

# *The MBA and reported career success: a study of the differences reported by gender*

Book or Report Section

Accepted Version

Houldsworth, E., McBain, R. and Brewster, C. ORCID:  
<https://orcid.org/0000-0001-5314-1518> (2019) The MBA and reported career success: a study of the differences reported by gender. In: Lopez-Cabrales, A. and Valle Cabrera, R. (eds.) Human Resource Management at the Crossroads: Challenges and Future Directions. Cambridge Scholars. ISBN 9781527537224 Available at <https://centaur.reading.ac.uk/85266/>

It is advisable to refer to the publisher's version if you intend to cite from the work. See [Guidance on citing](#).

Published version at: <https://www.cambridgescholars.com/human-resource-management-at-the-crossroads>

Publisher: Cambridge Scholars

Publisher statement: Published with the permission of Cambridge Scholars Publishing

All outputs in CentAUR are protected by Intellectual Property Rights law, including copyright law. Copyright and IPR is retained by the creators or other copyright holders. Terms and conditions for use of this material are defined in the [End User Agreement](#).

[www.reading.ac.uk/centaur](http://www.reading.ac.uk/centaur)

## **CentAUR**

Central Archive at the University of Reading

Reading's research outputs online

## CHAPTER 4

# THE MBA AND REPORTED CAREER SUCCESS: A STUDY OF THE DIFFERENCES REPORTED BY GENDER

ELIZABETH HOULDSWORTH,  
RICHARD McBAIN AND CHRIS BREWSTER

### CHAPTER SUMMARY

This chapter examines the extent to which reported post-MBA career outcomes differ by gender: do women have significantly different experience following the completion of an MBA than men? We find that women report greater levels of career capital development for the knowing why and knowing how aspects of career capital, but not for knowing whom. In terms of subjective career outcomes, women report greater levels of career satisfaction and self-efficacy; the results for objective career outcomes (promotions and levels of work) are not significantly different.

### INTRODUCTION

The President of the World Bank, Jim Yong Kim, who became the first UN ‘HeforShe’ Thematic Champion of an international financial institution, points to the fact that women’s economic opportunities lag those of men in every country in the world, at a cost to individuals, families, communities and economies (The World Bank, 2017). In corporate life, initiatives such as gender pay reporting are increasing the drive to ensure women are supported and rewarded in their careers but an Institute for Fiscal Studies report in the UK found that average earnings for female graduates 5 years after completing their degree are substantially lower than those for their male classmates (BBC Website June 14 2018). The focus of this chapter is upon one group of women, those who have completed an MBA. This study considers factors relating to career success post-MBA and includes career capital along with measures of both objective and subjective career success, comparing female alumni to their male counterparts and explores the extent to which their reported career outcomes post-MBA are similar to or different from those reported by their male counterparts. The chapter takes the following form: first we examine the literature on management education and the MBA, and on the associated gender issue and develop hypotheses about the differential position of men and women in relation to the career capital implications of the MBA and the subjective and objective outcomes. Then we present our methodology for exploring these issues, present our findings and discuss the implications for research and practice.

### MALE AND FEMALE MANAGERS AND GRADUATE EDUCATION

Women are still disadvantaged in their careers relative to men (Schweitzer, Ng, Lyons & Kuron, 2011). They suffer from adverse wage gaps (Fortin & Huberman, 2002); receive smaller wage increases (Beach, Finnie & Gray, 2003); and have fewer promotions (Yap & Konrad, 2009). Lyness and Thompson (2000) highlight the fact that female managers have to perform better than male colleagues to prove themselves and are less likely to be promoted than their equally qualified male counterparts.

Graduate management education seeks to enhance the likelihood that graduates will be effective leaders, managers, or professionals (Passarelli, Boyatzis & Wei, pg 56 2018), though our study is set against the backdrop of commentators such as Pfeffer and Fong (2002: 80) who concluded that “there is little evidence that mastery of the knowledge acquired in business schools enhances people’s careers, or that even attaining the MBA credential itself has much effect on graduates’ salaries or career attainment”. Despite this and recessionary conditions in recent years GMAC notes that more programmes reported growing application volumes for the 2016–2017 class year than reported declining volumes. (GMAC 2016). Wallen, Morris, Devine and Lu (2017) describe how over the past century, schools of business have become institutionalised at the world’s major universities. Many students complete MBAs for career reasons. These are important for the Schools too, as emphasised by the MBA rankings. MBA rankings criteria include the career progress of alumni, the international focus of the programme, and the ideas generation (research capabilities) of the school (Bradshaw, 2007).

For women it could be argued that the completion of an MBA may be particularly beneficial, serving to put them on the same footing as their male counterparts and helping them overcome the barriers to their careers. Prior research is equivocal. Certainly, many see the MBA qualification as a prerequisite for senior posts (Baruch & Peiperl, 2000) and for many women it is seen as a way of breaking through the ‘glass ceiling’ (Burke, 1994;

Leeming & Baruch, 1998). Thus the MBA is perceived by many women as a worthwhile investment, despite the criticisms outlined by Simpson (2006) who described the ‘masculinisation’ of the MBA in terms of both the focus it places on analytical and ‘hard’ skills (in place of what are traditionally construed as more ‘feminine’ skills relating to personal and interpersonal development) and points to the masculine nature of management education overall. A report in 2006 found that, despite the fact that women’s MBA graduation rates increased tenfold from 1970 to 2006, female MBAs lag behind their male counterparts in almost every area, from pay to long-term advancement (Roth, 2006). However, Chen, Doherty and Vinnicombe (2012) argue that to better understand female career development it is important to focus on a wider conception of career success than that captured in the external and objective measures of salary and promotions. Referencing Feldman and Ng, (2007) and Sturges et al. (2003) they call for the inclusion of subjective indicators of career success, and we have responded to that here: we consider both the concept of new careers (DeFillipi & Arthur, 1994; Inkson & Arthur, 2001) as well as objective and subjective career success.

## CAREER CAPITAL

The focus of this chapter is to consider the extent to which completion of an MBA provides a means for women to take ownership of and advance their careers, so we adopt the concept of new careers (Arthur, Inkson & Pringle 1999) which prioritises individual workers’ interests over organisations’ interests through ‘career self-management’ (King, 2004). Arguably, the MBA is a classic example of an individual investing in and seeking to take ownership of her or his own career. Career capital has been defined as the collection of previous work experiences, achievements, knowledge and personal qualities, as well as potential. Thus, Inkson and Arthur (2001: 50) suggest that “as we move from job to job, we do not start each time from scratch... our careers serve as ‘repositories of knowledge’”. The concept of new careers (DeFillipi & Arthur, 1994; Inkson & Arthur, 2001) considers the development of the ‘knowing why’, ‘knowing how’ and ‘knowing whom’ elements of career capital and we measure perceptions of career capital increase for each of the three types of career capital as an indicator of career outcome:

- **Knowing why** concerns the individual’s sense of purpose, associated with motivational energy and the confidence to follow an envisaged career (DeFillippi & Arthur, 1994). It includes the values, meanings and interests that determine how a person’s career develops (Jones & Lichtenstein, 2000) and links with career clarity, satisfaction and confidence (Sturges, Simpson & Altman, 2003), as well as performance, through increased commitment. Noting the emphasis typically given to personal development on MBA programmes, we might expect to see this being an area of reported increase.
- **Knowing how** refers to career-relevant skills, knowledge and abilities that accrue over time and that individuals can use throughout their working lives (Inkson & Arthur, 2001). They include soft skills such as people management and team-working skills, as well as harder skills such as technical competence in strategic planning and marketing techniques (Sturges, et al, 2003). It might be expected that an MBA would make a considerable contribution to the know-how of its students, given its broad ranging wide of disciplines.
- **Knowing whom** refers to the individual’s intra- and extra-organisational networks, individual reputations, mutual obligations and information sources (Parker, Khapova & Arthur, 2009). The development of such social capital is one of the declared objectives of many MBA programmes.

Chen et al (2012) and Sturges et al (2003) are amongst a limited number of authors to consider gender differences post MBA in terms of the reported development of career capital. Career development literature points to the fact that organisation-specific knowledge and skills (which link to knowing how) are required for organisational success (Sullivan, Carden & Martin, 1998). At managerial levels individuals are valued for their broad functional knowledge and skills and for their ability to adapt to changing work conditions (McCall, 1998). Metz and Tharenou (2001) tested the hypothesis that human capital around knowledge and skills are more important to women in the earlier stages of their career with social capital (linked to knowing whom) becoming more important for senior roles. In fact, their results showed that human capital comprising both education and training and development is a key facilitator for female advancement at all levels. This serves to highlight how important women find what Adler and Izraeli (1994) describe as ‘credentials’. It seems reasonable to assume that the MBA content and knowledge element of the MBA will serve as a key learning outcome for female graduate as they build their future careers.

At the same time, it is important to note that as MBA programmes typically invest heavily in personal development, we should expect that graduates will emerge with a greater sense of self-knowledge (linked to knowing why). Knowing why is also associated with increases in self-confidence and greater awareness of one’s role and contribution. Although Simpson et al (2005) found that both men and women claim an increase in confidence following the MBA, other commentators suggest this is particularly pronounced amongst female graduates (Sturges, et al, 2003). A study of MBA alumni in Canada by Sturges et al. (2003) indicated that

confidence (knowing-why) was a career outcome for women, beyond gaining 'soft' and 'hard' skills. They attributed the women graduates increased confidence to acquiring managerial skills and to a sense of achievement following a hard and demanding academic programme. As a result of the MBA experience Sturges et al (2003) reported women as describing themselves to be more effective and efficient and more able to cope with change.

In terms of the final areas of career capital, 'knowing whom' it equates with what Metz and Tharenou (2001) describe as social capital. Commentators describe the exclusion of women from the dominant male social networks in organisations and suggest this to be a 'recurrent theme' which has a detrimental impact upon women's advancement to senior management levels (Metz & Tharenou, 2001; Tharenou, 1999). This echoes Kanter's (1977) discussion of the range of barriers faced by women in order to secure career success, highlighting how the dominant group (men) tend to heighten cultural boundaries by exaggerating their camaraderie, emphasising their differences from the token women, and excluding women from the informal interactions where critical information is exchanged. From the context of the MBA Sturges et al (2003) found both men and women to perceive the acquisition of skill and knowledge as more important than the creation of networks (knowing-whom). We therefore hypothesised that:

Hypothesis 1: Female alumni will report higher levels of development of 'knowing why' and 'knowing how' than men, but not of 'knowing whom'.

### **CAREER SUCCESS**

Career success has been defined as "the real or perceived achievement individuals have accumulated as a result of their work experiences" (Judge, Higgins, Thoresen & Barrick, 1999: 622). Supangco (2011) identified three objective measures of career success (salary increase, number of job promotions and hierarchical level reached) and two subjective measures of career success (satisfaction with one's career and with one's job). Ng, Eby, Sorensen and Feldman's (2005) meta-analysis found objective success to be directly observable and verifiable by others (Hughes, 1937, 1958) whereas subjective career success relates to the individual's own feelings or judgment about job attainment and satisfaction (Heslin, 2005 & Judge et al., 1999).

In terms of the MBA and objective career success, Strunk and Hermann (2009) report that male business school graduates earn about €73,000 more than their female counterparts within the first ten career years. Patterson, Damaske & Sheroff (2017) found that men fare much better than women when moving to new organisations, suggesting that gender is more of an issue for individuals with shorter employment history in any one organisation. They conclude that external moves hamper women and may indeed stall their careers post MBA. In their meta-analysis Ng et al (2005) reported that women are likely to have lower expectations regarding career opportunities (skill development, sponsorship) and attainments (promotions) than men and are therefore more easily satisfied with the career opportunities and attainments they do reach. Supangco (2011), on the contrary, reporting on a study into objective and subjective measures of career success in the Philippines, found that gender did not explain variation in total compensation, number of levels from company president, or career satisfaction.

If the MBA is to be used as a springboard to a new career in a new organisation or new sector, we were interested to explore the differing reports of these objective career outcomes in terms of men vs women. Given that the dominant view from the literature points to fact that men still fare better than women in terms of objective career success post MBA we therefore hypothesise that:

Hypothesis 2: Female alumni will report lower levels of objective career success in terms of number of promotions, changing jobs, organisation or country, and being in a senior management role post MBA.

Subjective career success, on the other hand, relates to the individual's own feelings or judgment about job attainment and satisfaction (Heslin, 2005; Judge et al., 1999). A study of part-time MBA graduates and alumni in Brazil found that perceptions of the subjective effects of the MBA were stronger than perceptions of the objective effects (Fernandes, Personini, Cruz & Wood, 2015). Female graduates are likely to increase confidence and self-worth as a result of completing MBA studies, indicating the importance of such subjective career outcomes.

Linked to the concept of career satisfaction is the notion of self-efficacy. Bandura (1977: 126) describes self-efficacy as "the conviction that one can successfully execute the behaviour required to produce successful outcomes". Stajkovic and Luthans (1998) established a link between self-efficacy and work-related performance; and earlier studies (Gist, 1989 & Wood, Bandura & Bailey, 1990) demonstrated its link with aspects of the management role. If, as suggested by Betz (2004), women experience barriers in developing self-confidence and

self-efficacy then the MBA qualification may play a key role for them in support the development of this self-efficacy. So, we hypothesise that:

Hypothesis 3: Female alumni will report higher levels of subjective career success in terms of career satisfaction and self-efficacy

## METHODOLOGY

Our sample (n=616) was drawn from the alumni of the world's third largest and one of the UK's oldest MBA programmes. According to the rankings, the MBA features in the top 50 programmes worldwide and has traditionally focused on experienced managers (average current age whilst on the programme: 36), who have around 10 years' managerial experience pre-MBA.

Its operating model reflects that described by Bok (2003), whereby a provider uses technology to deliver content to students across many different locations. The product was marketed as being 'One MBA' and it represents an example of a British MBA being delivered in different locations, with large cohorts serviced from offices based in different partner offices in the Netherlands, Germany, Ireland, Australia & New Zealand, as well as Denmark, Trinidad and South Africa. The MBA is delivered via a number of modes, all of which are seen as 'executive' programmes requiring a minimum of three year's management experience. The majority of responses (444 in total) studied the Flexible Executive MBA which was completed in 3-5 years. The Executive MBA (136 alumni in this sample) was completed in 2-3 years, and the Executive Full-time MBA (36 alumni) was completed in 1-2 years. Both the Flexible Executive and Executive MBA's involved students who remained in work for the duration of the programme, whilst the Executive Fulltime programme was typically undertaken by students who had taken time out of their careers to study. All three modes of delivery provide access to the same core materials (online and text book formats) supported by a standardised workshop experience delivered by the same tutor pool, although the Executive and Executive Full-time modes had more workshop days than the Flexible Executive programme. Students all completed similar assessment regimes, comprising examinations, work-based assignments and a dissertation, with a shared team of marking tutors, although the Flexible Executive MBA did not include any group assessment, in contrast to the other programmes. The MBA programme has considerable emphasis upon its personal development approach. This is taught via an assigned specialist tutor as a non-assessed module in order to encourage learners to reflect upon their career to date and their personal strengths and weaknesses and to use knowledge about self and personal values in pursuit of future career goals.

We tested our hypotheses on the alumni of this school, using an online survey. The business school now has in excess of 14,000 MBA alumni but, given the elapsed time since many of these completed their studies and the fact that many of them will now be retired, there is not an ongoing relationship in all cases.

After an initial targeted pilot, the mailing went to 5,469 more recent members of the MBA alumni for whom there was a current email address and a total of 816 responses were received, representing a response rate of just under 15%. This total included responses from alumni around the world, including South Africa, Trinidad and the Caribbean, but this study focuses upon the 616 respondents who completed their programme in the Anglo-phone countries of UK, Ireland, and Australasia, as well as from countries in the Northern European (Nordic) and Central European grouping. Table 4.1 shows details of the sample by country and office grouping. The respondent group comprised 130 females and 486 males, with this proportion reflecting this MBA programme overall.

**Table 4.1: Sample characteristics (percentages in parentheses)**

Variable	Male	Female	Total
Number	486	130	616
	(78.9)	(21.1)	(100)
Mean age	47.5	46.9	47.3
Mean years since graduation	9.5	8.7	9.3
Mean number of promotions post-MBA	1.7	1.6	1.7
Mode of Study			
Flexible	347	97	444
	(55.7)	(15.6)	(71.3)
Executive	105	31	136
	(17.0)	(5.0)	(22.1)

Full-time	34 (6.0)	2 (0)	36 (6.0)
Senior management role			
Pre-MBA	91 (18.7)	24 (18.5)	115 (18.7)
Post MBA	313 (64.4)	74 (56.9)	387 (62.8)
Career Capital			
Knowing Why	33.3	34.9	33.6
Knowing How	30.4	32.1	30.8
Knowing Whom	29.1	29.8	29.2
Career satisfaction	22.5	23.6	22.7
Self-efficacy post-MBA	37.4	39.4	37.9
Same employer post-MBA	159 (33.5)	37 (29.6)	196 (32.7)
In same job post-MBA	69 (8.6)	11 (14.2)	80 (13.1)
In same country post-MBA	378 (77.8)	107 (82.3)	485 (78.7)

We examined career capital using pre-existing items developed by Jokinen Brewster & Suutari (2008). Although originally designed for analysing career capital development amongst expatriates, the items can sensibly be utilised in career development in other contexts. The questions all used a seven-point Likert scale, ranging from ‘not at all’ (1) to ‘very much’ (7). All three career capital variables exhibited minor to moderate negative skewness and so were transformed by squaring the variable, and the results for the squared variables are given in the chapter.

‘*Knowing why*’ was measured with a set of questions designed to assess the increase in the understanding of personal values, work interests and capabilities. This study utilized a scale based on nine items. The scale reliability in the present study was 0.92. ‘*Knowing how*’ was operationalised through a set of 20 questions utilised by Jokinen, et al. (2008) based upon earlier work by Jokinen (2005). The reliability of the overall scale in the current study was 0.95. ‘*Knowing whom*’ was measured using a four-item scale to assess the development of networking skills and social networks, and in the current study the reliability was 0.88.

In order to test Hypothesis 2 on objective career success MBA alumni were asked how many promotions they had received post MBA and whether they had changed job role, organisation and/ or country: dummy variables were created with no = 0 and yes = 1. They were also asked to report their perceived level of work pre- and post-MBA and a dummy variable was created for ‘senior management role’ (with no = 0 and yes = 1). We chose not to ask for salary data as an objective measure of career success because the range of professions in which the alumni operate, their widespread geographic location, the variability of exchange rates, and the potential sensitivity of this data, meant that any interpretation of the data could be misleading.

To test Hypothesis 3, we included perceptions around extrinsic and intrinsic career outcomes in order to capture how the individual feels about their occupation and progression, in line with Schein’s (1978) concept of the internal career. We included a measure of career satisfaction based on an earlier scale from Greenhaus, Parasuraman and Wormley (1990). This scale is widely used for subjective career satisfaction, although it is recognised that some concerns have been raised about gender response variance by Hofmans et al. (2008). As the overall project had broader aims than to study the gender differences we opted to go with the measure. Items measured satisfaction with the achievement of goals for career advancement, skill development and income as well as career goals and overall career satisfaction. The coefficient alpha for the five-item scale was 0.94. In order to study self-efficacy we adopted a nine item & seven point Likert scale initially produced by Bennett (2011). The variable was squared to correct moderate negative skewness and the coefficient alpha for the scale was 0.95.

Control variables were included comprising respondent age (in years), years since graduation, and dummy variables for 3 regional groups (English speaking; northern European; and Central European); organisational size based on number of employees (up to 250 as the reference category, 251-1000, 1001-10,000 and more than 10,000) and for organisational sector (i.e. 'public', 'not for profit' and 'private', with 'mixed' as the reference category). No specific hypotheses were developed concerning the effects of the control variables.

## FINDINGS

Separate ANCOVA analyses were undertaken to test Hypothesis 1 with gender as the grouping variable and region, age, years since graduation, organisation size and sector as the covariates. Neither the organisation size nor sector variables were significant in any of the three tests, so they were removed from the analysis in relation to the career capital variables. Furthermore, given that these variables showed negative skewness, the variables were squared. In the sample of 611 respondents who provided career capital data the 127 females reported greater levels of 'know why' and 'know how' than men and roughly equal levels of 'know whom' as men. See tables 4.2a-c. Furthermore the difference in know why (35.2 compared to 33.3) was statistically significant ( $F(1,605)=4.53$ ,  $p=0.03$ ), as was the control variable region ( $p=0.02$ ). In terms of 'know how' the difference (32.2 to 30.4) was significant at  $p<0.10$  ( $F(1,605)=3.26$ ,  $p=0.07$ ) while region ( $p=0.04$ ), years since graduation ( $p=0.02$ ) and age ( $p=0.01$ ) were all statistically significant. For 'know whom' gender was not significant ( $F(1,605)=0.45$ ,  $p=0.53$ ) and of the control variables only region was significant ( $p=0.02$ ). Hypothesis 1 is thus largely supported.

**Table 4.2a: ANCOVA summary 'Knowing why'**

Source	Sum of squares	df	Mean sq.	F	P	Partial eta squared
Gender	305.9	1	305.9	4.5	0.03	0.01
Age	157.8	1	157.8	2.3	0.01	0.00
Years since graduation	64.4	1	64.4	1.0	0.33	0.00
Region	505.7	2	252.9	3.7	0.02	0.01
Error	40867.2	605				

Notes: no organisational size dummy variables was significant  $p<0.05$ ;  $n=611$

**Table 4.2b: ANCOVA summary 'Knowing how'**

Source	Sum of squares	df	Mean sq.	F	P	Partial eta squared
Gender	260.2	1	260.2	3.2	0.07	0.01
Age	598.1	1	598.1	7.5	0.01	0.01
Years since graduation	428.5	1	428.5	5.4	0.02	0.01
Region	540.7	2	270.3	3.4	0.04	0.01
Error	48336.7	605				

Notes: no organisational size dummy variables was significant  $p<0.05$ ;  $n=611$

**Table 4.2c: ANCOVA summary 'Knowing whom'**

Source	Sum of squares	df	Mean sq.	F	p	Partial eta squared
Gender	55.2	1	55.2	0.5	0.50	0.00
Age	265.1	1	265.1	2.2	0.14	0.00
Years since graduation	182.0	1	182.0	1.5	0.22	0.00
Region	930.5	2	465.3	3.8	0.02	0.01
Error	73745.9	605				

Notes: no organisational size dummy variables was significant  $p<0.05$ ;  $n=611$

An ANCOVA analysis was undertaken to test hypothesis 2 in relation to number of promotions. The sample of 588 respondents who had provided data on promotions included 122 females and 466 males indicated that females averaged 1.57 promotions in relation to the 1.7 for men, but gender ( $F(1,576)=0.12$ ,  $p=0.73$ ) was not a significant



predictor. Only years since graduation and age and organisational size (more than 1,000 employees) emerged as significant predictors of the number of promotions, see table 4.3

**Table 4.3**  
**ANCOVA summary ‘number of promotions’**

Source	Sum of squares	df	Mean sq.	F	p	Partial eta squared
Gender	0.2	1	0.2	0.0	0.70	0.00
Age	51.5	1	51.5	31.6	0.00	0.05
Yrs. since graduation	247.8	1	247.8	152.2	0.00	0.20
Region	5.3	2	2.7	1.6	0.19	0.01
Size (dummy 1001-10000)	14.8	1	14.8	9.1	0.00	0.02
Size (dummy 10001+)	8.8	1	8.8	5.4	0.02	0.01
Error	937.6	576				

Notes: non-significant variables was significant ( $p < 0.05$ ) excluded from table;  $n = 587$

While fewer female than male alumni reported being in the same job (8.6% compared to 14.2%) or the same organisation (29.6% versus 33.5%), the position was reversed in terms of location with 82.3% reporting being in the same country compared to 77.8% for men. However, in a series of logistic regressions (see Tables 4.4a-c) gender was only marginally significant in terms of predicting whether an alumnus was in the same job ( $p = 0.054$ ), along with age ( $p = 0.04$ ) and organisation size greater than 10,000 employees ( $p = 0.04$ ), but it was not significant in terms of predicting whether an alumnus remained in the same organisation or same country.

**Table 4.4a: Logistic Regression summary ‘Same Job’**

Variable	Wald (d.f.)	Significance ( <i>p</i> )	Exp (B) (odds ratio)
Gender	3.7 (1)	0.05	0.5
Age	6.2 (1)	0.01	1.1
Years since graduation	23.4 (1)	0.00	0.8
Region	1.7 (2)	0.40	
Dummy (1001-10000)	4.1 (1)	0.04	1.9
Dummy (10001+)	16.4 (1)	0.00	4.5

*Chi-squared (11) = 66.2,  $p = 0.00$ , Cox & Snell = 0.10, Nagelkerke = 0.23,  $n = 616$*

*Note: only significant organisational size and sector dummy variables shown*

**Table 4.4b: Logistic Regression summary ‘Same Organisation’**

Variable	Wald (d.f.)	Significance ( <i>p</i> )	Exp (B) (odds ratio)
Gender	0.8 (1)	0.37	0.8
Age	1.5 (1)	0.23	1.0
Years since graduation	24.2 (1)	0.00	0.9
Region	3.9 (2)	0.14	
Dummy (250-1000)	4.5 (1)	0.03	0.5

*Chi-squared (11) = 54.8,  $p = 0.00$ , Cox & Snell = 0.09, Nagelkerke = 0.11  $n = 596$*

*Note: only significant organisational size and sector dummy variables shown*

**Table 4.4c: Logistic Regression summary ‘Same Country’**

Variable	Wald (d.f.)	Significance ( <i>p</i> )	Exp (B) (odds ratio)
----------	-------------	------------------------------	-------------------------

Gender	0.2 (1)	0.47	1.2
Age	1.2 (1)	0.15	1.0
Years since graduation	2.1 (1)	0.00	1.0
Region	8.5 (2)	0.01	
Dummy (Private)	6.2 (1)	0.01	.02

*Chi-squared (11) = 23.6, p=0.00, Cox & Snell = 0.04, Nagelkerke = 0.13, n=611*

*Note: only significant organisational size and sector dummy variables shown*

More male than female alumni reported being in a senior management position (64% compared to 57%) but in a logistic regression analysis (see Table 4.5) the only predictor to emerge as significant in terms of being in a senior management role was age ( $p=0.05$ ). Thus Hypothesis 2 that Female alumni will report lower levels of objective career success was not supported.

**Table 4.5**  
**Logistic Regression summary: 'senior management role'**

Variable	Wald (d.f.)	Significance ( <i>p</i> )	Exp (B) (odds ratio)
Gender	1.8 (1)	0.12	0.7
Age	4.0 (1)	0.05	1.0
Years since graduation	0.9 (1)	0.12	0.7
Region	1.8 (2)	0.34	1.30

*Chi-squared (11) = 25.92, p=0.00, Cox & Snell = 0.04, Nagelkerke = 0.06, n=611*

*Note: only significant organisational size and sector dummy variables shown*

Three separate ANCOVA analyses were undertaken to test hypothesis 3. Once again, the organisation size and sector control variables were not significant predictors and were removed from the analysis.

In terms of career satisfaction, female alumni report higher average levels than male alumni (23.28 versus 22.48) and the difference was significant ( $F(1,605)=5.81$ ,  $p=0.02$ ) see table 4.6a. Of the control variables, only region emerged as a significant predictor in terms of career satisfaction ( $p=0.02$ ), with alumni from the Northern European grouping reporting the highest level of satisfaction. The self-efficacy variable was squared to remove negative skewness. Female alumni reported higher levels of self-efficacy (see table 4.6b) and the difference in terms of gender was significant ( $F(1,605)=5.2$ ,  $p=0.03$ ) as was age ( $p=0.03$ ) but no other control variables were significant.

**Table 4.6a: ANCOVA summary 'career satisfaction'**

Source	Sum of squares	df	Mean sq.	F	p	Partial eta squared
Gender	162.5	1	162.5	5.8	0.02	0.01
Age	19.5	1	19.5	3.6	0.40	0.00
Years since graduation	101.3	1	101.3	3.6	0.06	0.01
Region	215.0	2	107.5	3.8	0.02	0.01
Error	16918.8	605				

*Note: no organisational sector or size dummy variables were significant  $p<0.05$ , n=611*

**Table 4.6b**  
**ANCOVA summary 'self-efficacy'**

Source	Sum of squares	df	Mean sq.	F	p	Partial eta squared
Gender	337.1	1	337.1	5.2	0.02	0.01
Age	325.8	1	325.8	5.0	0.03	0.01
Years since graduation	153.3	1	154.3	2.4	0.12	0.00
Region	312.4	2	156.2	2.4	0.09	0.01
Error	39277.4	605				

Notes: no organisational size dummy variables was significant  $p < 0.05$ ;  $n = 611$

## DISCUSSION

In terms of career capital, it is noteworthy that women report greater levels of development of knowing why, in line with what was expected from the literature around the enhancement of self-confidence for women completing an MBA. For knowing how the results are less convincing, although there is evidence to suggest women value their MBA programme as a means of providing them with career credentials. Results are different for knowing whom, associated as it is with networks and connections and women do not here report a greater level of development. However, the fact that there is no significant difference either way in terms of the reported development of knowing whom may actually be a positive finding. It may be the case that women who have completed the MBA go on to experience similar developments in their knowing whom career capital as their male colleagues. Of course, it could also be argued that, despite the fact that MBA is often 'sold' as being about networking and associated benefits, if women start at a lower base and develop at the same rate as men this does nothing to close the gap. This is a point that needs further research.

In terms of career trajectories post MBA, Hypothesis 2 was not supported as there were no significant differences between men and women. However, although the data does not produce significant differences in terms of the number of promotions or reported seniority, they do suggest women experience lower levels of objective career success than men after an MBA. We know that women tend to be more negative than men in their own self-assessment (Mayo, Kakarika & Pastor, 2012), so it is difficult to know whether this accounts for this difference or whether their careers were (non-significantly) less successful. Further research is required in this and other contexts to consider this more fully.

In terms of career mobility post MBA there is some evidence of women using the MBA to change role, but not to change organisation or country. This may be connected with the need for many mid-career women to juggle their career with their family commitments (Emslie & Hunt, 2009; Vinnicombe & Singh, 2011) making changes to their place and country of work more difficult.

The situation is clearer cut in relation to subjective career success or career satisfaction. Here hypothesis 3 was supported, with women reporting significantly higher levels of career satisfaction and self-efficacy. Thus, although women are not equalling men in terms of objective career outcomes our study does indicate that they have greater self-belief and are more satisfied with their careers post-MBA than their male counterparts. Whilst it may be argued that these higher levels of satisfaction may be a result of the limits they impose on their own career expectations (Hogue, Dubois & Fox-Cardamone, 2010), this should not detract from the fact that they are more satisfied.

## CONCLUSIONS

In summary our findings highlight the fact that women are more likely than men to believe their career capital has been enhanced by an MBA yet, despite years of advances, women have not yet reached a position of parity in terms of likely career outcomes post-MBA. Nonetheless, they remain more satisfied with their postgraduate career outcomes.

Our study has several limitations and raises some questions for further work. First, we rely on quantitative analysis based on self-report data collected post-MBA and requiring some reflection on the pre-MBA experience. Such data may not be reliable, and individuals may opt to inflate their relative seniority. More important is the fact that

this sample was taken from a much larger MBA population and could reflect a self-selecting group, possibly one with more interest in careers.

Despite the limitations, we believe our findings are important not only to all female current and prospective MBA students but also to a range of wider stakeholders including HRM professionals and others in organisational roles charged with improving diversity. Similarly, the findings are likely to be important for all those involved in the delivery and marketing of MBA programmes and MBA careers

## REFERENCES

- Adler, N. J., & Izraeli, D. N. (1994). *Competitive Frontiers*. Cambridge, MA: Blackwell.
- Allen, D.G., Shore, L.M. & Griffith, R.W. (2003), "The role of perceived organizational support and supportive human resource practices in the turnover process" *Journal of Management*, 29 (1): 99-118.
- Arthur, M.B, Inkson, K & Pringle, JK (1996). "The Boundaryless Career: A New Employment Principle for a New Organizational Era". *New York: Oxford University Press*
- Bandura, A (1977) Self-efficacy: "Towards a unifying theory of behavioural change". *Psychological Review*, 84 (2): 191-215.
- Baruch, Y. & Pieperl, M. (2000) "The impact of an MBA on graduate careers" *Human Resource Management Journal*, 10, (2): 69-90.
- Beach, C.M., Finnie, R. & Gary, D. (2003) "Earnings variability and earnings instability of female and males in Canada: How do the 1990s compare to the 1980s?" *Canadian Public Policy*, 29 (s1), 41-64.
- Bennett, R. (2011) "Brand managers' mindful self-management of their professional experience: Consequences for pay, self-efficacy and job performance" *Brand Management* 18, (8): 545-569.
- Betz, N. (2004) "Contributions of self-efficacy theory to career counselling: A personal perspective". *Career Development Quarterly*, 54 (4): 340-353.
- Bradshaw, D. (2007). "Business school rankings: The love-hate relationship". *Journal of Management Development*, 26(1): 54-60.
- Burke, R. J. (1994) "Women in corporate management in Canadian organisations: Slow progress?" *Executive Development*, 7 (3):15-24.
- Chen, A., Doherty, N. & Vinnicombe, S. (2012) "Developing women's career competencies through an EMBA" *Gender in Management: An International Journal*, 27 (4): 232-248
- DeFillippi, R. J. & Arthur, M. B. (1994). "The boundaryless career: A competency-based perspective". *Journal of Organisational Behavior*, 15(4): 307-324.
- Doherty, N. & Dickmann, M. (2009) "Exposing the symbolic capital of international assignments". *International Journal of Human Resource Management*, 20 (2): 301-320.
- Eby, L., Butts, M. & Lockwood, A. (2003), "Predictors of success in the era of the boundaryless career," *Journal of Organisational Behaviour*, Vol. 24 No. 6, pp. 689-708
- Feldman, D. & Ng, T. (2007), "Careers: mobility, embeddedness, and success," *Journal of Management*, Vol. 33 No. 3, pp. 350-77.
- Fernandes Personini Cruz, J. & Wood, T. (2015) "Perceived effects of part-time MBAs on careers", *Career Development International*, 20, 6, 646-662
- Fortin, N.M. & Huberman, M. (2002) "Occupational gender segregation and females' wages in Canada: A historical perspective." *Canadian Public Policy*, 28 (s1), 11-39
- Gist, M.E. (1989) "The influence of training method on self-efficacy and idea generating among managers". *Personnel Psychology*, 42: 787-805.
- GMAC. (2016). *2016 Application trends survey report*, Reston, VA: Graduate Management Admission Council.
- Heslin, P.A. (2005) "Conceptualizing and evaluating career success". *Journal of Organisational Behavior*, 26 (2): 113-136

- Hogue, M.C, Dubois, L.Z & Fox-Cardamone, L (2010) "Gender differences in pay expectations: The roles of job intention and self-view". *Psychology of Women Quarterly*, 34 (2), 215-227.
- Hughes E.C, (1958) *Men and their Work*. New York, NY: Free Press
- Hughes, E.C. (1937) "Institutional office and the person," *American Journal of Sociology*, 404-413
- Inkson, K., & Arthur, M. B. (2001). "How to be a successful career capitalist." *Organisational Dynamics*, 30(1): 48-61.
- Jones, C., & Lichtenstein, B. (2000). "The 'architecture' of careers: How career competencies reveal firm dominant logic in professional services'. In Peiperl, M., Arthur, M., Goffee, R. & Morris, T. (Eds)". *Career Frontiers: New Conceptions of Working Lives*. Oxford, Oxford University Press. 153-176
- Judge, T, A., Higgins, C.A., Thoresen, C. J. & Barrick, M.R (1999). "The big five personality traits, general mental ability, career success across the life span". *Personnel Psychology*, 52, 621-652
- Kanter, R.M. (1977) "Some effects of proportions on group life: Skewed sex ratios and responses to token women". *American Journal of Sociology*, 72, 965-990.
- King, Z. (2004) "Career self-management: Its nature, causes and consequences". *Journal of Vocational Behaviour* 65(1): 112-133.
- Leeming, A. & Baruch, Y. (1998) The MBA as a bridge over the troubled waters of discrimination. *Women in Management Review*; 13 (3) 95- 104.
- Lyness, K. S. & Thompson, D.E. (2000) "Climbing the Corporate Ladder: Do Female and Male Executives Follow the Same Route". *Journal of Applied Psychology*, 85 (1): 86-101.
- Marsden, P.V, Kalleberg, A.L. & Rook, C.R. (1993) "Gender differences in organizational commitment: Influences of work positions and family roles". *Work and Occupations* 20 (3): 368-90.
- Mayo, M., Kararik, M. & Pastor, J.C. (2012), "Aligning or inflating your leadership self-image? A longitudinal study of responses to peer feedback in MBA teams", *Academy of Management Learning & Education*, 2012. Vol. 11. No. 4. 631-652
- McCall, M. W. (1998). *High Flyers*. Boston: Harvard Business School Press.
- Metz, I. & Tharenou, P. (2001) "Women's Career Advancement the Relative Contribution of Human and Social Capital", *Group and Organization Management*, 26 (3): 312-342
- Ng, T.W. H, Eby, K.L, Sorensen, K.L. & Feldman, D.C. (2005), "Predictors of objective and subjective career success: A meta-analysis," *Personnel Psychology*, 58: 367-408
- Parker, P., Khapova, S. N., & Arthur, M. B. (2009). "The intelligent career framework as a basis for interdisciplinary inquiry." *Journal of Vocational Behavior*, 75(3): 291-302.
- Passerelli, A.M., Boyatsiz, R.E & Wei, H (2018) "Assessing Leader Development: Assessing Leader Development: Lessons from a Historical Review of MBA Outcomes", *Journal of Management Education*, Vol 42 (1), 55-59
- Patterson, S.E, Damaske, A. & Sheroff, C. (2017) "Gender and the MBA: Differences in career trajectories, institutional support, and outcomes" *Gender & Society*, 31 (3): 310-332
- Pfeffer, J. & C. T. Fong (2002) "The end of business schools? Less success than meets the eye," *Academy of Management Learning and Education*, 1, (1): 78-95
- Rhoades, L. & Eisenberger, R. (2002), "Perceived organizational support: a review of the literature," *Journal of Applied Psychology*, 87 (4): 698-714.
- Roth, Louise Marie. 2006. *Selling Women Short: Gender and Money on Wall Street*. Princeton, NJ: Princeton University Press.
- Schweitzer, L., Ng, E., Lyons, S. & Kuron, L. (2011) "Exploring the career pipeline: gendering differences in pre-career expectations", *Industrial Relations*, 66: 422-444
- Simpson, R. (2006) "Masculinity and management education: feminizing the MBA", *Academy of Management Learning and Education*, 5, (2): 182-193
- Simpson, R., Sturges, J. & Woods, A. (2005) "Gender, age and the MBA: an analysis of extrinsic and intrinsic career:" *Journal of Management Education*, 29 (2): 218-247

- Strunk, G. & Hermann, A. (2009) "Berufliche chancengleichheit von frauen und mannern, eine empirische untersuchung zum gender pay gap. IN:" *Zeitschriftfur Personalforschung*, 23 (3): 237-257.
- Sturges, J., Simpson, R., & Altman, Y. (2003). "Capitalising on learning: an exploration of the MBA as a vehicle for developing career competencies." *International Journal of Training and Development*, 7(1): 53-66
- Sullivan, S. E., Carden, W. A., & Martin, D. F. (1998). "Careers in the next millennium: Directions for future research". *Human Resource Management Review*, 8: 165-185.
- Supangco, V.T. (2011) "Organizational and Individual Determinants of Career Success of MBA students". *Journal of International Business Research*, 10 (2): 113-128
- Tharenou, P. (1999). "Gender differences in advancing to the top". *International Journal of Management Reviews*, 2: 1-22.
- "The World Bank", (2017) Accelerating Women's Economic Empowerment  
<http://www.worldbank.org/en/news/feature/2017/06/26/accelerating-womens-economic-empowerment>
- Varma, A. & Russell, L. (2016) "Women and expatriate assignments: Exploring the role of perceived organizational support", *Employee Relations*, 38 (2): 200-223
- Wallen, A. S., Morris, W.M., Devine, B.A. & Lu, J.G. (2017) "Understanding the MBA Gender Gap: Women Respond to Gender Norms by Reducing Public Assertiveness but not Private Effort". *Personality and Social Psychology Bulletin* Vol. 43(8): 1150–1170
- Yap, M. and Konrad, A.M. (2009) "Gender and Racial Differentials in Promotions: Is there a sticky floor, a mid-level bottleneck, or a glass ceiling?" *Industrial Relations*, 64, (4): 594-619