taxonomy of Team Processes', *The Academy of Management Review*, 26(3), pp. 356–376. doi: 10.2307/259182.
- Mathieu, J. *et al.* (2008) 'Team effectiveness 1997-2007: A review of recent advancements and a glimpse into the future', *Journal of Management*, 34(3), pp. 410–476. doi: 10.1177/0149206308316061.
- McEwan, D. *et al.* (2017) 'The Effectiveness of Teamwork Training on Teamwork Behaviors and Team Performance: A Systematic Review and Meta-Analysis of Controlled Interventions', *PLOS ONE*. Public Library of Science, 12(1), p. e0169604. Available at: <https://doi.org/10.1371/journal.pone.0169604>.
- McNiff, J. (2017) *Action Research: All You Need to Know*. 1st edn. London: SAGE.
- Mejri, M. and De Wolf, D. (2013) 'Crisis Management: Lessons Learnt from the BP Deepwater Horizon Spill Oil', *Business Management and Strategy*, 4(2), p. 67. doi: 10.5296/bms.v4i2.4950.

- Menzies, K. (1982) *Sociological Theory in Use*. London: Routledge and Kegan Paul.
- Merriam, S. B. (2009) *Qualitative research: A guide to design and implementation*. 3rd edn. San Francisco: Jossey-Bass.
- Merriam Webster (2020) *Theory*, Merriam Webster Dictionary.
- Miles, M., Huberman, A. M. and Saldaña, J. (2020) *Qualitative Data Analysis*. 4th edn. Thousand Oaks, California: SAGE.
- Mohla, N. (2020) *Teamship*, InspireOne.
- Mohr, L. B. (1971) 'Organizational Technology and Organizational Structure', *Administrative Science Quarterly*. [Sage Publications, Inc., Johnson Graduate School of Management, Cornell University], 16(4), pp. 444–459. doi: 10.2307/2391764.
- Mohrman, S. A., Cohen, S. G. and Mohrman, A. M. (1995) *Designing team-based organizations: new forms for knowledge work*, Jossey-Bass management series.
- Moorhead, G. and Montanari, J. R. (1986) 'An Empirical Investigation of the Groupthink Phenomenon', *Human Relations*. doi: 10.1177/001872678603900502.
- Moorhead, G., Neck, C. P. and West, M. S. (1998) 'The tendency toward defective decision making within self-managing teams: The relevance of groupthink for the 21st century', *Organizational Behavior and Human Decision Processes*, 73(2–3), pp. 327–351. doi: 10.1006/obhd.1998.2765.
- Morgan, P. B. C., Fletcher, D. and Sarkar, M. (2015) 'Understanding team resilience in the world's best athletes: A case study of a rugby union World Cup winning team', *Psychology of Sport and Exercise*. Elsevier Ltd, 16(P1), pp. 91–100. doi: 10.1016/j.psychsport.2014.08.007.
- Morris, M. W. *et al.* (1999) 'Views from inside and outside: Integrating Emic and Etic Insights about Culture and Justice Judgment', *The Academy of Management Review*. Academy of Management, 24(4), pp. 781–796. doi: 10.2307/259354.
- National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (1979) *The Belmont Report* | HHS.gov, *The Belmont Report*.
- Neck, C. P. and Moorhead, G. (1995) 'Groupthink re-modeled: The importance of leadership, time pressure, and methodical decision-making procedures', *Human Relations*, 48(5), pp. 537–557. doi: 10.1177/001872679504800505.
- Neufeld, A., Mossière, A. and Malin, G. (2020) 'Basic psychological needs, more than mindfulness and resilience, relate to medical student stress: A case for shifting the focus of wellness

- curricula', *Medical Teacher*. Taylor & Francis, 42(12), pp. 1401–1412. doi: 10.1080/0142159X.2020.1813876.
- Nicholls, J. G. (1989) *The competitive ethos and democratic education*. rd University Press.
- O'Hear, A. (1989) *An Introduction to the Philosophy of Science*. Oxford: Clarendon Press.
- Offermann, L. and Spiros, R. (2001) 'The science and practice of team development: Improving the link', *Press -Academy of Management Journal Team Development: Science & Practice*, 1. doi: 10.2307/3069462.
- Ohlert, J. and Zepp, C. (2016) 'Chapter 16 - Theory-Based Team Diagnostics and Interventions', in Raab, M. et al. (eds). San Diego: Academic Press, pp. 347–370. doi: <https://doi.org/10.1016/B978-0-12-803634-1.00016-9>.
- Ospina, S. *et al.* (2008) 'Taking the Action Turn: Lessons from Bringing Participation to Qualitative Research', in Reason, P. and Bradbury, H. (eds) *The SAGE Handbook of Action Research: Participative Inquiry and Practice*. 2nd edn. London: SAGE, pp. 421–428.
- Park, W. (1990) 'A review of research on Groupthink', *Journal of Behavioral Decision Making*, 3(4), pp. 229–245. doi: 10.1002/bdm.3960030402.
- Park, W. (2000) 'A comprehensive empirical investigation of the relationships among variables of the Groupthink model', *Journal of Organizational Behavior*, 21(8), pp. 873–887. doi: 10.1002/1099-1379(200012)21:8<873::AID-JOB56>3.0.CO;2-8.
- Parmar, B. *et al.* (2010) 'Stakeholder Theory: The State of the Art', *The Academy of Management Annals*, 3, pp. 403–445. doi: 10.1080/19416520.2010.495581.
- Parris, M. A. and Vickers, M. H. (2005) 'Working in teams: The influence of rhetoric - from sensemaking to sadness', *Administrative Theory & Praxis (Administrative Theory & Praxis)*. *Administrative Theory & Praxis*, 27(2), pp. 277–300. Available at: <http://10.0.4.56/10841806.2005.11029488>.
- Pearce, C. and Sims, H. (2001) 'Shared leadership: Toward a multi-level theory of leadership', *Advances in Interdisciplinary Studies of Work Teams*, 7, pp. 115–139. doi: 10.1016/S1572-0977(00)07008-4.
- Pennings, J. M. (1975) 'Interdependence and Complementarity-The Case of a Brokerage Office', *Human Relations*. SAGE Publications Ltd, 28(9), pp. 825–840. doi: 10.1177/001872677502800904.
- Pettigrew, A. (1988) '(1988) Longitudinal field research on change: Theory and practice', in

- Longitudinal Research Methods in Organisations*. Austin: National Science Foundation Conference.
- Pirola-Merlo, A. *et al.* (2002) 'How leaders influence the impact of affective events on team climate and performance in R&D teams', *Leadership Quarterly*, 13(5), pp. 561–581. doi: 10.1016/S1048-9843(02)00144-3.
- Poole, M. S. *et al.* (2000) *Organizational Change and Innovation Processes: Theory and Methods for Research*. 1st edn. Oxford: Oxford University Press.
- Popper, K. (1959) *The Logic of Scientific Discovery*. London: Hutchinson.
- Puranam, P. and Raveendran, M. (2013) 'Interdependence and organization design', in Grandori, A. (ed.) *Handbook of Economic Organization*. 1st edn. Cheltenham, UK: Edward Elgar Publishing. doi: <https://doi.org/10.4337/9781849803984.00020>.
- Ragin, C. (2014) *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies*. doi: 10.1525/9780520957350.
- Raveendran, M., Silvestri, L. and Gulati, R. (2020) 'The Role of Interdependence in the Micro-Foundations of Organization Design: Task, Goal, and Knowledge Interdependence', *Academy of Management Annals*. Academy of Management, 14(2), pp. 828–868. doi: 10.5465/annals.2018.0015.
- Reason, P. and Bradbury, H. (2012) *The SAGE Handbook of Action Research*. 2nd edn, *The SAGE Handbook of Action Research*. 2nd edn. London: SAGE. doi: 10.4135/9781848607934.
- Reis, H. T. *et al.* (2000) 'Daily well-being: The role of autonomy, competence, and relatedness', *Personality and Social Psychology Bulletin*. SAGE Publications Inc, 26(4), pp. 419–435. doi: 10.1177/0146167200266002.
- Roethlisberger, F. J. and Dickson, W. J. (1939) *Management and the worker*. Cambridge, MA: Harvard University Press.
- Rogers, C. R. (1951) *Client-centered therapy*. Oxford: Houghton Mifflin.
- Rose, J. (2011) 'Diverse perspectives on the Groupthink theory: A literary review', *Emerging Leadership Journeys*, 4(1), pp. 37–57.
- Ross, A., Koneri, L. and Stansell, P. (2020) 'Experiencing teamship by escaping the leadership lecture', *Nurse Leader*. Elsevier Inc., (September), pp. 1–4. Available at: <http://10.03.248/j.mnl.2020.08.005>.
- Rugby Football Union (2004) *England: The Official Rugby Football Union History*. 2nd edn. London:

- Virgin Books Ltd.
- Ryan, R. M. and Deci, E. L. (2000) 'Intrinsic and extrinsic motivations: Classic definitions and new directions', *Contemporary Educational Psychology*, 25, pp. 54–67. doi: 10.1006/ceps.1999.1020.
- Ryan, R. M. and Deci, E. L. (2018) *Self-determination Theory: Basic psychological needs in motivation, development and wellness*. 1st edn. New York: Guildford Press.
- Salas, E. *et al.* (2015) 'Measuring team cohesion: Observations from the science', *Human Factors*, 57(3), pp. 365–374. doi: 10.1177/0018720815578267.
- Salas, E., Cooke, N. J. and Rosen, M. A. (2008) 'On Teams, Teamwork, and Team Performance: Discoveries and Developments', *Human Factors*. SAGE Publications Inc, 50(3), pp. 540–547. doi: 10.1518/001872008X288457.
- Sandy, G. (2007) 'Sport and Business Coaching: Perspective of a Sport Psychologist', *Australian Psychologist*, 42(4), pp. 271–282.
- Santoro, J. *et al.* (2015) 'Measuring and monitoring the dynamics of team cohesion: Methods, emerging tools, and advanced technologies', in Salas, E., Vessey, W. B., and Estrada, A. X. (eds) *Team Cohesion: Advances in Psychological Theory, Methods and Practice*. 1st edn. Bingley: Emerald Group Publishing Limited, pp. 115–145.
- Sarantakos, S. (2013) *Social Research*. 4th edn. London: Red Globe Press.
- Saunders, M., Lewis, P. and Thornhill, A. (2016) *Research Methods for Business Students*. 7th edn. Edited by Pearson Education. Harlow.
- Schafer, M. and Crichlow, S. (1996) 'Antecedents of groupthink: A quantitative study', *Journal of Conflict Resolution*, 40(3), pp. 415–435. doi: 10.1177/0022002796040003002.
- Schroth, H. A. (2011) 'It's not about winning, it's about getting better.', *California Management Review*. California Management Review, 53(4), pp. 134–153. Available at: <http://10.0.5.245/cmr.2011.53.4.134>.
- Seashore, S. E. (1954) 'Group Cohesiveness in the Industrial Work Group.' Ann Arbor: University of Michigan, Survey Research Center Institute for Social Research.
- Serban, A. and Roberts, A. J. B. (2016) 'Exploring antecedents and outcomes of shared leadership in a creative context: A mixed-methods approach', *Leadership Quarterly*. Elsevier Inc., 27(2), pp. 181–199. doi: 10.1016/j.leaqua.2016.01.009.
- Van Seters, D. and Field, R. (1990) 'The Evolution of Leadership Theory', *Journal of Organizational*

- Change Management*. MCB UP Ltd, 3(3), pp. 29–45. doi: 10.1108/09534819010142139.
- Severt, J. B. and Estrada, A. X. (2015) ‘On the Function and Structure of Group Cohesion’, in Salas, E., Vessey, W. B., and Estrada, A. X. (eds) *Team Cohesion: Advances in Psychological Theory, Methods and Practice*. 1st edn. Bingley: Emerald.
- Sheard, A. G. and Kakabadse, A. P. (2002) ‘From loose groups to effective teams: The nine key factors of the team landscape’, *Journal of Management Development*. doi: 10.1108/02621710210417439.
- Shearer, D. A. (2015) ‘Collective efficacy at the Rugby World Cup 2015 – The role of imagery and observation’, *European Journal of Sport Science*. Routledge, 15(6), pp. 530–535. doi: 10.1080/17461391.2015.1034787.
- Sheehan, R. B., Herring, M. P. and Campbell, M. J. (2018) ‘Associations Between Motivation and Mental Health in Sport: A Test of the Hierarchical Model of Intrinsic and Extrinsic Motivation’, *Frontiers in Psychology*, p. 707.
- Sheldon, K. M. *et al.* (2001) ‘What is satisfying about satisfying events? Testing 10 candidate psychological needs’, *Journal of Personality and Social Psychology*, 80, pp. 325–339. doi: 10.1037/0022-3514.80.2.325.
- Siebold, G. L. (2006) ‘Military group cohesion’, in Britt, T., Adler, A., and Castro, C. (eds) *Military Life: The psychology of serving in peace and combat*. 1st edn. Westport, CT: Greenwood Publishing Group, pp. 185–201.
- Silver, D. (2014) *Managing Corporate Communications In The Age Of Restructuring, Crisis, And Litigation*. 1st edn. Plantation, Florida: Ross Pub.
- Simon, H. A. (1946) ‘The Proverbs of Administration’, *Public Administration Review*, 6(1), pp. 53–67.
- Simon, H. A. (1947) *Administrative behavior: a study of decision-making processes in administrative organization*. 1st edn. New York: Macmillan.
- Sims, R. R. and Sauser, W. I. (2013) ‘Toward a better understanding of the relationships among received wisdom, groupthink, and organizational ethical culture.’, *Journal of Management Policy and Practice*, 14(4), pp. 75–90.
- Sims, R. and Sauser, W. (2013) ‘Toward a better understanding of the relationships among received wisdom, groupthink, and organizational ethical culture’, *Journal of Management Policy and Practice*, 14(4), pp. 75–90.

- Singelton, L. (2014) 'Understanding the evolution of theoretical constructs in organization studies: Examining "Purpose"', *Academy of Management Annual Meeting Proceedings*. Academy of Management, 2014(1), pp. 1132–1137. Available at: <http://10.0.21.89/AMBPP.2014.246>.
- Smith, A. (2006) 'Tourists' Consumption and Interpretation of Sport Event Imagery.', *Journal of Sport & Tourism*. Routledge, 11(1), pp. 77–100. Available at: <http://10.0.4.56/14775080600985382>.
- Stake, R. E. (1995) *The Art of Case Study Research*. 1st edn. Thousand Oaks, California: SAGE.
- Stenling, A. *et al.* (2017) 'Longitudinal associations between athletes' controlled motivation, ill-being, and perceptions of controlling coach behaviors: A Bayesian latent growth curve approach', *Psychology of Sport and Exercise*, 30, pp. 205–214. doi: <https://doi.org/10.1016/j.psychsport.2017.03.002>.
- Stenling, A., Lindwall, M. and Hassmén, P. (2015) 'Changes in perceived autonomy support, need satisfaction, motivation, and well-being in young elite athletes', *Sport, Exercise, and Performance Psychology*, 4(1), pp. 50–61.
- Sundstrom, E., De Meuse, K. and Futrell, D. (1990) 'Work Teams: Applications and Effectiveness', *American Psychologist*, 45, pp. 120–133. doi: 10.1037/0003-066X.45.2.120.
- Tajfel, H. (1974) 'Social identity and intergroup behaviour', *Social Science Information*, 13(2), pp. 65–93. doi: 10.1177/053901847401300204.
- Tajfel, H. and Turner, J. C. (1979) 'An integrative theory of intergroup conflict', in Austin, W. G. and Worchel, S. (eds) *The social psychology of intergroup relations*. Monterey, CA: Brooks/Cole, pp. 33–47. doi: 10.4324/9780203505984-16.
- Taylor, F. W. (1913) *The Principles of Scientific Management*. Harper. Available at: <http://books.google.co.uk/books?id=HoJMAAAAYAAJ>.
- Taylor, S. (2021) *From the battlefield to the boardroom: What the military leadership can teach us*, Kaplan. Available at: <https://www.kaplansolutions.com/article/from-the-battlefield-to-the-boardroom-what-the-military-leadership-can-teach-us> (Accessed: 11 February 2021).
- Tesluk, P. E. *et al.* (1997) 'Task and aggregation issues in the analysis and assessment of team performance.', in Brannick, M. T., Salas, E., and Prince, C. (eds) *Team performance and measurement: Theory, methods, and applications*. Mahwah, NJ: Erlbaum, pp. 197–224.
- Tesluk, P. E. and Mathieu, J. E. (1999) 'Overcoming roadblocks to effectiveness: Incorporating management of performance barriers into models of work group effectiveness', *Journal of*

- Applied Psychology*, 84, pp. 200–217.
- Tetlock, P. E. *et al.* (1992) 'Assessing political group dynamics: The test of the groupthink model', *Journal of Personality and Social Psychology*, 63, pp. 403–425.
- Thibaut, J. W. and Kelley, H. . (1959) *The Social Psychology of Groups*. New York: Wiley.
- Thompson, J. D. (1967) *Organizations in action; social science bases of administrative theory*. New York: McGraw-Hill.
- Townsend, P. (2002) 'Fitting teamwork into the grand scheme of things', *The Journal for Quality and Participation*. Cincinnati: American Society for Quality, 25(1), pp. 16–18.
- Townsend, P. L. and Gebhardt, J. E. (2003) 'The Leadership-Teamship-Followership Continuum', *Leader to Leader*, 29(2), pp. 18–21.
- Tuckman, B. W. (1965) 'Developmental sequence in small groups.', *Psychological Bulletin*, 63(6), pp. 384–399.
- Tuckman, B. W. and Jensen, M. A. C. (1977) 'Stages of Small-Group Development Revisited', *Group & Organization Studies*. SAGE Publications, 2(4), pp. 419–427. doi: 10.1177/105960117700200404.
- Turner, J. C. *et al.* (1987) *Rediscovering the social group: A self-categorization theory*. Oxford: Blackwell.
- Turner, J. C. and Oakes, P. (1986) 'The significance of the social identity concept for social psychology with reference to individualism, interactionism and social influence', *British Journal of Social Psychology*, 25(3), pp. 237–252.
- Turner, J. C. and Onorato, R. S. (1998) 'Social identity, personality, and the self-concept: A self-categorization perspective', *The Psychology of the Social Self*. Edited by T. R. Tyler, R. M. Kramer, and O. P. John, 26(4), pp. 11–46.
- Tziner, A. (1982a) 'Differential effects of group cohesiveness types: A clarifying overview', *Social Behavior and Personality*, 10(2), pp. 227–239.
- Tziner, A. (1982b) 'Group cohesiveness: A dynamic perspective', *Social Behavior and Personality: an international journal*, 10(2), pp. 205–211.
- Ulrich, D. *et al.* (2017) 'Leaders as Paradox Navigators', *Leader to Leader*. John Wiley & Sons, Ltd, 2017(86), pp. 53–59. doi: 10.1002/ltl.20322.
- Vallerand, R. (2012) 'From Motivation to Passion: In Search of the Motivational Processes Involved in a Meaningful Life', *Canadian Psychology-psychologie Canadienne*, 53, pp. 42–52. doi:

- 10.1037/a0026377.
- Vallerand, R. J., Deci, E. L. and Ryan, R. M. (1987) '12 Intrinsic Motivation in Sport', *Exercise and Sport Sciences Reviews*, 15(1). Available at: https://journals.lww.com/acsm-essr/Fulltext/1987/00150/12_Intrinsic_Motivation_in_Sport.15.aspx.
- Vallerand, R. J. and Thill, E. E. (1993) 'Introduction au concept de motivation [Introduction to the concept of motivation]', in Vallerand, R. and Thill, E. (eds) *Introduction à la psychologie de la motivation [Introduction to the psychology of motivation]*. Laval, Canada: Éditions Études Vivantes, pp. 3–39.
- Vallerand, R. and Losier, G. (1999) 'An Integrative Analysis of Intrinsic and Extrinsic Motivation in Sport', *Journal of Applied Sport Psychology - J APPL SPORT PSYCHOL*, 11, pp. 142–169. doi: 10.1080/10413209908402956.
- Vallerand, R. and Rousseau, F. L. (2001) 'Intrinsic and extrinsic motivation in sport and exercise: A review using the Hierarchical Model of Intrinsic and Extrinsic Motivation', *Handbook of Sport Psychology*, pp. 389–416.
- Vanhove, A. and Herian, M. (2015) 'Team cohesion and individual well-being: A conceptual analysis and relational framework', in Salas, E., Vessey, W. B., and Estrada, A. X. (eds) *Team Cohesion: Advances in Psychological Theory, Methods and Practice*. 1st edn. Bingley: Emerald Group Publishing Limited, pp. 53–82.
- Vansteenkiste, M., Ryan, R. M. and Soenens, B. (2020) 'Basic psychological need theory: Advancements, critical themes, and future directions', *Motivation and Emotion*, 44(1), pp. 1–31. doi: 10.1007/s11031-019-09818-1.
- Van De Ven, A. H., Delbecq, A. L. and Koenig, R. (1976) 'Determinants of Coordination Modes within Organizations', *American Sociological Review*, 41(2), pp. 322–338. doi: 10.2307/2094477.
- Victor, B. and Blackburn, R. S. (1987) 'Interdependence: An Alternative Conceptualization', *Academy of Management Review*. Academy of Management, 12(3), pp. 486–498. doi: 10.5465/amr.1987.4306563.
- Van Vuuren, M., de Jong Menno, D. T. and Seydel Erwin, R. (2008) 'Contributions of self and organisational efficacy expectations to commitment: A fourfold typology', *Employee Relations*. Emerald Group Publishing Limited, 30(2), pp. 142–155. doi: 10.1108/01425450810843339.
- Waddington, D. (2004) 'Participant Observation', in Cassell, C. and Symon, G. (eds) *Essential guide to qualitative methods in organizational research*. 1st edn. London: SAGE Publications Ltd, p. 156.

- Wageman, R. (1995) 'Interdependence and group effectiveness', *Administrative Science Quarterly*. [Sage Publications, Inc., Johnson Graduate School of Management, Cornell University], 40(1), pp. 145–180. doi: 10.2307/2393703.
- Wageman, R. (2001) 'The meaning of interdependence', in Turner, M. E. (ed.) *Groups at work: Theory and research*. 1st edn. Mahwah, New Jersey: Lawrence Erlbaum Associates Publishers, pp. 197–217.
- Wageman, R., Gardner, H. and Mortensen, M. (2012) 'The changing ecology of teams: New directions for teams research', *Journal of Organizational Behavior*, 33, pp. 301–315. doi: 10.1002/job.1775.
- Wageman, R., Hackman, J. R. and Lehman, E. (2005) 'Team diagnostic survey development of an Instrument', *The Journal of Applied Behavioral Science*, 16(6), pp. 687–700. doi: 10.1177/0021886305281984.
- Walliman, R. (2011) *Your Research Project: A Step by Step Guide for the First-Time Researcher*. 3rd edn. Edited by Sage. London.
- Weber, M. (1946) 'Class, Status, Party', in Girth, H. H. and Mills, C. W. (eds) *From Max Weber: Essays in Sociology*. New York: Oxford University Press, pp. 180–195.
- Weiner, B. (1972) *Theories of motivation : from mechanism to cognition*. Chicago (Ill.): Markham. Available at: <http://lib.ugent.be/catalog/rug01:000744393>.
- Wheelan, S. A. (2009) 'Group size, group development, and group productivity', *Small Group Research*, 40(2), pp. 247–262. doi: 10.1177/1046496408328703.
- White, R. W. (1959) 'Motivation reconsidered', *Psychological Review*, 66(5), pp. 297–333.
- Wild Rugby Academy* (2020). Available at: <http://www.wildrugbyacademy.de> (Accessed: 20 July 2020).
- Wilkinson, J. (2012) *Jonny*. 1st edn. London: Headline.
- Wise, S. (2014) 'Can a Team Have Too Much Cohesion? The Dark Side to Network Density', *European Management Journal*. Pergamon, 32(5), pp. 703–711. doi: 10.1016/J.EMJ.2013.12.005.
- Woodward, C. (2003) 'England Rugby - The Black Book'.
- Woodward, C. (2004) *Winning!* 1st edn. London: Hodder & Stoughton.
- Woodward, C. (2019) *How To Win: Rugby and Leadership from Twickenham to Tokyo*. 1st edn. London: Hodder & Stoughton.

- Woodward, C. and Walters, H. (2003) *Beyond Number One: The Black Book*. London.
- Yin, R. K. (2018) *Case Study Research and Applications: Design and Methods*. 6th edn. Los Angeles: SAGE.
- Zaccaro, S. J. (1991) 'Nonequivalent associations between forms of cohesiveness and group-related outcomes: Evidence for multidimensionality', *Journal of Social Psychology*, 131(3), pp. 387–399. doi: 10.1080/00224545.1991.9713865.
- Zaccaro, S. J., Gualtieri, J. and Minionis, D. (1995) 'Task Cohesion as a Facilitator of Team Decision Making Under Temporal Urgency', *Military Psychology*. Routledge, 7(2), pp. 77–93. doi: 10.1207/s15327876mp0702_3.
- Zaccaro, S. J. and Lowe, C. (1988) 'Cohesiveness and Performance on an Additive Task: Evidence for Multidimensionality.', *The Journal of Social Psychology*, 128(4), pp. 547–558.
- Zaccaro, S. J. and McCoy, C. M. (1988) 'The Effects of Task and Interpersonal Cohesiveness on Performance of a Disjunctive Group Task', *Journal of Applied Social Psychology*, 18(10), pp. 837–851.
- Zoltan, R. and Vancea, R. (2016) 'Work group development models: The evolution from simple group to effective team', *Ecoforum*, 5(1), pp. 241–246.

Appendices

9.1 Appendix A Biographical Profile - Kieran Lees (Author)

Born in 1968, the author started his career as an officer in the Royal Navy in the 1980s. He left the Royal Navy in the 1990s to pursue a commercial career, initially in the office equipment industry, and then in the information technology industry, working for corporations such as Oracle, Sun Microsystems, NCR, Computacenter and Hitachi Data Systems, initially in sales and sales leadership roles, extending to general management and executive positions with UK and global responsibilities. Since 2008 he has focused on three areas: Software and hi-tech start-ups; small-cap international software companies; and the development of his academic knowledge. He started-up a “business to business” consumer app company in 2016, raising almost £1m of growth capital and developing the business through to exit in 2018. Alongside this, he founded and runs a business consulting services company with revenues approaching £1m per annum focused on driving organisational growth in both revenue and people-terms.

In 2016 he completed an MBA from the University of Southampton, awarded with Distinction. In 2018 he completed an MSc from the University of Reading (Henley Business School), also awarded with Distinction. He has been undertaking a doctoral research degree (DBA) since 2018, focused on group purpose and self-motivation as antecedents to cohesiveness in small groups. The thesis will be submitted for consideration in 2021.

The author has three children, aged 23, 11 and 2. His interests outside of work and family include rugby, which he played competitively from 1989 to 2005, as well as golf, cycling, hiking and gardening.

9.2 Appendix B Rugby Union: A description of the sport

Rugby is a full contact team sport played between two teams using an oval-shaped ball on a rectangular pitch. The sport originated in England in the mid-19th Century and is based on running with the ball in hand, passing and kicking, with the intention of evading the defence of the opposition, and placing the ball over the opponents 'try-line'; of which there is one at each end of the pitch. Successful placement of the ball over the opposition try-line is referred to as scoring a 'try'. In order to prevent the attacking team from scoring, the defending team is allowed to physically intercept and tackle the ball-carrier in an effort to both stop the attack and 'steal' the ball, whereupon they now become the attacking team. Such interventions are typically high impact for both the tacker and the tackled, and require significant courage, strength, skill and speed; physical injuries are frequent. There is no limitation on the number of defenders permitted to execute a tackle on the ball carrier, thus increasing the risk of injury significantly. The attacking team seeks to avoid the loss of the ball by passing it from player to player and thus frustrating the efforts of the defending players to capture the ball and affecting a turnover of possession. Players from both teams are permitted to engage physically and aggressively to defend or steal the ball, and to protect or support their teammates. At international level the intensity of the physicality of these confrontations is significant, and the safety and welfare of individual players, and the performance of the team requires total understanding between teammates, instant decision-making, high levels of personal courage, and a willingness to sacrifice your own welfare for the sake of a teammate and the team.

A match is controlled by a strict set of rules that must be adhered to during the game, and which are enforced by a referee. Stoppages in the game – such as the scoring of a try, the ball going out of play, or transgressions of rules by players of either team – result in restart routines such as kick-offs, lineouts or scrums. These set-piece recommencements of the game involve the close engagement of players from either team to win control of the ball again. As such, these set-pieces are generally comprised of physically larger and stronger players from either team – known as 'forwards'. Their role throughout the match is primarily based on close physical confrontation and domination; achieved through power, skill and courage. Their job is to steal the ball and provide it to the players in the team who are both fast and skilful in ball-handling. These individuals are typically lighter and more agile than the forwards and are referred to as 'backs'. The profile and roles of these two groups in a single team often leads to the generation of different focus and culture both in training and socially.

Supporting the players are a team of coaches and support staff. At international level these typically include a Director of Rugby, Head Coach, Forwards Coach, Backs Coach, Line-out Coach, Attack Coach, Defence Coach, Kicking Coach, two or more Strength and Conditioning Coaches (S&C), multiple physiotherapists, 'kitman', team manager, one or more doctors, press manager, nutritionist, and – increasingly – experts in mental excellence, team performance and sports psychology. In all, there are around twenty to twenty-five 'back-office staff' directly supporting the playing squad.

Sevens Rugby is increasing in popularity worldwide. In 2016 it was included in the Olympics for the first time and attracted significant following and commercial interest. The 7s game is similar to the XV's game in many respects but requires some different skill sets. 7s games at international level are held over two-day tournaments, with sixteen nations competing in each two-day tournament. The games comprise two halves of seven minutes. During a tournament each team will play three matches in group qualifying stages (Day 1), and then progress on merit to quarter-final, semi-final and final matches (Day 2). Like XV's, 7s is also a professional sport, with the top nations globally contracting players on a full-time basis to represent their country. The top fifteen nations globally compete in an annual series of ten tournaments called the World Series; the sixteenth place is invitational. The Olympics competition comprises just twelve nations; the top five in the World Series qualify automatically, the remainder having to compete and win in a variety of qualifying tournaments.

9.3 Appendix C Summarised history of England Rugby

The history of an England XV's rugby team extends back to 1871, when England played its first ever official international test match against Scotland. Since that time, rugby has developed as a global sport, with the dominant playing nations including Wales, Scotland, Ireland, France, New Zealand, Australia, South Africa, Argentina and Italy. Over the last thirty years other nations have emerged strongly and competitively, including Samoa, Fiji, Japan, USA and Canada. Despite international games being played for nearly 150 years, a global tournament (the Rugby World Cup) was not introduced until 1987. However, the 'Home Nations' championship (subsequently renamed the "Five Nations" tournament in 1940, and then the "Six Nations" tournament from 2000) has been an annual competition since 1883. In addition to this annual tournament, England plays regular international test matches against New Zealand, Australia and South Africa, all of which hold significant importance to the competing nations and are intensely competed. The international games held between all nations results in a World Ranking of teams, which has significance not only for competitive reasons, but also for commercial attractiveness for sponsoring organisations, and for seeding at the RWC each four years. Since the introduction of the RWC there have been nine tournaments (including RWC 2019). The period addressed in this section represented the fourth and fifth occurrences of the RWC.

9.4 Appendix D A summary of formative and recent history in German Rugby

The German Rugby team's history began in 1927 when they played France in Paris. The sport has two main bases in Germany: Heidelberg and Hannover. In the years before the Second World War, Germany was a highly competitive rugby nation, regularly beating both the French and Italian national teams. In 1940 the national team was disbanded and did not play another international game until 1952. They have never regained their early standards and have competed in Europe's second tier since then.

Unlike Europe's Tier 1 rugby nations - but consistent with the status of most other Tier 2 and Tier 3 national teams - XV's rugby in Germany has remained a predominantly amateur sport, with both playing and coaching staff remaining either unpaid or paid on a part-time basis. German XV's rugby does not receive state funding and is reliant on contributions of funding from their domestic league clubs, World Rugby grants and commercial sponsorships. This presents significant challenges for the sport; the gulf in compensation and investment in the sport between Tier 1 and Tier 2 has implications for the levels of attainment feasible for the national team against professional opposition, and also for the welfare and security of players, coaches and their families.

Rugby in Germany does, however, have some passionate and ardent followers, some of whom have been willing to invest in the development of the sport. In 2007 the billionaire owner of the soft drinks firm 'Capri-Sun' (Dr. Hans-Peter Wild) made a significant investment in German rugby. Dr. Wild was born and lives in Heidelberg, the home of rugby in Germany. Whilst having never played the sport, he has deep admiration for the camaraderie, courage and teamwork required to compete in the game. Frustrated with the lack of state funding for the sport, and with the internal politics in the DRV that hampered the development of the game, he decided to take a personal initiative to professionalise the sport and to develop players who would be able to compete for the country at a high level. To do this he established his own professional rugby academy – the Wild Rugby Academy (WRA) and also sponsored a Bundesliga club, Heidelberg Rudder Klub (HRK). This investment meant that players, coaches and support staff became employees of the WRA and were paid on full time contracts of employment.

The WRA aimed to develop the game of rugby union in Germany, by awarding scholarships to both young and senior players. It also planned to assist in the development of coaches and referees. Wild decided to accelerate the growth in playing standards by recruiting players from around the globe to the WRA and to play for HRK. WRA's main goals were to establish a German

team in the European Challenge Cup and to develop players for Germany to be able to participate in the 2015 Rugby World Cup (*Wild Rugby Academy*, 2020). Over a period of ten years Wild invested over €20 million in WRA and HRK, effectively bank-rolling the German National XV's and Academy squads. The outcome of this investment resulted in success both domestically and internationally; HRK competed in the European Challenge Cup (a domestic club rugby tournament) and against the odds qualified to participate in the 2017 tournament against the established senior club teams in Europe from England, Scotland, Ireland, France and Italy. This was a significant and profound achievement, against all expectations. However, Wild also owned a globally recognised French Tier 1 rugby club - Stade Francais - who had also qualified for the tournament. Citing a potential conflict of interest and contravention of European Rugby regulations, the European Professional Club Rugby organisation (EPCR) (*EPCR Home*, 2020) mandated that Wild withdraw one of his clubs from the competition. Wild opted to support his senior club – Stade Francais – and withdrew HRK.

Alongside this domestic rugby drama, 80% of the German XV's international team now comprised players developed through Wild's WRA and playing their senior rugby as professionals for HRK. The performance outcome of this at an international level was that Germany improved its World Rugby ranking considerably, and rapidly became a potential contender for qualification for the RWC2019. However, the increasing control that WRA was exerting over the DRV caused significant conflict with the grandees of the DRV and a continual stand-off between Wild and the national organisation.

When the EPCR demanded the ejection of one of Wild's rugby clubs, and with the relentless unpleasantness from the leaders of the DRV, Wild decided to withdraw from all interest in German rugby with immediate effect. In May 2017 he liquidated the WRA, withdrew his sponsorship of HRK, and severed all ties with the DRV overnight. This resulted in the instantaneous termination of employment and loss of income for all the WRA players and staff. The DRV refused to provide any financial support for the players, leaving many of them destitute and unable to provide for their families. Ultimately, in an effort to force the DRV to take supportive action to help the players, the players went on strike shortly before an important international match against Chile. Rather than help the players, the DRV chose to field a scratch team of inexperienced German players and ignore the needs and perils of the senior squad. This created deep division and resentment between the DRV and its players. The critical game against Chile was lost, and so – it appeared – were Germany's chances of competing in the RWC 2019 Repechage. In a final twist of fate, in August 2018 both Spain and Romania were ejected from competing in the Repechage tournament for breaches of competition rules during the earlier

qualifying matches, resulting in Germany being invited to play in the Repechage as a wild-card entry after all.

In contrast to the situation with XV's rugby, 7s rugby in Germany has benefitted from the inclusion of this version of the sport in the Olympic Games since 2016. Olympic sports in Germany are eligible for significant state investment, and the German 7s organisation has been professionalised since 2015. This means that players are paid as full-time professionals, along with all the coaching and support staff. They have full access to medical support for injury treatment, rehabilitation, physiotherapy and psychotherapy. In addition, the German Olympic Federation also provides permanent training and accommodation facilities for the squad in both Hannover and Heidelberg. With both XV's and 7s rugby residing under a single umbrella organisation (the DRV), but with players not being eligible to play for both codes, it is unsurprising that the national teams experience inter-code rivalry and resentment.

9.5 Appendix E Review of published literature for “teamship”

Article title and reference	Context of “Teamship” in article	Theoretical alignment [interpreted by this author]	Comment
<p><i>“Experiencing teamship by escaping the leadership lecture”</i></p> <p>(Ross, Koneri and Stansell, 2020)</p>	<p>“...a group of individuals who come together in a collaborative effort to identify solutions.” (p.3)</p>	<p>Group and Team definition.</p>	<p>Describes the use of “escape rooms” as a means of teambuilding in healthcare nursing teams. Refers to Adair’s Action-Centred Leadership Model to identify action, behaviours and outcome (Input-Process-Outcome) that result in teamwork. Confused between definitions of “teams”, “teamwork”, and “teamship”. No theoretical contribution.</p>
<p><i>“The Role of Practice in the Development of Military Masculinities.”</i></p> <p>(Hale, 2012)</p>	<p>“...the sense of teamwork and camaraderie and the sense of humour... (p.709)</p>	<p>Social Identity Theory.</p> <p>Masculinity and Identity.</p>	<p>Qualitative study examining the use of masculinity in militarization in British Armed Forces. Focuses on personal and social identity, belonging, acceptance and cohesiveness, and links to organisational efficacy. Does not contribute to “teamship” theory specifically, but useful empirical contextualisation.</p>
<p><i>“Customized Assessment Group Initiative: A Complementary Approach to Students’ Learning.”</i></p> <p>(Akindayomi, 2015)</p>	<p>“...teamship is a grouping arrangement where members embrace (1) individual responsibility; (2) shared obligation; and (3) mutual accountability as complementary</p>	<p>Group cohesiveness.</p> <p>Group collaboration processes.</p> <p>Interdependence Theory.</p>	<p>Experimental study testing the longitudinal development of group-supportive behaviours within students, aimed at improving academic performance and team spirit. Akindayomi’s definition of “teamship” is used as the foundation for assessing the efficacy of CAGI. Findings support the hypothesis. A further examination of the conceptualisation of “teamship” offered by this study could be useful.</p>

	features of cooperative learning.” (p.103)		
<i>“Inclusion in global virtual teams: Exploring non-spatial proximity and knowledge sharing on innovation.”</i> (Hung <i>et al.</i> , 2020)	“...telephone interviews, letters, and communication software were used to contact team leaders to confirm their global virtual teamship.” (p.5)	Virtual teams. Workplace diversity. Group knowledge sharing. Group proximity and efficacy.	Empirical survey investigating the effect of non-spatial proximity (cognitive proximity, organizational proximity, and institutional proximity) on knowledge sharing in virtual teams. “Teamship” is referenced only once and without context. No contribution to “teamship” knowledge but highlights the assumption of the scholarly understanding of the term, and therefore the need for academic definition.
<i>“It’s not about winning; it’s about getting better.”</i> (Schroth, 2011)	“...membership in a high-performance team is conditional—based on performance and teamship.” (pp.142-143)	Culture. Group cohesiveness. Self-motivation. Selfishness and Selflessness in groups.	Critical Incident case study exploring the factors contributing to the exceptional record of success at Cal Rugby (University of California). “Teamship” is referred to twice but without definition. Contextual interpretation of the text indicates that it refers to culture, values and standards of the group, and the commitment to them by the team-member. May provide useful cross-reference to other studies in creating a definition of “teamship”.
<i>“The journey toward voluntary public health accreditation readiness in local health departments: leadership and followership theories in action.”</i> (Carman, 2015)	“Teamship indicates interaction between leaders and followers...members of the team assuming leader and follower roles according to the expertise needed by the team...”(p.3)	Followership. Trait Leadership. Transformational Leadership. Interdependence Theory.	Theoretical article addressing leadership and followership in USA healthcare, suggesting the need for increased collaboration and fluidity in role adoption and execution. Applies Gerhardt and Townsend’s description of “teamship” as a transitional state between leadership and followership.

<p><i>“Fitting teamwork into the grand scheme of things.”</i> (Townsend, 2002)</p>	<p>“So where does teamwork (or, for sake of auditory/visual consistency, “teamship”) fit in with everything else? It’s the middle third of the continuum; it’s where leadership and followership meet and overlap.” (p.17)</p>	<p>Leadership. Followership. Teamwork.</p>	<p>Theoretical article providing a definition of “teamship”. Suggests that leaders and followers are fluid roles on a continuum, and that the transitional state from one to the other necessitates behaviours from the individual that are supportive of the group need. This is an opinion-piece only and offers no empirical or theoretical support for its assertions. However, the proposed conceptual model does provide a framework for discussion or practical application and use.</p>
<p><i>“The Leadership-Teamship-Followership Continuum.”</i> (Townsend and Gebhardt, 2003)</p>	<p>“Teamship is what happens when a group of individuals interact—either prior to beginning a project or at various times throughout the project—to accomplish a shared goal, and the interplay is such that an outside observer might find it difficult to tell, at any given moment, exactly who the “official” leader is and who the “official” followers are.” (p.19)</p>	<p>Leadership. Followership. Group membership. Teams. Shared Purpose.</p>	<p>Expansion of Townsend’s original theoretical assertion that “teamship” is an emergent state of behaviour [this author’s interpretation] as individuals oscillate between leadership, management, and both active and passive followership roles. Again, no empirical or theoretical evidence is offered to support the notion. There is consistency in the placement of “teamship” when compared to the 2002 article, but the description includes reference to shared goals, indicating that the authors had developed their thinking to associate “teamship” with group tasks rather than group membership.</p>
<p><i>“Small and medium-sized firms top management teams’</i></p>	<p>“The TMT is thus an integral part of the value of the acquisition by</p>	<p>Upper Echelon Theory.</p>	<p>Theoretical study examining the importance of the acquired top management team (TMT) in successful acquisitions. “Teamship” is mentioned once only and no definition - direct or contextual - of the</p>

<p><i>decision-making in global acquisitions.”</i></p> <p>(Kiessling, Harvey and Moeller, 2009)</p>	<p>developing its strategy, organization and teamship.” (p.104)</p>	<p>Top Management Teams.</p> <p>Network Relational Theory.</p>	<p>term is provided. It can be implied from the text that the term is used to suggest behaviours of acquired TMT members which are oriented to the new goals of the organisation. The potential contribution to this study is highlighting the assumed scholarly understanding of “teamship”.</p>
<p><i>“Managing team activities toward success.”</i></p> <p>(Ketelhut, 1999)</p>	<p>“Teamwork constitutes a blending of team dynamics with partnership thus a new term was created to define teamwork at Amgen: Teamship.” (p.27, original emphasis)</p>	<p>Teamwork.</p> <p>Social Exchange Theory.</p> <p>Social Identity Theory.</p>	<p>Theoretical article describing the processes of establishing an instrumental work team [this author’s interpretation] within a large organisation. A definition of “teamship” is offered, suggesting it is the combination of partnership and teamwork behaviours. By implication only this suggests affective collaboration combined with instrumental actions to achieve a collective goal. No empirical foundation for the article, but the conceptualisation of “teamship” implies shared values and group behavioural norms.</p>
<p><i>“Working in teams: The influence of rhetoric - from sensemaking to sadness.”</i></p> <p>(Parris and Vickers, 2005)</p>	<p>“Many organizations espouse words such as “teamship”, and the phrase “team-based philosophy” has been used to describe organizations which are using teams...”(p.287)</p>	<p>Organisational rhetoric.</p> <p>Teamwork.</p> <p>Teams.</p> <p>Group cohesion.</p>	<p>A phenomenological empirical study challenging the assumption that “teams” are always beneficial to both the organisation and the individual. The findings posit that teams often have a negative rather positive effect on members and outcomes. “Teamship” is used as an assumed term without context or definition. Interpretation of the text implies that it is intended to represent the array of behavioural associations of members in teams. Highlights the scholarly gap regarding definition of “teamship”.</p>
<p><i>“Bob Hayes: Forty Years of Leading Operations</i></p>	<p>“To leverage young talent, successful technology companies remove</p>	<p>Broad range of organisational</p>	<p>A biopic review of a leading figure in operations management practice and theory. “Teamship” is referred to by the author in respect to</p>

<p><i>Management into Uncharted Waters.</i>” (Fisher, 2007)</p>	<p>hierarchy through lack of titles, open office space, and no executive perks, like separate dining rooms and parking. These practices also foster a sense of “teamship” crucial in developing a new technology.” (p.164)</p>	<p>behaviour, leadership and group theory.</p>	<p>Hayes’ findings in regard to highly successful technology firms. “Teamship” is not defined, but its contextual use implies organisational culture and leadership behaviours which encourage employee inclusivity, cohesion and shared values and goals. Highlights the scholarly gap in regard to the definition of “teamship” and indicates its potential interpretation in practice and theory.</p>
<p><i>“Tourists’ Consumption and Interpretation of Sport Event Imagery.”</i> (Smith, 2006)</p>	<p>“...sport provides a potent symbolic theme because of its associations with 'universalism, transcendence, heroism, competitiveness, individual motivation and teamship.” (p.80)</p>	<p>Image and Identity. Social Identity Theory.</p>	<p>A qualitative study in tourism exploring how city image effects desirability for major sporting event venue selection and attendance. “Teamship” is referred to in regard to the importance of values related to specific sports, and the attractiveness of this to attendees. No explanation is provided of “teamship”, but the context implies positive behaviours within sports teams. The contribution to this study is to highlight again the assumed and confused interpretation of the term, and the diversity of its employment in academic literature.</p>
<p><i>“Current Practices in Strategic Partnerships.”</i> (Duff, 1994)</p>	<p>“Develop a culture of teamship using shared visions, goals and objectives as the mortar to bring together and unify the stakeholders so that they share a common purpose in a non-adversarial environment.” (p.32)</p>	<p>Partnerships. Teamwork. Interdependence in groups and partnerships. Group cohesiveness. Group culture.</p>	<p>A reflective essay discussing the need for an increase in collaborative partnering in the Australian construction industry. “Teamship” is referred to without definition, but with an assumed interpretation of its meaning. It is used contextually in association with group culture, cohesion, purpose and collaboration.</p>

<p><i>“Understanding team resilience in the world's best athletes: A case study of a rugby union World Cup winning team.”</i></p> <p>(Morgan, Fletcher and Sarkar, 2015)</p>	<p>“A salient social identity was constructed through the use of mottos, imagery, and symbolic linguistic references such as, teamship.” (p.94).</p> <p>“...the players repeated use of the phrase teamship to symbolize how team members collectively set their own high standards in difficult times.” (p.95).</p> <p>“...the phrase teamship was used to reinforce the team's commitment to collective accountability and action.” (p.97).</p> <p>“...teamship symbolized the importance of their shared and distinct team identity.” (p.98)</p>	<p>Group resilience.</p> <p>Interdependence.</p> <p>Teamwork.</p> <p>“Teamship”.</p> <p>Culture.</p> <p>Groupthink (Isolation, Recent Failure, Mindguards, Insulation, External Pressure, Risk)</p>	<p>A narrative inquiry exploring resilience in high performance teams, analysing eight autobiographies of members of the England Rugby team from 2003. “Teamship” is referred to several times in the text as references to the various authors written recollections. This group includes Sir Clive Woodward. The interpretation of “teamship” is therefore consistent with the increasing popular and colloquial use of the word. Of note, this empirical study offers four different explanations of “teamship”, highlighting the confusion both for practitioners and academics in regard to its definition.</p> <p>This forensic narrative analysis of members of the RWC2003 winning team (the inspiration of this study), highlights a number of antecedent conditions within the group which contributed to the development of “teamship”. These antecedents are consistent with those determined by Janis (1972) in his development of Groupthink Theory.</p>
--	---	---	--

9.6 Appendix F Review of groupthink meta-analyses 1990 - 2011

Meta-analysis article title and reference	# studies included	Types of studies analysed	Author's conclusion	This author's comments
<p>"A review of research on Groupthink." (Park, 1990)</p>	16	<p>8 Historical Case studies</p> <p>7 Experimental</p> <p>1 Content analysis</p>	<p>Contrary to Janis' (1972) position, Park concludes that the findings of the 16 studies suggest that group cohesiveness is not a major antecedent factor in the emergence of groupthink. Park highlights the challenge of creating laboratory conditions that might authentically result in group cohesiveness.</p>	<p>A review of the cases and experiments included in this meta-analysis show that not only is group cohesiveness not defined in the various author's studies (i.e., uni-, or multi-dimensional), but that no credible measurement of cohesiveness was attempted or possible in any of the studies.</p>
<p>"Groupthink re-modeled: The importance of leadership, time pressure, and methodical decision-making procedures." (Neck and Moorhead, 1995)</p>	15	<p>8 Experimental</p> <p>6 Historical case studies</p> <p>2 Theoretical</p>	<p>Assert that Janis' framework omits two key antecedents - high consequence and high time pressure and proposes a revision to the groupthink conceptual framework.</p>	<p>It is credible to extract from the studies included in this analysis that the proposed two new antecedents were present in all cases. However, the importance of cohesion is raised, but not investigated by these authors. Type of cohesion is not mentioned, nor what antecedent conditions may exist to contribute to its emergence.</p>
<p>"Alive and well after 25 years: A review of Groupthink research." (Esser, 1998)</p>	28	<p>17 Historical case studies</p> <p>11 Experimental</p>	<p>Provides a detailed analysis of antecedents and variables investigated in the studies. Highlights that 7 of the 11 experimental designs attempted to investigate group cohesiveness, but that all failed to reliably</p>	<p>Esser's analysis is thorough and objective. He identifies problems in research designs specific to group cohesiveness, identifying that a) it is impossible to evaluate emotions of participants in case studies without asking them, and b) that experimental designs fail to create conditions for the</p>

			recreate any measurable criteria for it. Also highlights that historical case analyses are unreliable in their inability to report on the feelings and beliefs of participants. Calls for more innovative empirical research designs.	emergence of group cohesiveness, other than at an individual-level to complete the task allocated. Esser fails to explore the implications of this further in groupthink research findings. He also fails to highlight the potential underlying design issues such as a) the types of cohesiveness that may affect the groups, and b) what method of data capture might be appropriate to resolve this problem.
“Diverse perspectives on the Groupthink theory: A literary review.” (Rose, 2011)	60	22 Historical case studies 17 Experimental designs 14 Theoretical or Conceptualisation papers 2 Literature reviews	A comprehensive re-analysis of the seminal case analyses, as well as the extensive range of research designs, including assessment of whether the studies were intended to examine symptoms, antecedents or decision-making. The primary finding relates to the issue of group cohesiveness, and the failure of any study to credibly describe what type of cohesiveness was referred to, and how it would be measured.	Rose makes a well-constructed contribution to the research literature. His analytical synthesis of a broad range of qualitative and quantitative studies, and balanced arguments for and against the conceptualisation of groupthink provide insight into many of the design limitations and problems with previous research. His key finding regarding group cohesiveness is consistent with all the reviews included in this study. The lack of a) consistent understanding of the construct, b) the muddled attempts to create its presence, and c) the inability to credibly measure its occurrence which undermines much of the literature.

9.7 Appendix G University of Reading Ethics Approval Form A

MSc in Business and Management Research/
Doctor of Business Administration

Cover Sheet

Project details

Name of researcher: Kieran Lees

Student number: 24905950

Programme: MScDBA09

Email: Kieran.Lees@programme-member.henley.com

Title of proposed project: **“An action research inquiry exploring how individual motivation and organisational purpose influence the functional and structural properties of cohesiveness in teams.”**

Responsible persons

Details of academic supervisor:

Name: Professor Malcolm Higgs

Email: Malcolm.higgs@soton.ac.uk

Nature of project

(Mark with an 'x' as appropriate)

Undergraduate []

Masters (not MBA) []

MBA []

MSc in BMR []

Doctoral [X]

Other []

Date of Cover Sheet/Section A submission: 5th September 2018

Date of final submission (to be completed on completion of Pilot Study/thesis): TBC – est. January 2021.

Section A - Research approval application

Section A must be completed in full and submitted prior to any data collection. If you have any questions regarding the form, please discuss them with your programme director or academic supervisor (if one has been appointed).

Approval must be obtained *before* the research project commences.

Summary of proposed project and research methods

This project seeks to explore how the structural and functional properties associated with the cohesiveness of groups is affected by the purpose of the organisation and the motivation of the individual within the group. Examination the antecedents draws on existing understanding of personal identity, social identity, work identity and organisational identity.

The project has been inspired by an interest in the occurrences of high-profile team successes and failures, attributed to “teamship” and ‘groupthink’ respectively. Examples such as the England Rugby Union team of 2003 and the British Olympic Squad in 2012 cite the presence of a phenomenon referred to as “teamship” as being a significant contributory factor to success. Equally, in other scenarios such as the Everest disaster of 1996, numerous political examples studied by Janis (1973), business scandals and disasters such as Enron and BP Deepwater Horizon, performance and outcomes have been suggested to have been influenced by the emergence of ‘groupthink’, leading the group members to make, accept and enforce courses of action that were highly detrimental to safe, informed and defensible decision-making.

In these scenarios, the groups concerned could have been considered to be operating in extreme environments, as defined by Harrison and Connors (1984), marked by (a) hostile environmental demands, (b) danger and physical risk, (c) restricted living or working conditions, and (d) social demands that may include isolation from those outside the setting and close confinement with those inside.

The unique stresses of groups working in extreme environments magnifies the impact of these antecedents being explored, allowing examination of their presence and influence. By seeking to explore the effects of purpose, motivation and identity on group cohesiveness, insight may be gained that could assist those involved with developing organisational structures to be able to determine whether a group or team is required, and the relevant leader and member selections appropriate to the purpose of the group. Additionally, the impacts on individuals within the groups may lead to insight for further research into stress in the workplace, and how organisations may be able to plan and manage more effectively in this regard.

The chosen methodology for this research purpose is Participatory Action Research. I have specifically sought to focus on conducting the research with an international rugby union squad, with the intention of working with individuals in a similar environment to that in which the original term of “teamship” was conceived and used.

I have been successful in engaging with the German National Rugby Union and have been invited to conduct the research with both their XV's and 7s squads as they prepare for and compete in various international competitions around the world. This is not a case study as I have been asked to also work directly with the players and coaches as a member of the coaching squad, with specific responsibility for the development of mental excellence at an individual and collective level.

Data collection will involve longitudinal observation of the teams and individuals, a sequence of semi-structured interviews, as well as video recordings of squad training and meetings, and selected telephone interviews at the end of the data collection period.

Individuals will not be named in the reporting of data, but their roles may be. Permission for participation has been sought and agreed both collectively and individually across both the XV's and 7s squads.

The period of data collection is 5th September 2018 to August 2019.

The German Rugby Football Union (Deutscher Rugby Verband – DRV) has *not* requested access to the data or thesis or for any validation purposes, and no restrictions have been imposed on publication of the findings.

1. Questions about proposed research (University ethics requirements)

Please reply to all of the following questions concerning your proposed research by marking with an 'x' as appropriate.

		Yes	No
1.1	Have the participants and subjects of the study been chosen because they are patients and/or clients of the National Health Service or Social Services in the UK, or equivalent health or social care systems in another country?		x
1.2.	Are the participants and subjects of the study unable to give free and informed consent because they are not over the age of 18, or as a consequence of their mental capacity? (For more details on how mental capacity might impair the ability to give free and informed consent, please consult the Mental Capacity Act 2005)		x
1.3	Are you asking questions that are likely to be considered inappropriate or to cause distress to any of the participants?		x
1.4	Are any of the subjects in a special relationship with the researcher that could affect their ability freely to give informed consent?		x
1.5	Is your project funded by a Research Council or other external source (excluding research conducted by postgraduate students)?		x

If you have answered **Yes** to any of these questions, your proposal will be reviewed in accordance with the requirements of the University Research Ethics Committee.

If you are unsure whether any of these conditions apply, please contact your programme director or academic supervisor (if one has been appointed) for further advice.

2. Questions about proposed research (administration of investigation process)

Please respond to all the following questions concerning your proposed research project by marking with an 'x' as appropriate.

		Yes	No
2.1	The research involves only archival research, access to company documents/records, access to publicly available data and/or questionnaires, surveys, focus groups or other interview techniques.		x
2.2	The need to reimburse expenses or make other payments to any research participants has been reviewed.		x
2.3	Participants will be/have been advised that they may withdraw at any stage if they so wish.	x	
2.4	Arrangements for ensuring personal privacy, commercial confidentiality and data protection during and after the project and for the disposal of material will be in line with University guidelines.	x	
2.5	Arrangements for providing subjects with research results if they wish to have them have been considered.	x	
2.6	Research instruments (questionnaires, interview guides, etc) will be reviewed against the policies and criteria noted in The University Research Ethics Committee Notes for Guidance.	x	
2.7	The arrangements for publishing the research results and, if confidentiality might be affected, for obtaining written consent of this have been reviewed.	x	
2.8	Information Sheets and consent forms will be prepared in line with University guidelines for distribution to participants, as appropriate. This contains details of the project, contact details for the principal researcher and advises subjects that their privacy will be protected and that their participation is voluntary and that they may withdraw at any time without reason.	x	
2.9	Completed consent forms, where required, will be retained and submitted with the final report on completion of the project for retention by Henley Business School.	x	

If you have answered **No** to any of these questions, contact your programme director or academic supervisor (if one has been appointed) for further advice.

3. Safeguarding personal safety and security of the researcher(s) and research participants

If the research is to be conducted outside of an office environment or normal place of work and/or outside normal working hours, please note the details in the comments box below and state how the personal safety and security of the researcher(s) and research participants will be safeguarded.

Comments

The research will be conducted in a high-performance sports environment in various locations globally over a 12-month period. Appropriate care will be taken by the researcher to protect my personal safety and security during this time.

The nature of the sport of rugby union exposes the participants to potential risk, but this is not as a result of the research being conducted.

There are no further security or safety risks envisaged in the conduct of the research.

I confirm that I have read and understood the ethics requirements of the University of Reading and will abide by these requirements in the course of my research.

Signed (student):

Date: 5th September 2018

Print name: Kieran Lees

Student number: 4905950

(Note to Research Associate: a signature is not required for Section A if submitting electronically via the RISISweb portal. In submitting via the RISISweb portal you are confirming that declarations regarding your proposed research are true and correct to the best of your knowledge, that you have read and understood the ethics requirements of the University of Reading and will abide by those requirements in the course of you of your research).

Approval review (supervisor)

Academic supervisor to mark with an 'x' as appropriate:

I have reviewed this application as **Approved** and confirm that it is consistent with the requirements of the University Research Ethics Committee procedures.

This proposal is **Not approved** and

is returned to the applicant for further consideration

or

has been referred for further review in accordance with University of Reading Ethics Committee requirements

Name (supervisor): Professor Malcolm Higgs

Signed (supervisor):

Comments (where application has been refused)

(Note to supervisor: a signature is not required for Section A if you are submitting proposal feedback electronically via the RISISweb Portal. In approving the proposal in the RISISweb Portal you are also confirming your approval of the proposed research from an ethical point of view. If you are not able to so approve the proposed research, you should not approve the proposal and should advise the appropriate assignments office.)

Further action (office use only)

9.8 Appendix H Participant Engagement and Consent Form



Information sheet

Title of research project: *A collective case study exploring the constructs affecting the multiple dimensions of cohesiveness of teams operating effectively in extreme environments*

This research project investigates what affects the type and depth of bonding between team members in teams working under stressful or demanding conditions, in order to help organisational leaders design team structures, recruitment, and both strategies and actions that may optimise individual and collective performance.

The research forms part of my doctoral (DBA) academic qualification at Henley Business School at the University of Reading.

Part of the research, involves interviewing people who work as members of groups that work in extreme environments and for this reason, I would like to invite you to take part.

If you agree, you will be asked to participate in one or more interviews of about 30-45 minutes.

During the interview I will ask you questions on your thoughts and opinions of how the team functions, including your view of factors that affect the performance of both the team and you. This may include your observations of your team mates, management, external factors or organisations, personal pressures and ambitions, or resources.

You can choose not to answer any particular questions and you are free to withdraw from the study at any time.

With your permission, I would like to record the interview and take notes for later analysis. The data will be kept securely and either destroyed after the completion of the project or retained securely for inclusion in publications directly related to this research subject to participants consent to do so.

At every stage your identity will remain confidential. Your name and identifying information will not be included in the final report.

The project has been subject to ethical review in accordance with the procedures specified by the University of Reading Research Ethics Committee and has been given a favourable ethical opinion for conduct.

If you have any further questions about the project, please feel free to contact me at the email address below.

Name of researcher: Kieran Lees MSc MBA

Email address: Kieran.lees@programme-member.henley.com

Date: 4th September 2018

Consent form

Title of research project:

A collective case study exploring the constructs affecting the multiple dimensions of cohesiveness of teams operating effectively in extreme environments

1. I have read and had explained to me by Kieran Lees the information sheet relating to the project and any questions have been answered to my satisfaction.
2. I agree to the arrangements described in the information sheet insofar as they relate to my participation.
3. I understand that my participation is entirely voluntary and that I may withdraw from the project at any time.
4. I agree to the interview being audio recorded.
5. I agree to the primary data being used in publications directly related to this research. I understand that data will be retained securely for this purpose.
6. I understand that any data will be anonymised for the purposes of this research, unless I agree otherwise.
7. I have received a copy of this consent form and of the accompanying information sheet.
8. I am aged 18 or older.

Name of participant: .



Signed:

Date: 04/09/18.....

Contact details of Researcher:

Kieran Lees

Kieran.lees@programme-member.henley.com

9.9 Appendix I **Mental Excellence Coach – Role and Responsibilities**

Kieran Lees MSc MBA
Mental Excellence Coach
Teamship and Leader Development

Mental Excellence

Exceptional performance in any sport comprises many elements that must come together to for the individual to deliver at the highest level, consistently. Physical and mental conditioning are of equal importance for the athlete to be able to apply their natural skills, along with the trained capabilities from coaches, to a level of excellence required to win on the international stage.

The state of mind of every player not only affects their performance, but also that of all those around them. In extreme sports such as rugby, the added dimension of physical danger and threat, and the absolute need to function seamlessly with teammates, makes mental excellence a critical component of success.

My approach to working with individuals is to clearly understand the motivation of every team member to be a part of the team. Are they driven by ego and selfish goals, or by the desire to collectively contribute and win? What are they prepared to sacrifice for success, and to be the best? What are they prepared to sacrifice for their teammates and the overall organisation? Understanding these fundamental motivations gives insight into the strengths, risks and development needs of the individual.

On a daily basis, it is also essential to understand the state of mind of every player; their ambitions, anxieties, frustrations, needs and concerns. Allowing them to speak openly, confidentially and without judgement frees them to focus on the elements of their performance that will create world-class players and teams.

Additionally, development of ACUP (Acting Correctly Under Pressure) and TCUP (Thinking Clearly Under Pressure) skills and capability in individuals will allow team coaches to be able to prepare the team for both structured and unstructured playing scenarios, giving the squad the ability to react appropriately to the demands and pressures of international rugby.

Teamship

There are fundamental differences between a group of players, and a team. Understanding those differences is crucial in the rapid development of the bonds, trust and understanding needed between players to win. Developing a culture that every member of the organisation believes in and ‘lives’ is essential to teams operating in extreme environments such as those in international rugby. From the shared vision and goal, to the tiniest detail of rituals and behaviours of that team, the code of conduct, behaviours and actions of every player is what makes a team function at the highest level. Teamship is the description of the behaviours and actions of the individuals that support and comply with that code.

Developing the culture requires the rapid development of a set of behavioural and performance standards that form the foundation of the team. It also requires the unanimous, undiluted and absolute commitment of *every member of the organisation – with no exceptions.*

Leader Development

There are many leaders in a rugby organisation, all of whom need to be able to perform their leadership role with excellence when they are leading.

Whether it is the leadership shown by the Head Coach, or the supporting coaching staff; or the medical and physio staff; or the commercial leaders; or the Squad Captain and Vice; or the numerous leaders-on-the-pitch, the development of exceptional leadership skills is critical to the performance of the team. Not only does it affect every member of the organisation, but it also affects external and public perceptions, and can inspire support, sponsors, belief and results.

Understanding the leadership styles of each of the many leaders and helping them to understand the strengths and risks of their style, along with introducing them to additional styles of leading, will bring the organisation resilience, direction, collective belief and increased commitment – both on and off the pitch.

My role as your Mental Excellence, “teamship” and Leader Development Coach is to help every team member – from Head Coach, players and support staff – to be totally prepared and aligned so that they are able to perform to the very best of their abilities individually and collectively.

9.10 Appendix J My Focus and Motivation Template for Squad Members

My Focus and Motivation

<name>

This table is a list of the reasons that I want to earn my place for RWC19.

	My challenge	1	2	3
1	Why do I want to be in this squad?			
2	Why do I want to participate in the Repechage tournament?			
3	Why do I want to WIN the tournament?			
4	What difference will it make to my life to WIN?			
5	Who am I playing for – myself, my family, my team, or something else?			
6	What does winning this tournament mean to me?			
7	What am I prepared to sacrifice to WIN?			
8	What am I prepared to sacrifice to get the team to WIN?			
9	What will stop me from being at my absolute best by 11 Nov 18?			
10	What do I need to do to increase my readiness?			
11	Who needs to help me? (Family, coaches, DRV, etc)			
12	Who will be the first people I call when we WIN the Repechage?			

9.11 Appendix K Demographic Profile of AC1 Participants

AC1	Participant Attribute Analysis								
Total Participants	n = 53								
Role	Players	Coaches			Physio/medical		Management/Support		
	38	8			3		4		
Age	18-22	22-25	26-30	31-35	36-40	41-50	51+		
	4	11	16	11	7	1	3		
Gender	Male				Female				
	49				4				
Nationality	Argentinian	Australian	English	German	New Zealand	Scottish	South African	Welsh	
	1	1	8	22	2	2	16	1	
Professional status	Amateur (unpaid)				Professional (Paid)				
	7				46				
International caps	0	1-5	6-10	11-20	21-30	31-50	51+		
	5	7	4	13	8	4	2		
Marital status	Single		Married		Separated		Divorced		
	37		14		0		2		
Children	0		1		2		3		
	41		7		3		2		
Parents	Married		Divorced		Separated		Single Parent		Adopted
	27		25		0		1		0
Siblings	Brother(s)		Sister(s)		Both		None		Not known
	13		15		11		9		5

9.12 Appendix L Permission Letter for Doctoral Research Study with DRV

Robin J Stalker

Am Olavyn Croft 10

31 August 2020

Kieran Lees MBA MSc
Research Associate
Henley Business School
University of Reading
Greenlands,
Henley-on-Thames
United Kingdom
RG9 3AU

Dear Kieran,

Re: Your Doctoral Action Research Study with Deutscher Rugby Verband (DRV) from September 2018 to June 2019 examining the Structures, Functions and Antecedent Conditions that Impact Cohesion in Groups and Teams

The purpose of this letter is to confirm our verbal agreement from September 2018 where I provided you with my permission to conduct an Action Research study within the DRV based on the following understandings and conditions:

1. My permission was granted in my capacity as President of the DRV, and ultimate legal authority for the organisation for the duration of your period of study.
2. The study was approved for the examination of the Men's XV's and 7s international squads as they prepared for and participated in all international tournaments, training camps and matches for the period of September 2018 to June 2019.
3. Your engagement would be as a Participant Observer, consistent with the Action Research method of inquiry employed for your study.

4. You held a dual role during your research study; that of academic researcher and also as a remunerated coach, providing specific responsibilities for the improvement of teamwork and player mental skills. It was clearly understood that in order to fulfil the levels of objectivity required in your research you would not be subjected to or influenced to exercise bias in your academic observations and interpretation.
5. My permission for your research study did *not* override the rights of individuals within the two squads to opt-in or out of the study. Specifically, the participation of individuals was required to be sought on an individual by individual basis and evidenced by their signing of a Participant Engagement Form prior to the commencement of their involvement in the study. I understand that this requirement was fulfilled without exception.
6. My permission to conduct your research with the DRV includes the rights to publish your research findings provided such publications do not bring harm to the reputation of the DRV.
7. Unless otherwise agreed with individual participants, it is my expectation that all references to individuals in the thesis and subsequent published articles will be anonymised. However, I agreed to the identification of the DRV as the case study under examination, and for the two squads accordingly.
8. The findings of the research would be made available on request to the appropriate executive leaders of the DRV after final completion of the thesis and award of your doctorate, for the purposes of improvement in the functioning and efficacy of the DRV and its playing squads.

I am satisfied that your entire study was conducted respectfully and with due regard for the rights of privacy of individual participants and the ethical guidelines that I would expect for a doctoral candidate from one of the UK's leading business schools and universities.

I look forward to reading your finished thesis in due course and wish you luck in the final phases of your research studies.

Yours sincerely,


Robin Stalker

9.13 Appendix M Roles and Responsibilities - Actual Submissions

Name	Role	Responsibilities	Not responsible for...	Critical Objective
<p>██████ ██████</p>	<p>Director of XV's rugby</p>	<p>On field responsibilities</p> <ul style="list-style-type: none"> • Scrums, kick-offs and attack contact (breakdown). • Overlook the big picture with Mike <p>Off field responsibilities</p> <ul style="list-style-type: none"> • ensure player availability • manage staff and players to take care of their responsibilities • organise camps, games and November tournament details. • look after budget and contracts <p>Overlook the whole program and keep everyone happy, which includes everyone and everything.</p>	<ul style="list-style-type: none"> • Kit • travel & accommodation • daily meals & snacks • office supplies • medical supplies • player insurance analysing • the list goes on 	<p>None stated</p>
<p>██████ ██████</p>	<p>Head Coach</p>	<ul style="list-style-type: none"> • Philosophy style of football (Vision) (with input from DOR) • Implement the Game plan: Attack & Defence Strategy (with input from all the coaches) • Coordinate of all training activities and the way we train • Selection with DOR • Coordinate all meetings and style (less is more) • Coordinate Analysis and the way we preview and review • Assist with the way we condition the players 	<ul style="list-style-type: none"> • Kit • travel & accommodation • daily meals & snacks • office supplies • medical supplies • player insurance analysing • the list goes on • organising camps, games and November tournament details. • looking after budget and contracts 	<p>To prepare the team to be the best it can be by 11th Nov</p>

		<ul style="list-style-type: none"> • Match day messages & subs • Help develop a culture of hard work, positivity, teamwork and constant improvement. • Devise the weekly schedule • Support and challenge the coaching staff to continually improve both team performance and their own approach to the game. 		
■■■ ■■■	Nothing stated	<ul style="list-style-type: none"> • General attack and set piece • Backline • Exits • Counter attack and skills 	<ul style="list-style-type: none"> • Chaos • starter options from rucks etc (ie: Bombers, Orange, Reds, Waratahs) 	Understanding, execution, decision making and providing feedback.
■■■ ■■■	Defence and forwards coach	<ul style="list-style-type: none"> • Defence • Defensive breakdown • Different aspects of forward play • Kick offs and exits (in collaboration with other coaches.) 	Nothing stated	To prepare the team and players to an exceptional standard based on their abilities to be the best defensive unit and forward pack they can be and help win the Repechage.
■■■ ■■■	Nothing stated	<ul style="list-style-type: none"> • Skills • Backline • Kicking • Exit plays • General attack • Execution under pressure • Understanding and feedback 	Nothing stated	Make this once in a lifetime opportunity a reality
■■■ ■■■	Head of Performance	<ul style="list-style-type: none"> • Leading and supporting the performance team, 	<ul style="list-style-type: none"> • Coaching the team 	(1) Develop the physical ability

	(only in context of our preparations and as consultant – not to be confused with Colin’s official DRV title/role)	<p>ensuring alignment and collaboration.</p> <ul style="list-style-type: none"> • All athletic performance: design and implementation of performance programs. All in collaboration with performance team. • Enhancement of performance processes and systems. • Scientific underpinning of preparation, performance, and recovery, incl. advising and assisting coaches on maximising training structure. 	<ul style="list-style-type: none"> • Kit • Medical matters • Administration of camps or personnel. • Supplies. <p>NB: always crossover and there to support and help wherever realistic.</p>	<p>to be highly repeatable and pressure the opposition.</p> <p>(2) Raise the standard of performance support by collaborating with staff, sharing lessons and implementing appropriate systems.</p>
■■■■	Strength & Conditioning Coach	<ul style="list-style-type: none"> • Organisation and planning of sessions • implementation of gym & conditioning sessions • Warm ups for rugby sessions • Monitoring of players loads • Assisting the players in any area closely related to fitness (nutrition e.g.) • Working closely together with Neill for all of the above • Liaising with medical department (Colin, Mandana) on common ground • Helping the coaches in any possible way 	<ul style="list-style-type: none"> • Taking over Kit Man's duties • cleaning up after the players 	Get the team to the tournament in the best physical condition as possible
■■■■	<ul style="list-style-type: none"> • Head of Physical Performance • Medical Lead (coordinating my work with that of 	<ul style="list-style-type: none"> • Design, delivery and coordination of the athletic performance program. • Build strong relations to the Olympic Training facilities in order to use their Rehab, Physio and 	Nothing stated	Nothing stated

	Mandana Scharei)	<p>medical facilities to our optimum.</p> <p>Key performance indicators</p> <ul style="list-style-type: none"> • Player welfare, • to develop proactive health maintenance and Injury prevention strategies. • to oversee and manage and deliver the appropriate recognition and rapid management of injury • Injury rehabilitation and return to play decisions • Coordinate with clinics for further injury management <p>Match day cover</p> <ul style="list-style-type: none"> • Player Medicals • Perform pre-participation medical assessments (SCAT, neurocognitive assessments —> busy talking to a potential partner) • anti-doping and concussion education • to work as part of a multidisciplinary team. • Develop a fast-track network of Consultant Specialists 		
	Physiotherapist	<ul style="list-style-type: none"> • Monitoring player welfare • Rehabilitation/treatment of injured players • Strapping • Organizing appointments with doctors in cooperation with Colin 	<ul style="list-style-type: none"> • Medication • Supplements 	To optimise the playing availability of all members of the squad, employing both reactive and proactive therapeutic interventions.

<p>████ ██████</p>				
<p>████</p>				
<p>████ ██████</p>				
<p>████ ████</p>	<p>Mental Excellence, Teamship and Leader Development Coach</p>	<ul style="list-style-type: none"> • Understand the motivation and determination of individuals and squad • Assess sense of purpose and focus of squad members • Evaluate cohesiveness of the organisation, and the individual players • Identify areas for improvement in mindset, teamwork, motivation and morale of all players • Work with leaders and coaches on leadership skills both on and off the pitch. • Support the head coach in recognising areas for improvement in organisational performance • Support players, coaches and staff on personal issues that may impact their focus or ability to perform at the highest level • Support coaching team and players in establishing and implementing the values, standards of behaviour, identity and code of conduct of the organisation • Work with DRV or external parties in any activity that may affect the mental readiness or 	<ul style="list-style-type: none"> • Any rugby, S&C, physical or medical activities • Any organisational or leadership responsibilities or decision-making 	<p>To ensure that the players and the team are mentally prepared to compete and win the Rugby World Cup Repechage tournament.</p>

		welfare of the individuals, team or organisation		
--	--	---	--	--

9.14 Appendix N Demographic Profile of AC2 Participants

AC2	Participant Attribute Analysis							
Total Participants	n = 43							
Role	Players		Coaches		Physio/medical		Management/Support	
	28		8		3		4	
Age	18-22	22-25	26-30	31-35	36-40	41-50	51+	
	1	6	14	11	7	1	3	
Gender	Male				Female			
	39				4			
Nationality	Argentinian	Australian	English	German	New Zealand	Scottish	South African	Welsh
	1	1	6	16	1	2	15	1
Professional status	Amateur (unpaid)				Professional (Paid)			
	0				43			
International caps	0	1-5	6-10	11-20	21-30	31-50	51+	
	0	2	4	13	8	4	2	
Marital status	Single		Married		Separated		Divorced	
	27		14		0		2	
Children	0		1		2		3	
	31		7		3		2	
Parents	Married		Divorced		Separated		Single Parent	
	21		21		0		1	
Siblings	Brother(s)		Sister(s)		Both		None	
	8		13		9		8	
							5	

9.15 Appendix O Demographic Profile of AC3 Participants

AC3	Participant Attribute Analysis							
Total Participants	n = 37							
Role	Players		Coaches		Physio/medical		Management/Support	
	28		4		3		2	
Age	18-22	22-25	26-30	31-35	36-40	41-50	51+	
	5	8	11	8	2	1	2	
Gender	Male				Female			
	34				3			
Nationality	Australian	English	German	Irish	New Zealand	Scottish	South African	Welsh
	0	5	18	1	3	0	9	1
Professional status	Amateur (unpaid)				Professional (Paid)			
	29				8			
International caps	0	1-5	6-10	11-20	21-30	31-50	51+	
	5	8	6	6	3	1	1	
Marital status	Single		Married		Separated		Divorced	
	30		6		0		1	
Children	0		1		2		3	
	32		2		1		2	
Parents	Married		Divorced		Separated		Single Parent	
	22		14		0		1	
Siblings	Brother(s)		Sister(s)		Both		None	
	11		12		8		5	
							Not known	
							1	

9.16 Appendix P Summary of Themes and Codes from AC1, AC2 and AC3

AC	#	<i>In vivo</i> Observations	<i>In vivo</i> Themes
AC1	1	Animosity, resentment and distrust of the DRV from non-German participants.	<ul style="list-style-type: none"> • Isolation and mistrust • Resilience
	2	Presence of In-groups and Out-groups based upon nationality, age, club membership, playing experience and both direct and indirect involvement in the DRV-WRA conflict.	<ul style="list-style-type: none"> • Integration • Social Identity • Stages of Group Formation • Limited communication • Limited collaboration
	3	Lack of commitment and focus regarding the core purpose.	<ul style="list-style-type: none"> • Clarity of group purpose • Lack of common purpose • Roles and responsibilities • Task and project planning
	4	Low levels of personal preparation and commitment.	<ul style="list-style-type: none"> • Sense of urgency • Personal responsibility • Accountability to peers • Selfishness • Personal pride
	5	Lack of collective group identity within the squad.	<ul style="list-style-type: none"> • Group pride • Reputation • Branding and identity • Inclusion/exclusion • Culture - values, standards, expected behaviours, rituals • Social Identity
	6	Conflicts and confusion within the coaching group and support staff.	<ul style="list-style-type: none"> • Roles and responsibilities • Taskwork • Teamwork
	7	Isolated pockets of high levels of interpersonal cohesion, “teamship” and selflessness.	<ul style="list-style-type: none"> • Selflessness • Teamwork • Sacrificing own needs for others • Trust • Interdependence • Intrinsic motivation

	8	Positive relationships and trust with all members of the coaching, medical and support staff.	<ul style="list-style-type: none"> • Trust • Vertical bonding/cohesion
	9	Excitement and positivity regarding the appointment of the new head coach, his coaching team and approach.	<ul style="list-style-type: none"> • Belief • Ambition • Followership
	10	Excitement and desire to participate and compete in the RWC19 Repechage.	<ul style="list-style-type: none"> • Desire • Commitment • Excitement and energy • Extrinsic motivation • Instrumental group purpose
	11	Personal pride of what selection to the squad means to participants' families and friends.	<ul style="list-style-type: none"> • Personal Purpose • Pride • Collective purpose • Instrumental cohesiveness
AC2	1	Collective and individual excitement and belief.	<ul style="list-style-type: none"> • Belief • Readiness • Fight • Teamwork • Task focus • Determination • Values • Team
	2	Independence and self-management within the playing squad.	<ul style="list-style-type: none"> • Task focus • Teamwork • Confidence • Personal Readiness • Shared purpose • Self-management • Autonomy (group) • Belief • Interpersonal trust • Affective cohesion • Instrumental cohesion
	3	Performance and expectation anxiety, and potential fracturing.	<ul style="list-style-type: none"> • Emotions - fear of failure • Taskwork • Interdependence (Sequential and Reciprocal) • Mental control and skill

		<ul style="list-style-type: none"> • Cohesion/Fracturing - Affective-Interpersonal • Group formation/fragmentation (regression from Performing to Storming) • Effects of stress on group cohesion
4	Perceptions of favouritism and emerging interpersonal resentments and frustrations.	<ul style="list-style-type: none"> • Leadership behaviour • Trust • Team first, self last • Group and personal values and beliefs • “Teamship” • Selfishness • Motivation • Extrinsic/Introjection • Power • Authority • Cohesion • Fragmentation, fracturing and collapse - interpersonal • Anger, aggression • Roles and responsibilities • Boundary spanning/breaching
5	Emergence of bullying.	<ul style="list-style-type: none"> • Identity - Group and Social • Groupthink - In-groups and out-groups + mindguards • Culture - Values, belief, rules, behaviours and trust • Motivation - Extrinsic/Introjection/Ego + Intrinsic/Autonomy (loss of) • Cohesion - Affective/Interpersonal + group-pride • Interdependency - Reciprocal, Affective • Teamwork • Mental health • Power, control and dominance • Selfishness
6	Collective focus on Hong Kong effected performance against Canada.	<ul style="list-style-type: none"> • Purpose - loss of instrumentalism • Stages of Formation - Adjourning • Cohesion - instrumental/task • Motivation - extrinsic/external + introjection • Cohesion - fracturing based on instrumental success

	7	Change of purpose affected type of cohesion from instrumental to affective and increased resilience and performance.	<ul style="list-style-type: none"> • Group resilience • Purpose - Shared affective, shared instrumental • Cohesion - Affective/group pride + interpersonal • Identity - Social, group, personal • Selflessness • Teamwork • “Teamship” • Culture - Values, standards, rituals, rules, behaviours
	8	Distraction of focus caused by post-tournament employment and income concerns.	<ul style="list-style-type: none"> • Motivation - Humanistic/physiological • Cohesion - Fracturing and regression (affective and instrumental) • Resilience - Regression • Motivation • Commitment • Selfishness • Cohesion - Affective/Group Pride - Diminish organisational trust • Cultural commitment - regression • Interdependency - Reciprocal + affective • Taskwork + teamwork • Motivation - Intrinsic/Competence + relatedness
AC3	1	Senior players from the WRC campaign causing negativity in the squad.	<ul style="list-style-type: none"> • Frustration • Injustice • Disappointment • Disruption • Fragmentation • Undermining purpose • Undermining cohesion (Group) • Undermining cohesion (Task) • Undermining motivation (Extrinsic) • Undermining focus • Undermining leadership processes and authority • Undermining belief • Undermining culture (values (Fight and Unity), behaviours, standards) • Identity crisis (Personal, Group and Social)

2	The DRV leadership behaviours created even greater division between the Union and the XV's squad.	<ul style="list-style-type: none"> • Bullying • Leadership • Favouritism • Discrimination
3	There was no 'win' scenario for this group.	<ul style="list-style-type: none"> • Task-oriented purpose • Unrealistic goals
4	Low morale in the first week of training camp.	<ul style="list-style-type: none"> • Physiological needs • Physical needs • Emotional needs • Extrinsic motivation • Intrinsic motivation

9.17 Appendix Q Third-person Analysis - Initial Template

	Level 1	Level 2	Level 3	Level 4
1	Group Cohesiveness	Instrumental	Task	
			Social	
		Affective	Interpersonal	
			Group Pride	
2	Self-Motivation	Extrinsic	External	Reward
				Punishment
				Consequence
				Compliance
				Guilt
				Obligation
			Introjected	Ego
				Pride
				Recognition
				Self-esteem
				Self-worth
			Identified	Instrumental self-fulfilment

			Integrated	Instrumental self-determination
		Intrinsic	Autonomy	
			Competence	
			Relatedness	
3	Purpose	Organisational		
		Group		
		Personal		
		Common		
		Shared		
4	Stages of Group Formation	Forming		
		Storming		
		Norming		
		Performing		
		Adjourning		
5	Interpersonal Behaviour	Selfish		
		Selfless		
6	Identity	Personal		
		Group		
		Social		
7	Interdependence	Pooled		

		Sequential		
		Reciprocal		
8	Instrumental Group Collaboration Processes (ICGP)	Taskwork		
		Teamwork		
9	Culture	Behaviours		
		Standards		
		Rules		
		Primary		
10	Types of Groups	Social		
		Collectives		
		Categories		
		Primary		

9.18 Appendix R

Third-person Analysis - Second Iteration Template

	Level 1	Level 2	Level 3	Level 4
1	Group Cohesiveness	Instrumental	Task	
			Social	
		Affective	Interpersonal	
			Group Pride	
2	Self-Motivation (Self-Determination Theory)	Extrinsic	External	Reward
				Punishment
				Consequence
				Compliance
				Guilt
				Obligation
			Introjected	Ego
				Pride
				Recognition
				Self-esteem
				Self-worth
			Identified	Instrumental self-fulfilment

			Integrated	Instrumental self-determination
		Intrinsic	Autonomy	
			Competence	
			Relatedness	
3	Purpose	Organisational		
		Group		
		Personal		
		Common		
		Shared		
		Collective		
4	Stages of Group Formation	Forming		
		Storming		
		Norming		
		Performing		
		Adjourning		
		Affective		
6	Interpersonal Behaviour	Selfishness		
		Selflessness		
7	Identity	Personal		
		Group		

		Social		
8	Interdependence	Pooled		
		Sequential		
		Reciprocal		
		Affective/emotional		
9	Instrumental Group Collaboration Processes (ICGP)	Taskwork		
		Groupwork		
		Teamwork		
10	Culture	Shared values		
		Behaviours		
		Standards		
		Rules		
		Rituals		
		“Teamship”		
		Enforcement		
11	Types of Groups	Primary		
		Social		
		Collectives		
		Categories		
12	Resilience			

13	Groupthink	Cohesion		
		Insulation		
		Homogeneity		
		High stress		
		Low esteem		
		Stereotypes		
		Mindguards		
		Oppression of dissenters		
		Illusion of unanimity		
		Collective rationalisation		
14	Roles and responsibilities			
15	Power	Authority		
		Control		
		Status		
16	Leadership	Unity		
		Example		
		Care		
		Authenticity		
		Confidence		
		Inspiration		

		Equality/fairness		
		Transparency		
		Direction		
		Empowerment		
		Delegation		
		Affective and instrumental goaling		
17	Emotions	Commitment		
		Belief		
		Respect		
		Loyalty		
		Jealousy		
		Resentment		
18	Cognitive dissonance			

9.19 Appendix S Analysis of Participant Reflexive Interviews (August 2019)

#	Theme from Analysis	Comparison with AC1-AC3 themes	Confirmatory evidence and new themes
1	Disgust at DRV treatment of players – welfare pre, during and post tournaments.	Consistent with AC 1-1 and AC3-2 observations regarding affective-group-pride, groupthink-insulation and groupthink-low esteem. Also supportive of difference between organisation purpose and group purpose.	“Till this day the Union has done nothing for me. From the first cap to my last against Portugal the Union hasn’t done one bit. I’m not talking about money or sponsors or kit, I’m talking about just respect, respecting us by treating us like their players and investing time in us.” (██████████ 20 th August 19)
2	Intensity of cohesion for Repechage.	Consistent with AC observations regarding cohesion, instrumental-shared purpose, culture and interdependency.	“Then I think Marseille was just like I think we’d never been that strong going into the tournament as a team; mental wise, physical and everything. I think 80% of the guys would tell you they’d never been that ready to do something.” (██████████, 21 st August 2019)
3	Importance of the values and standards of the squad to individuals and the collective.	Consistent with AC observations regarding culture, intrinsic motivation, Instrumental Group Collaborative Processes (GCP)-teamwork and interpersonal behaviour-selflessness	“I think the entire experience is one that the amount of adversity that a group had to overcome was quite substantial. I think that’s testament to the group and testament to the relationships that we built throughout... [we] had a common goal and we ended up just fighting towards a common goal of trying to be as best prepared as possible.” (██████████ 22 nd August 2019)
4	The power of teams.	Enhanced efficacy observation recognising the high level of cohesion	<ul style="list-style-type: none"> • Cohesiveness (<i>Affective-Interpersonal</i>)

		<p>resulting in performance exceeding expectation.</p>	<p>“...we were never as a team, as a group - when I talk about team, I talk about everyone - we’d never been that ready where we’d been so ready. You could have put anyone in front of us; we could all stand up to that.” (████, 21st August 19)</p> <ul style="list-style-type: none"> • Roles and Responsibilities • ICGP (<i>Taskwork, Teamwork</i>) • Interdependency (<i>Pooled, Reciprocal, Affective</i>) <p>“For me in my playing career...it was probably the most professional environment from a coaching point of view. Everyone knew exactly what they did and what they had to do and when training starts everything was ready.” (████ 21st August 19)</p>
5	<p>Willingness to sacrifice own needs for team-mates.</p>	<p>Enhanced observation from AC3 where interpersonal loyalty and commitment (affective cohesion) took precedent over instrumental cohesion.</p>	<ul style="list-style-type: none"> • Interpersonal Behaviour (<i>Selflessness</i>) • Motivation (<i>Intrinsic-relatedness</i>) • Purpose (<i>Affective</i>) • Cohesiveness (<i>Affective-interpersonal</i>) • Interdependency (<i>Affective</i>) • ICGP (<i>Taskwork, Teamwork</i>) <p>“We have a lot of players in that squad they will fight for anything that involves in the team with minimum getting out of it.” (████ 21st August 19)</p> <p>“Q: What ultimately made you go; ‘I’m going to play?’</p> <p>Captain: That’s easy and I told you this before I came, it was purely just to play for my team-mates, that’s it. Nothing else. Players and the staff...People that actually took the time out putting the best in us. And I can tell you now if anyone else was in charge my</p>

			<p>last game would have been Kenya. Purely the players and I'd do it again for the players.” (██████ 21st August 19)</p>
6	<p>Emergence of selfishness results in regression of cohesion.</p>	<p>New observation relating to interpersonal behaviour and impact on cohesion and efficacy.</p>	<p>Properties of Group (Primary characteristics)</p> <ul style="list-style-type: none"> • <i>Instrumental purpose</i> • <i>Instrumental cohesion</i> • <i>Extrinsic motivation (external and introjection)</i> • <i>Instrumental interdependency</i> • <i>Selfishness/ Self</i> <p>“I think especially with ██████ that we, the old guys have been there for a while now...have never seen ██████ being like this...But then with him I never saw it that bad. In a team environment that quite changed a bit because everyone was like, what the hell is going on, you know. It felt a bit weird. But nobody really confronted him.” (██████ 21st August 19)</p> <p>“I think you start to see people for who they actually are... you know people need to put pride in their pockets and come together as a team...I realised ██████ is probably one of the best rugby players I've seen. He's got pretty much everything, he's got a great throw, he's big, he's quite quick, he's confident; but ██████ doesn't play for anyone else but himself.</p> <p>I think instead of worrying about what your [PR video] clips are, I think you need to worry about bringing other people with you and teaching them the ways of how professional rugby works or how we should have been preparing. I think had other people taken more responsibility at that point especially those that were able to be in those positions I think it was a different story.” (██████, 21st August 19)</p>

7	Group members who don't share the cultural values and standards erode team unity.	New observation relating to interpretation of 'what is a team?' versus 'what is a group?' Instrumental purpose creates functioning groups, affective values create teams.	<p>Properties of Team (primary characteristics)</p> <ul style="list-style-type: none"> • <i>Affective behaviours</i> • <i>Affective cohesion</i> • <i>Affective interdependency</i> • <i>Selflessness/others</i> <p>“One thing that...bothered me the most is that [after conceding] 50 points against Georgia - and I know travel was shit and stuff - but it still didn't give us a reason to go back after the game in the changing room and you have the guy like [REDACTED]; first thing he does he puts the music on, and he takes photos in the changing room like he just won a game. And I personally couldn't deal with it. It happened; we lost, don't cry about it. But at least sit down for five minutes and just be sad or angry or something. But to walk into the changing room and first thing put a boombox on and smiling and laughing - while he was probably one of the less effective players on the field. And you have guys - I remember seeing [REDACTED]-heads down broken, broken bodies because they just had to fight 80 minutes...and then in that corner you have guys going on like they won the game, happy. For me I could not accept that as a player or a leader.” ([REDACTED], 21st August 19)</p>
8	Affective purpose enhanced cohesion but players still self-imposed instrumental purpose and as a result were more committed to it.	New observation relating to definition of 'what is a team?' Implies that an affective purpose is relevant in group formation and provides a foundation from which participants may establish instrumental goals from within the group.	<p>Properties of Team</p> <ul style="list-style-type: none"> • <i>Affective purpose</i> • <i>Self-management</i> • <i>Culture</i> • <i>Group purpose</i>

			<p>“I knew if Germany goes down a lot of people would stop [playing for Germany in the future] and there would be no more team to actually rebuild. So, I think our expectation was just to stay up no matter what...Just basically to do better than Belgium.”</p> <p>“We were losing matches, the tightness, the courage, the selflessness within the team got stronger and stronger...I think there was again another common focus streak - we just wanted to win one game. And that one focus was all the way up until the end because we still had that belief no matter what we went through we realised that we had this job to do.” (██████, 22nd August 19)</p>
--	--	--	---