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**Modelling the Production and Consequences of Career Success
in the Present Era from the Perspectives of Sustainable Careers,
Social Capital and Self-Expatriation
Bozionelos, Georgios**

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MODELLING THE PRODUCTION AND CONSEQUENCES OF CAREER SUCCESS
IN THE PRESENT ERA FROM THE PERSPECTIVES OF SUSTAINABLE CAREERS,
SOCIAL CAPITAL AND SELF-EXPATRIATION

GEORGIOS BOZIOVELO

A thesis submitted in partial fulfilment of the requirements of the University of
Westminster for the degree of Doctor of Philosophy

July 2024

Abstract

The outputs submitted, nine in number (eight full length refereed journal articles and one chapter in Edited Volume) fall within the disciplines of Organisational Behaviour and Human Resource Management. As a whole entity, this work contributes to the field of careers with special emphasis on career success by means of providing insights into the processes involved in the production of outcomes that relate to career success and are of interest to both career actors and employers. Specifically, these works made distinct contributions to career success literature in the past ten years, under the three following themes: first, sustainable careers, by means of advancing knowledge on the antecedents and mechanisms involved in the production of key proximal career success indicators, such as employability and job performance, and more distal success indicators, such as objective career success; second, careers of self-initiated expatriates, by means of developing comprehensive context-embedded models to map the decision to self-expatriate or to consider another self-expatriation endeavour as function of actual and anticipated career success; third, the social capital approach to career success, by means of identifying personality antecedents of social capital accumulation and shedding light in the shape (linear vs. non-linear) of association between personality antecedents and social capital (considered in terms of mentoring and network ties). Hypotheses and models have been developed using established theoretical frameworks and careful contemplation, but there are also outputs where I (or with co-authors) constructed novel theoretical argumentation. Viewed independently, each of the nine works contributes towards an improved understanding of a narrow issue within the broader careers literature. Considered together, the works are complementary and provide a comprehensive idea of the factors and processes involved in the production of proximal and distal career success in the present era.

Contents

Abstract	i
Contents.....	ii
List of figures	v
Accompanying Material.....	vi
Published Works upon which the Submission is based	vi
Preface	viii
Acknowledgements.....	ix
Author’s declaration.....	x
CHAPTER 1: INTRODUCTION AND CONTRIBUTION.....	1
Introduction.....	1
Contribution	1
Career Success.....	2
What Shapes Career Success	3
Three Complementary Frameworks for a Comprehensive Account of Career Success	4
Sustainable Careers	4
Social Capital as a Resource for Career Success	5
Self-initiated Expatriation as Career Move	6
The Integrated Model of the Contribution	7
CHAPTER 2: THEORETICAL BACKGROUND	10
Sustainable Careers.....	10
What a Sustainable Career is	11
Indicators of Sustainable Careers	12
My Contribution.....	14
Personality in the Accumulation of Social Capital as Career Resource	14
The Notion of Social Capital	14
Social Capital as Mentoring and Network Resources	15
Social Capital and Career Success	16
Personality and Social Capital Accumulation	16
Extant research and the caveat of non-linearity.	17
My Contribution.....	20
Self-expatriate Careers	20

Expatriation.....	20
Self-initiated Expatriates	21
Why Studying the Careers of SIEs is of Importance	22
My Contribution.....	24
Modelling the decision to self-expatriate.....	24
Taking the context into account.	25
CHAPTER 3: METHODOLOGICAL ISSUES	27
Methodological Approach.....	27
Data Analysis	28
The Nature of the Variables and Relationships in the Submitted Works	29
CHAPTER 4: THE SUBMITTED WORKS AND THEIR MAIN FINDINGS	31
Sustainable Careers.....	31
Works #7, #6, #5 and #3.....	31
Work #7.....	31
Work #3.....	33
Work #6.....	34
Work #5.....	35
Personality in the Accumulation of Social Capital as Career Resource	37
Works #9, #4 and #2	37
Work #9.....	37
Work #4.....	38
Work #2.....	39
Careers of SIEs: Modelling the decision to self-expatriate.....	41
Work #8 and work #1	41
Work #8.....	41
Work #1.....	42
CHAPTER 5: DISCUSSION	45
Sustainable Careers.....	45
The Relationship of Personality with Social Capital	47
Careers of Self-initiated Expatriates	49
Implications for Practice	50
Limitations	52

Ongoing and Future Work	53
APPENDICES	54
APPENDIX A - Contribution Statements	55
Dr Beatrice van der Heijden.....	55
Dr Izabela Marzec.....	56
Dr Kostantinos Kostopoulos	57
Dr Nikos Bozionelos.....	59
Dr Sumona Mukhu	62
References	63
Accompanying Materials - Published Works.....	87

List of figures

Figure 1	The three contemporary theoretical frameworks	8
Figure 2	The comprehensive model of career success as synthesis of the submitted papers	8
Figure 3	The integrated model with the theoretical framework that mostly reflects each set of variables superimposed	9
Figure 4	The final model that was derived in work #7	32
Figure 5	The final model that emerged after the hypothesis testing in work #3	33
Figure 6	The final model after hypothesis testing in work #6	35
Figure 7	The elements of the contribution to the total model from my research from the perspective of Sustainable Careers	36
Figure 8	Schematic depictions of the quadratic relationships between personality elements and Mentoring Receipt that emerged from work #9	38
Figure 9	The relationship of Emotional Intelligence with Mentoring Provision (Figure 4a) and Expressive Network Resources (Figure 4b) – as presented in work #2	40
Figure 10	The elements of the contribution from my research from the Social Capital perspective to Career Success to the total model	40
Figure 11	The final model of work #8	42
Figure 12	The model with all the hypothesized links that was tested in work #1	43
Figure 13	The elements of the contribution to the total model that resulted from my research on Career Success from the perspective of Self-initiated Expatriation	44

Accompanying Material

Published Works upon which the Submission is based

1. **Bozionelos, G.** – **fourth author** [with Bozionelos, N., Mukhuty, S., Kostopoulos, K., & Blenkinsopp, J.] (2022). United Nations civilian volunteers in UN hot spots: What makes them apply for yet another assignment? *International Journal of Human Resource Management*, 34(12), 2516-2545.
URL: <https://doi.org/10.1080/09585192.2022.2086438>
Word count: 11,532
2021 CABS Academic Journal Guide rating: 3
Clarivate (Web of Science) indexed: Yes
Citations (Google Scholar) (as of June 30 2024): 2
2. **Bozionelos, G.** (2018) – **first author** [with Bozionelos, N.] (2018). Trait emotional intelligence and social capital: The emotionally unintelligent may occasionally be better off. *Personality and Individual Differences*, 134, 348-351.
URL: <https://doi.org/10.1016/j.paid.2018.06.037>
Word count: 3,709
2012 CABS Academic Journal Guide rating: 3
Clarivate (Web of Science) indexed: Yes
Citations (Google Scholar) (as of June 30 2024): 19
3. **Bozionelos, G.** – **first author** [with Bozionelos, N., van der Heijden, B., & Marzec, I.] (2018). In search of challenge: Flow at work and the development of occupational expertise. In Baugh, G. & S. E. Sullivan (Eds.), *Research in Careers, Vol. 4: Seeking challenge in the career* (pp. 125-144). Charlotte, NC: Information Age Publishing. ISBN-10: 1641131896; ISBN-13: 978-1641131896
Word count: 7,702
2021 CABS Academic Journal Guide 2021 rating: Not applicable (Edited Book)
Clarivate (Web of Science) indexed: Not applicable
Citations (Google Scholar) (as of June 30 2024): 1
4. **Bozionelos, G.** (2017) – **sole author**. The relationship of the big-five with workplace network resources: More quadratic than linear. *Personality and Individual Differences*, 104, 374-378.
URL: <https://doi.org/10.1016/j.paid.2016.08.036>
Word count: 5,145 words
2021 CABS Academic Journal Guide rating: 3
Clarivate (Web of Science) indexed: Yes
Citations (Google Scholar) (as of June 30 2024): 22
5. **Bozionelos, G.** (2016) – **sole author**. Emotion work in the Arab context: Its relationship to job satisfaction and the moderating role of trust to the employer. *Psychological Reports*, 119(1), 136-153.
URL: <https://doi.org/10.1177/0033294116653949>

Word count: 6,385 words

2021 CABS Academic Journal Guide rating: 1

Clarivate (Web of Science) indexed: Yes

Citations (Google Scholar) (as of June 30 2024): 22

6. **Bozionelos, G.**, - **fifth author** [with Bozionelos, N., Kostopoulos, K., & the Indic@tor Consortium] (2016). Employability and job performance as links in the relationship between mentoring receipt and career success: A study in SMEs. *Group and Organization Management*, 41(2), 135-171.

URL: <https://doi.org/10.1177/1059601115617086>

Word count: 13,086 words

CABS Academic Journal Guide 2021 rating: 3

Clarivate (Web of Science) indexed: Yes

Citations (Google Scholar) (as of June 30 2024): 138

7. **Bozionelos, G.** – **first author** [with Bozionelos, N.] (2015). Employability and key outcomes in times of severe change: The role of career orientation. *Human Resource Management (Poland) [Zarządzanie Zasobami Ludzkimi]*, 6(107), 11-32.

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Word count: 7,785 words

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Clarivate (Web of Science) indexed: No

Citations (Google Scholar) (as of June 30 2024): 9

8. **Bozionelos, G.** – **second author** [with Bozionelos, N., Kostopoulos, K., Shyong, C-H., Baruch, Y., & Zhou, W.] (2015). International graduate students' perceptions and interest in international careers. *International Journal of Human Resource Management*, 26(11), 1428-1451.

URL: <https://doi.org/10.1080/09585192.2014.935457>

Word count: 11,685

CABS Academic Journal Guide 2021 rating: 3

Clarivate (Web of Science) indexed: Yes

Citations (Google Scholar) (as of June 30 2024): 69

9. **Bozionelos, G.** – **second author** [with Bozionelos, N., Kostopoulos, K., & Polychroniou, P.] (2014). Mentoring receipt and the big-five of personality: Evidence for non-linear relationships. *Journal of Business Research*, 67(2), 171-181.

URL: <https://doi.org/10.1016/j.jbusres.2012.10.007>

Word count: 12,116

2021 CABS Academic Journal Guide 2021 rating: 3

Clarivate (Web of Science) indexed: Yes

Citations (Google Scholar) (as of June 30 2024): 107

Preface

Methodology: The submitted work has adopted a positivist approach, which was necessitated by the nature of the aims and objectives. In most cases, expectations were developed in advance in the form of hypotheses. Following this, hypotheses – which often involved or necessitated the utilization of causal path modelling either with manifest or with latent factors – were tested with statistical techniques (typically the general linear model with linear or quadratic equations, or structural equations modelling).

Collaborative Element & Personal Contribution: In the nine works I submit, I am the sole author in two of them, first author in three of them, and second author in two of them. This is confirmed by signed statements of co-authors about my contributions. This signifies the decisive individual contribution I have made throughout the submitted works.

Quality and Significance: Seven of the eight submitted journal articles appeared in journals that are indexed by Clarivate (Web of Science) and are included in the *Academic Journal Guide (AJG)* of the Chartered Association of Business Schools (*CABS*) – *the median CABS* journal rating of my refereed journal articles is 3 (out of the maximum 4 assigned in AJG) (Chartered Association of Business Schools, 2021). The book chapter appeared in a prestigious edited series. Submitted **work #6** received the 2016 Outstanding Article Award by *Group and Organization Management* (the journal it was published, Group and Organization Management, 2016).

Impact: The works I submit appeared in the last ten years (2014 – 2023). They have already attracted (as per June 30, 2024) close to 400 citations (google scholar via Harzing Publish or Perish, Harzing, 2007; 2023), with $h = 7$ and $h_1 = 6$ (the closer the h_1 to h , the greater the individual contribution of the researcher (for information about the h-index, see Hirsch, 2005; Batista, Campitelli, Kinouchi & Martinez, 2006)– in my case this is also corroborated by the fact that I am either sole or first author in most of my submitted works).

Acknowledgements

It has been almost ten years since the first publication that laid the foundations for this PhD. From its conception to its completion many people were involved, their influence and contribution varying in degree and nature. Nonetheless, I strongly believe that the absence of anyone of them would have led to a different result and end product.

First, I would like to express my appreciation to my supervisors, Dr Michielsens and Dr Nazarian, for their help and support throughout this PhD. Their insight and advice guided it to completion.

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Third, though not with us anymore, my parents should be thanked posthumously. They passed to me the love and passion for knowledge acquisition and gave me their unconditional support, which had been catalytic to my educational accomplishments.

Fourth, I would like to express my gratitude towards my brother for his encouragement from conception to completion.

Finally, but not less important, I could not forget to thank all co-authors that made possible the publications this PhD was based on.

Author's declaration

I declare that

- a. The submission as a whole or in part is not substantially the same as any that I have previously made or am currently making, whether in published or unpublished form, for a degree, diploma or similar qualification at any university or similar institution.
- b. Until the outcome of the current application to the University is known, the work or works submitted will not be submitted for any such qualification at another university or similar institution.

Georgios Bozionelos

July 2024

CHAPTER 1: INTRODUCTION AND CONTRIBUTION

Introduction

I submit nine works (eight full length refereed journal articles and one chapter in Edited Volume) towards the PhD by published works. These outputs are found at the end of the Commentary following the references, their numbering follows the chronological ordering of their appearance in reverse (work #1 the most recent, and work #9 the earliest).

My work has contributed to the literature in the field of careers, and specifically in career success. That was accomplished by means of identifying an integrated set of factors and processes (mechanisms) that enable us to comprehensively explain how individuals achieve success in their careers. In essence, therefore, the submitted work responds to the Question: what factors and processes describe the achievement of career success in the present era? In this quest, my work made contributions under three major contemporary approaches to careers: sustainable careers, the social capital perspective to career success, and the careers of self-initiated expatriates. These three perspectives together enable a comprehensive understanding of how career success is achieved in the present era (see Figure 1, with additional explanation further down). Below I provide a succinct presentation of the construct of career success and how my work has contributed to this literature.

Contribution

Though careers existed as a concept since the first part of the twentieth century (e.g., Hughes, 1937), it was relatively recently that their study emerged as a distinct field within social science and management studies. That was consequence of the seminal edited book by Arthur, Hall & Lawrence (1989a) that contained essays on careers from established scholars and essentially “legitimized” careers as a field of study. The concept of career is embedded within the context of work, a career is defined as the totality of work-related experiences throughout the individual’s life (Arnold, 1997; Arthur, Hall & Lawrence, 1989b). Careers, therefore, involve movement across time and through contexts (work settings and the environment these settings are embedded in), jobs (set of tasks and

activities) and levels of status or responsibility (Baruch & Rousseau, 2019; Greenhaus, Callanan & Godshalk, 2010). Depending on the trajectory of this movement (e.g., upwards, flat, or downwards) careers can be seen as successful or less successful.

Career Success

Because work has been a fundamental element in every society, careers are important for the vast majority of people, who define themselves in terms of their success in their work lives (Anderson, Hildreth & Howland, 2015). Indeed, the notion of success (or failure) has always been inherent in the conceptualization of careers (Akkermans & Kubasch, 2017; Hall, 1976, 2002). The level of success in career can be evaluated either from an external, or objective, perspective or from an internal, or subjective, perspective. The former is referred to as objective career success and is typically evaluated with verifiable criteria of success or potential of success that draw upon societal definitions of success or failure (e.g., earnings, promotions, occupational prestige, employability rated by others) (Nicholson & De Waal-Andrews, 2005). The latter is referred to as subjective career success and reflects people's own personal evaluations of their accomplishments and prospects of future accomplishments in their work lives, and is typically measured with specialist attitude scales (Gattiker & Larwood, 1986; Judge, Higgins, Thoresen & Barrick, 1999).

Whether evaluations of career success are positive or not has serious implications for both individuals but also employers, societies, and governments (that naturally have vested interests in economic growth and societal harmony). This is not only because, as noted, success in career is of importance for most individuals, but also because individual career success relates to organisation-level outcomes, such as various indices of organizational performance (Alvi, Jabeen & Kaur, 2020; Carter, Nesbit, Badham, Parker & Sung, 2018; Salas-Vallina, Pozo-Hidalgo & Gill-Monte, 2020). This does not only apply to outcomes that relate to objective career success, but also to outcomes that pertain to subjective career success, such as career satisfaction, job satisfaction and willingness to embrace change. To illustrate, subjective evaluations of careers are related to employees' willingness to invest effort at work and commit themselves to the employer (Hu, Zhang, Chen & Griggs, 2022; Moon & Choi, 2017; Ng & Feldman, 2014). Well-performing

organizations form a pillar for a buoyant economy that is important for the well-being of people and the stability and progress of the society.

What Shapes Career Success

Given the significant implications of career success for all stakeholders (individual career actors, employers, the state, and the society), there has naturally been great effort to identify the factors that determine it (Akkermans & Kubasch, 2017; Elsey, Van der Heijden, Smith & Moss, 2022; Ng, Eby, Sorensen & Felman, 2005; Pico-Saltos, Carrión-Mero, Montalván-Burbano, Garzás & Redchuk, 2021). The unit of analysis in career studies has naturally been the individual, the notion of careers has as locus the work experiences of the individual. For this reason, individual characteristics occupy a prominent position in the effort to identify factors that determine career success (Lo Presti, Van der Heijden, Briscoe & De Rosa, 2023; Pico-Saltos et al., 2021). Personality and other disposition-related characteristics, such as individual career orientations, occupy commanding position as individual-level factors that have been studied as antecedents of career success (Lo Presti et al., 2023; Ng et al., 2005; Pico-Saltos et al., 2021; Van Dyk & Ditsela, 2013; Zhang, Fang, Luan, Chen & Peng, 2022; Zhao & Sang, 2023). These characteristics are deeply entrenched (i.e., they are partly rooted in the genetic make-up and partly formed by environmental influences in early years of life, Vukasović & Bratko, 2015; Segal, 2013; Torgersen & Janson, 2002) and not easily amendable to change over adult life time (Bleidorn, Kandler & Caspi, 2014; Judge et al., 1999). Therefore, because they are reflective of the very core of qualities of each individual, they form part of any attempt to comprehensively understand the factors that contribute to individual career success (Alderotti, Rapallini & Traverso, 2023; Semeijn, Van der Heijden & De Beuckelaer, 2020).

Individuals, however, pursue their careers within a broader eco-system that contains their job, immediate work, organizational and social environment, along with macro-level factors, such as the industry, the economic conditions, the physical conditions, and the cultural elements of the very country they work or move to work (Bagdadli & Gianecchini, 2019; Baruch, 2015; Baruch, Altman & Tung, 2016; Bozionelos, Lan & Xu, 2023; Covington, Malkowska & Elsey, 2023; De Vos & Van der Heijden, 2017). Such

factors, therefore, must also be looked at if it is to develop a plausible account of how career success is achieved.

My work has pursued the identification of factors and processes that determine individual career success in the present era. Following from the above, to achieve comprehensiveness and validity I had to consider work, organizational, economic, cultural and international mobility factors. This became feasible with the adoption of three contemporary frameworks within the careers literature: The social capital view of career success, the notion of sustainable careers, and self-initiated expatriation as a career endeavour. These represent, and represented at the time my submitted work commenced, three most recent frameworks in the study of careers and career success. Considered together, they operate in a complementary manner to provide a broad understanding of factors and processes that determine career success in the contemporary era (see Baruch et al., 2016; Donald, Ashleigh & Baruch, 2018; Donald, Van der Heijden & Baruch, 2024; De Vos & Van der Heijden, 2017; Guo & Baruch, 2021; Whitaker, Hughes & Rugendkye, 2018).

Three Complementary Frameworks for a Comprehensive Account of Career Success

Sustainable Careers

The notion of sustainable careers emerged as result of the observation that careers unfold over most of the length of adult life. As consequence, success in that timeframe lies in the capacity of the individual not only to accumulate achievements in the work sphere, but also to maintain well-being and to succeed in non-work life too (Herman & Lewis, 2012; Newman, 2011; Van der Heijden & De Vos, 2015).

Achievement of sustainable careers is challenging in the present era because advances in technology that are occurring with an increasing pace along with fast societal change have brought constant reshaping of jobs, occupations and professions, some of which disappear with new ones appearing (Nam, 2019). These changes necessitate from individuals to regularly update their existing knowledge and skills, and acquire new ones (Kolade & Owoseni, 2022; Li, 2022). Otherwise, they are in danger of losing their

employability and being unable to remain competitive in the job market. The fast pace of change in the organizational and general work environment has also increased uncertainty (Feng, Cooper & Zhu, 2023). Increased uncertainty poses demands to individuals: apart from constantly updating their skills and knowledge, they have to be more vigilant for and alert to change along with being more resilient and agile to adapt and meet new challenges (Covington, et al., 2023; Sullivan & Al Ariss, 2021; Van der Baan, Raemdonck, Bastiaens & Beausaert, 2022). Therefore, what has become of prime importance is the ability to sustain one's career, which means to be able to maintain one's employment in the long-term (to be employable and perform consistently well), but at the same time to attain well-being and be able to cater for non-work life domains, such as family obligations and personal interests (De Vos, Van der Heijden & Akkermans, 2020; Newman, 2011; Van der Heijden & De Vos, 2015). Hence, advancement of knowledge on how sustainable careers can be achieved has been a research imperative.

The sustainable careers framework arguably represents the most recent major framework to consider career success, as it was solidly founded less than a decade ago with the edited volume of De Vos and Van der Heijden (2015). The commencement of my work on topics that pertain to sustainable careers (**works #7, #6, #5 and #3**) essentially coincides with the advent of the sustainable careers framework. The first of these works, **work #7** that appeared in 2015, was conceived and materialized at the beginning of the second decade of the millennium. That was followed by further work that advanced the literature on the topic (**works #6, #5 and #3**). These works provided knowledge on how key elements of sustainable careers that reflect proximal success outcomes (e.g., employability, job performance, well-being, work-life balance) are produced and how these proximal outcomes interact to enable distal success outcomes (eventual objective and subjective career success).

Social Capital as a Resource for Career Success

The social capital perspective of career success posits that the social ties of the individual are highly instrumental in career progression because they contribute to the accumulation of resources, such as information, influence and solidarity, that help objective and subjective career achievements (Baruch & Bozionelos, 2011; Seibert, Kraimer & Liden,

2001; Zhang, Liu, Loi, Lau & Ngo, 2010). The idea was formally articulated at the beginning of the new millennium (Seibert et al., 2001). After that, solid evidence about the impact of social capital on career success had been accumulating (e.g., Allen, Eby, Poteet, Lentz & Lima, 2004; Jokisaari & Nurmi, 2005; Wolff & Moser, 2009).

Considering the benefits of social capital for career success, knowledge about what factors increase the chances for individuals to accumulate social capital becomes of value. However, advancement of knowledge on antecedents of social capital (what makes some people more prone to develop their social capital) had been lagging behind, probably because the priority at the time was to establish that social capital benefits career success in the first place. Therefore, a clear idea about how disposition-related individual-level factors, such as personality, career orientations and emotional intelligence, contribute to the accumulation of social capital had yet to be developed at the time the submitted work commenced to materialize (i.e., near the end of the first decade of the millennium).

In response to this, my work focused on identifying which personality-related traits relate to social capital accumulation and the nature (linear vs. non-linear) of the relationship (**works #9, #4 and #2**). **Work #9** appeared in 2014, and was conceived at the end of the first decade of the millennium, while **work #4** and **work #2** (that appeared in 2017 and 2018, respectively) were conceived and designed soon thereafter. These works contributed into understanding not only which personality-related factors contribute most to social capital accumulation, but also (and especially) the nature of the relationship (linear vs. non-linear).

Self-initiated Expatriation as Career Move

Finally, though the sustainable careers and social capital perspectives provide useful frameworks to understand factors and processes that determine career success in the present era, they miss a major dimension of contemporary careers: the international element and in particular expatriation, a frequently performed career move (Mello, Suutari & Dickmann, 2023; Vance, 2005; Wechtler, 2018). Expatriation involves the temporary (at least this is the initial intention) relocation to work and live in a country other than one's home country (Andresen, Biemann & Pattie, 2015). Expatriation affects

career trajectories and outcomes (Suutari, Brewster, Makela, Dickmann & Tornikoski, 2018).

Self-initiated expatriation, when this move is attempted not as part of a corporate mission abroad but purely on the individual's own initiative (Machado, 2022; Suutari & Brewster, 2000), is the type of expatriation that was identified more recently, but applies to the vast majority of expatriate cases (more than 95% of expatriates are self-initiated expatriates, Finaccord, 2014). Considering that expatriates compose a substantial proportion of the global workforce (Finaccord, 2017, 2021), it is not surprising that they are important for host and home countries and the global economy in general (Song, Zhu & Rundquist, 2015). This renders it imperative to consider self-initiated expatriates, who are the most numerous and least researched, in the quest for understanding how career success is achieved in the contemporary era.

The identification of self-initiated expatriation as concrete expatriation type at the very beginning of the new millennium (Suutari & Brewster, 2000) initially triggered mostly theoretical work to clarify the construct (e.g., Cerdin & Selmer, 2014; Doherty, 2013; Peltokorpi & Froese, 2009). Systematic empirical research with self-initiated expatriates started to appear only within the second decade of the millennium (Machado, 2022). Submitted **work #8**, which appeared in 2015 and conceived and designed five years earlier, forms part of that first wave of systematic investigations on the shaping of careers of self-initiated expatriates. The conception and design of **work #1**, which appeared in 2023, started immediately afterwards with the purpose to extend the literature on self-initiated expatriate careers by considering self-expatriates in the non-profit sector, which had been largely ignored until then. My work with self-initiated expatriates focused on identifying the factors and their interplay that motivate people to self-expatriate or prolong their self-expatriation in the pursue of career success, and how career-success-related expectations and outcomes are involved in this process.

The Integrated Model of the Contribution

It was, therefore, under these three contemporary and complementary theoretical frameworks that my work contributed to the understanding of how career success is materialized. This is depicted in Figure 1. These three frameworks suggested factors

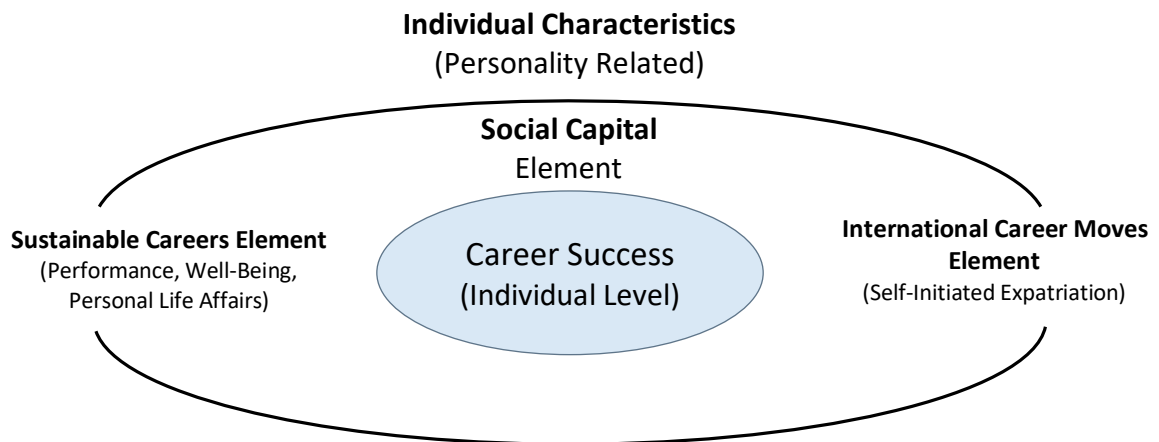


Figure 1. The three contemporary theoretical frameworks (social capital as career resource, sustainable careers and self-initiated expatriation career moves). Together they operate in a complementary way to enable a comprehensive understanding of career success in the present era.

(variables) and processes (how these variables relate and combine together) to integrate into models that, when empirically tested, produced significant increments to knowledge of how career success outcomes are produced. When integrated (considered together),

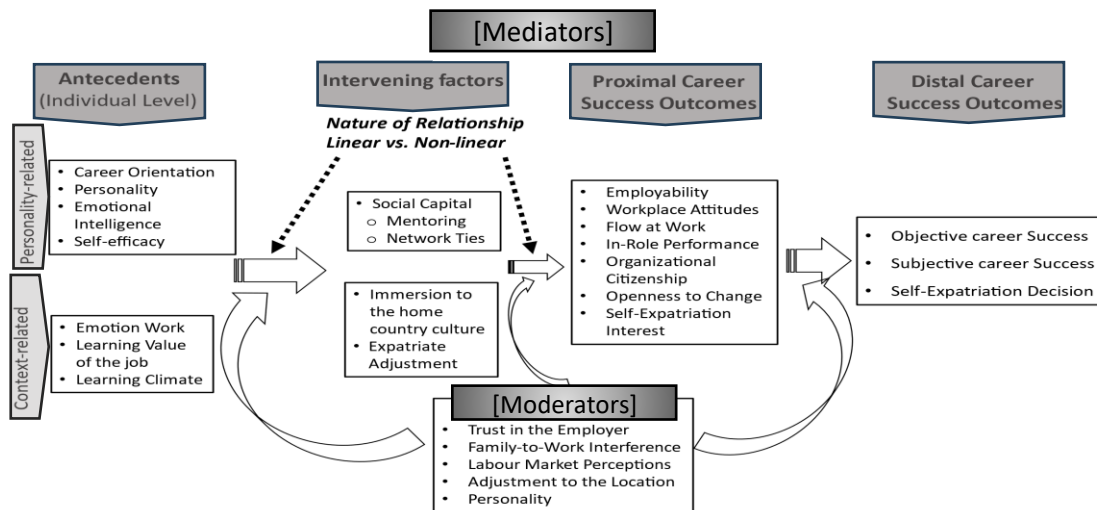


Figure 2. The comprehensive model of career success as synthesis of the submitted papers.

these knowledge increments enable a comprehensive and nuanced understanding of the factors and processes that underline career success in the present era. How the findings of the nine works I submit combine to produce an integrated model of career success is shown in Figure 2.

Figure 3 adds information about into which of the three complementary theoretical frameworks each set of factors is mostly rooted.

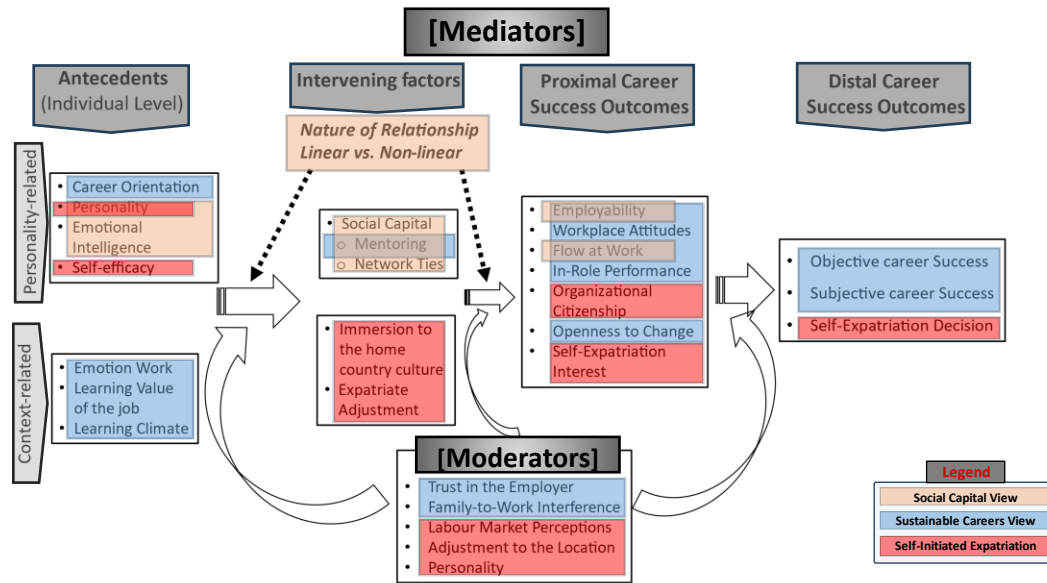


Figure 3. The integrated model with the theoretical framework that mostly reflects each set of variables superimposed (coloured).

What follows is a detailed review of the literature the pertains to each of these three frameworks, sustainable careers, social capital as career resource and the careers of self-initiated expatriates, and the contributions made by my work in each.

CHAPTER 2: THEORETICAL BACKGROUND

My work has made contributions to the three above domains of the broad careers literature: **sustainable careers** and in particular how indicators of sustainable careers, such as employability, measures of well-being and work-life balance relate to each other to produce long-term career success; **expatriate careers**, and in particular self-expatriation as a choice for career advancement; and the **social capital perspective to career success**, and in particular how personality-related factors contribute to the accumulation of social capital.

Sustainable Careers

The notion of sustainable careers was formally articulated recently (De Vos & Van der Heijden, 2015) in order to point at the necessity to identify ways for individuals to successfully maintain their careers throughout the full length of their adulthood, including late adulthood that was traditionally considered a time out of work (Newman, 2011). The concept of sustainable career spawned as result of multiple parallel developments that include:

- (a) the fact that people live healthy lives longer than they used to until the recent past. People in most countries nowadays live long past the “traditional” retirement age range of 60 to 65 years (Dattani, Rodes-Guirao, Ritchie, Ortiz-Ospina & Roser, 2023), which was established around one century ago, when life expectancy and conditions of work were very different (UKPension, 2023). This means that they can be productive for very long, which poses an opportunity for their employers, and themselves, to benefit from (Bratun, Asaba & Zurc, 2023; Newman, 2011).
- (b) related to the first, increased life expectancy makes it more difficult for pension funds to sustain themselves if people continue to retire at ages that were set at a time that life expectancy was much lower (Austin, 2020; MacMinn, Lin & Shi, 2023).
- (c) fast paced technological development, combined with social changes, have led to continuous reshaping of jobs. That includes not only the tasks and activities that compose jobs and how these are combined, but also the way these are executed (new forms of

technology for accomplishment of tasks are fast replacing existing ones) (Keshvarparast, Battini, Battaia & Pirayesh, 2023). That requires from people to update their knowledge and skills on a continuous basis, if it is to sustain their performance at acceptable levels so they can retain their employment (Bañeres & Conesa, 2017).

(d) Constant technological change, competition and social change have reduced the prevalence of truly “permanent” jobs, creating employment uncertainty (Retkowsky, Nijss, Akkermans, Jansen & Khapova, 2023). In the past few decades, we have witnessed increases in the frequency of redundancies, in “flexible” contracts, and compulsory internal job changes for employees (e.g., Haenggli, Hirschi, Rudolph & Peiro, 2021; Nimmi, Mukundan, Jose, Tesi & Alias, 2013). In these cases, people must be able to find a new employer or completely change their work roles if it is to have continuation in their work lives.

(e) likewise, shifts in the society and in social values (e.g., the global shift towards individualism, Santos, Varnum & Grossmann, 2017), have made people more likely to leave their employers in pursuit of career opportunities they consider more promising; even when they are satisfied with their present employment (Rodrigues, Guest, Oliveira & Alfes, 2015).

(f) finally, living longer and having to work longer, people must in parallel be able to cater for their personal needs, including raising families, along with being able to maintain a healthy physical and psychological life (Herman & Lewis, 2012).

For the above reasons, career success in the contemporary era requires continuous employment in the long-term that also allows balancing the needs of the individual, the employer and the society. This is what the notion of sustainable career articulated, along with the fact that successful pursue of a sustainable career poses a challenge (Van der Heijden & De Vos, 2015).

What a Sustainable Career is

Though the literature on sustainable careers is still at early stages, there is sufficient common ground (e.g., Baruch, 2015; De Vos & Van der Heijden, 2017; De Vos et al., 2020; Newman, 2011; Schweitzer, Lyons & Smith, 2023; Van der Heijden & De Vos,

2015) to provide a definition as follows: careers can be considered as sustainable if in the long-term (this is to be stressed) the individual is able to be productive (in the broad sense that includes career success) and maintain well-being (that includes positive work attitudes). To meet these objectives careers must be characterized by adaptability, flexibility, opportunities for reflection and reinvigoration, along with room for accommodation of demands from the non-work sphere (work-life balance).

An imperative in career sustainability is the ability to learn on a continuous basis (Anseel, 2017; Asuquo & Inaja, 2013; De Vos et al., 2020; Heslin, Keating & Ashford, 2020; Valcour, 2015; Zhang, Chin, Li, Lin, Shan & Ventimiglia, 2022). Therefore, willingness and capacity to learn, availability of learning opportunities, and active search for learning experiences are critical in career sustainability. In addition, though sustainable careers (like careers in general) are viewed from the perspective of the individual, to achieve such careers requires the contribution of other parties too. These may include the employer, the line manager, the state (who sets employment legislation and educational paths), and maybe the individual's family and social cycle (Baruch, 2015; De Vos et al., 2020; Henke, Jones & O'Neil, 2022; Karlsen, Borg & Meng, 2022; Straub, Vinkenburg & Van Kleef, 2020; Wang, Lin & Wu, 2023). These are also stakeholders because when a large proportion of the workforce lead sustainable careers this is to the benefit of employers, the state and the society (Barthauer, Kaucher, Spurk & Kauffeld, 2020; Chu, Liu & Fang, 2021; Chudzikowski, Gufstafsson & Tams, 2020; De Vos et al., 2020; Pfeffer, 2010).

Indicators of Sustainable Careers

After defining sustainable careers, the next step is to identify the factors that indicate whether careers contain sustainable qualities. Cornerstone aspects of sustainable careers are productivity (that can also be seen as proximal career success), well-being and long-term (distal) career success. According to sustainable careers theory, two key indicators of productivity are employability and job performance (Van der Heijden & De Vos, 2015; De Vos et al., 2020), especially the former because it is a general construct and can be deployed in a variety of jobs, professions and occupations. Employability refers to the ability of the individual to search for, discover, create and exploit opportunities for employment inside or outside the current workplace (Forrier & Sels, 2003; Van der

Heijden & Van der Heijden, 2006). It is evident that employability is critical for employment continuity, which is necessary to sustain a career, and is a proximal indicator of career success (Elsey et al., 2022; Nimmi, Joseph & Donald, 2022; Semeijn, Van Dam, Van Vuuren & Van der Heijden, 2015; Valcour, 2015; Van der Heijden & De Vos, 2015). Job performance is also of importance because, first, it can serve as signal for others that helps continuation of employment, and second enables achievement of career success in the long-term (e.g., promotions). It appears, therefore, that employability along with various forms of job performance (that can include precursors, such as willingness to expend effort), should be at the core of research designs to investigate processes via which careers are sustained.

Well-being is the other major aspect of sustainable careers, and within the domain of sustainable careers it includes any index of positivity or happiness, health (physical and psychological) and subjective success (De Vos et al., 2020). Career satisfaction, job satisfaction, feelings of accomplishment, and other positive attitudes at work can be seen as forms of well-being. Low levels of mal-being, such as low burnout or low turnover intentions, can also serve as indicators of well-being (Barthauer et al., 2020; Grass, Dörendahl, Losereit, Greiff & Strobel, 2023; Round, Wetherell, Elsey & Smith, 2022). Similarly, work-life balance can also serve as indicator of well-being because it reflects whether the individual has the opportunity to take care of one's personal affairs (e.g., care for family or respond to other personal obligations) and other interests (e.g., hobbies, activities that enable personal growth) (Bujacz, Eib, Toivanen, 2020; De Vos et al., 2020; Hall, Lee, Kossek & Heras, 2021; Kelly, Strauss, Arnold & Stride, 2020). In other words, it can be instrumental in ensuring long-term career success (e.g., Kelly et al., 2020).

The above indicators of sustainable careers, however, do not exist in a vacuum, they relate to and influence each other in dynamic systems (De Vos et al., 2020). Furthermore, they are dependent on the context where the individual functions, such as organizational and societal structures, systems and opportunities (Hirschi, Steiner, Burmeister & Johnston, 2020; Van der Heijden, De Vos, Akkermans, Spurk, Semeijn, Van der Velde & Fugate, 2020). Moreover, the way the elements of sustainable careers develop and influence each other is largely underlined by learning and other key factors such as

resilience, adaptability, flexibility and anticipation, which provide the “glue” for the elements of sustainable careers to fit together (Heslin et al., 2020; Schweitzer et al., 2023; Valcour, 2015). Therefore, to draw valid conclusions about how sustainable careers are produced we must develop models that incorporate expressions of the above indicators and depict their relationships.

My Contribution

A substantial part of my work (**works #3, #5, #6 and #7**) has focused on establishing the relationship between various indicators of sustainable careers, in an effort to understand the processes and the conditions under which how these are produced and influence each other. In particular, my work responded to the following questions:

- What factors within the individual (**work #7**) or in the work environment (**works #3, #6**) contribute to proximal and distal career success outcomes within the sustainable careers framework?
- How indicators from different domains, such as productivity and well-being, of sustainable careers relate to each other? (**works #6, #7**)
- How proximal career success outcomes can be sustained under conditions of radical and adverse organisational change? (**work #7**)
- What are the optimal strategies for individuals who perform particular types of work, such as emotion work, to sustain career success? (**work #5**)

Personality in the Accumulation of Social Capital as Career Resource

The Notion of Social Capital

Social capital is a construct that was first introduced by the French sociologist Bourdieu (1980, 1986), an addition to the long-standing construct of economic capital and to human capital that had been introduced in the 1960s (Becker, 1964). Bourdieu (1986) conceived social capital as a resource that contributed to individuals’ social standing and social progression. The construct was further developed in the following years (Adler & Kwon, 2002; Coleman, 1988), and was explicitly utilized to form the social capital perspective of career success (Seibert et al., 2001).

Social capital refers to the resources individuals have at their disposal by means of their relationship ties with others within a particular social entity (Bourdieu, 1986; Portes, 1998). Social entities may include organizations, professions, alumni, or the wider society. The relationship ties that form social capital provide information, influence and solidarity that can help the individual to achieve success-related outcomes (Adler & Kwon, 2002; Bourdieu, 1986). Empirical work confirmed the link between social capital and career success (Allen et al., 2004; Bozionelos, 2015; Ng et al., 2005).

Social Capital as Mentoring and Network Resources

Social capital can be comprehensively conceptualized in terms of mentoring relationships and network resources (e.g., Baruch & Bozionelos, 2011; Seibert et al, 2001). This conceptualization facilitates operationalization (measurement) and, therefore, empirical research (Baruch & Bozionelos, 2011). Mentoring in its traditional genre means an intensive developmental relationship that typically involves a more senior member of the organization, the mentor, and a less senior member of the organization, the protégé or mentee (Kram, 1985). Within that relationship, career-related functions (such as challenging assignments, protection and visibility, opportunities for development) and socio-emotional functions (such as friendship, counselling, role modelling) are provided to the protégé (Cotton, Shen & Livre-Tarandach, 2011; Kram, 1985). Expectedly, individuals differ widely in their involvement in mentoring relationships (some may have multiple during their careers and others none) and there is extensive variation in the number and quality of functions provided within each of them (Fletcher & Ragins, 2007).

Network ties signify all interpersonal links of the individual, excluding those that fall within traditional mentoring. Peer or lateral mentoring, that is mentoring between individuals of similar status (McManus & Russell, 2007), can be seen within the framework of network ties. Network resources are the resources individuals have at their disposal by means of their network ties. In a way analogous to mentoring, network ties, and their consequent resources, can also be distinguished into socio-emotional or expressive (whose main purpose is the provision of socio-emotional support to the individual) and career-related or instrumental (whose main function is the advancement of the person's career interests) (Fombrun, 1983; Kram & Isabella, 1985; Saint-Charles &

Mongeau, 2009). These categories are not mutually exclusive, they form a continuum, most network ties fall in-between its two ends depending on the degree of instrumental and socio-emotional qualities they contain (Brass, 1992).

Social Capital and Career Success

Evidence has accumulated on the beneficial effects of mentoring and network ties with career success. Allen et al. (2004) conducted the first meta-analysis on mentoring and career success, to find that mentoring receipt (that is being a protégé) was related to measures of both objective success and subjective career success (Allen et al., 2004). Similar findings were echoed in subsequent meta-analyses and narrative reviews (Borna, Afrasiabi, Sadati & Gifford, 2022; Eby, Allen, Evans, Ng & Dubois, 2008; Kammeyer-Mueller & Judge, 2008; Ng & Feldman, 2014; Underhill, 2006). Furthermore, there is evidence that having a relationship with a protégé provides career benefits for the mentor too (Ghosh & Reio, 2013). Similarly, there is evidence that network ties via the resources these provide relate to career success (Choi, 2019; Fang, Zhang & Shaw, 2021; McDonald, 2011; Offermann, Thomas, Lanzo & Smith, 2020; Wolff & Moser, 2009).

Personality and Social Capital Accumulation

Considering the importance of social capital for career success (and other life outcomes to be said) it was deemed necessary to identify the factors that contribute to its accumulation. Apparently, that stream of research progressed less rapidly than research to establish the link between social capital and career success, maybe because establishing the link between social capital and career success in the first place was a priority. This is an element my work (**works #9, #4 and #2**) focused on, to identify individual-level antecedents of social capital accumulation, and in particular personality-related antecedents.

Personality is fully embedded within the individual and is manifested in terms of behaviours that reflect emotions, patterns of thought and motives or behavioural tendencies (Digman, 1990; Eichstaedt et al., 2021). The reason for focusing on personality as antecedent of social capital (mentoring relationships and network ties) is that the initiation, accumulation and maintenance of social relationships is primarily the result of interaction with others where personality plays a pivotal role (e.g., Brown &

Sherman, 2014; Hogan, 1998; Wiggins & Trapnell, 1997). Furthermore, an important factor in the behavioural manifestation of personality is the strength of the situation, which refers to the behavioural constraints imposed by the social environment (Murphy & Dziweczynski, 2005). Generally, situations of high strength restrict the range of behaviours individuals exhibit (Mischel, 1977). In such situations, regardless of personality, people tend to behave in very similar ways. On the other hand, situations of weak strength are associated with manifestation of a wide range of behaviours because they allow expression of behavioural tendencies that stem from personality traits (Mischel, 1977; Murphy & Dziweczynski, 2005). Most situations in the work and organizational environment are of intermediate strength (Bell & Staw, 1989). In addition, there is large variance in situational strength in the work environment, which means that over a period of time personality differences inevitably manifest themselves in actual behaviour (Lozano, 2018; Meyer, Dalal & Hermida, 2009).

Extant research and the caveat of non-linearity.

Despite having good reasons - discussed earlier - to expect that personality relates to accumulation of social capital (e.g., Bozionelos, 2003; Feiler & Kleinbaum, 2015), empirical research in this topic did not progress fast or in great numbers (Landis, 2016). Nonetheless, there had been a reasonable number of studies on the relationship of personality with mentoring (Arora & Rangnekar, 2016; Bozionelos & Bozionelos, 2010; Chun, Litzky, Sosik, Bechtold & Godshalk, 2010; Hu, Wang, Wang, Chen & Jiang, 2016; Turban & Doherty, 1994; Welsh & Wanberg, 2009) and network ties (Bozionelos, 2003; Forret & Dougherty, 2001; Liang & Gong, 2013; Wolff & Kim, 2012). To be noted here that not all these studies had as sole objective to investigate how personality-related factors associate with mentoring or network ties. Nonetheless, they included both personality and mentoring/networking in their core design in a way that allows conclusions.

A caveat of that research, however, was that it assumed linear relationships between personality and involvement in mentoring relationships or accumulation of network ties (Ghosh, 2014). A linear relationship means that increases (or decreases) in the values of one variable is accompanied by increases (or decreases) in the values of the other variable

that are equal and in the same direction across the whole range of values of the variables (Cohen, Cohen, West & Aiken, 2003; Jiménez, Gras, Rosel, & Miedes, 2000). To illustrate, a positive relationship between a personality trait and an aspect of social capital would mean that people with higher scores on that trait are always more likely to have more social capital than people with lower scores; and a negative relationship would mean the reverse (i.e., people with lower scores on the trait will always have greater chance to accumulate social capital than people with higher scores). And that the difference (increase or decrease) in amount of social capital accumulated remains constant across all range of scores of the personality trait.

Non-linear (also referred to as “curvilinear”) association, on the other hand, means that the direction and/or the magnitude of the relationship is not the same across the spectrum of values of the variables (Cohen et al., 2003; Jiménez et al., 2000). The possibility that relationships between variables are not always linear had been neglected until relatively recently in social science, including management studies (e.g., Ones, Viswesvaran, Dilchert & Judge, 2007; Vasilopoulos, Cucina, & Hunter, 2007). This is despite that they often provide a more realistic picture of the functioning of the world (Bertenthal, 2007; Xu, Liu, Ji, Dong & Wu, 2022). Indeed, assuming linearity when non-linearity is present can lead to incomplete understanding or erroneous conclusions (e.g., Ferrari, Marchese & Tei, 2018; Iversen, Malchow-Moller, & Sorensen, 2010; Trevor, Gerhart, & Boudreau, 1997). Specifically, assuming and testing only for linearity in a relationship that is non-linear may: first, lead us to incorrect conclusions about the nature of the relationship (Avanzi, Savadori, Ciampa & Van Dick, 2022; Katz, Rudolph & Zacher, 2019; Kostopoulos, 2018; Maruping, Venkatesh, Thatcher & Patel, 2015); second, prevent us from uncovering any relationship at all because non-linear associations often appear as non-systematic (non-significant) if examined under a linear lens (e.g., Adkins & Premeaux, 2012; Sousa & Novello, 2014; Wynen, Van Dooren, Mattijs & Deschamps, 2019); third, may lead to underestimation of the magnitude, hence importance, of the relationship (Katz et al., 2019; Wynen et al., 2019; Yang, Levine, Smith, Ispas & Rossi, 2008); and fourth, may disallow us from developing an understanding of the complexity and intricacies of the relationship and the situation it represents (Jian, Kling & Bo, 2021;

Kostopoulos, 2018; Maruping et al., 2015; Wang, Johnson, Nguyen, Goodwin & Groth, 2020; Xu et al., 2022). Therefore, investigating for non-linearity when there is theoretical reasoning behind it enables the development of a more thorough and nuanced understanding of the studied phenomenon (Adkins & Premeaux, 2012; Avanzi et al., 2022; Maruping et al., 2015; Wang et al., 2020). This also leads to improved quality of advice for practice (Katz et al., 2019; Kostopoulos, 2018; Xu et al., 2022).

There is substantial theoretical and logic-based reasoning to prompt investigation for non-linear relationships of personality with social capital (mentoring relationships and network ties). The first comes from science in general, which suggests that the world, including the social world, functions in non-linear modes, and the linearity assumption has been just a convention imposed by lack of appropriate analytical concepts and tools (Burke, 2009). The second comes from logical reasoning: though empirical research had traditionally assumed and tested linear relationships between personality and various outcomes (e.g., Barrick, Mount & Judge, 2001), that same research had at times failed to uncover relationships that logically should exist (Ones et al., 2007). For example, linear testing had surprisingly failed to find relationships between the personality trait of extraversion and sales performance (Barrick et al., 2001) or between conscientiousness and career success (Bozionelos, 2004; Robertson, Baron, Gibbons, MacIver & Nyfield, 2000). Under a non-linear mentality, that failure could simply mean that personality traits may not relate throughout their whole spectrum of scores in the same way with outcomes (Le, Oh, Robbins, Ilies, Holland & Westrick, 2011; Ones et al., 2007).

Specifically with respect to personality and social capital, in the studies cited above it was often the case that many hypothesized relationships that seemed reasonable were not confirmed by the testing. For example, Bozionelos and Bozionelos (2010) hypothesized and tested relationships for five different personality traits of protégés with protégé mentoring receipt, but they found evidence for only two of these. Similarly, Chun et al. (2010) found a systematic (significant) relationship between the amount of mentoring mentors provided and their trait emotional intelligence but not with the trait emotional intelligence of the protégé. It cannot be ruled out that the testing in these studies did not confirm all hypothesized associations not because they did not exist, but simply because

the testing was confined to linear relationships while the relationships were in fact curvilinear. It must be clear that the linearity assumption has been a major feature (and limitation...) not only specifically in the social capital and personality literature, but in the management and social science literature in general (Adkins & Premeaux, 2012; Iversen et al., 2010; Katz et al., 2019; Wang et al., 2020).

My Contribution

My research (**works #9, #4 and #2**), therefore, contributed by means of being the first to adopt a non-linear lens in the relationship of personality with social capital. That enabled a more nuanced understanding of the link along with a more realistic estimation of its magnitude. Moreover, considering that research to explicitly investigate the relationship of personality with social capital had been scarce in the first place, my research contributed to advancing knowledge on how personality relates to the accumulation and maintenance of social capital in general. The questions these works responded to were:

- Which personality traits show the most consistent relationship with social capital?
- Are personality traits related to social capital (mentoring and network ties) in non-linear ways?
- Does emotional intelligence, which is rooted into personality traits, also relate to social capital? And if so, what is the form (linear vs. non-linear) of the relationship?

Self-expatriate Careers

Expatriation

Internationalization, that is the movement of operations to other countries or territories, has been present throughout human history (Andresen, Suutari, Muhr, Barzantny & Dickmann, 2023; Brewster, Sparrow, Vernon & Houldsworth, 2011; Van Zanden & De Zwart, 2018). This is typically accompanied by movement of people across national borders (Brewster et al., 2011; Steger, 2017). People who legally move from their home country to live and work in another country (the host country) on a non-permanent basis are defined as expatriates (McNulty & Brewster, 2017). Expatriation in the past few decades has been facilitated by developments in technology, and especially in technology that pertains to transport and telecommunications (Cavusgil, Knight & Riesenber, 2019;

Knight & Lisch, 2016; Steger, 2017). According to estimates, today the number of expatriates globally exceed 150 million (Finaccord, 2014; 2021) (to note that this number excludes immigrants, that is people who have moved and live permanently in a country different from their country of origin, and people who move to a country temporarily but do not work there, for example, trailing spouses, as these individuals do not meet the criteria for expatriation).

Expatriates are very important for all stakeholders, ranging from their home countries (in terms of skills loss) to their employers in the host countries and the host countries themselves (e.g., the host countries societies and economies) (Ahlvik, Smale & Sumelius, 2016; Song et al., 2015; Yoon, Varma, Katou, Cha & Lee, 2022). Expatriation is an endeavour that has implications for career success (Dickmann, Suutari, Brewster, Makela, Tanskanen & Tornikoski, 2018; Jokinen, Brewster & Suutari, 2008; Mello, Dickmann, Brewster & Suutari, 2020). For the above reasons, and considering that individual career success also impacts employers and the society, studying the careers of expatriates becomes of importance (Andersen, 2021; Machado, 2022).

Self-initiated Expatriates

Expatriation was traditionally seen as assigned expatriation that is people sent abroad as part of a corporate mission with the support of their home country employer to go to the host country (Andresen, Bergdolt, Margenfeld & Dickmann, 2014). As consequence, until relatively recently relevant research focused exclusively on assigned expatriates (AEs) (Brewster, Suutari & Waxin 2021; Machado, 2022). However, at the beginning of the new millennium a distinct type of expatriation, the self-initiated expatriation, was pointed at (Inkson, Arthur, Pringle & Barry, 1997; Suutari & Brewster, 2000; Tharenou, 2003). Self-initiated expatriates (SIEs) are expatriates who move to the host country on their own initiative, not sent as part of a corporate mission by an employer (Andresen et al., 2014; Doherty, 2013). Attempts have been made to delineate the criteria for an exact definition of the SIE (e.g., Andresen et al., 2014; Cerdin & Selmer, 2014; McNulty & Brewster, 2017; Peltokorpi & Froese, 2009). It appears that the most parsimonious and feasible to operationalize definition considers SIEs as individuals who meet the following conditions (Brewster et al., 2021): they (a) live and work in a country other from their

own on a temporary basis (at least this is the intention), (b) legally, (c) made the decision to move purely of their own volition instead of driven by external forces out of their control (e.g., war), and (d) were not sent from a home country employer, either they found employment in the host country before the move or once they had moved into it.

Self-initiated expatriation has been boosted by technological and especially political change (e.g., treaties that allow free movement of people across borders, such as the European Union) (e.g., Machado, 2022). It is estimated that SIEs outnumber assigned expatriates by a ratio that approximates 20 to 1 (Finaccord, 2014, 2021). The estimate is that in 2019, the year of the Covid-19 outbreak, there were approximately 1.4 million SIEs in the UK (contrasted by approximately .06 million AEs). That estimation is based on the approach of Tharenou (2010) and Finaccord (2014) to identify expatriates and SIEs, along with the most-up-to-date SIE definition that was provided earlier (Brewster et al., 2021), and the utilization of statistics of the British government (Office for National Statistics, 2019a, 2019b) and other UK sources (Kone & Sumption, 2019). Though since 2019 the British government has changed the way it reports statistics for non-UK workers, an estimate for the June 2023, the last month data were available, would bring the number of SIEs in the UK to more than two million.

Why Studying the Careers of SIEs is of Importance

Their large population by itself makes SIEs of key interest for the host countries if not for the global economy, and empirical research on the careers of SIEs had been called as a priority in the international human resource management literature (Doherty, 2013; Doherty, Richardson & Thorn, 2013). Apart from their very substantial numbers, however, what further strengthens the case for studying SIEs is that they are often individuals with either high level of knowledge and education that pursue professional or managerial careers (Cerdin & Selmer, 2014; McNulty & Brewster, 2017) or with highly demanded non-technical skills and employment flexibility that are in shortage in the host country workforce (Brewster et al., 2021). Hence, SIEs can be critical for host countries and employers (and for their home countries who miss them even temporarily), which further underlines the need to study their careers. Whether SIEs, for example, feel satisfied with their accomplishments in the expatriate endeavour may influence their

decision to prolong their stay, or move to another SIE destination (Suutari et al., 2018). Moreover, career outcomes do not exist in vain, they have antecedents and identification of such antecedents for SIEs contributes towards a complete picture that allows us to understand what determines their career success (Mello et al., 2023). Hence, it can inform on what host country employers and governments can do to maximize the career benefits of SIEs that can, in turn, help attract, manage and retain SIEs (Ceric & Crawford, 2016; Shao & Al Ariss, 2020).

SIEs differ from assigned expatriates (AEs) in fundamental characteristics, hence, any conclusions that have been drawn from research with AEs cannot be safely generalized to SIEs. A major difference is that SIEs do not normally have the logistical support of the home country organization (that is often an MNC) to take care of their move to the host country. In most cases, SIEs must manage the logistical aspects of the move to the host country – which includes, material, physical and psychological challenges – by themselves on their own resources, which is naturally a source of greater strain (Fontinha, De Cuyper, Williams & Scott, 2018; Richardson, 2009; Vance, 2005). Furthermore, AEs typically work for a subsidiary or a branch of the home country organization in the host country, which means they have some familiarity with the work environment and the systems of work, and hence what to expect. Likewise, the subsidiary is knowledgeable of their arrival and role, which means that AEs are more likely to have a smooth adaptation and acculturation. On the other hand, SIEs typically enter an unfamiliar work environment with procedures, technology and systems that may take time to learn, while at the same time they must adapt to a completely new social environment that may pose acculturation and adaptation challenges (e.g., Clipa & Clipa, 2009; Donnelly, 2014; Rofcanin, Imer & Zingoni, 2014). This likely causes challenges, especially considering that most SIEs find employment in domestic organizations in the host country that often lack familiarity or sensitivity with multi-culturality (Jokinen et al., 2008; Peltokorpi & Froese, 2009). Finally, SIEs, unlike AEs, do not have the reassurance of being able to return to their post back in the home country once their mission is complete or if for any reason they wish to return earlier (premature return) – e.g., in case their employment in the host-country does not meet success or they find the host country environment not

accommodating enough (Fontinha et al., 2018; Kelly & Conroy, 2023). Considering, therefore, the importance of SIEs along with that findings about AEs cannot be generalized to SIEs, research on the careers of SIEs is imperative.

My research with SIEs (**works #8** and **#1**) focused on understanding how they decide to pursue self-initiated expatriation as a career move, either for first time or once they have already had self-expatriation experience. An additional contribution of these studies is that they explicitly considered the context.

My Contribution

Modelling the decision to self-expatriate.

Mapping the decision to self-expatriate as a career move is important from both a scholarly and a practice point of view. Knowing why people decide to engage in self-expatriation can help predict the success of self-expatriation and the extent to which they will contribute to the host country employer and the society (Isakvic & Whitman, 2013; Richardson & McKenna, 2002; Ridgway & Robson, 2018; Suutari & Brewster, 2000). **Works #8** and **#1** shed light on this issue. Very recently, Brewster et al. (2021) conducted a systematic review of the literature to identify the key themes on which SIE research mostly focused. They concluded that mapping the decision to pursue self-expatriation as career move (i.e., identifying the factors involved and the process) was one of the key themes. Indeed, understanding the decision to self-expatriate had been flagged as priority in research at the turn of the first decade of the millennium (Selmer & Lauring, 2011; Thorn, 2009). This is when **work #8**, which appeared in 2015, was conceived and designed.

Work #8 employed a sample of foreign postgraduate students in the UK to develop a comprehensive model that addressed the following research questions:

- How do people who are currently in a host country for postgraduate study form their intentions to self-expatriate once they complete their studies?
- What is the impact of expectations for career success in the host vs. the home country in the decision to self-expatriate?

Work #1 also developed such a career decision mapping model and responded to analogous research questions, but within a very different context. **Work #1** considered SIEs volunteers in the non-profit sector, and addressed the following research questions:

- How do people who find themselves in a self-expatriate mission in a host country form their intentions to pursue yet another self-expatriation endeavour?
- How do career success outcomes during the self-expatriate mission relate to intentions to pursue yet another self-expatriation move?

Taking the context into account.

The context (for example, the specific characteristics of the mission, of the job or of the host region) has been neglected in self-expatriation research (Andresen, Pattie & Hippler, 2020; Andresen et al., 2023; Arseneault, 2020). The context can influence the process of SIEs adaptation (Samarsky, 2023), and thereby their career success, which may in turn impact decisions about future career moves (for example, whether they will prolong their stay, whether they will return to the home country, or whether they will seek to move to another expatriate destination) (Akkan, Lee & Reiche, 2022; Andresen et al., 2023). Both works, **work#8** and **work#1**, took into account the context.

Work #8 was contextualized by considering the experience of foreign postgraduate students (positive or negative) during their studies in the host country (the UK in this case), along with previous international experience in a country other from their home country. Foreign students who stay as SIEs compose a workforce that is both resource efficient and of prime quality (Chellaraj, Maskus & Mattoo 2008). The positivity of the experience in the host country and previous international experience can be seen as meso-level context (see Andresen et al., 2023). Furthermore, **work #8** considered the macro-level context by looking at how perceived opportunities for success in the home country relates to the decision to pursue a career as SIE (Andresen et al., 2023). The theoretical underpinning for the study, Social Cognitive Career Theory (SCCT) (Lent, Brown & Hackett, 1994; 1996) was chosen specifically because it was developed to understand career decision making from early age and takes into account contextual factors.

Work #1 focused on SIEs in the non-profit sector, which is substantial in terms of contribution and size and, furthermore, is expanding (Hamilton, 2019). Expatriation has been rather exclusively studied in the for-profit sector (Dickman & Cerdin, 2018; Renshaw, Parry & Dickmann, 2018). However, the conditions and incentives in the non-profit sector are different (Alfes, Antunes & Shantz, 2017), which renders likely that the factors that determine the decisions of people to seek careers in the non-profit sector are also different (Alfes et al., 2017; McCormick & Donohue, 2019); and the same may apply to SIEs (Brewster et al., 2021). Much of the non-profit sector (for example, charities and humanitarian organizations) extensively relies on volunteers who are often expatriates (Brewster et al., 2021; Dickman & Cerdin, 2018). The United Nations (UN) is a prime such example (United Nations, 2023), and **work #1** considered UN volunteers who were serving as expatriates in “hot spots” (locations with a serious need for humanitarian aid that may also contain substantial physical danger). **Work #1** utilised concepts and developed specific measures to reflect the particular host environment (Chen, Moon, Davy, Hong & Gabrenya, 2022) and its fit with SIEs personal characteristics (i.e., personality, motives, values). That was accomplished by using a specifically chosen theoretical lens, the Person-Environment fit (Edwards, 1991).

CHAPTER 3: METHODOLOGICAL ISSUES

Methodological Approach

Inherent in research is epistemology that is the discourse over the nature of knowledge: what it means to know something, what gives confidence to claim that we know something, and how we know that we know something (e.g., Bird, 2010; Wenning, 2009; Zangwill, 2020). Epistemology is adjacent to ontology, what constitutes reality and how we can comprehend and record it (Bergmann, 1960). The two major methodological viewpoints in social science, and by extension in management studies, are the positivist (deductive) and the interpretivist (inductive) (e.g., Gray, 2014). These are rooted in different ontological perspectives as to whether reality can be defined and recorded independently of the context and the viewpoint of the observer (Bowden, 2019; Hay, 2017). As consequence, they make different assumptions about the world and the nature of knowledge (Gray, 2014; Holden & Lynch, 2004).

My work clearly abides to the positivist/deductive philosophy to research inquiry. The positivist approach is underpinned by the naturalist or realist ontological view (e.g., Hume, 1739/2006) and borrows mostly from natural sciences. Its fundamental assumption is that there can be a single and only truth or reality that can be observed in an unbiased (objective) way (e.g., Crotty, 1998; House, 1991). According to this viewpoint, social phenomena can be defined and measured as constructs, and subsequently the way (strength and direction of the relationship) they associate with each other can be estimated with precision. Under the positivist viewpoint, therefore, the researcher must define constructs, find ways to measure and actually measure them, and then estimate their properties and inter-relationships (Creswell, 2014).

The reason I have abided to the positivist approach is the aims of my research: to identify factors and mechanisms that explain career-related processes, including the way these factors interact with each other and their relative contribution (Antonakis, Bendahan, Jacquart & Lalive, 2010; Ghauri & Gronhaug, 2010). This necessitates definition and measurement of constructs along with estimation of the magnitude and direction of their associations. The positivist approach suits research that focuses on constructs that have

already been identified and some knowledge on them has already been gained. This is the case with the constructs I utilize in my research. Whether long established (e.g., personality, career success, emotion work) or relatively new (e.g., employability) the constructs have already been defined, and my aim has been to reveal the intricate ways they interact and influence each other. This directs towards the adoption of the positivist/deductive methodology. Though there are limitations in the positivist approach, it does allow for the development of a useful picture of how various social phenomena that have already been identified relate to each other.

Data Analysis

The positivist tradition is often seen as utilizing exclusively quantitative methodologies (Holtz & Odag, 2020; Punch, 2005). Though there are exemptions (Creswell, 2014; Maxwell, 2010), my work abides to this “rule” nonetheless. My work employs mainly questionnaire/survey-based research methodologies under a positivist viewpoint, which subsequently necessitate quantitative approaches to the analysis of data. The data analytic methods that have been utilized in the submitted works range from statistical techniques of intermediate sophistication, such as variants of the general linear model [e.g., regression analysis, multiple analysis of variance or co-variance (ANOVA, MANOVA, MANCOVA)] – assuming either linear or non-linear relationships (**works #2, #4, #5 and #9**) –, to more sophisticated methods such as Confirmatory Factor Analysis (CFA) (**works #1, #2, #3, #4, #6, #7, #8**), and Structural Equation Modelling (SEM) with manifest (**works #1, #3, #7, #8**) or latent variables (**work #6**).

The statistical techniques that are based on the general linear model (i.e., the various forms of regression and analysis of variance and co-variance, Vik, 2014)) are powerful, robust to violations of their assumptions, and enable a clear picture of the relative size and direction of the tested relationships (Cohen et al., 2003; Lewis-Beck & Lewis-Beck, 2015). The use of the general linear model remains widespread in social science research. A limitation of it, however, is that it does not take into account the presumed error of measurement (variables represent constructs, and their measurement inevitably contains error that is represented by the reliability coefficient). This is a limitation that SEM allegedly rectifies because it takes into account the reliability in the measurement of

variables (Bollen, 1989; Cohen et al., 2003; Jöreskog, 1970). Hence, by estimating latent factors (which reflect the measured or manifest variables after correcting for the error of measurement) we arguably obtain less biased estimates of the magnitude of the relationships (Bollen, 1989; Kaplan, 2009). Another characteristic of SEM is that it enables the testing of multiple equations simultaneously in a single model. In this way all the depicted estimates incorporate the influence of all other relationships between the variables in the model (Bollen, 1989; Jöreskog & Sörbom, 1979). Given that my research has often focused on identifying the mechanisms that underline the way variables combine together, causal path modelling with SEM has been a common data analytic technique in it (**works #1, #3, #6, #7, #8**). Identification of mechanisms also necessitates testing for mediating relationships as part of the causal model (for example, **works #1, #3, #6, #7, and #8**) or moderating relationships (**works #1, #3, #5, and #8**). These were enabled by the afore-mentioned statistical techniques.

The Nature of the Variables and Relationships in the Submitted Works

Given that all my research shares the same methodological underpinnings, the following applies to all the work I submit. One of the primary aims of the scientific endeavour – beyond the establishment of relationships between phenomena (variables or factors) – is to explain how particular phenomena/outcomes occur (Popper, 2002). In effect, this means the identification of the mechanisms or processes that are responsible for the production of outcomes (Baron & Kenny, 1986; MacKinnon, Fairchild & Fritz, 2007). In this line, my work aimed to identify processes by which the outcomes of interest (such as intention to self-expatriate) are realized. For this reason, I have employed intervening factors (often referred to as “mediators”) that signify these processes, along with their causal factors (often referred to as “causes” or “antecedents”) and factors that may affect the relationships between antecedents and outcomes (also referred to as “moderators”). The last are important because they enhance the comprehensiveness and realism of the research (Baron & Kenny, 1986). To illustrate, **work #8** considered the perceived pressure of the family to return to the home country as a factor that influences (moderates) whether the individual’s confidence (self-efficacy) and expectancy of career

pay-offs from working and living abroad is translated into interest in pursuing self-initiated expatriation.

CHAPTER 4: THE SUBMITTED WORKS AND THEIR MAIN FINDINGS

In this section the nine submitted works, grouped in terms of the three areas of contribution, are discussed in terms of their aims and main findings.

Sustainable Careers

Works #7, #6, #5 and #3, which contributed to the area of sustainable careers, are described below.

Work #7

This work (which appeared in print in 2015) investigated whether and how career-related orientations were helpful in strengthening key productivity-related factors at times of severe organizational change that seriously affected employment conditions.

Productivity-related factors are proximal (short-term) indices of career success. In the study, such factors were employability, openness to organizational change and willingness to expend effort. Career orientations are malleable but only to direct interventions, otherwise they remain stable (e.g., Hirschi, Jaensch & Hermann, 2017), therefore, they can be seen within the sphere of personality.

The setting was a Greek state-owned public utility at a period (2010-2011) when all state-owned public utilities in Greece were going through severe restructuring to drastically reduce operational losses, cut costs, and improve efficiency. Up to that time, public utilities in Greece used to offer lifetime employment with virtually no performance management. Therefore, it was of interest to find how these proximal career success indices that are productivity-oriented would behave within that context. All 157 employees who participated in the study had spent their total careers in that organization. Career orientations were considered after the major career frameworks of protean career (Hall, 1976; 2004) and boundaryless career (DeFillippi & Arthur, 1994), both of whom relate to the capacity to adapt and implement one's career plans. For example, the boundaryless career orientation is especially relevant to conditions of uncertainty that may necessitate unpredictable changes in employment (the concept itself was developed as response to restructuring and downsizings that started to massively happen in the

1980s (Arthur & Rousseau, 1996; DeFillippi & Arthur, 1994). That was exactly the environment in that public utility at the time of the study.

The first stage of analysis showed that concepts like protean and boundaryless career orientation and employability had a substantive meaning within that particular context, where employees had never been under pressure to perform or to respond to change before. The main findings are depicted in Figure 4.

From the sustainable careers perspective, the findings implied that career sustainability (evaluated in terms of proximal career success indicators) is feasible even under change that completely upturns long-held practices and assumptions. Career orientations, and

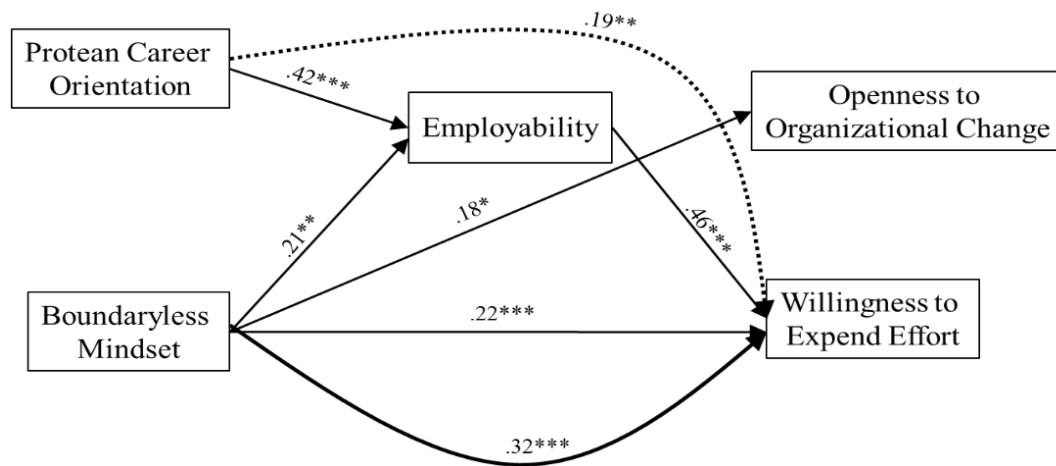


Figure 4. The final model (only significant relationships as paths) that was derived in work #7.

especially the boundaryless career orientation, contributed to employability. However, career orientations also operated partly independent of employability (they had direct effects) in increasing openness to organizational change and willingness to expend effort, the other proximal career success indicators. Protean and the boundaryless career orientation are individual characteristics that are to some extent malleable (e.g., Hirschi et al., 2017), therefore, development of these orientations can be a route towards career sustainability.

Work #3

This work (which appeared in print in 2018) is to some extent complementary to **work #7**. **Work #7** considered employability antecedents that were personality-related (i.e., rooted into the individual), while **work #3** considered context-related antecedents.

Specifically, **work #3** investigated whether learning opportunities provided by the environment, and specifically by the job (learning value of the present job) or the organization (organizational learning climate) enhance individual occupational expertise, the largest dimension of employability. Flow at work, a pleasurable and immersive state

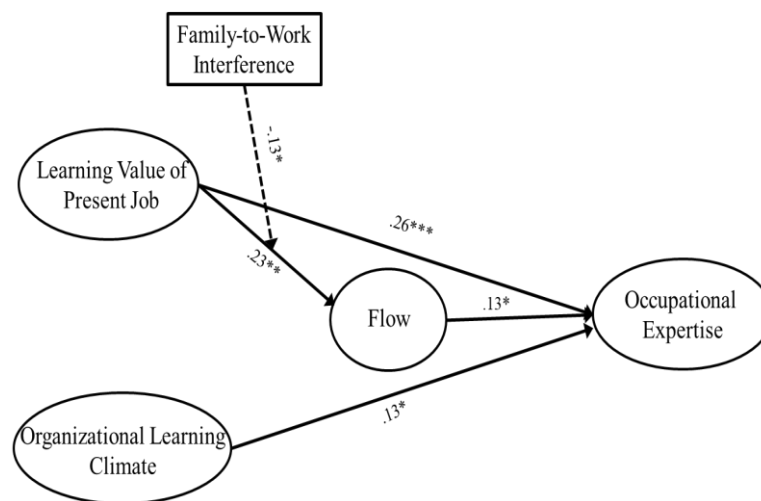


Figure 5. The final model that emerged after the hypothesis testing in **work #3**.

where performance reaches its peak (Bakker, 2005; Csikszentmihalyi, Abuhamdeh, & Nakamura, 2005), was considered as mediator. Both, employability and flow can be seen as indices of proximal career success (objective and subjective). The study, therefore, utilized variables that represented key elements of sustainable carers, including productivity (employability), well-being (flow) and learning (De Vos et al., 2020). Participants were 282 IT professionals, and the findings are summarized in Figure 5.

The major elements of the findings were: both the learning value of the job and the organizational climate nourished occupational expertise. Strong family-to-work interference weakened their benefits. Flow was of some importance for occupational

expertise, but learning opportunities benefited occupational expertise largely independent of it. Interference from personal/family life weakened the positive impact of learning from the job on flow and via it on occupational expertise. Overall, the study contributed by confirming the critical role of learning for proximal career success within the sustainable careers framework, and emphasizing the pivotal importance of available opportunities for learning in the organizational environment. It also contributed by showing that proximal career success outcomes relate causally to each other (i.e., flow can trigger increases in employability).

Work #6

That work (which appeared in print in 2016) was set to investigate whether having a mentor and receiving mentoring (which is part of social capital) enhances multiple career-success outcomes: proximal, including employability and job performance, along with distal, including objective and subjective career success. The aim was also to unveil the causal mechanism: which factor is directly affected most by mentoring to trigger the development of the rest. Employability and job performance represent pivotal productivity-related indicators of sustainable careers, and proximal career success indices. Objective career success is an index of distal career success, and it takes longer to materialize as result of employability and job performance (Ramaswami & Dreher, 2007). Furthermore, from the perspective of sustainable careers, subjective career success can also be seen as an index of well-being. Participants were 352 software engineers (and their line managers who rated their employability and job performance) from three European countries (Greece, Italy and Poland) that belong to different cultural clusters. The fast-paced Information Technology (IT) sector was ideal for a study from a sustainable careers perspective. The results, summarized in a causal path model, are shown in Figure 6.

The findings suggested the following: First, mentoring (a dimension of social capital) is an effective resource for nourishing sustainable careers in the organizational environment. Second, success-related indicators of sustainable careers, namely employability, job performance and objective career success are linked in a particular sequential order. Third, employability (a proximal career success index) is pivotal for job performance

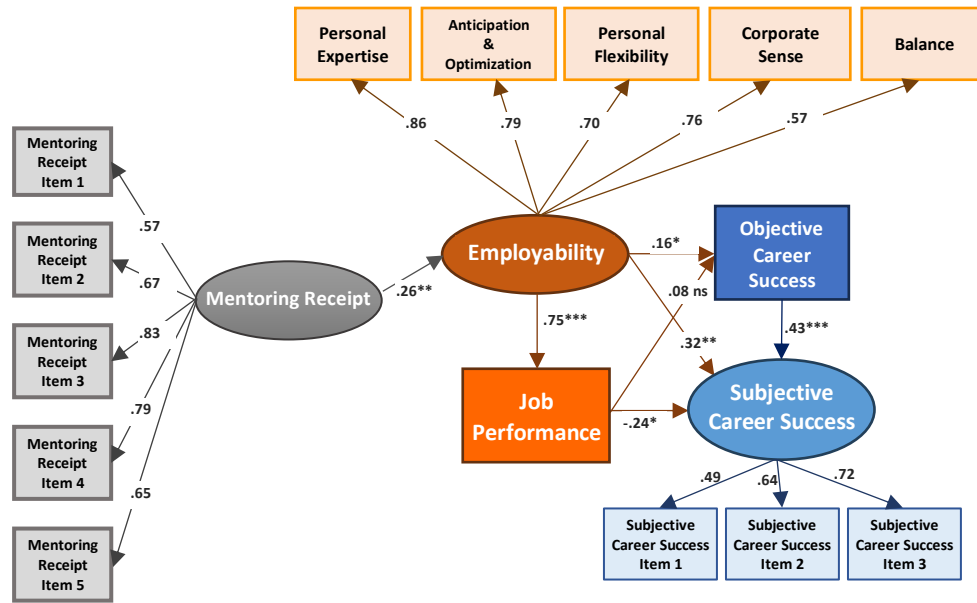


Figure 6. The final model after hypothesis testing in work #6 (only significant paths are depicted).

(another proximal success index) and objective career success (the distal career success index). Fourth, subjective career success, which within the sustainable careers framework can be seen as index of well-being, is dependent upon the success-related indicators that, however, nourish it independently.

Work #5

That work (which appeared in print in 2016) aimed to disentangle how a widespread type of work, emotion work, relates to job satisfaction, an index of proximal career success and of well-being at the same time (Heffernan & Dunton, 2016), within a particular cultural context. Emotion work (or “emotional labour”) refers to regulation of emotional display at work so the conveyed emotions match those expected by customers, colleagues and employers (Hochschild, 1983; Tschan, Rochat & Zapf, 2005; Zapf & Holz, 2006). Two main strategies in performing emotion work are: surface acting, dissonance between displayed and felt emotion, which is essentially “faking”; and deep acting, expending effort to actually feel the displayed emotion (Hulsheger & Schewe, 2011; Morris & Feldman, 1996). Therefore, identification of the ideal strategy configuration, “faking” or “feeling”, in emotion work informs sustainable careers literature by providing information about how proximal success or well-being – key indicator of sustainable

careers (De Vos et al., 2020) – can be maximized in settings where emotion work is performed.

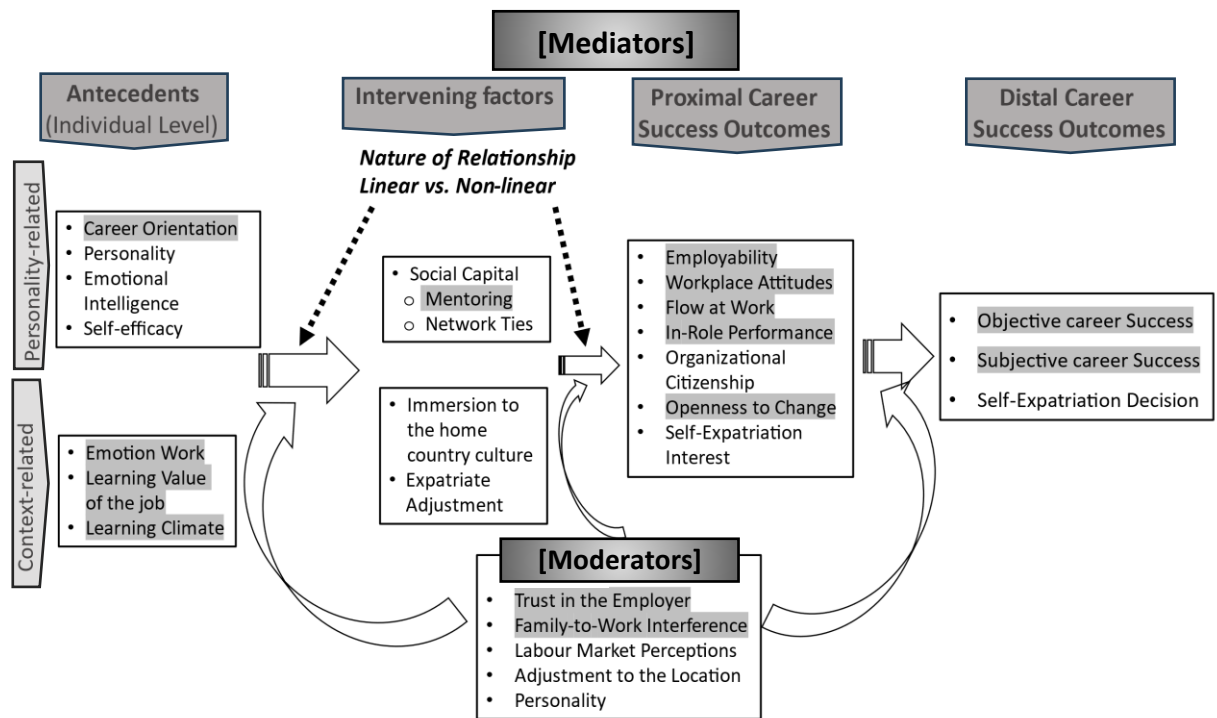


Figure 7. The elements of the contribution (greyed) to the total model from my research from the perspective of sustainable careers.

The study was conducted in Saudi Arabia with 147 natives who were cabin crew members – the stereotypical emotion work profession. The contribution of the study was substantial because the findings contrasted the general pattern of findings in predominantly institutionally oriented cultural contexts (most recent available meta-analysis at the time of the study, Hülshager & Schewe, 2011; most recent, Yin, Sun, Song, Jin & Wang, 2023). In particular, the findings showed that deep acting towards both customers and co-workers was strongly related to job satisfaction, but surface acting was not. These findings were in line with the impulsively oriented culture of the region, the Middle East, the study was conducted in (Al Soufi, 2005). Impulsively oriented cultures allow greater individual latitude in emotional management and expression (Gordon, 1989), hence, may offer protection to well-being when engaging in surface acting (Grandey, Fisk & Steiner, 2005; Hülshager & Schewe, 2011). The elements in the

comprehensive model of career success that were based on the contributions of the study from the perspective of sustainable careers are indicated in Figure 7. From the perspective of sustainable careers, the study contributed by pointing that employee emotion regulation strategies to enhance subjective career success (that can also reflect well-being) must be adapted to the national cultural context. The study also contributed by reinforcing that sustainable careers is an affair of many stakeholders, employers being one of them: subjective success was highest under condition of employee beliefs that the employer is benevolent, fair and caring (high trust towards the employer).

Personality in the Accumulation of Social Capital as Career Resource

Works #9, #4 and #2 focused on the investigation of the relationship between personality and social capital from a non-linear perspective.

Work #9

That work (which appeared in print in 2014) focused on the nature of the association of having a mentor and receiving mentoring (mentoring receipt, which is a component of social capital) with the personality of the protégé. It was arguably the first work in the social capital literature to look at the relationship between protégés' personality with mentoring receipt through the prism of non-linearity. Personality was considered in terms of the big-five model (Digman, 1990; Goldberg, 1993; Norman, 1963), seen as the most complete and parsimonious description of human personality (John, Naumann & Soto, 2008). The big-five considers personality in terms of five traits: emotional stability, extraversion, openness to experience (hereinafter “openness”), agreeableness and conscientiousness. The type of non-linearity that was hypothesized in **work #9** was quadratic (U shaped or inverted-U shaped): the relationship may “flatten” or even change direction at some point (Cohen et al., 2003).

The work utilized two independent studies to test the hypotheses, each study purportedly employed a sample of different nature. Furthermore, in the second study the personality of participants was measured using the ratings of their peers in an attempt to increase validity and generalizability of the overall conclusions. The general conclusion of the findings was that the relationship of mentoring receipt with three – extraversion, openness

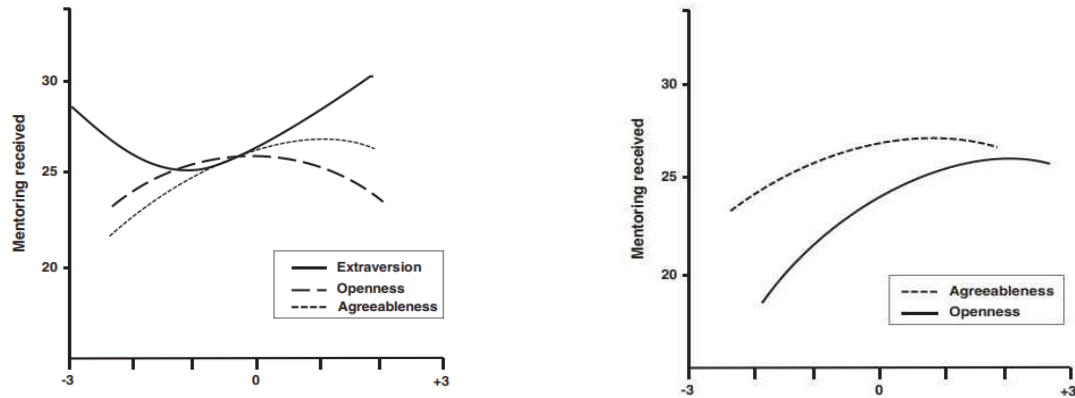


Figure 8. The quadratic relationships between personality and receipt of mentoring (**work #9**) - Study 1 left, and study 2 right.

and agreeableness – out of the five big-five traits were not linear, but quadratic instead. These relationships are depicted in Figure 8.

The findings contributed by fully vindicating the idea behind the study, they demonstrated that assuming linearity in the relationship is an oversimplification, and provided a nuanced picture of how personality relates to an aspect of social capital, ties with a mentor. That was an important contribution, and two further studies that culminated into **work #4** and **work #2** followed in the same line.

Work #4

This work (that appeared in print in 2017) investigated the relationship of personality, using again the big-five framework, with the other element of social capital, network ties (Seibert et al., 2001). Ten models were constructed, five for each of the big-five traits with the two dimensions of network ties (expressive and instrumental). Hypothesized relationships were both quadratic (either U-shaped or inverted U-shaped) and linear, and were tested with responses of 183 technical and managerial employees working in the Information Systems function of a large financial services firm.

The contribution of the study to the social capital perspective to career success was substantial again: nine out of the 10 tested relationships turned out to be quadratic. The increase in the explanatory power of the linear to the non-linear models was impressive: the quadratic terms accounted for an additional 24.7% and 16.7% of the variance in

expressive and instrumental network ties, respectively, beyond the linear terms and the controls. This study also provided strong vindication to the necessity to consider non-linear associations: simple linear associations would have led to a gross under-estimation of the magnitude, breadth and complexity of the relationships. The study soundly showed that the role of personality in career success via accumulation of social capital is both strong and complex.

Work #2

That work (which appeared in print in 2018) followed from the previous two works and adopted similar philosophy. Social capital was considered in terms of instrumental and expressive network ties along being a mentor for a protégé (that is the amount of mentoring the person has provided as mentor). The reason for choosing these two elements of social capital was to further increase the scope of social capital in our overall work in this area (i.e., **works #9, #4 and #2**). Thus, the three studies together provided evidence with respect to a comprehensive consideration of social capital as resource for career success.

An additional contribution of **work #2** was that it represented the first empirical study to establish that trait emotional intelligence (EI) relates to social capital. Emotional intelligence is the ability to understand and monitor one's own and others' emotions and utilize this knowledge to achieve social outcomes (Mayer & Salovey, 1997; Wong & Law, 2002). Trait EI is located at the lower levels of trait personality hierarchies (De Raad, 2005; Van der Linden et al., 2017). It is, therefore, an expression of personality, which is related to but distinct from the single personality traits of the big-five (Petrides, 2011; Petrides, Pita & Kokkinaki, 2007).

Participants were 172 middle and upper-level managers (so they had the opportunity to be mentors). Methodologically, statistical controls were imposed for the big-five traits – known from earlier **works #9 and #4** to relate to social capital – in order to eliminate the possibility of spurious relationships. The findings were largely vindicative of the motives behind the work. The relationship of EI with ties with protégés (mentoring provision) and expressive network ties was found to be of quadratic form and specifically U-shaped, graphically depicted in Figure 9.

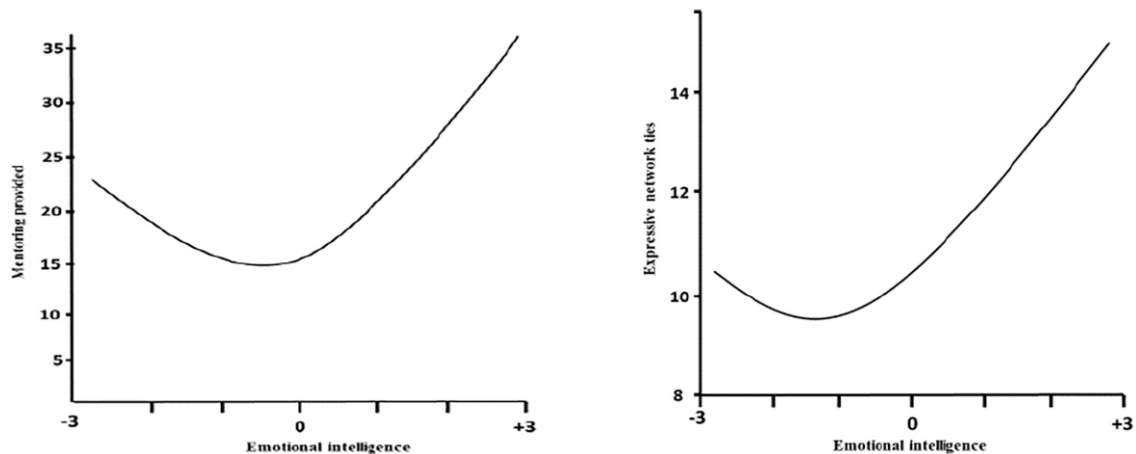


Figure 9. The relationship of Emotional Intelligence with mentoring provision (Figure 4a) and with expressive network resources (Figure 4b) – as presented in *work #2*.

The essence of the findings was that those individuals with very low scores on trait EI were more likely to establish ties with protégés and develop networks than those with scores around the middle of the EI distribution. The study contributed by extending the literature on personality and social capital into the domain of emotional intelligence, and underscoring that low emotional intelligence does not always pose a disadvantage in achieving career success by means of social capital accumulation.

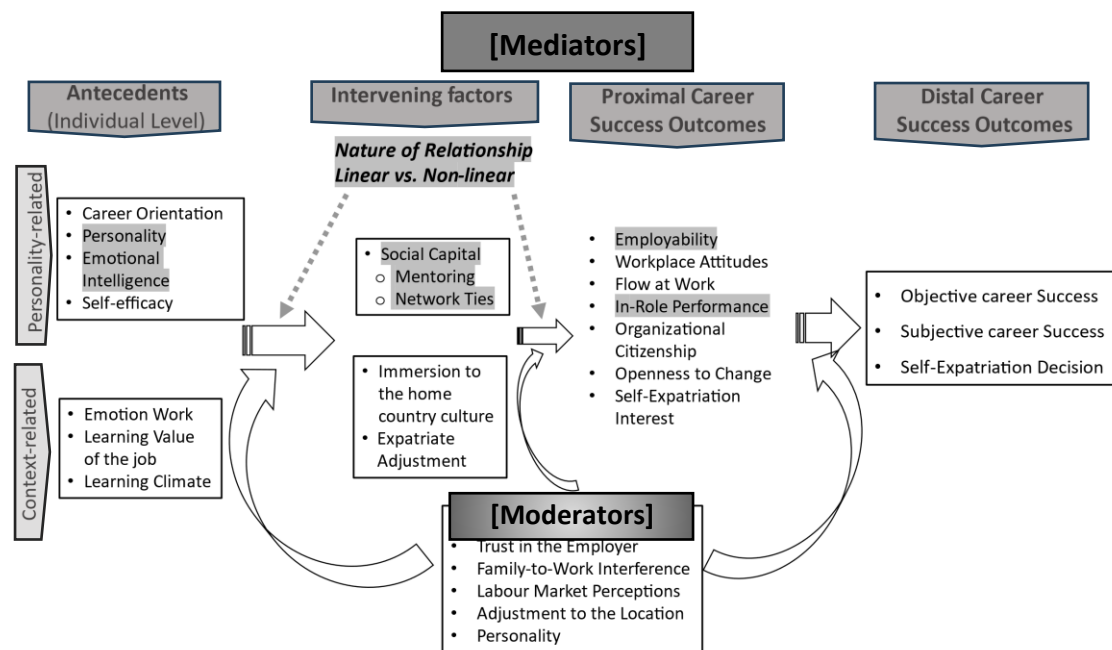


Figure 10. The elements of the contribution (greyed) to the total model that resulted from my research on the social capital perspective to career success.

Figure 10 shows (highlighted) the elements in the comprehensive model of career success that resulted from my contributions to the literature on social capital as a resource for career success.

Careers of SIEs: Modelling the decision to self-expatriate

Work #8 and **work #1** modelled the self-expatriation decision, placing special emphasis to the context. Both works aimed to provide comprehensive models that include key factors and their inter-relationships that describe that process.

Work #8

That work (which appeared in print in 2015) developed and tested a comprehensive model to describe the development of interest in self-initiated expatriation of early career individuals, individuals who pursue postgraduate studies in another country. Social Cognitive Career Theory (SCCT) (Lent, Brown & Hackett, 1994; 1996) served as the main theoretical backdrop, an established theory of career interest that takes into account the interplay of social environmental factors (the context) and individual dispositions (Lent et al., 1994; Lent, Brown, Sheu, Schmidt, Brenner & Gloster, 2005). The constructs posed by the theory were adapted to the context of self-initiated expatriation and the personal circumstances (i.e., postgraduate students in a host country). For this reason, the study was one of the very first quantitative studies in self-initiated expatriation, if not expatriation in general, to take into account the context, some time ahead of explicit calls for this (Andressen et al., 2020; Arseneault, 2020).

The model, which involved a large set of mediating and moderating relationships, was tested with 139 postgraduate students in the final stages of their studies in the UK, most of whom already with work experience. The final model after the testing is presented in Figure 11.

The findings pointed, amongst others, at the importance of the quality of subjective experience (positive or negative) during the postgraduate studies when people consider self-expatriation as a career move. Part of that experience was reflected in the level of adjustment to the host country, which had both direct and moderator effects. Expectations for career success if one stays abroad and the perceived pressure from home to return

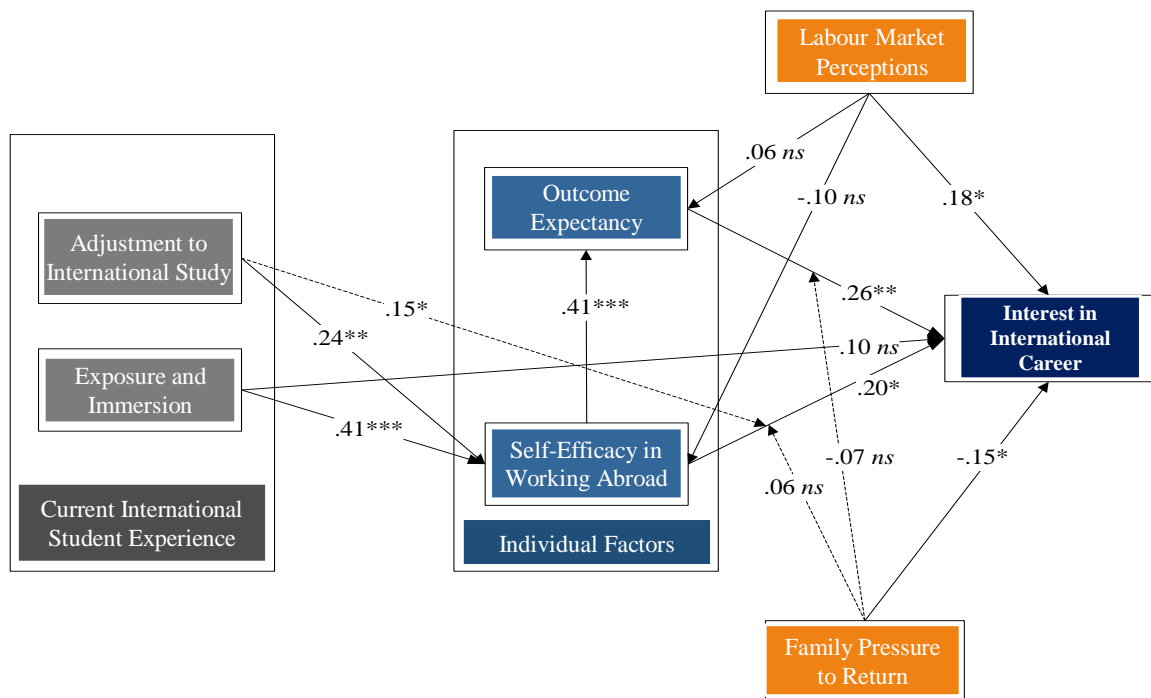


Figure 11. The final model in **work #8** (to include significant and non-significant hypothesized effect coefficients).

were other important factors in the decision to pursue a career as SIE. **Work #8** contributed by presenting an integrated model of the decision to self-expatriate taking into account a comprehensive set of factors, including experiences of well-being in the host country and expectations of career success.

Work #1

That work (that appeared in print in 2023) bears similarities with **work #8**, and to some extent it is a continuation of it. **Work #1** focused on individuals at a more advanced career stage and for that reason it could take into account proximal career success indices, such as job performance and feelings of personal accomplishment. Specifically, the study considered civilian volunteers who serve in United Nations (UN) “hot spots”. They represent, along with volunteers in non-profit organizations, a large yet understudied population that can be seen as SIEs: automatic discharge and return to the home country once their mission has ended, with no guarantee for another mission, they have to apply anew.

The study was highly contextualized, hence, the Person-Environment (P-E) Fit approach (Edwards, 1991; 1996; French, Caplan & Harrison, 1982; Kristof, 1996) was an

appropriate theoretical backdrop. Specific measures were developed to tap the constructs in the model, specific to the particular setting and population. All hypotheses, 13 in total, are shown as path links in Figure 12.

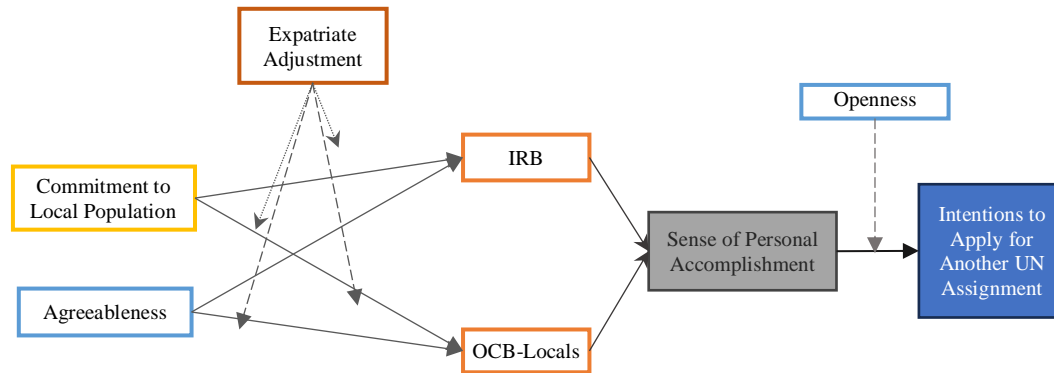


Figure 12. The model that contains all hypothesized links that was tested in *work #1*.

Hypotheses were tested with data provided by 191 UN civilian volunteers from all continents in 16 “hot spots”. Both the supporting findings (that were the majority) and the non-supporting findings (there were the exceptions) stressed the importance of the context and, hence, vindicated the study and the relevant calls for taking into account the context into SIE research (Andresen et al, 2023). In a nutshell, the results showed that whether UN civilian volunteers intend to apply for yet another UN expatriate assignment is determined by their personality and values, which in turn influence their proximal objective career success (performance in their assignment: in role behaviours, IRB, and organizational citizenship behaviours towards the local population, OCB-Locals) and subjective career success (sense of personal accomplishment).

There were, however, two findings that drew attention because they run contrary to hypotheses. First, it was under conditions of low adjustment to the host location (low expatriate adjustment) under which the personality trait of agreeableness was most strongly linked with OCB-Locals. Second, it was when the personality trait of openness to experience was low that the link between sense of personal accomplishment (index of subjective career success) and intentions to re-apply for another UN assignment was strongest. These were explained in the article in an *ad hoc* manner using knowledge about the specific characteristics of volunteers in non-profit organizations and the specific

context (locations in which both locals typically live under poor conditions and facilities for the volunteer expatriates are limited). Overall, the findings highlighted the key role of career success in the careers of SIEs, and stressed the importance of research within peculiar contexts with utilization of contextual knowledge in the design, execution and interpretation of findings in SIE research.

Figure 13 shows the elements in the total model of career success that arose from the contributions of these works to the literature on the careers of self-initiated expatriates.

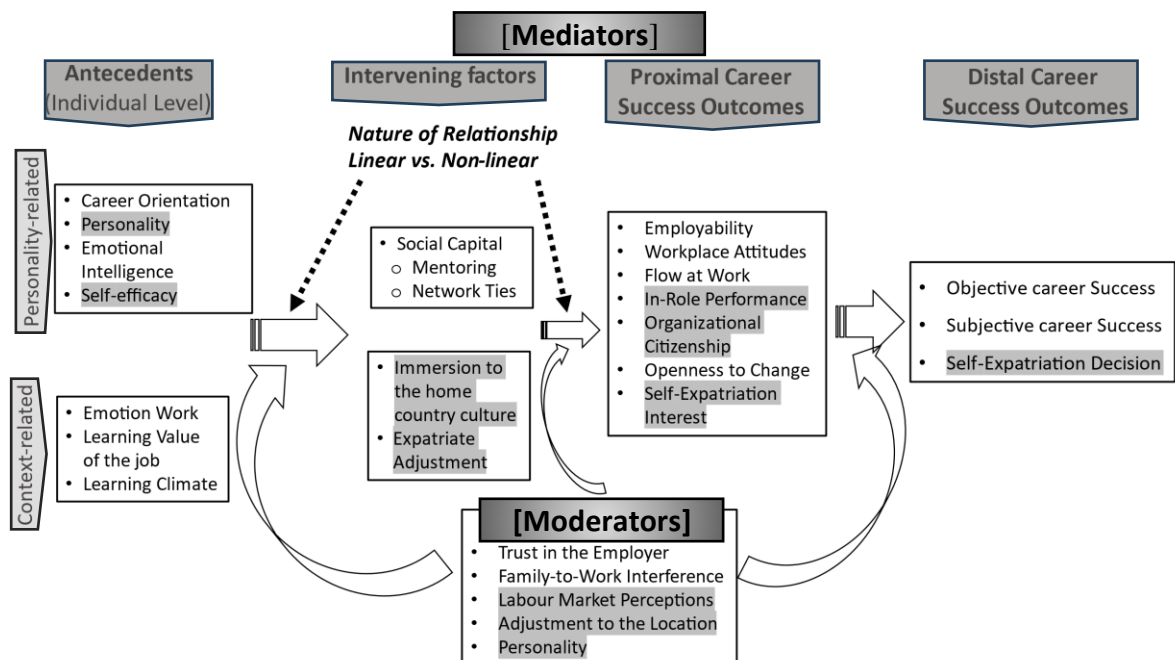


Figure 13. The elements of the contribution (greyed) to the total model that resulted from my research on career success from the perspective of self-initiated expatriation.

CHAPTER 5: DISCUSSION

The submitted works enabled a comprehensive understanding of factors and processes involved in the production of career success in the present era. That was accomplished by research that took the perspective of the three most recent, at the time the studies were conducted, contemporary perspectives to the study of career success: Sustainable careers, the social capital perspective, and self-expatriate careers.

Sustainable Careers

The idea of sustainable careers represents the most recent major framework to approach the study of careers and career success (e.g., Scheitzer et al., 2023). My work followed and contributed to the sustainable careers approach from its very advent. The fast pace of change in all fronts, technology, society and business practices in the present era, pose concerns over how individuals will be able to maintain success in career in the long term (De Vos et al, 2020; Newman, 2011). The notion of sustainable careers has provided a framework to consider this issue by handing general principles along with criteria (in the form of indicators) on which sustainable careers can be judged (De Vos et al., 2020; Schweitzer et al., 2023). My work has contributed to knowledge on career success by making use of these suggestions.

First, in line with the point that sustainable careers are not the sole responsibility of the individual, but also of other stakeholders, such as employers (e.g., Baruch, 2015; Henke et al., 2022), my work identified factors in the work environment that foster both proximal (short-term) and distal (long-term) career success (**work #3** and **work #6**). Taking the premise that learning, and opportunities for learning, is fundamental in career sustainability (e.g., Valcour, 2015), **work #3** established that learning motives and opportunities provided by both the job itself (learning value of the job) and the broader organizational environment (organizational learning climate) enhance aspects of employability, an index of proximal career success. **Work # 3** also showed that interference from personal life (another factor that is suggested by sustainable career theory, Kelly et al., 2020) may limit the beneficial learning effects of the job on employability. The organizational climate, the design of jobs to enable learning, but also

the introduction of policies and systems that allow employees to accommodate their personal life is largely under the control of employers.

Mentors are part of the social work environment, and **work #6** showed that having a mentor is nourishing for a variety of key outcomes that reflect proximal career success (employability and job performance), and distal career success (total promotions received). In addition, **work #6** showed that mentoring receipt fosters subjective career success, a manifestation of the well-being aspect of sustainable careers. Though receiving mentoring also depends on factors located within the individual (i.e., personality) (as my research from the social capital perspective showed), creation of mentoring cultures (work environments that encourage mentoring) is under the control of the employer (Lindenberger & Watson, 2015; Zachary, 2017). Therefore, my work has also contributed by identifying how contextual factors, which can be amended for the better by the employer, enable career success by fostering career sustainability.

Complementing these studies, **work #7** unveiled factors rooted within the individual that contribute as antecedents of proximal career success outcomes. In particular, **work #7** identified that protean and boundaryless career mindsets contribute to the development of employability, willingness to expend effort at work and openness to organizational change, proximal career success indices. By identifying both contextual and individual factors as nourishers of proximal career success, my work responded to relevant calls (e.g., De Vos et al., 2020; Van der Heijden & De Vos, 2015) and added to knowledge of career success from the perspective of the newly established sustainable careers framework.

Going beyond antecedents, my work also contributed to knowledge on how career success indices relate to each other. Together **works #6** and **#7** showed employability as key for the development of other proximal success factors, such as willingness to expend effort and job performance, which in turn lead to distal objective career success, a more solid indicator of a sustainable career. Employability also emerged as key for subjective career success, an indicator that touches upon the well-being dimension of sustainable careers (**work #6**). Overall, these findings advance knowledge about what proximal success indicators to target in order to increase the chances for career sustainability.

The contribution to sustainable careers extended by looking at a particular yet widespread type of work, emotion work, which is known for heavily impacting work well-being, one of the dimensions of sustainable careers (De Vos et al., 2020). My research (**work #5**) was specifically conducted within an impulse-oriented national culture, and identified optimal emotional display strategies in the performance of emotion work that favour the achievement of job satisfaction, an indicator of both well-being and proximal success. Considering that impulse oriented cultures extend over a large part of the globe (Al Soufi, 2005; Gordon, 1989), these findings advanced knowledge about what individuals but also employers (who provide training to employees about emotional management) can do to make careers more likely to be sustainable.

In a nutshell, my work has contributed to knowledge on career success within the sustainable careers framework by identifying individual and contextual success antecedents, the causal ordering of success manifestations, and behavioural strategies for enhancing success indicators.

The Relationship of Personality with Social Capital

My work contributed to the development of a nuanced understanding of how personality relates to the accumulation of social capital as resource for career success, mostly by means of alerting to, hypothesising, testing and discovering an extensive array of non-linear relationship patterns. Social capital is a proven career resource, and identification of factors that help to its accumulation, including personality, had been in order. However, relevant research, in line with research in social science in general, was imposed to the constraints of assuming linear relationships (Ghosh, 2014). Taking cognizance of that fact, my work (**works #9, #4 and #2**) investigated for the type of non-linearity that seemed most likely in the relationship of personality-related traits and social capital, the quadratic. In this quest, I utilized the most widely accepted and validated trait personality framework, the big-five (John et al., 2008; Petrides, 2011).

Work #9 and **work #4** revealed that personality traits relate to social capital mostly in a non-linear quadratic (U-shaped or inverse U-shaped) manner. Highlights of the findings were that low extraversion is more advantageous over moderate extraversion for having a mentor (U-form curve); those with moderate levels of agreeableness are in the best

position to have a mentor than those with low or high agreeableness (inverted U-form curve); and high levels of conscientiousness become a disadvantage for establishing network ties either for social support (expressive) or for career support (instrumental).

The importance of the contribution of the submitted works is further illustrated by comparing the findings of **work #9**, which focused on how the big-five of personality relate to mentoring receipt, with earlier work of mine (that is not amongst the submitted works) that examined the same relationship but strictly from linear point of view (Bozionelos & Bozionelos, 2010). In Bozionelos and Bozionelos (2010) all big-five traits together explained in a linear manner just 2.7% of the total variance in social capital, while in the two independent studies of **work #9** the big-five traits explained four and fourteen times more than that amount of variance, respectively (!). Furthermore, Bozionelos and Bozionelos (2010), testing strictly linearity, identified no relationship for extraversion, in contrast to **work #9** where extraversion was related with mentoring in a quadratic fashion. Finally, one of my co-authors had in the past investigated the relationship of the big-five with network ties (expressive and instrumental) from a purely linear viewpoint and had found only one systematic relationship out of the 10 he had tested (Bozionelos, 2003). Yet, **work #4** identified nine systematic quadratic relationships out of the 10 tested between exactly the same variables. These comparisons further emphasise the strong contribution of the work. **Work #2** complemented the previous works by expanding the measurement of social capital and employing trait emotional intelligence, which is another expression of personality (Van der Linden et al., 2017), as antecedent. Its findings were also suggestive that in most cases personality relates to social capital accumulation in a non-linear way.

The three works together, therefore, provided an exhaustive testing of the personality-social capital relationship by means of using all dimensions of social capital and two different expressions of personality, the big-five and trait emotional intelligence. That exhaustive testing resolved the question about the form of the relationship between personality and social capital, by showing that it is for most part non-linear, with all profound implications this has.

Careers of Self-initiated Expatriates

Self-initiated expatriates compose by far the largest part of expatriate population with importance for the global economy. However, having been identified as a distinct group only recently, knowledge about how SIEs make career-related decisions was very limited at the turn of the second decade of the millennium, when my work on that subject commenced (Brewster et al., 2021; Mello et al., 2023). My work (**works #1 and #8**) has contributed to knowledge on the factors and processes that shape the motivation to pursue self-expatriation as career move, along with the role of proximal career success (job performance and feelings of personal accomplishment) in this process.

Critically, my work also considered the context in which self-initiated expatriation is pursued, a factor of importance that had been neglected (Akkan et al., 2022; Andresen et al., 2023). It did so by utilizing context specific variables and measures, and using context-oriented theoretical backdrops, such as the Person-Environment fit and the Social Cognitive Career Theory. Each work focused on a different population to map their decisions to self-expatriate in the first place (**work #8**), or their intent to attempt yet another self-expatriate mission upon the end of the current mission (**work #1**). The decision process involved elements of career success or anticipated career success. Hence, the contribution extended into two major areas in self-initiated expatriation literature: the decision to self-expatriate as a career move and as function of career success (Brewster et al., 2021), along with taking into account the self-expatriation context (Andresen et al., 2023).

Findings of both works suggested that the process of decision to self-expatriate or to self-expatriate again as a career move is complex and involves multiple personality-related (personality traits or self-efficacy to work abroad) and context-related factors (macro: such as perceptions of success as a function of labour market conditions, and meso: such as adjustment to the particular location, and the relationship with the local population) in intricate relationships. Proximal career success, such as job performance and feelings of accomplishment as result of personality and personal values (**work #1**), or anticipated career success (such as anticipated financial success from working abroad as SIE) (**work #8**) were related to intentions to pursue self-expatriation as career move. A notable

contribution was the finding that adjustment to the foreign environment played a role (as shown in both works, **#1** and **#8**), but not always in the anticipated way due to the influence of the context.

In a nutshell, my work made key contributions to the literature on the careers of SIEs by means of: mapping their decision to expatriate as career move; identifying the role of actual or anticipated career success in the decision; taking the expatriate context into account; and considering self-expatriates in the non-profit sector.

Overall, all submitted works considered together advanced – over a period of 10 years – knowledge on career success by means of identifying: an array of personal and contextual antecedents of both proximal and distal career success, the way career success outcomes relate to and trigger each other, the role of actual and anticipated career success in the decisions about career moves, and the role played by the context in which careers are pursued. This was enabled by means of contributing to three most contemporary - especially at the time the submitted research was conceived - career-related theoretical frameworks. Together, the findings provide a comprehensive idea of the factors and processes that produce career success in the present era (as illustrated in Figure 2).

Implications for Practice

The findings of the submitted works have multiple implications for practice. Some illustrations follow.

The findings of the research that falls within the sustainable careers domain suggest that employers should not let employees by themselves in the development of their employability and other aspects of proximal career success. Instead, they should be active in the creation of learning opportunities at every level, the job and the wider organizational environment. In addition, treating employees in a way that develops employees trust towards employers (i.e., by showing fairness and care towards employees) helps with employees' subjective success expressions that often overlap with well-being, which is to the benefit of employers. For example, as it emerged in **work #3**, helping employees with their personal affairs (for example, flexible work schedules,

contribution to childcare facilities) pays off in terms of maximizing the benefits of learning opportunities for proximal career success.

The findings that personality traits relate to social capital as career resource in mostly non-linear manner imply that current assumptions and subsequent advice to individuals and organizations may need to be reconsidered. To illustrate, the submitted works showed that people with “average” rather than low EI (that a “linear” logic would suggest) may accumulate the least social capital (hence, benefit the least from it in their quest for career success). Considering that there is training to increase emotional intelligence (e.g., Campo, Laborde & Mosley, 2016), that finding means that providing such training to those very low on EI may in fact be harmful to their careers: EI training will render those people poorer in social capital because their EI scores will shift towards the middle of the distribution! Similar were the practical implications of the findings with respect to the big-five. Recently accumulated evidence shows that – unlike earlier beliefs – peoples’ standings on the big-five traits may be changed with conscious systematic interventions (e.g., Stieger, Fluckiger, Ruegger, Kowatsch, Roberts & Allemand, 2021; Wang & Wu, 2021). Many people have the desire to increase their standings in “sociable” traits, such as extraversion, agreeableness and emotional stability, with the belief that they will become more apt at creating social capital to help their personal lives and career progression (Baranski, Morse & Dunlop, 2017; Hudson & Roberts, 2014). The findings of the submitted work, however, suggest that higher standings in traits that are perceived as desirable may not always be accompanied by higher chances of success; in fact, in some cases this may render the individual worse off in career success terms, depending on one’s initial standing on each trait.

Finally, the findings of the works that modelled the decision to self-expatriate as career move suggest that whether personality and personal values fit the self-expatriation context in terms of the nature of work and the conditions is critical. They have a key role in the production of proximal success outcomes, such as job performance and satisfaction with accomplishments in the expatriate mission, which are of importance to employers. And subsequently influence the decision to prolong self-expatriation or not, which is of benefit to both employers and host country organizations. The findings also suggest that

host country governments and employers must carefully consider the circumstances of the self-expatriate work before they design interventions that aim to increase chances of attracting and retaining self-expatriates.

Limitations

The submitted works had certain methodological strengths, such as use of theory to develop hypotheses (all works), use of multi-source data for improvement of validity in the estimation of coefficients (**works #1, #3, #6, #9**), employment of controls in the design stage or statistically in the analysis stage (all works), and use of advanced data-analytic techniques that amongst others allow testing for model fit to the data, which is important when causal relationships are assumed.

Nonetheless, the works have methodological limitations. The main limitation was the employment of cross-sectional designs (all data were collected at that same point in time). Cross-sectional designs limit confidence about the direction of causality (Graziano & Raulin, 2009), and some of my works heavily relied on causal models. Furthermore, cross-sectional designs may lead to inflated, hence less realistic, estimates about the strength of tested relationships (Aguinis, Edwards & Bradley, 2016; O’Laughlin, Martin & Ferrer, 2018). Though utilization of sound theory and logical reasoning reduces the risk of setting causality order erroneously (Spector, 2019), the cross-sectional design is nonetheless an issue to bear in mind.

The lack of follow-up behavioural measurement can be seen as another limitation that applies to some of my works (especially **works #8 and #1**). For example, it would have been ideal to follow up participants after one or two years to find out whether their intentions to self-expatriate were converted to actual self-expatriation. That, however, was not feasible due to practical reasons. Though intentions are predictors of actual behaviour, they are by no means perfect such predictors (Glasman & Albarracin, 2006).

Ongoing and Future Work

The intention is to continue researching within the field of human resources and organizational behaviour, with special emphasis on career success. After the last work that I included in this submission (**work #1**), I have published another paper (Miao, Yu, Bozionelos & Bozionelos, 2023) that falls within the broad sustainable careers domain. In particular, this new work focuses on how career growth (a proximal career success indicator) can be enhanced by human resource systems and what its impact on employee well-being is. Furthermore, I have yet another manuscript in the final stages of preparation (Bozionelos, 2023), this manuscript being a review work that identifies gaps in our knowledge about mentoring as part of social capital as a career resource.

My intention is to further improve over the methodology of the submitted work, to the extend this is possible. This is on the way, in Miao et al. (2023), the design, apart from multi-source data, has included measurements at three different time points along with multi-level design. The plan is to continue with further work in this direction.

APPENDICES

APPENDIX A - Contribution Statements

STATEMENT TO CONFIRM RELATIVE CONTRIBUTIONS OF AUTHORS IN MULTI-AUTHORED WORKS

I, Beatrice van der Heijden (PhD), confirm that the contribution of co-authors in the following work are as follows:

Bozionelos, G., Bozionelos, N., van der Heijden, B., & Marzec, I. (2018). In search of challenge: Flow at work and the development of occupational expertise. In Baugh, G. & S. E. Sullivan (Eds.), *Research in Careers, Vol. 4: Seeking challenge in the career* (pp. 125-144). Charlotte, NC: Information Age Publishing.

Bozionelos, G. [Georgios]: 40%

Bozionelos, N.: 25%

Van der Heijden, B.: 25%

Marzec, L.: 10%

Date: 27th of August 2021



Signed:

Professor Beatrice van der Heijden PhD
Head of Department Strategic HRM
Professor of Strategic HRM
Radboud University Nijmegen
Institute for Management Research
Department SHRM
P.O. Box 9108
6500 HK Nijmegen
the Netherlands
Email: beatrice.vanderheijden@ru.nl

**STATEMENT TO CONFIRM RELATIVE CONTRIBUTIONS OF AUTHORS IN
MULTI-AUTHORED WORKS**

I, Izabela Marzec (PhD Hab), confirm that the contribution of co-authors in the following work are as follows:

Bozionelos, G., Bozionelos, N., van der Heijden, B., & Marzec, I. (2018). In search of challenge: Flow at work and the development of occupational expertise. In Baugh, G. & S. E. Sullivan (Eds.), *Research in Careers, Vol. 4: Seeking challenge in the career* (pp. 125-144). Charlotte, NC: Information Age Publishing.

Bozionelos, G. [Georgios]: 50%

Bozionelos, N.: 35%

Van der Heijden, B.: 10%

Marzec, I.: 5%

Date: 24.08.2021

Signed: Izabela Marzec

Professor UE Izabela Marzec PhD Habilitation
Department of Public Management and Social Science
University of Economics in Katowice
1 Maja 50, 40-287 Katowice
Poland
Tel. +4832257-7503
Email: izabela.marzec@ue.katowice.pl

**STATEMENT TO CONFIRM RELATIVE CONTRIBUTIONS OF AUTHORS IN
MULTI-AUTHORED WORKS**

I, Kostantinos Kostopoulos (PhD), confirm that the contribution of co-authors in the following works are as follows:

Bozionelos, N., Mukhuty, S., Kostopoulos, K., Bozionelos, G., & Blenkinsopp, J. (2021). United Nations civilian volunteers in UN hot spots: What makes them apply for yet another assignment? Manuscript under revision

Bozionelos, N.: 30%

Kostopoulos, K.: 20%

Mukhuty, S.: 20%

Bozionelos, G. [Georgios]: 20%

Blenkinsopp, J.: 10%

Bozionelos, N., Kostopoulos, K., Bozionelos, G. & the Indic@tor Consortium (2016). Employability and job performance as links in the relationship between mentoring receipt and career success: A study in SMEs. *Group and Organization Management*, 41(2), 135-171.

Bozionelos, N.: 50%

Kostopoulos, K.: 30%

Bozionelos, G. [Georgios]: 20%

The rest of the authors were included as part of the agreement between the partners of the Indic@tor Consortium.

Bozionelos, N., Bozionelos, G., Kostopoulos, K., Shyong, C-H., Baruch, Y., & Zhou, W., (2015). International graduate students' perceptions and interest in international careers. *International Journal of Human Resource Management*, 26(11), 1428-1451.

Bozionelos, N.: 30%

Bozionelos, G. [Georgios]: 30%

Kostopoulos, K.: 25%

Rest of the authors: 15%

Bozionelos, N., Bozionelos, G., Polychroniou, P., & Kostopoulos, K. (2014). Mentoring receipt and the Big-Five of personality: Evidence for non-linear relationships. *Journal of Business Research*, 67, 171-181.

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Bozionelos, N.: 45%

Bozionelos, G. [Georgios]: 40%

Kostopoulos, K.: 10%

Polychroniou, P: 5%

Date: 24/08/2021

Signed:



Kostantinos Kostopoulos PhD
Associate Professor of Corporate Strategy,
Department of Industrial Management & Technology,
University of Piraeus
80 Karaoli & Dimitriou St.
185 34, Piraeus, Greece
T: +30 210 4142152
E: kkostop@unipi.gr

STATEMENT TO CONFIRM RELATIVE CONTRIBUTIONS OF AUTHORS IN MULTI-AUTHORED WORKS

I, Nikos Bozionelos (PhD), confirm that the contribution of co-authors in the following works are as follows:

Bozionelos, N., Mukhuty, S., Kostopoulos, K., Bozionelos, G., & Blenkinsopp, J. (2021). United Nations civilian volunteers in UN hot spots: What makes them apply for yet another assignment? Manuscript under revision.

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Kostopoulos, K.: 30%

Bozionelos, G. [Georgios]: 20%

The rest of the authors were included as part of the agreement between the partners of the Indic@tor Consortium.

Bozionelos, G., & Bozionelos, N.] (2015). Employability and key outcomes in times of severe change: The role of career orientation. *Human Resource Management (Poland) [Zarządzanie Zasobami Ludzkimi]*, 6(107), 11-32.

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Bozionelos, N.: 35%

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Kostopoulos, K.: 25%

Rest of the authors: 15%

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Bozionelos, N.: 50%

Bozionelos, G. [Georgios]: 40%

Polychroniou, P: 5%

Kostopoulos, K.: 5%

Bozionelos, N., & Bozionelos, G. (2013). Attention deficit/hyperactivity disorder: Does it impact job performance? *Academy of Management Perspectives*, 27(3). DOI: 10.5465/amp.2013.0107

Bozionelos, N.: 60%

Bozionelos, G. [Georgios]: 40%

Bozionelos, N., & Bozionelos, G. (2011). Do pre-retirement work and personal factors shape happiness as a retiree? *Academy of Management Perspectives*, 25(3), 81-82.

Bozionelos, N.: 60%

Bozionelos, G. [Georgios]: 40%

Bozionelos, N., Bozionelos, G., Kostopoulos, K., & Polychroniou, P. (2011). How providing mentoring relates to career success and organizational commitment: A study in the general managerial population. *Career Development International*, 16, 446-468.

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Kostopoulos, K.: 10%

Polychroniou, P.: 5%

Bozionelos, N., & Bozionelos, G. (2010). Mentoring received by protégés: Its relation to personality and mental ability in the Anglo-Saxon organizational environment. *International Journal of Human Resource Management*, 21, 509-529.

Bozionelos, N.: 60%

Bozionelos, G. [Georgios]: 40%

Date: August 23, 2021

Signed:



Nikos Bozionelos HDR PhD
Professor of IHRM
EM Lyon Business School
23 avenue Guy de Collongue
69134
Ecully, France
tel: +33 (0)478337761
email: bozionelos@em-lyon.com

**STATEMENT TO CONFIRM RELATIVE CONTRIBUTIONS OF AUTHORS IN
MULTI-AUTHORED WORKS**

I, Sumona Mukhuty (PhD), confirm that the contribution of co-authors in the following work is as follows:

Bozionelos, N., Mukhuty, S., Kostopoulos, K., Bozionelos, G., & Blenkinsopp, J. (2021). United Nations civilian volunteers in UN hot spots: What makes them apply for yet another assignment? Manuscript under revision

Bozionelos, N.: 30%

Mukhuty, S.: 20%

Kostopoulos, K.: 20%

Bozionelos, G. [Georgios]: 20%

Blenkinsopp, J.: 10%

Date: 24.8.2021

Signed: *S. Mukhuty*.

Sumona Mukhuty PhD FHEA CMBE
Education Lead, Department of People and Performance
Faculty Lead for Peer Assisted Learning Scheme I Faculty of Business & Law
Manchester Metropolitan University
Email: s.mukhuty@mmu.ac.uk

References

- Adkins, C. L., & Premeaux, S. F. (2012). Spending time: The impact of hours worked on work–family conflict. *Journal of Vocational Behaviour*, 80, 380-389.
- Adler, P. S., & Kwon, S-W (2002). Social capital: Prospects for a new concept. *Academy of Management Review*, 27, 17-40.
- Aguinis, H., Edwards, J. R., & Bradley, K. J. (2016). Improving our understanding of moderation and mediation in strategic management research. *Organizational Research Methods*, 20(4), 665-685.
- Ahlvik, C., Smale, A., & Sumelius, J. (2016). Aligning corporate transfer intentions and subsidiary HRM practice implementation in multinational corporations. *Journal of World Business*, 51(3), 343-355.
- Akkan, E., Lee, Y.-T., & Reiche, B.S. (2022). How and when do prior international experiences lead to global work? A career motivation perspective. *Human Resource Management*, 61(1), 117-132.
- Akkermans, J., & Kubasch, S. (2017). Trending topics in careers: A review and future research agenda. *Career Development International*, 22(6), 586-627.
- Al Soufi, A. H. (2005). Cultural differences between Arabs and Danes: The intracultural diversity's effect on intercultural negotiations. Unpublished Master's Thesis. Aarhus University, Denmark.
- Alderotti, G., Rapallini, C., & Travesco, S. (2023). The big five personality traits and earnings: A meta-analysis. *Journal of Economic Psychology*, 94, 102570.
- Alfes, K., Antunes, B., & Shantz, A. D. (2017). The management of volunteers: What can human resources do? A review and research agenda. *International Journal of Human Resource Management*, 28(1), 62–97.
- Allen, T. D., Eby, L. T., Poteet, M. L., Lentz, E., & Lima, L. (2004). Career benefits associated with mentoring for protégés: A meta-analysis. *Journal of Applied Psychology*, 89, 127-136.
- Alvi, A. K., Jabeen, Z., & Kaur, P. (2020). Relationship of career success and organizational performance through the path of business strategy. *International Journal of Economics, Management and Accounting*, 28(1), 1-33.
- Andersen, N. (2021). Mapping the expatriate literature: A bibliometric review of the field from 1998 to 2017 and identification of current research fronts. *International Journal of Human Resource Management*, 32(22), 4687-4724.

- Anderson, C., Hildreth, J. A., & Howland, L. (2015). Is the desire for status a fundamental human motive? A review of the empirical literature. *Psychological Bulletin*, 141(3), 574-601.
- Andresen, M., Bergdolt, F., Margenfeld, J. & Dickmann, M. (2014). Addressing international mobility confusion – developing definitions and differentiations for self-initiated and assigned expatriates as well as migrants. *International Journal of Human Resource Management*, 25(16), 2295 – 2318.
- Andresen, M., Biemann, T., & Pattie, M. W. (2015). What makes them move abroad? Reviewing and exploring differences between self-initiated and assigned expatriation. *International Journal of Human Resource Management*, 26, 932-947.
- Andresen, M., Pattie, M. W., & Hippler, T. (2020). What does it mean to be a ‘self-initiated’ expatriate in different contexts? A conceptual analysis and suggestions for future research. *International Journal of Human Resource Management*, 31(1), 174–201.
- Andresen, M., Suutari, V., Muhr, S. L., Barzantny, C., & Dickmann, M. (2023). Guest editorial: Careers of self-initiated expatriates: Exploring the impact of context. *Career Development International*, 28(4), 333-347.
- Anseel, F. (2017). Agile learning strategies for sustainable careers: A review and integrated model of feedback-seeking behavior and reflection. *Current Opinion in Environmental Sustainability*, 28, 51-57.
- Antonakis, J., Bendahan, S., Jacquart, P., & Lalive, R. (2010). On making causal claims: A review and recommendations. *Leadership Quarterly*, 21, 1086-1120.
- Arnold, J. (1997). *Managing careers into the 21st century*. London: Chapman.
- Arora, R., & Rangnekar, S. (2016). Dispositional traits influence on mentoring relationships: A revisit to the Big Five personality model in the Indian context. *South Asian Journal of Global Business Research*, 5(3), 306-322.
- Arseneault, R. (2020). Intercultural adjustment challenges of Korean and Canadian self-initiated expatriates in the workplace: An exploratory bidirectional investigation. *International Journal of Cross Cultural Management*, 20(2), 181–199.
- Arthur, M. B., Hall, D. T., & Lawrence, B. S. (Eds.) (1989a). *Handbook of career theory*. Cambridge, UK: Cambridge University Press.
- Arthur, M. B., Hall, D. T., & Lawrence, B. S. (1989b). Generating new directions in career theory: The case for a transdisciplinary approach. In M. B. Arthur, D. T. Hall & B. S. Lawrence (Eds.), *Handbook of career theory* (pp. 7-25). Cambridge: Cambridge University Press.
- Arthur, M. B., & Rousseau, D. M. (1996). The boundaryless career as a new employment principle. In M. G. Arthur & D. M. Rousseau (Eds.), *The boundaryless career* (pp. 3-20). New York: Oxford University Press.

Association of Business Schools (ABS) (2015). *ABS Academic Journal Guide 2015*. London: Association of Business Schools.

Asuquo, P. N., & Inaja, A. E. (2013). Fostering sustainable career development and employability among young people in the changing world of work: Employers' perspective. *Procedia-Social and Behavioral Sciences*, 84, 1492-1499.

Austin, A., (2020, September 25). Pension warnings issued as life expectancy grows. *FT Adviser*. <https://www.ftadviser.com/pensions/2020/09/25/pension-warnings-issued-as-life-expectancy-grows/>

Avanzi, L., Savadori, L., Fraccaroli, F., Ciampa, V., & Van Dick, R. (2022). Too-much-of-a-good-thing? The curvilinear relation between identification, overcommitment, and employee well-being. *Current Psychology*, 41(3), 1256-1266.

Bagdadli, S., & Gianecchini, M. (2019). Organizational career management practices and objective career success: A systematic review and framework. *Human Resource Management Review*, 29(3), 353-370.

Bakker, A. B. (2005). Flow among music teachers and their students: The crossover of peak experiences. *Journal of Vocational Behavior*, 66, 26-44.

Bañeres, D., & Conesa, J. (2017). A life-long learning recommender system to promote employability. *International Journal of Emerging Technologies in learning*, 12(6), 77-93.

Baranski, E. N., Morse, P. J., & Dunlop, W. L. (2017). Lay conceptions of volitional personality change: From strategies pursued to stories told. *Journal of Personality*, 85, 285–299.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.

Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and performance at the beginning of the new millennium: What do we know and where do we go next? *International Journal of Selection and Assessment*, 9(1), 9–30.

Barthauer, L., Kaucher, P., Spurk, D., & Kauffeld, S. (2020). Burnout and career (un)sustainability: Looking into the blackbox of burnout triggered career turnover intentions. *Journal of Vocational Behavior*, 117, 103334.

Baruch, Y. (2015). Organizational and labor markets as career ecosystem. In A. De Vos & B. I. J. M. Van der Heijden (Eds.), *Handbook of research on sustainable careers* (pp. 364-380). Cheltenham, UK: Edward Elgar.

Baruch, Y., & Bozionelos, N. (2011). Career issues. In S. Zedeck (Ed.), *APA Handbook of Industrial and Organizational Psychology, Volume 2: Selecting & Developing*

Members of the Organization (pp. 67-113). Washington DC: American Psychological Association.

Baruch, Y., Altman, Y., & Tung, R. L. (2016). Career mobility in a global era: Advances in managing expatriation and repatriation. *Academy of Management Annals*, 10(1), 841-899.

Baruch, Y., & Rousseau, D. M. (2019). Integrating psychological contracts and ecosystems in career studies and management. *Academy of Management Annals*, 13(1), 84-111.

Batista, P. D., Campitelli, M. G., Kinouchi, O., & Martinez, A. S. (2006). Is it possible to compare researchers with different scientific interests? *Scientometrics*, 68, 179-189.

Becker, G. S. (1964). *Human capital*. New York: National Bureau of Economic Research.

Bell, N. E., & Staw, B. M. (1989). People as sculptors versus sculpture: the roles of personality and personal control in organizations. In M. B. Arthur, D. T. Hall & B. S. Lawrence (Eds.), *Handbook of career theory* (pp. 232-251). Cambridge: Cambridge University Press.

Bergmann, G. (1960). Ineffability, ontology and method. *The Philosophical Review*, 69(1) 18-40.

Bertenthal, B. I. (2007). Dynamical systems: It is about time! In S. M. Boker & M. J. Wenger (Eds.), *Data analytic techniques for dynamical systems*. The Notre Dame Series on Quantitative Methodology (pp. 1-24). Mahwah, NJ: Laurence Erlbaum Associates.

Bird, A. (2010). The epistemology of science: A bird's yet view. *Synthese*, 175, 5-16.

Bleidorn, W., Kandler, C., & Caspi, A. (2014). The behavioural genetics of personality development in adulthood; Classic, contemporary, and future trends. *European Journal of Personality*, 28(3), 244-255.

Bollen, K. A. (1989). *Structural equations with latent variables*. New York: Wiley.

Borna, E., Afrasiabi, H., Sadati, A. K., & Gifford, W. (2022). Women's perspectives on career successes and barriers: A qualitative meta-synthesis. *Social Science Information Sur les Sciences Sociales*, 61(2-3), 318-344.

Bourdieu, P. (1980). Le capital social: Notes provisoires [Social capital: Provisional notes]. *Actes de la Recherche en Sciences Sociales*, 31, 2-3.

Bourdieu, P. (1986). The forms of capital. In J. E. Richardson (Ed.), *Handbook of theory for research in the sociology of education* (pp. 241-258). New York: Greenwood Press.

Bowden, B. G. (2019). Empiricism, epistemology and modern postmodernism: A critique. *Qualitative Research in Organizations and Management*, 14(4), 481-497.

Bozionelos, G. (2023). The questions mentoring answers and those it cannot answer yet. Manuscript under preparation.

Bozionelos, N. (2003). Intra-organizational network resources: Relation to career success and personality. *International Journal of Organizational Analysis*, 11, 41-66.

Bozionelos, N. (2004). The relationship between disposition and career success: A British study. *Journal of Occupational and Organizational Psychology*, 77, 403-420.

Bozionelos, N. (2015). Social capital and careers: Indisputable evidence and note for caution. In De Vos, A. & Van der Heijden B. I. J. M. (Eds.), *Handbook of Research on Sustainable Careers* (pp. 67-82). Northampton, MA: Edward Elgar Publishing.

Bozionelos, N., & Bozionelos, G. (2010). Mentoring received by protégés: Its relation to personality and mental ability in the Anglo-Saxon organizational environment. *International Journal of Human Resource Management*, 21, 509-529.

Bozionelos, N., Lan, Y., & Xu, Y. (2023). CEO gender and firm performance: It is the predecessor-successor gender combination that matters! *International Journal of Business, Economics and Management*, 10(4), 54-69.

Brass, D. J. (1992). Power in organizations: A social network perspective. In G. Moore & J. A. Whitt (Eds.), *Research in politics and society: The political consequences of social networks* (Vol. 4, pp. 295-323). Greenwich, CT: JAI Press.

Bratun, U., Asaba, E., & Zurc, J. (2023). Motives of retirement-aged workers and the importance of doing, being, becoming, and belonging: A systematic review of qualitative studies. *Journal of Occupational Science*, 30(3), 420-437.

Brewster, C., Sparrow, P., Vernon, G., & Houldsworth, E. (2011). *International human resource management* (2nd ed.). London: CIPD.

Brewster, C., Suutari, V., & Waxin, M-F., (2021). Two decades of research into SIEs and what do we know? A systematic review of the most influential literature and a proposed research agenda. *Journal of Global Mobility*, 9(3), 311-337.

Brown, N. A., & Sherman, R. A. (2014). Predicting interpersonal behavior using the Inventory of individual differences in the lexicon (IIDL). *Journal of Research in Personality*, 51(1), 23-38.

Bujacz, A., Eib, E., & Toivanen, S. (2020). Not all are equal: A latent profile analysis of well-being among the self-employed. *Journal of Happiness Studies*, 21(5), 1661-1680.

Burke, K. M. (2009). Nonlinearity: The history and philosophy of the science. Paper presented at the seventh Biennial Qualitative Research Conference: Generations in Qualitative Research. February 6-7, St Louis, MO, USA.

- Campo, M., Laborde, S., & Mosley, E. (2016). Emotional intelligence training in team sports: The influence of a season long intervention program on trait emotional intelligence. *Journal of Individual Differences*, 37(3), 152-158.
- Carter, W. R., Nesbit, P. L., Badham, R. J., Parker, S. K., & Sung, L.-K. (2018). The effects of employee engagement and self-efficacy on job performance: A longitudinal field study. *The International Journal of Human Resource Management*, 29(17), 2483–2502.
- Cavusgil, S., Knight, G., & Riesenbergs, J. (2019). *International business: The new realities* (fifth ed.). New York: Pearson.
- Cerdin, J.-L., & Selmer, J. (2014). Who is a self-initiated expatriate? Towards conceptual clarity of a common notion. *International Journal of Human Resource Management*, 25, 1281-1301.
- Ceric, A., & Crawford, H. (2016). Attracting SIEs: Influence of SIE motivation on their location and employer decisions. *Human Resource Management Review*, 26, 136–48
- Chartered Association of Business Schools (CABS) (2021). *Academic Journal Guide*. London: Chartered Association of Business Schools.
- Chellaraj, G., Maskus, K.E., & Mattoo, K. (2008). The contribution of international graduate students to US innovation. *Review of International Economics*, 16, 444–462.
- Chen, X., Moon, N. A., Davy, A. K., Hong, J., & Gabrenya, W. K. (2022). Expatriate effectiveness: From conceptualization to operationalization. *International Journal of Cross Cultural Management*, 22(3), 459-485.
- Choi, S. (2019). Breaking through the glass ceiling: Social capital matters for women's career success. *International Public Management Journal*, 22(2), 295-320.
- Chu, W. X., Liu, H. G., & Fang, F. (2021). A tale of three excellent Chinese EFL teachers: Unpacking teacher professional qualities for their sustainable career trajectories from an ecological perspective. *Sustainability*, 13, 6721.
- Chudzikowski, K., Guftafsson, S., & Tams, S. (2020). Constructing alignment for sustainable careers: Insights from the career narratives of management consultants. *Journal of Vocational Behavior*, 117, 103312.
- Chun, J. U., Litzky, B. E., Sosik, J. J., Bechtold, D. C., & Godshalk, V. M. (2010). Emotional intelligence and trust in formal mentoring programs. *Group & Organization Management*, 35(4), 421–455.
- Clipa, F., & Clipa, R. I. (2009). Cultural diversity and human resource management in multinational companies. CES Working Papers, 1(1), 10-16. Centre for European Studies, Alexandru Ioan Cuza University, Romania.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95 - S120.

Cotton, R. D., Shen, Y., & Livre-Tarandach, R. (2011). On becoming extraordinary: The content and structure of the developmental networks of major league baseball hall of famers. *Academy of Management Journal*, 54, 15-46.

Covington, I. K., Molkowska, W., & Elsey, V. (2023). Elite high-performing military leaders: An evidence-based analysis on the role of resilience in military careers. In n R. S. J. Fotinatos-Ventouratos, C. L. Cooper, & A-S. G. Antoniou (Eds.), *Resilience in modern day organisations* (pp. 189-212). (Series title: Current Issues in Work and Organizational Psychology). London: Taylor & Francis.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). London: Sage.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Thousand Oaks, CA: Sage.

Csikszentmihalyi, M., Abuhamdeh, S. & Nakamura, J. (2005). Flow. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 598-608). New York: Guilford Press.

Dattani, S., Rodes-Guiroa, Ritchie, H., Ortiz-Ospina, E., & Roser, M. (2023). Life expectancy. *Our World in Data*. <https://ourworldindata.org/life-expectancy>

De Raad, B. (2005). The trait-coverage of emotional intelligence. *Personality and Individual Differences*, 38, 673-687.

De Vos, A., & Van der Heijden, B. I. J. M. (2015). *Handbook of research on sustainable careers*. Cheltenham, UK: Edward Elgar.

De Vos, A., & Van der Heijden, B. I. J. M. (2017). Current thinking on contemporary careers: the key roles of sustainable HRM and sustainability of careers. *Current Opinion in Environmental Sustainability*, 28, 41-50.

De Vos, A., Van der Heijden, B. I. J. M., & Akkermans, J. (2020). Sustainable careers: Towards a conceptual model. *Journal of Vocational Behavior*, 117, 103196.

DeFillippi, R. J., & Arthur, M. B. (1994). The boundaryless career: A competency-based perspective. *Journal of Organizational Behavior*, 15, 307-324.

Dickmann, M., & Cerdin, J.-L. (2018). Exploring the development and transfer of career capital in an international governmental organization. *International Journal of Human Resource Management*, 29(15), 2253–2283.

Dickmann, M., Suutari, V., Brewster, C., Makela, L., Tanskanen, J. and Tornikoski, C. (2018). The career competencies of self-initiated and assigned expatriates: Assessing the development of career capital over time. *International Journal of Human Resource Management*, 29(16), 2353-2371.

Digman, J. M. (1990). Personality structure: Emergence of the five factor model. *Annual Review of Psychology*, 41, 417–440.

Doherty, N. (2013). Understanding the self-initiated expatriate: A review and directions for future research. *International Journal of Management Reviews*, 15, 447-469.

Doherty, N., Richardson, J., & Thorn, K. (2013). Self-initiated expatriation and self-initiated expatriates: Clarification of the research stream. *Career Development International*, 18, 97-112.

Donald, W. E., Ashleigh, M. J., & Baruch, Y. (2018). Students' perceptions of education and employability: Facilitating career transition from higher education into the labor market. *Career Development International*, 23(5), 513-540.

Donald, W. E., van der Heijden B. I. J. M., & Baruch, Y. (2024). Introducing a sustainable career ecosystem: Theoretical perspectives, conceptualization, and future research agenda. *Journal of Vocational Behavior*, 151, 103989.

Donnelly, R. (2014). Tensions and challenges in the management of diversity and inclusion in IT services multinationals in India. *Human Resource Management*, 54, 199-215.

Eby, L.T., Allen, T. D., Evans, S. C., Ng, T., & DuBois, D. L. (2008). Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals. *Journal of Vocational Behavior*, 72, 254-267.

Edwards, J. R. (1991). Person-job fit: A conceptual integration, literature review, and methodological critique. In C. L. Cooper & I. T. Robertson (Eds.), *International Review of Industrial and Organizational Psychology*, vol. 6 (pp. 283–357). New York: Wiley.

Edwards, J. R. (1996). An Examination of competing versions of the person-environment fit Approach to Stress. *The Academy of Management Journal*, 39(2), 292-339.

Eichstaedt, J. C., Kern, M. L., Yaden, D. B., Schwartz, H. A., Giorgi, S., Park, G., ..., Ungar, L. H. (2021). Closed- and open-vocabulary approaches to text analysis: a review, quantitative comparison, and recommendations. *Psychological Methods*, 26(4), 398-427.

Else, V., Van der Heijden, B., Smith, M. A., & Moss, M. (2022). Examining the role of employability as a mediator in the relationship between psychological capital and

objective career success amongst occupational psychology professionals. *Frontiers in Psychology*, 13, 958226.

Fang, R. L., Zhang, Z., & Shaw, J. D. (2021). Gender and social network brokerage : A meta-analysis and field investigation. *Journal of Applied Psychology*, 106(11), 1630-1654.

Feiler, D. C., & Kleinbaum, A. M. (2015). Popularity, similarity, and the network extraversion bias. *Psychological Science*, 26(5), 593-603.

Feng, C. L., Cooper, B., & Zhu, C. J. H. (2023). How and when job security reduces resistance to change in the context of organizational change. *Journal of Applied Behavioral Science*, 59, 426-447.

Ferrari, C., Marchese, M., & Tei, A. (2018). Shipbuilding and economic cycles: A non-linear econometric approach. *Maritime Business Review*, 3(2), 112-127.

Finaccord (2014). *Global expatriates: Size, segmentation and forecast for the worldwide market*. London: Finaccord Ltd.

Finaccord (2017). *Global expatriates: Size, segmentation and forecasts for the worldwide market*. London: Finaccord Ltd.

Finaccord (2021). *Global expatriates: Size, segmentation and forecasts for the worldwide market*. London: Finaccord Ltd.

Fletcher, J. K., & Ragins, B. R. (2007). Stone center relational cultural theory: A window on relational mentoring. In B. R. Ragins & K. E. Kram (Eds.), *Handbook of mentoring at work* (pp. 373-399). Thousand Oaks, CA: Sage.

Fombrun, C. J. (1983). Attributions of power across a social network. *Human Relations*, 36, 493–508.

Fontinha, R., De Cuyper, N., Williams, S., & Scott, P. (2018). The impact of HRM, perceived employability, and job insecurity on self-initiated expatriates' adjustment to the host country. *Thunderbird International Business Review*, 60, 861-871.

Forret M. L., & T. W. (2001). Dougherty Correlates of Networking Behavior for Managerial and Professional Employees. *Group and Organization Management*, 26(3), 283-311

Forrier, A., & Sels, L. (2003). The concept employability: A complex mosaic. *International Journal of Human Resources Development and Management*, 3, 102-124.

French, J. R. P., Caplan, R. D., & Harrison, R. V. (1982). *The mechanisms of job stress and strain*. Chichester: Wiley.

Gattiker, U. E., & Larwood, L. (1986). Subjective career success: A study of managers and support personnel. *Journal of Business and Psychology*, 1, 78-94.

Ghauri, P., & Gronhaug, K. (2010). *Research methods in business studies* (4th ed.). Harlow, UK: Pearson.

Ghosh, R. (2014). Antecedents of mentoring support: A meta-analysis of individual, relational, and structural or organizational factors. *Journal of Vocational Behavior*, 84, 367-384.

Ghosh, R., & Reio, T. J. Jr. (2013). Career benefits associated with mentoring for mentors. A meta-analysis. *Journal of Vocational Behavior*, 83, 106-116.

Glassman, L. R., & Albarracin, D. (2006). Forming attitudes that predict future behavior: A meta-analysis of the attitude-behavior relation. *Psychological Bulletin*, 132(5), 778-822.

Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48, 26–34.

Gordon, S. L. (1989). Institutional and impulsive orientations in selective appropriating emotions to self. In D. D. Franks & D. McCarthy (Eds.). *The sociology of emotions: Original essays and research papers* (pp. 115–136). Greenwich, CT: JAI Press.

Grandey, A. A., Fisk, G. M., & Steiner, D. D. (2005). Must “service with a smile” be stressful? The moderating role of personal control for American and French employees. *Journal of Applied Psychology*, 90, 893–904.

Grass, J., Dörendahl, J., Losereit, T., Greiff, S., & Strobel, A. (2023). Thinking to promote happiness: Need for cognition, subjective well-being, and burnout in different populations. *Journal of Research in Personality*, 105, 104383.

Gray, D. E. (2014). *Doing research in the real world* (3rd Ed.). London: Sage.

Graziano, A. M., & Raulin, M. L. (2009). *Research methods: A process of inquiry*. New York: Pearson.

Greenhaus, J. H., Callanan, G. A., & Godshalk, V. M. (2010). *Career management* (4th ed.). New York: Sage.

Group and Organization Management (2016). 2016 Outstanding articles. https://journals.sagepub.com/topic/collections-gom/gom-4-2016_outstanding_articles/gom

Guo, L., & Baruch, Y. (2021). The moderating role of a city's institutional capital and people's migration status on career success in China. *Human Relations*, 74(5), 678-704.

Hall, D. T. (1976). *Careers in organizations*. Pacific Palisades, CA: Goodyear.

Hall, D. T. (2002). *Careers in and out organizations*. Thousand Oaks, CA: Sage.

Hall, D. T. (2004). The protean career: A quarter-century journey. *Journal of Vocational Behavior*, 65, 1, 1-13.

Hall, D. T., Lee, M. D., Kossek, E. E., & Heras, M. L. (2021). Pursuing career success while sustaining personal and family well-being: A study of reduced-load professionals over time. *Journal of Social Issues*, 68, 742-766.

Hamilton, S. (2019, October 2). The nonprofit sector is growing: Why nonprofits should act now to leverage their position. *Forbes*.

<https://www.forbes.com/sites/forbescoachescouncil/2019/10/02/the-nonprofit-sector-is-growing-why-nonprofits-should-act-now-to-leverage-their-position/?sh=7b7fba6e7b52>

Harzing, A. W. (2007). Publish or Perish. Available from:
<http://www.harzing.com/pop.htm>

Harzing, A. W. (2023). *Using the Publish or Perish software: Crafting your career in academia*. London: Tarma Software Research.

Hay, C.S. (2017) The interdependence of intra- and inter-subjectivity in constructivist institutionalism. *Critical Review*, 29, 235-247.

Haenggli, M., Hirschi, A., Rudolph, C. W., & Peiro, J. M. (2021). Exploring the dynamics of protean career orientation, career management behaviors, and subjective career success: An action regulation theory approach. *Journal of Vocational Behavior*, 131, 103650.

Heffernan, M., & Dundon, T. (2016). Cross-level effects of high-performance work systems (HPWS) and employee well-being: The mediating effect of organizational justice. *Human Resource Management Journal*, 26(2), 211-231.

Henke, J. B., Jones, S. K., & O'Neill, T. A. (2022). Skills and abilities to thrive in remote work: What have we learned. *Frontiers in Psychology*, 13, 893895

Herman, C., & Lewis, S. (2012). Entitled to a sustainable career? Motherhood in science, engineering, and technology. *Journal of Social Issues*, 68, 767–789.

Heslin, P. A., Keating, L. A., & Ashford, S. J. (2020). How being in learning mode may enable a sustainable career across the lifespan. *Journal of Vocational Behavior*, 117, 103324.

Hirsch, J. E. (2005). An index to quantify an individual's scientific research output. *Proceedings of the National Academy of Sciences*, 102(46), 16569-16572.

Hirschi, A., Jaensch, V. K., & Hermann, A. (2017). Protean career orientation, vocational identity, and self-efficacy: An empirical clarification of their relationship. *European Journal of Work and Organizational Psychology*, 26, 208-220.

Hirschi, A., Steiner, R., Burmeister, A., & Johnston, C. S. (2020). A whole-life perspective of sustainable careers: The nature and consequences of nonwork orientations. *Journal of Vocational Behavior*, 117, 103319.

Hochschild, A. R. (1983). *The managed heart: Commercialization of human feeling*. Berkeley, CA: University of California Press.

Hogan, R. (1998). Reinventing personality. *Journal of Social and Clinical Psychology*, 17(1), 1-10.

Holden, M. T. & Lynch, P. (2004). Choosing the appropriate methodology: Understanding research philosophy. *Marketing Review*, 4(4), 397-409.

Holtz, P., & Odag, O. (2020). Popper was not a positivist: Why critical rationalism could be an epistemology for qualitative as well as quantitative social scientific research. *Qualitative Research in Psychology*, 17, 541-564.

House, E. (1991). Realism in research. *Educational Researcher*, 20(6), 2-25.

Hu, C., Wang, S., Wang, Y-H., Chen, C., & Jiang, D-Y. (2016). Understanding attraction in formal mentoring relationships from an affective perspective. *Journal of Vocational Behavior*, 94, 104-113.

Hu, C. Y., Zhang, S. H., Chen, Y. Y., & Griggs, T. L. (2022). A meta-analytic study of subjective career plateaus. *Journal of Vocational Behavior*, 132, 103649.

Hudson, N. W., & Roberts, B. W. (2014). Goals to change personality traits: Concurrent links between personality traits, daily behavior, and goals to change oneself. *Journal of Research in Personality*, 53, 68–83.

Hughes, E. C. (1937). Institutional office and the person. *American Journal of Sociology*, 43, 404-413.

Hülsheger, U. R., & Schewe, A. F. (2011). On the costs and benefits of emotional labor: A meta-analysis of three decades of research. *Journal of Occupational Health Psychology*, 16, 361–1361.

Hume, D. (1739/2006). *A treatise of human nature*. London: John Noon/ebooks@Adelaide.

Information Age Publishing (2021). *IA Book Series: Research in careers*. <https://www.infoagepub.com/series/Research-in-careers> on June 30 2021

Inkson, K., Arthur, M. B., Pringle, J., & Barry, S. (1997). Expatriate assignment versus overseas experience: Contrasting models of international human resource development. *Journal of World Business*, 32, 351-368.

Isakvic, A. A., & Whitman, M. F. (2013). Self-initiated expatriate adjustment in the United Arab Emirates: A study of academics. *Journal of Global Mobility*, 1(2), 161-186.

Iversen, J., Malchow-Moller, N., & Sorensen, A. (2010). Returns to schooling in self-employment. *Economic Letters*, 109, 179-182.

Jiang, L., Kling, G., & Bo, H. (2021). Does executive compensation affect firms' acquisition decisions? Evidence from China. *Asia Pacific Business Review*, 27(5), 731-748.

Jiménez, P. J., Gras, J. A. I., Rosel, J., & Miedes, A. C. (2000). Modelling non-linear relationships: Theoretical aspects. *Psicothema*, 12(S2), 315-319.

John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative big-five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114–158). New York: Guilford Press.

Jokinen, T., Brewster, C., & Suutari, V. (2008). Career capital during international work experiences: Contrasting self-initiated expatriate experiences and assigned expatriation. *International Journal of Human Resource Management*, 19, 979-998.

Jokisaari, M., & Nurmi, J-E. (2005). Company matters: Goal-related social capital in the transition to working life. *Journal of Vocational Behavior*, 67, 413-428.

Jöreskog, K. G. (1970). A general method for analysis of covariance structures. *Biometrika*, 57, 239–251.

Jöreskog, K. G., & Sörbom, D. (1979). *Advances in factor analysis and structural equation models*. New York: University Press of America.

Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The big five personality traits, general mental ability, and career success across the life span. *Personnel Psychology*, 52, 621–652.

Kammeyer-Mueller, J. D., & Judge, T. A. (2008). A quantitative review of mentoring research: Test of a model. *Journal of Vocational Behavior*, 72, 269-283.

Kaplan, D. (2009). *Structural equation modelling: Foundations and extensions* (2nd ed.). Newbury Park, CA: Sage.

Karlsen I. B., Borg V., & Meng A. (2022). Exploring the use of selection, optimization, and compensation strategies beyond the individual level in a workplace context – A qualitative case study. *Frontiers in Psychology*, 13, 832241.

Katz, I. M., Rudolph, C. W., & Zacher, H. (2019). Age and career commitment: Meta-analytic tests of competing linear versus curvilinear relationships. *Journal of Vocational Behavior*, 112, 396-416.

Kelly, C. M., Strauss, K., Arnold, J., & Stride, C. (2020). The relationship between leisure activities and psychological resources that support a sustainable career: The role of leisure seriousness and work-leisure similarity. *Journal of Vocational Behavior*, 117, 103340.

Kelly, G & Conroy C. M. (2023). Premature return of self-initiated expatriates in the spectre of a global crisis: A sensemaking perspective. *The International Journal of Human Resource Management*, 35(4), 587-620.

Keshvarparast, A., Battini, D., Battaia, O., & Pirayesh, A. (2023). Collaborative robots in manufacturing and assembly systems: Literature review and future research agenda. *Journal of Intelligent Manufacturing*. DOI: 10.1007/s10845-023-02137-w

Knight, G. A. & Liesch, P. W. (2016). Internationalization: From incremental to born global. *Journal of World Business*, 51(1), 93-102.

Kolade, O., & Owoseni, A. (2022). Employment 5.0: The work of the future and the future of work. *Technology in Society*, 71, 102086.

Kone, Z., & Sumption, M. (2019). Migration Observatory Briefing: Permanent or temporary: How long do migrants stay in the UK? Oxford, UK: COMPASS, University of Oxford.

Kostopoulos, I. (2018). Do empowered front-line employees perform better? A non-linear approach and the role of service complexity. *European Management Review*, 16, 229-242.

Kram, K. E. (1985). *Mentoring at work: Developmental relationships in organizational life*. Glenview, IL: Scott, Foresman.

Kram, K. E., & Isabella, L. A. (1985). Mentoring alternatives: The role of peer relationships in career development. *Academy of Management Journal*, 28, 110-132.

Kristof, A. L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement and implications. *Personnel Psychology*, 49(1), 1–49.

Landis, B. (2016). Personality and social networks in organizations: A review and future directions. *Journal of Organizational Behaviour*, 37, S107-S121.

Le, H., Oh, I-S., Robbins, S. B., Ilies, R., Holland, E., & Westrick, P. (2011). Too much of a good thing: Curvilinear relationships between personality traits and job performance. *Journal of Applied Psychology*, 96(1), 113-133.

Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice and performance. *Journal of Vocational Behavior*, 45, 79–122.

Lent, R. W., Brown, S. D., & Hackett, G. (1996). Career development from a social cognitive perspective. In D. Brown, & L. Brooks (Eds.), *Career choice and development* (3rd ed., pp. 373-421). San Francisco: Jossey-Bass.

Lent, R. W., Brown, S. D., Sheu, H. B., Schmidt, J., Brenner, B. R., & Gloster, C. S. (2005). Social cognitive predictors of academic interests and goals in engineering: Utility

for women and students at historically black universities. *Journal of Counseling Psychology*, 52, 84–92.

Lewis-Beck, C., & Lewis-Beck, M. (2015). *Applied regression: An introduction* (2nd ed.). Los Angeles: Sage

Li, L. (2022). Reskilling and upskilling the future-ready workforce for industry 4.0 and beyond. *Information Systems Frontiers*. DOI: 10.1007/s10796-022-10308-y

Liang, J., & Gong, Y. (2013). Capitalizing on proactivity for informal mentoring received during early career: The moderating role of core self-evaluations. *Journal of Organizational Behavior*, 34(8), 1182-1201.

Lindenberger, J., & Watson, D. (2015, February 12). Use mentoring to attract and retain the best employees. *Business Know-How*.
<https://www.businessknowhow.com/manage/mentorattract.htm>

Lo Presti, A., Van der Heijden, B., Briscoe, J. P., & De Rosa, A. (2023). *Career Development International*, 28(2), 180-195.

Lozano, J. H. (2018). The situational strength hypothesis and the measurement of personality. *Social Psychological and Personality Science*, 9(1), 70-79.

Machado, C. F. (2022). Self-initiated expatriation: A ‘new’ management challenge – an analysis based on bibliometrics. *Administrative Sciences*, 12, 136.

MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation analysis. *Annual Review of Psychology*, 58, 593-614.

MacMinn, R., Lin, Y. J., & Shi, T. X. (2023). Buy-ins, buy-outs, longevity bonds, and the creation of value. *Journal of Demographic Economics*, 89(3), 329-347.

Maruping, L. M., Venkatesh, V., Thatcher, S. M. B., & Patel, P. C. (2015). Folding under pressure or rising to the occasion? Perceived time pressure and the moderating role of team temporal leadership. *Academy of Management Journal*, 58(5), 1313-1333.

Maxwell, J. A. (2010). Using numbers in qualitative research. *Qualitative Inquiry*, 16, 475–482.

Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey (Ed.), *Emotional development and emotional intelligence* (pp. 3–31). New York: Basic Books.

McCormick, L., & Donohue, R. (2019). Antecedents of affective and normative commitment of organisational volunteers. *International Journal of Human Resource Management*, 30(18), 2581–2604.

McDonald, S. (2011). What’s in the “old boys” network? Accessing social capital in gendered and racialized networks. *Social Networks*, 33, 317-330.

McManus, S. E., & Russell, J. E. A. (2007). Peer mentoring relationships. In B. R. Ragins & K. E. Kram (Eds.), *Handbook of Mentoring at Work* (pp. 273-297). Thousand Oaks, CA: Sage.

McNulty, Y., & Brewster, C. (2017). Theorizing the meaning(s) of ‘expatriate’: establishing boundary conditions for business expatriates. *International Journal of Human Resource Management*, 28, 27-61

Mello, R., Dickmann, M., Brewster, C., & Suutari, V. (2020). The long-term effects of self-initiated expatriation on the future careers of assignees. In M. Andresen, C. Brewster and V. Suutari (Eds), *Self-Initiated Expatriates in Context: Recognizing Space, Time, and Institutions* (pp. 91-109). Abingdon: Taylor and Francis.

Mello, R., Suutari, V., & Dickmann, M. (2023). Taking stock of expatriates’ career success after international assignments: A review and future research agenda. *Human Resource Management Review*, 33, 100913.

Meyer, R. D., Dalal, R. S., & Hermida, R. (2009). A review and synthesis of situational strength in the organizational sciences. *Journal of Management*, 36(1), 121-140.

Miao, R., Yu, J., Bozionelos, N., & Bozionelos, G. (2023). Organizational career growth and high-performance work systems: The roles of job crafting and organizational innovation climate. *Journal of Vocational Behavior*, 143, 103879.

Mischel, W. (1977). The interaction of person and situation. In D. Magnusson & N. S. Endler (Eds.), *Personality at the crossroads: Current issues in interactional psychology* (pp. 333–352). Hillsdale, NJ: Lawrence Erlbaum.

Moon, J. S., & Choi, S. B. (2017). The Impact of Career Management on Organizational Commitment and the Mediating Role of Subjective Career Success: The Case of Korean R&D Employees. *Journal of Career Development*, 44(3), 191-208.

Morris, J. A., & Feldman, D. C. (1996). The dimensions, antecedents, and consequences of emotional labor. *Academy of Management Review*, 21, 986–1010.

Murphy, K. R., & Dziewieczynski, J. L. (2005). Why don’t measures of broad dimensions of personality perform better as predictors of job performance? *Human Performance*, 18, 343-357.

Nam, T. (2019). Technology usage, expected job sustainability, and perceived job insecurity. *Technological and Social Change*, 138, 155-165.

Newman, K. L. (2011). Sustainable careers: Lifecycle engagement in work. *Organizational Dynamics*, 40(2), 136-143.

Ng, T. W. H., & Feldman, D. C. (2014). Subjective career success: A meta-analytic review. *Journal of Vocational Behavior*, 85(2), 167-179.

Ng, T. W. H., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology*, 58(2), 367–408.

Nicholson, N., & De Waal-Andrews, W. (2005). Playing to win: Biological imperatives, self-regulation, and trade-offs in the game of career success. *Journal of Organizational Behavior*, 26, 137-154.

Nimmi, P. M., Joseph, G., & Donald, W. E. (2022). Is it all about perception? A sustainability viewpoint on psychological capital and life well-being of management graduates. *Higher Education Skills and Work-Based Learning*, 12(2), 384-398.

Nimmi, P. M., Mukundan, S. P., Jose, G., Tesi, A., & Alias, R. (2013). Future of work: Apprehensions and excitement of management graduates. *Higher Education Skills and Work-Based Learning*, 13, 911-926.

Norman, W. T. (1963) Toward an adequate taxonomy of personality attributes. *Journal of Abnormal and Social Psychology*, 66, 574-583.

Offermann, L. R., Thomas, K. R., Lanzo, L. A., & Smith, L. N. (2020). Achieving leadership and success: A 28-year follow-up of college women leaders. *Leadership Quarterly*, 31(4), 101345.

Office for National Statistics (2019a, May). UK and non-UK people in the labour market: May 2019.

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/ukandnonukpeopleinthelabourmarket/may2019>

Office for National Statistics (2019b, May). Dataset: Short-term international migration 02, Citizenship by main reason for migration - stocks, England and Wales.

<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/datasets/shorttermmigrationestimatesforenglandandwalesstim02citizenshipbymainreasonformigrationstocks>

O'Laughlin, K. D., Martin, M. J., & Ferrer, E. (2018). Cross-sectional analysis of longitudinal mediation processes. *Multivariate Behavioral Research*, 53(3), 375–402.

Ones, D. S., Viswesvaran, C., Dilchert, S., & Judge, T. A. (2007). In support of personality assessment in organizational settings. *Personnel Psychology*, 60, 995–1027.

Peltokorpi, V., & Froese, F. J. (2009). Organizational expatriates and self-initiated expatriates: who adjusts better to work and life in Japan? *International Journal of Human Resource Management*, 20(5), 1096-1112.

Petrides, K. (2011). Ability and trait emotional intelligence. In Chamorro-Premuzic, T., von Stumm, S., & Furnham, A. (Eds.), *The Willey-Blackwell handbook of individual differences* (2nd ed.). Oxford: Willey-Blackwell.

Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology*, 98, 273-289.

Pfeffer, J. (2010). Building sustainable organizations: The human factor. *Academy of Management Perspectives*, 24, 34-45.

Pico-Saltos, R., Carrión-Mero, P., Montalván-Burbano, N., Garzás, J., & Redchuk, A. (2021). Research trends in career success: A bibliometric review. *Sustainability*, 13, 4625.

Popper, K. (2002). *The logic of scientific discovery* (2nd Ed.). London: Routledge.

Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24, 1-24.

Punch, K. (2005). *Introduction to social research: Quantitative and qualitative approaches*. London: Sage.

R. Hogan, J. A. Johnson, & S. R. Briggs (Eds.), *Handbook of personality and social psychology* (pp. 737–765). San Diego, CA: Academic Press.

Ramaswami, A., & Dreher, G. F. (2007). The benefits associated with workplace mentoring relationships. In T. D. Allen & L. T. Eby (Eds.), *The Blackwell handbook of mentoring: A multiple perspectives approach* (pp. 211-231). Oxford: Blackwell Publishing.

Renshaw, P. S. J., Parry, E., & Dickmann, M. (2018). Seconded national experts and global mobility-extending the paradigm. *Thunderbird International Business Review*, 60(6), 897–909.

Research Excellence Framework 2014 (2015). Research Excellence Framework 2014: Overview report by Main Panel C and Sub-panels 16 to 26. London: REF14.

Retkowsky, J., Nijs, S., Akkermans, J., Jansen, P., & Khapova, S. N. (2023). Toward a sustainable career perspective on contingent work: A critical review and a research agenda. *Career Development International*, 28(1), 1-18.

Richardson, J. (2009). Geographical flexibility: A cautionary note. *British Journal of Management*, 20, S160-S170.

Richardson, J., & McKenna, S. (2002). Leaving and experiencing: why academics expatriate and how they experience expatriation. *Career Development International*, 7(2), 67-78.

Ridgway, M., & Robson, F. (2018). Exploring the motivation and willingness of self-initiated expatriates, in the civil engineering industry, when considering employment opportunities in Qatar. *Human Resource Development International*, 21(1), 24-45.

- Robertson, I. T., Baron, H., Gibbons, P., MacIver, R., & Nyfield, G. (2000). Conscientiousness and managerial performance. *Journal of Occupational and Organizational Psychology*, 73(2), 171-180.
- Rodrigues, R., Guest, D., Oliveira, T., & Alfes, K. (2015). Who benefits from independent careers? Employees, organizations, or both? *Journal of Vocational Behavior*, 91, 23-34.
- Rofcanin, Y., Imer, H. P., & Zingoni, M. (2014). Global trends in international human resource management. In Ozbilgin, M. F., Groutsis, D., & Harvey, W. S. (Eds.). *International human resource management* (pp. 6-22). Melbourne: Cambridge University Press.
- Round, E. K., Wetherell, M. A., Elsey, V., & Smith, M. A. (2022). Positive expressive writing as a tool for alleviating burnout and enhancing wellbeing in teachers and other full-time workers. *Cogent Psychology*, 9(1), 2060628.
- Saint-Charles, J., Mongeau, P. (2009). Different relationships for coping with ambiguity and uncertainty in organizations. *Social Networks*, 31, 33-39.
- Salas-Vallina, A., Pozo-Hidalgo, M., & Gill-Monte, P. (2020). High involvement work systems, happiness at work (HAW) and absorptive capacity: A bathtub study. *Employee Relations*, 42(4), 949-970.
- Samarsky, E. (2023). Exploring the impact of national context on adjustment of self-initiated expatriates: The case of German professionals in Britain. *Career Development International*, 28(4), 458-472.
- Santos, H. C., Varnum, M. E. W., & Grossmann, I. (2017). Global increases in individualism. *Psychological Science*, 28(9), 1228-1239.
- Schweitzer, L., Lyons, S., Smith, C. J. (2023). Career sustainability: Framing the past to adapt in the present for a sustainable future. *Sustainability*, 15, 11800.
- Segal, N. L. (2013). Personality similarity in unrelated look-alike pairs: Addressing a twin study challenge. *Personality and Individual Differences*, 54(1), 23-28.
- Seibert, S. E., Kraimer, M. L., & Liden, R. C. (2001). A social capital theory of career success. *Academy of Management Journal*, 44, 219-237.
- Selmer, J., & Lauring, J. (2011). Acquired demographics and reasons to relocate among self-initiated expatriates. *International Journal of Human Resource Management*, 22, 2055-2070.
- Semeijn, J. H., Van Dam, K., Van Vuuren, T., & Van der Heijden, B. I. (2015). Sustainable labour participation and sustainable careers. In A. De Vos & B. I. J. M. Van der Heijden (Eds.), *Handbook of research on sustainable careers* (pp. 146-160). Cheltenham, UK: Edward Elgar Publishing.

Semeijn, J. H., Van der Heijden, B. I. J. M., & De Beuckelaer, A. (2020). Personality traits and types in relation to career success: An empirical comparison using the big five. *Applied Psychology: An International Review*, 69(2), 538-556.

Shao, J. J., & Al Ariss, A. (2020). Knowledge transfer between self-initiated expatriates and their organizations: Research propositions for managing SIEs. *International Business Review*, 29, 101634.

Song, N., Zhu, J. P., & Rundquist, J. (2015). Knowledge transfer mechanisms and global R&D operations in MNCs. *International Journal of Innovation and Technology Management*, 12(2), 1550011.

Sousa, C. M. P., Novello, S. (2014). The influence of distributor support and price adaptation on the export performance of small and medium-sized enterprises. *International Small Business Journal*, 32(4), 359-385.

Spector, P. E. (2019). Do not cross me: Optimizing the use of cross-sectional designs. *Journal of Business and Psychology*, 34(2), 125-137.

Steger, M. B. (2017). *Globalization: A very short introduction* (4th ed.). Oxford: Oxford University Press.

Stieger, M., Fluckiger, C., Ruegger, D., Kowatsch, T., Roberts, B. W., & Allemand, M. (2021). Changing personality traits with the help of a digital personality change intervention. *Proceedings of the National Academy of Sciences of the United States of America*, 118(8), e2017548118. DOI10.1073/pnas.2017548118

Straub, C., Vinkenbarg, C. J., & van Kleef, M. (2020). Career customization: Putting an organizational practice to facilitate sustainable careers to the test. *Journal of Vocational Behavior*, 117, 103320.

Sullivan, S. E., & Al Ariss, A. (2021). Making sense of different perspectives on career transitions: A review and agenda for future research. *Human Resource Management Review*, 31, 100727.

Suutari, V., & Brewster, C. (2000). Making their own way: International experience through self-initiated foreign assignments. *Journal of World Business*, 35, 417-436.

Suutari, V., Brewster, C., Makela, L., Dickmann, M. and Tornikoski, C. (2018). The effect of international work experience on the career success of expatriates: A comparison of assigned and self-initiated expatriates. *Human Resource Management*, 57(1), 37-54.

Tharenou P. (2003). The initial development of receptivity to working abroad: Self-initiated international work opportunities in young graduate employees. *Journal of Occupational and Organizational Psychology*, 76(4), 489-515

Tharenou, P. (2010). Women's self-initiated expatriation as a career option and its ethical issues. *Journal of Business Ethics*, 95, 73-88.

Thorn, K. (2009). The relative importance of motives for international self-initiated mobility. *Career Development International*, 14, 441-464.

Torgersen, A. M., & Janson, H. (2002). Why do identical twins differ in personality: Shared environment reconsidered. *Twin Research*, 5(1), 44-52.

Trevor, C. O., Gerhart, B., & Boudreau, J. W. (1997). Voluntary turnover and job performance: Curvilinearity and the moderating influences of salary growth and promotions. *Journal of Applied Psychology*, 82, 44-61.

Tschan, F., Rochat, S., & Zapf, D. (2005). It's not only clients: Studying emotion work with clients and co-workers with an event-sampling approach. *Journal of Occupational and Organizational Psychology*, 78, 195-220.

Turban, D. B., & Dougherty, T. W. (1994). Role of protégé personality in receipt of mentoring and career success. *Academy of Management Journal*, 37(3), 688-702.

UKPension (2023). UK pension history. <https://ukpension.co.uk/history/>

Underhill, C. M. (2006). The effectiveness of mentoring programs in corporate settings: A meta-analytical review of the literature. *Journal of Vocational Behavior*, 68(2), 292–307.

United Nations Volunteers (2023). UN volunteers: Volunteer abroad. <https://www.unv.org/become-volunteer/volunteer-abroad>

Valcour, M. (2015). Facilitating the crafting of sustainable careers in organizations. In A. De Vos & B. I. J. M. Van der Heijden (Eds.), *Handbook of research on sustainable careers* (pp. 20-34). Cheltenham, UK: Edward Elgar Publishing.

Van der Baan, N., Raemdonck, I., Bastiaens, E., & Beusaert, S. (2022). Employability competences of workers in health care and finance. The role of self-directed learning orientation and job characteristics. *International Journal of Training and Development*, 26, 427-447.

Van der Heijden, B. I., & De Vos, A. (2015). Sustainable careers: Introductory chapter. In A. De Vos & B. I. J. M. Van der Heijden (Eds.), *Handbook of research on sustainable careers* (pp. 1-19). Cheltenham, UK: Edward Elgar Publishing.

Van der Heijden, B., De Vos, A., Akkermans, J., Spurk, D., Semeijn, J., Van der Velde, M., & Fugate, M. (2020). Sustainable careers across the lifespan: Moving the field forward. *Journal of Vocational Behavior*, 117, 103344.

Van der Heijde, C. M., & Van der Heijden, B. I. (2006). A competence-based and multidimensional operationalization and measurement of employability. *Human Resource Management*, 45(3), 449-476.

Van der Linden, D., Pekaar, K. A., Bakker, A. B., Schermer, J. A., Vernon, P. A., Dunkel, C. S., & Petrides, K. V. (2017). Overlap between the general factor of personality and emotional intelligence: A meta-analysis. *Psychological Bulletin*, 143, 36–52.

Van Dyk, G., & Ditsela, N. (2013). Personality factors explaining career success for soldiers: An analytical review. *Journal of Psychology in Africa*, 23(4), 679-983.

Van Zanden, J. L., & De Zwart, P. (2018). *The origins of globalization: World trade in the making of the global economy, 1500-1800*. Cambridge: Cambridge University Press.

Vance, C. M. (2005). The personal quest for building global competence: A taxonomy of self-initiating career path strategies for gaining business experience abroad. *Journal of World Business*, 40, 374-385.

Vasilopoulos, N. L., Cucina, J. M., & Hunter, A. E. (2007). Personality and training proficiency: Issues of bandwidth-fidelity and curvilinearity. *Journal of Occupational and Organizational Psychology*, 80, 109-131.

Vik, P. (2014). *Regression, ANOVA and the general linear model*. Thousand Oaks, CA: Sage.

Vukasović, T., & Bratko, D. (2015). Heritability of personality: A meta-analysis of behavior genetic studies. *Psychological Bulletin*, 141(4), 769–785.

Wang, K. L., Johnson, A., Nguyen, H., Goodwin, R. E., & Groth, M. (2020). The Changing Value of skill utilisation: Interactions with job demands on job satisfaction and absenteeism. *Applied Psychology: An International Review*, 69(1), 30-58.

Wang, S., Lin, X., & Wu, J. (2023). The effect of abusive supervision variability on work–family conflict: The role of psychological detachment and optimism. *Frontiers in Psychology*, 2022, 13, 973634.

Wang, Y., & Wu, C-H. (2021). *Work and personality change*. Bristol, UK: Bristol University Press.

Wechtler, H. (2018). “Life if elsewhere”: A diary study of female self-initiated expatriates' motivations to work abroad. *Career Development International*, 23(3), 291-311.

Welsh E. T., & Wanberg C. R. (2009). Launching the post-college career: A study of mentoring antecedents. *Journal of Vocational Behavior*, 74(3), 257-263.

Wenning, C. J. (2009). Scientific epistemology: How scientists know what they know. *Journal of Physics Teacher Education Online*, 5(2), 3-16.

Whitaker, L., Hughes, M., & Rugendkye, B. (2018). 'I would call it a social capital building exercise': The nature of networks that enable women with a refugee background to access sustainable employment in regional Australia. *Journal of Social Inclusion*, 9(2), 73-85.

Wiggins, J. S., & Trapnell, P. D. (1997). Personality structure: The return of the big five. In R. Hogan, J. A. Johnson, & S. R. Briggs (Eds.). *Handbook of personality psychology* (pp. 737–765). San Diego, CA: Academic Press.

Wolff, H-G., & Kim S. (2012). The relationship between networking behaviors and the Big Five personality dimensions. *Career Development International*, 17(1), 43-16.

Wolff, H-G., & Moser, K. (2009). Effects of networking on career success: A longitudinal study. *Journal of Applied Psychology*, 94, 196-206.

Wong, C-S., & Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *Leadership Quarterly*, 13(3), 243-274.

Wynen, J., Van Dooren, W., Mattijs, J., & Deschamps, C. (2019). Linking turnover to organizational performance: The role of process conformance. *Public Management Review*, 21(5), 669-685.

Xu, L., Liu, Z., Ji, M., Dong, Y., & Wu, C-H. (2022). Leader perfectionism : Friend or foe of employee creativity ? Locus of control as a key contingency. *Academy of Management Journal*, 65(6), 2009-2117.

Yang, L-Q., Levine, E. L., Smith, M. A., Ispas, D., & Rossi, M. E. (2008). Person–environment fit or person plus environment: A meta-analysis of studies using polynomial regression analysis. *Human Resource Management Review*, 18, 311-321.

Yin, Y. Y., Sun, S. Y., Song, L. L., Jin, C. C., & Wang, Y. (2023). Emotional labour strategies and job burnout: A meta-analysis of Chinese employees. *Asian Journal of Social Psychology*, 26(2), 219-237.

Yoon, Y.-J., Varma, A., Katou, A., Cha, Y., & Lee, S. (2022). Host country national support to expatriates: A motivated information processing perspective. *Cross Cultural and Strategic Management*, 29(1), 147-170.

Zachary, L. J. (2017, March 23). How to create a mentoring culture. *The Balance*. <https://www.thebalance.com/how-to-create-a-mentoring-culture-1917838>

Zangwill, N. (2020). Epistemic pluralism: The missing link and the ambitions of epistemology. *Metaphilosophy*, 51, 485-498.

Zapf, D., & Holz, M. (2006). On the positive and negative effects of emotion work in organizations. *European Journal of Work and Organizational Psychology*, 15, 1-28.

Zhang, W., Chin, T., Li, F., Lin, C. L., Shan, Y. N., & Ventimiglia, F. (2022). The impact of career competence on career sustainability among Chinese expatriate managers amid digital transformation in Vietnam: The role of lifelong learning. *Frontiers in Psychology*, 13, 791636.

Zhang, Z. Y., Fang, H., Luan, Y. X., Chen, Q. S., & Peng, J. F. (2022). A meta-analysis of proactive personality and career success: The mediating effects of task performance and organizational citizenship behavior. *Frontiers in Psychology, 13*, 979412.

Zhang, L. Q., Liu, J., Loi, R., Lau, V. P., & Ngo, H-Y. (2010). Social capital and career outcomes: A study of Chinese employees. *International Journal of Human Resource Management, 21*(8), 1323-1336.



Zhao, Y. Y., & Sang, B. A. (2023). The role of emotional quotients in career success. *Frontiers in Psychology, 14*, 1128773.

Accompanying Materials - Published Works

#	Reference Publication	Pages
1	Bozionelos, N., Mukhuty, S., Kostopoulos, K., Bozionelos G. & Blenkinsopp, J. (2022). United Nations civilian volunteers in UN hot spots: What makes them apply for yet another assignment? <i>International Journal of Human Resource Management</i> , 34(12), 2516-2545.	88-117
2	Bozionelos, G. and Bozionelos, N. (2018). Trait emotional intelligence and social capital: The emotionally unintelligent may occasionally be better off. <i>Personality and Individual Differences</i> , 134, 348-351.	118-121
3	Bozionelos, G., Bozionelos, N., van der Heijden, B., & Marzec, I. (2018). In search of challenge: Flow at work and the development of occupational expertise. In Baugh, G. & S. E. Sullivan (Eds.), <i>Research in Careers, Vol. 4: Seeking challenge in the career</i> (pp. 125-144). Charlotte, NC: Information Age Publishing.	122-141
4	Bozionelos, G. (2017). The relationship of the big-five with workplace network resources: More quadratic than linear. <i>Personality and Individual Differences</i> , 104, 374-378.	142-146
5	Bozionelos, G. (2016). Emotion work in the Arab context: Its relationship to job satisfaction and the moderating role of trust to the employer. <i>Psychological Reports</i> , 119(1), 136-153.	147-164
6	Bozionelos, N., Kostopoulos, K., van der Heijden, B., Rousseau D. Bozionelos G., & the Indic@tor Consortium (2016). Employability and job performance as links in the relationship between mentoring receipt and career success: A study in SMEs. <i>Group and Organization Management</i> , 41(2), 135-171.	165-201
7	Bozionelos, G. and Bozionelos, N. (2015). Employability and key outcomes in times of severe change: The role of career orientation. <i>Human Resource Management (Poland) [Zarządzanie Zasobami Ludzkimi]</i> , 6(107), 11-32.	202-223
8	Bozionelos, N., Bozionelos, G., Kostopoulos, K., Shyong, C-H., Baruch, Y., & Zhou, W. (2015). International graduate students' perceptions and interest in international careers. <i>International Journal of Human Resource Management</i> , 26(11), 1428-1451.	224-247
9	Bozionelos, N., Bozionelos, G., Kostopoulos, K., & Polychroniou, P. (2014). Mentoring receipt and the big-five of personality: Evidence for non-linear relationships. <i>Journal of Business Research</i> , 67(2), 171-181.	248-258



Civilian volunteers in United Nations hot spots: what makes them intend to apply for yet another mission?

Nikos Bozionelos^a , Sumona Mukhuty^b, Konstantinos C. Kostopoulos^c, Georgios Bozionelos^d and John Blenkinsopp^{e, f} 

^aEM Lyon Business School, Écully, France; ^bManchester Metropolitan University, Manchester, United Kingdom; ^cUniversity of Piraeus, Piraeus, Greece; ^dSotiria General Hospital of Chest Diseases, Greece; ^eOslo New University College, Oslo, Norway; ^fNorthumbria University, Newcastle upon Tyne, United Kingdom

ABSTRACT

This study focused on United Nations (UN) civilian volunteers serving in “hot spots”, and tested a model to predict their intentions to apply for a new UN assignment. These individuals have characteristics of both assigned expatriates and self-initiated expatriates. In-Role Behaviours (IRB) and Organizational Citizenship Behaviours towards the Local Population (OCB-Locals) were related to sense of personal accomplishment, that in turn was related to intentions to apply for another UN assignment. Sense of personal accomplishment played a mediating role. Both the personality trait of agreeableness and the attitudinal factor of commitment towards the local population were predictive of IRB, but only agreeableness was predictive of OCB-Locals. Moderation effects were identified, but the direction of most of them was unexpected. For example, it was low openness to experience that strengthened the link between sense of personal accomplishment and intentions to re-apply. The study's implications for expatriation research and for practice are discussed.

KEYWORDS

Expatriates; non-profit; volunteers; job performance; personality traits; behavioural intentions; personal accomplishment; inter-governmental organization

Expatriation refers to pursuing and engaging in work experiences beyond one's native country and culture (McNulty & Brewster, 2017; Tharenou, 2015). Expatriation might be organization initiated/assigned or self-initiated (Andresen et al., 2015). Assigned expatriates (AEs) are sent to international locations by a home country organization (Andresen et al., 2014; Andresen et al., 2015). Self-initiated expatriates (SIEs), on the other hand, move to the host country on their own initiative, and usually take full responsibility for the relocation (Cerdin & Selmer, 2014;

CONTACT Dr. Nikos Bozionelos  bozionelos@em-lyon.com  EM Lyon Business School, 23 Avenue Guy de Collongue, Ecully, 69134, France.

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Suutari & Brewster, 2000; Tharenou, 2015). The focus population of this study, United Nations (UN) civilian volunteers, possess features of both AEs and SIEs. Specifically, they are sent to an overseas mission on behalf of a particular organization (in our case the UN), which is feature of AEs, but they are not employees of that organization before taking up the mission, and they apply for the assignment and move to the location of service on their own initiative, which are features of SIEs. We label these expatriates “tethered SIEs” because of their constrained choices, they must interact with a specific organization during the whole experience (both in their home country and in the host country) with no latitude to change employers when in host country (something that SIEs typically have the option of doing).

Though knowledge on expatriation has advanced substantially in the past decades, authors point at the lack of context-specific research in both assigned and self-initiated expatriation (Andresen et al., 2020; Arseneault, 2020; Bjerregaard, 2014; Vaiman et al., 2015). Furthermore, despite the considerable rise on self-initiated expatriation research in the previous decade (Andersen, 2019), our knowledge about this very sizable population is far from exhaustive (Andresen et al., 2020; Bozionalos, 2019; Kumar & Chhokar, 2019). Finally, there is a noticeable scarcity of investigations on expatriation in the non-profit sector; expatriation whether assigned or self-initiated has been predominantly studied within the confines of for-profit organizations, most typically the Multinational Corporation (MNC) (Dickmann & Cerdin, 2018; He et al., 2019; McNulty et al., 2017; Renshaw et al., 2018). The conditions and incentives in the non-profit sector, which often relies on volunteers to deliver its mission (Alfes et al., 2017; Fallon & Rice, 2015), are different from the for-profit sector; hence, the factors that determine motivation and outcomes are also likely different (e.g., Alfes et al., 2017; He et al., 2019; McCormick & Donohue, 2019). This study takes into account these points as it focusses on civilian volunteers who serve in UN “hot spots” (locations with a serious need for humanitarian aid). These individuals share characteristics of AEs and SIEs and work for a non-profit organization in extreme settings.

Expatriates in the context of volunteering for the UN

UN civilian volunteers are not regular UN employees; instead, they register with the UN, thus becoming part of the talent pool. Then they may either be contacted by the organization when their profile matches available appointments and asked whether they are interested in accepting the appointment, or themselves apply directly for advertised appointments. In both cases they have to go through a selection process. If

they are selected, the process of their deployment in the hot spot starts. Missions typically last from six to 12 months. Upon completion of the assignment, the volunteer is discharged (United Nations, 2020; United Nations Volunteers, 2020a). This may be likened to self-initiated expatriation, whereby individuals put into service their own initiative to take employment abroad (Cerdin & Selmer, 2014), with the clear intention of only a temporary stay (Cerdin & Selmer, 2014; Doherty et al., 2013) and usually on a temporary work contract (Andresen et al., 2015). On the other hand, in line with the criteria of AEs (Andresen et al., 2014; Cerdin & Selmer, 2014), UN civilian volunteers on hot spot assignments are sent (i.e., the selection decision about their mission is made) and receive support from a parent organization (the UN in this case). Typically, the UN provides a settling grant, return airfares and living allowance for the duration of the mission along with other provisions such as health and life insurance (United Nations Volunteers, 2020a). Once the assignment on hand has been completed, volunteers are discharged. They have no obligation to undertake any further UN assignments. If they desire to undertake another UN mission, they have to make themselves available again. In other words, individuals who go on UN missions to hot spots engage in a significant proportion of self-initiated expatriation, but they also have characteristics of AEs, hence they are hybrid expatriates.

Expatriation in the for-profit sector (for example, in MNCs), both assigned and self-initiated, appears to be primarily motivated by the prospect of career advancement or at least career maintenance (Dickmann et al., 2008; Hippler, 2009; Kumar & Chhokar, 2019; Jokinen et al., 2008; Vance, 2005; Wechtler, 2018) - regardless of whether expectations are fulfilled. In fact, the motive of career development seems inter-twined with the endeavour of expatriation in the literature. In their purported comprehensive definition of the expatriate, McNulty and Brewster (2017) emphasize “the purpose to accomplish a career-related goal” (p. 46). However, expatriate missions in the non-profit sector do not always contain the (explicit or implicit) promise of career advancement, while at the same time they may involve the possibility of significant physical or psychological danger (e.g., Dickmann & Cerdin, 2018; Fee & McGrath-Champ, 2017; Van Emmerik & Euwema, 2009). Hence, the decision to engage in such a mission defies to some extent mainstream logic of motivation behind expatriation and implies motives of a different nature. Indeed, in a study with regular employees of religious and humanitarian organizations, Oberholster et al. (2013) investigated the motives behind accepting an international assignment. Altruistic motives, such as a sense of a calling to help others, the desire to make a difference, and personal meaning emerged as by far the strongest, while career

advancement and development came far below and were fairly unimportant (Oberholster et al., 2013). Similarly, Dickmann and Cerdin (2018) in their study with permanent UN civilian employees (i.e., individuals who had careers with the UN) in hot spot assignments found that the most frequently cited motive to accept it was the humanitarian nature of the mission and the personal meaning this had for them. Most of them confessed that they chose to accept the mission despite their belief that it was detrimental for their careers (which would benefit most from staying in the head office) (Dickmann & Cerdin, 2018).

Notwithstanding that service as UN volunteer may enhance career-related prospects (e.g., facilitate obtaining preferred or long-term employment) because international experience - whether as volunteer or not - contributes to skill and confidence development (e.g., Fee & Gray, 2011; Inkson et al., 1997; Inkson & Myers, 2003) that likely enhance employability back home, the UN volunteers programme is not linked to a career nor the promise of a career with the UN (“being a UN Volunteer is not a career”, United Nations, 2020). Hence, most of the typical extrinsic career rewards (e.g., promotion, status, financial attainment, or even some kind of job security, Dries, 2020) do not seem to apply in this case. Furthermore, the assignments are fraught with the potential danger of serious injury, loss of life, and repeat witnessing of extreme human misery and suffering. These elements make them quite distinct from typical expatriate missions that are expected to involve work and opportunities to discover without exposure to significantly greater physical or psychological dangers than those found in one’s home country. Therefore, and considering the prominent role of the UN in amelioration or prevention of humanitarian crises and its substantial reliance on volunteers (United Nations Volunteers, 2021), it becomes of significance to identify the motivation mechanism that shapes these individuals’ intentions to repeatedly apply for participation in UN hot spot assignments.

The model we construct and test contains factors that should theoretically shape the intentions of UN civilian volunteers to declare availability for another assignment upon the end of the current one. It draws upon person-environment (P-E) fit. P-E fit is a umbrella term for approaches (e.g., Chatman, 1989; French et al., 1974; Holland, 1959; Muchinsky & Monahan, 1987; Schneider, 1987) that share certain assumptions, including that people are attracted by work environments that are compatible with and allow them to express their attributes, and that the degree of fit with their environment determines outcomes (e.g., job performance, satisfaction, stay or leave intentions) (Van Vianen, 2018). P-E fit posits that, among others, individuals’ personality, attitudes, values, and interests dictate the environments in which they will feel

most comfortable and perform best (Edwards, 1991; 1996; French et al., 1982; Kristof, 1996). Studies integrated in meta-analytic reviews (e.g., Hoff et al., 2020; Kristof-Brow, Zimmerman & Johnson, 2005; Oh et al., 2014) attest to the usefulness of P-E fit in explaining outcomes. PE-fit is an appropriate theoretical backdrop in the present study because volunteers in the non-profit sector place strong emphasis on the fit between their own personal beliefs, values and attitudes and the goals of their mission (Englert et al., 2020). Aligning with the logic of P-E fit, the present work proposes a model whereby specific personality traits of individual assignees, their propensity to commit to the local population, organizational citizenship behaviours towards the local population, in-role behaviours, and expatriate adjustment determine their sense of accomplishment, which in turn relates to their intentions to reapply for a UN assignment. Testing of the model showed support of most premises by the data with some notable exceptions that apparently underline the importance of the context (which includes the sector) when processes and outcomes in expatriation are considered.

P-E fit posits that the match between the individual and the environment where the individual functions determines individual and, by extension, group and organizational outcomes (Edwards, 1996; French et al., 1982; Kristof, 1996; Van Vianen, 2018). Such outcomes include job performance and key work attitudes and intentions including satisfaction and intentions to stay/quit (Chatman, 1991; Edwards & Billsberry, 2010; Hoff et al., 2020; Jansen & Kristof-Brown, 2006; Kristof-Brown et al., 2005; Oh et al., 2014). The individual's side of the equation may embody internal individual factors such as personality, values, skills, aspirations and expectations; and the environmental side may encompass the nature and demands of the job or the occupation, the collegial environment, and the physical and cultural environment of the organization or the location (Chatman, 1991; French et al., 1982; Edwards & Billsberry, 2010; Jansen & Kristof-Brown, 2006; Makkonen, 2015; Solnet et al., 2014). The extent of fit between individual and corresponding environmental factors (e.g., whether the individual's personality is compatible with the values of the environment or the nature of the job) determine the outcome.

The present study, therefore, sits firmly within the scope of P-E fit. Civilian volunteers who are deployed in UN hot spots are contributing to humanitarian missions. Assuming that the strongest motive for participating in such missions revolves around dedication to their humanitarian causes—which is what relevant studies suggest (Cerdin & Dickmann, 2011; Dickmann & Cerdin, 2018; Hudson & Inkson, 2006; Oberholster et al., 2013)—it follows that the extent to which they perform well and feel accomplished within the context of their assignment

should ultimately shape their desire to go to a new mission. In turn, their performance and their feelings of accomplishment should depend on factors that determine their fit with the nature of the mission and of the location; hence, these should include whether they are altruistic and empathic (encompassed by the personality trait of agreeableness, McCrae et al., 2005; Goldberg, 1999), committed to the local population who are typically under strain, and adjusted to the life in the hot spot itself.

Hypotheses development

The main focus of UN missions in hot spots is the welfare of the local population, and it is argued that the performance of assignees in such missions depends on whether they have an altruistic disposition along with commitment to the cause (Oberholster et al., 2013; Perry & Hondeghem, 2008). It would be expected, therefore, that commitment towards the local population and personality traits that encompass altruism are antecedents of civilian UN volunteers' job performance.

Job performance is multi-dimensional; two key dimensions are in-role behaviours (IRB) and extra-role or organizational citizenship behaviours (OCB) (Rotundo & Sackett, 2002). IRB pertain to formally stipulated job duties and responsibilities—prescribed behaviours - while OCB are manifested in whether employees go beyond formal job requirements (Borman & Motowidlo, 1997; Organ, 1997). In the context of this study, we consider it appropriate to view OCB in terms of OCB towards the local population (OCB-Locals), that is to say, what UN civilian personnel in hot spots do over and above their formally prescribed duties to contribute to the welfare of the local population. This may be likened to customer-oriented OCB (Bettencourt & Brown, 1997), whereby staff invest extra efforts going beyond the call of their duty to help clients (Kutaula et al., 2020).

Commitment is the manifestation of affective processes (Li et al., 2010) and entails an affinity or strong emotional attachment towards a particular target that propels the individual to follow a particular course of action (e.g., Rusbult et al., 2006). Though commitment can have a non-affective form, it is the affect-based form that is consistently associated with outcomes and typifies the construct (e.g., Mercurio, 2015; Solinger et al., 2008). Commitment in the work context has many foci (Becker, 2016), but regardless of the focus high commitment propels individuals to engage themselves in pursuing the welfare of others beyond formal organizational requirements (Solinger et al., 2008). Naturally, commitment is associated with key outcomes including IRB, OCB, and intentions to stay or quit (Riketta, 2002; Voigt & Hirst, 2015).

In line with P-E fit, we believe that it is commitment that focuses on the local population that should be most relevant for outcomes of UN civilian volunteers in hot spot settings. Indeed, many participants in Dickmann and Cerdin (2018) interview-based study with permanent UN civilian personnel in hot spots stressed their commitment to the local population, some explicitly rating it stronger than their commitment to the UN itself. In line with the above discussion, therefore, commitment to the local population should be associated with stronger IRB, but also with stronger OCB-Locals. This last is because those UN civilian volunteers who are more committed towards the local population would likely be inclined to go beyond their contractual call of duty and invest extra effort in ensuring the welfare and needs of the locals in the afflicted spot.

Hypothesis 1: Commitment to local population will be positively related to IRB (H1a) and to OCB-Locals (H1b).

Adopting the principles of P-E fit, we can assume that those UN volunteers who are most concerned and inclined to expend effort towards helping the hot spot population are those who are empathic and altruistic in nature. Volunteering is a prosocial act (Penner, 2002), which is primarily linked to altruistic and empathic motives (McCormick & Donohue, 2019; Stukas et al., 2016). In the context of expatriation, Oberholster et al. (2013) found that the strongest motive of expatriates who had joined humanitarian or religious non-profit organizations was altruism, the devotion to the welfare of others even if this brings personal inconvenience. Altruism and empathy are core elements of the personality trait of agreeableness (McCrae et al., 2005; Costa & McCrae, 1992; Goldberg, 1999), one of the five fundamental personality traits or “big five” (DeYoung, 2015; John et al., 2008). Therefore, UN civilian volunteers who score high on agreeableness should fit better into their assignment than their lower-agreeableness counterparts because they have an inherent predisposition towards the humanitarian and altruistic nature of the UN mission. Hence, they should perform their prescribed tasks better, IRB, but they should also be more inclined to go beyond their formal work duties to help the local population, considering that altruistic behaviour is a core component of OCB (Organ, 1988; Smith et al., 1983). In support to the above reasoning empirical research has found that people who are high on agreeableness prefer super-ordinate goals instead of goals that are linked with monetary-only rewards (Sato et al., 2012). Furthermore, short-term volunteers in disaster areas who score high on agreeableness demonstrate stronger performance in their mission than their counterparts with low scores on agreeableness (Istiani & Muetia, 2016).

Hypothesis 2: Agreeableness will be positively related to IRB (H2a) and to OCB-Locals (H2b).

Sense of personal accomplishment refers to one's level of satisfaction with one's own competence and achievement in relation to the work they carry out (Maslach & Jackson, 1981; Maslach et al., 1996). UN operations have a clear mission, hence, the extent to which volunteers believe they are accomplishing their part of the mission, that is whether they are performing well, should serve as source of satisfaction for them. Indeed, work with volunteers in non-profit international aid and development organizations indicated that it was important to them to know whether they were performing well (Barrett et al., 2017). Hence, the level of performance, that is IRB and OCB-Locals, of UN volunteers should relate to their sense of personal accomplishment. In indirect support of this view, feelings of personal accomplishment are stronger when people perceive that their goal-related needs are met (Silva et al., 2017), and when they perceive that their efforts are appreciated by their line managers (Lai et al., 2018).

Hypothesis 3: IRB (H3a) and OCB-Locals (H3b) will be positively related to sense of personal accomplishment.

In line with P-E fit, it is reasonable to expect that a positive sense of personal accomplishment following good performance with respect to the mission will be related to high intentions of UN volunteers to apply for yet another UN assignment upon completion of the current one. Concurring with this assumption, recent research in a setting that bears some resemblance to UN hot spots, nurses in acute care hospitals, found that sense of personal accomplishment was associated with stronger intentions to stay in nursing (Van Bogaert et al., 2017), and comparable results were reported in a study with volunteers in hospital settings (Ferreira et al., 2015).

Hypothesis 4: Sense of personal accomplishment will be positively related to intentions to apply for another UN assignment.

Mediation effects

We have argued that commitment to the local population will be related to greater IRB and OCB-Locals, which in turn will be associated with a higher sense of personal accomplishment. It follows that IRB and OCB-Locals should serve as mediators in the relationship (e.g., Aguinis et al., 2017; Rungtusanatham et al., 2014).

Hypothesis 5: IRB (H5a) and OCB-Locals (H5b) will mediate the relationship between commitment to the local population and sense of personal accomplishment.

In a similar vein, we have argued that agreeableness will relate to IRB and OCB-Locals, and these performance-related factors will in turn relate to sense of personal accomplishment. This sequence of relationships also invites us to hypothesize that IRB and OCB-locals play a mediating role.

Hypothesis 6: IRB (H6a) and OCB-Locals (H6b) will mediate the relationship between agreeableness and sense of personal accomplishment.

Finally, we have also hypothesized that performance in the UN assignment, manifested as IRB and OCB-Locals, will enhance feelings of personal accomplishment which, in turn, will strengthen intentions to apply for a new mission. These hypotheses also direct towards a mediating effect for sense of personal accomplishment.

Hypothesis 7: Sense of personal accomplishment will mediate the relationship of IRB (H7a) and OCB-Locals (H7b) with the intention to apply for another UN assignment.

Moderators: Expatriate adjustment and openness to experience

The degree to which expatriates feel comfortable in the host environment reflects their adjustment (Black et al., 1991; Black & Stephens, 1989). Aspects of the host environment that determine general expatriate adjustment (hereafter “expatriate adjustment”) include everyday life experiences (e.g., accommodation, food, healthcare facilities), the work environment itself (job content, performance standards), and interpersonal interaction (Black & Stephens, 1989). Though there is substantial theorizing on expatriate adjustment, empirical research, especially on how it relates to outcomes, is not abundant (Takeuchi, 2010; Salgado & Bastida, 2017). We believe that expatriate adjustment may influence the relationship of UN volunteers’ agreeableness and commitment to the local population with their job performance. Low level of adjustment for the expatriate means elevated concerns and difficulties in running one’s every day personal and work life in the host location and *vice versa*. We expect that under the condition of high adjustment to the hot spot, those UN civilian volunteers who are highly agreeable and strongly committed to the local population will perform their prescribed duties (i.e., IRB) best. This is because they will be able to fully dedicate their energy, skills and other abilities to their work duties without distractions and impediments. In addition, it is reasonable to expect that in the absence of serious hindrances in the running of their own personal and work lives, agreeable and committed-to-the-locals volunteers will have more time and energy to engage in non-prescribed tasks to help the local population.

Hypothesis 8: Expatriate adjustment will moderate the relationship of agreeableness and commitment to the local population with IRB (H8a and H8c) and OCB-Locals (H8b and H8d).

Openness to experience (“openness”) is another trait of the big five, encompassing curiosity, willingness to expose oneself to different ideas, perspectives and ways of life, a desire for adventure, and artistic interests (Goldberg, 1999; McCrae et al., 2005). UN assignments, besides the difficulties and dangers they entail, also provide opportunities to explore different parts of the world that bring with them a variety of cultures, ideologies, physical locations, and approaches to life. Considering the characteristics of openness, it is reasonable to expect that high levels of the trait should further strengthen the link between sense of personal accomplishment and intention to apply for another UN assignment. That is the desire to apply for another assignment as consequence of their belief of fulfilling their current mission will be stronger if they also have a desire to explore and discover different locations, civilizations and ways of living.

Hypothesis 9: Openness will moderate the relationship between sense of personal accomplishment and intention to go to another UN assignment, with the relationship being stronger for those who score higher on openness.

The model that includes all proposed hypotheses is presented in Figure 1.

Methods

Participants and procedure

Participants were 191 UN civilian volunteers (118 men and 73 women) from a variety of countries deployed in 16 hot spots in four continents (Africa, Europe, Asia and the Americas). None of the participants were

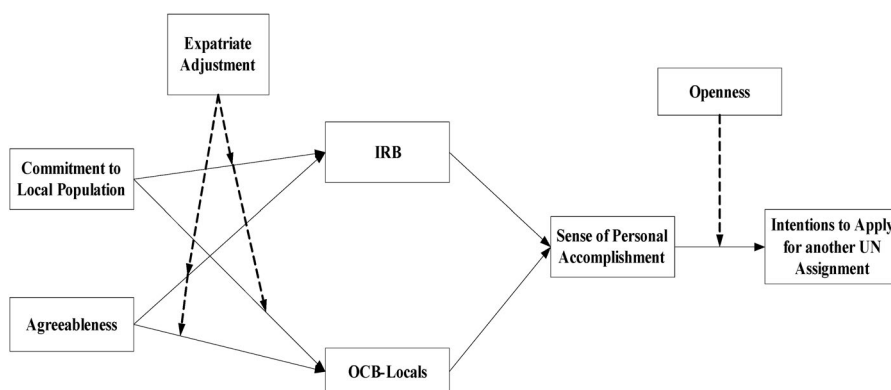


Figure 1. The hypothesized model.

serving in a hot spot that was in their country of origin. Mean age was 41.95 years ($SD=8.16$). The average number of months already spent in their current mission was 9.75 ($SD=5.79$), while the average number of UN missions they had participated in as volunteers was 2.74 ($SD=1.68$). Mean age of line managers was 47.28 years ($SD=6.45$). Participants were solicited via direct contact by a former UN civilian volunteer who utilized her network of contacts with UN officials and volunteers. Contact, with a brief general description of the study (“understand experiences and views of people who serve in hot spots”) and a request for participation was addressed either via email or via the social media account of the volunteer. The contact message specified that it was necessary to also have a short questionnaire completed by one’s own line manager, whose agreement to participate was also needed. Upon agreement to participate, links giving access to the appropriate online questionnaires were sent separately to the participant and the line manager. Each had access only to the questionnaire they were asked to complete. Responses were registered by the online survey software, which generated the dataset (no missing data) in spreadsheet form that was converted into the statistical package we utilized as the basis for our analysis.

Measures

Questionnaire language was English; although other languages are in use, English language is an essential prerequisite in the UN (United Nations Volunteers, 2020b). A 1-5 response format (e.g., 1: strongly agree, 5: strongly disagree) was utilized in all scales. Line managers completed the scales that assessed IRB and OCB-Locals, the rest of the measures were completed by the participants themselves.

Intentions to go to another UN mission after the end of the current mission

This was measured with three items in the template of Van Emmerik and Euwema (2009) measure, which had been developed for professional soldiers in peacekeeping missions. The items were adapted to the population of the present study (e.g., “I do not intend to go to another mission with the UN once this mission ends”, reverse scored).

Sense of personal accomplishment

This was measured with three items (e.g., “I feel I am positively influencing other people’s lives through my work”) from Maslach et al. (1996).

In role behaviours (IRB)

These were assessed by the line manager with three items (e.g., “fulfils the responsibilities specified in his/her job description”) adapted from

Bettencourt and Brown (1997) scale, developed to measure IRB of front-line contact employees.

Organizational citizenship behaviours towards the locals (OCB-Locals)

These were rated by the line manager with three items (e.g., “he/she frequently goes out of his/her way to help locals”), also adapted from Bettencourt and Brown (1997) for the specific population of our study.

Commitment to the local population

This was assessed with four items (e.g., “I really feel that the local people’s problems are my own”) adapted for the needs of this study from Allen and Meyer (1990) heavily utilized and validated affective organizational commitment scale.

Agreeableness and openness

These were each assessed with four items, from the NEO Personality Inventory, *NEO PI-R* (Costa & McCrae, 1992).

Expatriate adjustment

This was assessed with 12 items using the scale developed by Black and Stephens (1989) as base. The items covered a number of life (e.g., living conditions in general, healthcare facilities, food) and work aspects (e.g., conditions to perform one’s work properly) along with personal safety issues, which was added because this is a typical concern in most UN hot spots. Assessing the domain of personal safety was necessary towards achieving content validity of the measure. Coverage of all domains that pertain to expatriate adjustment within the specific host environment is a critical factor in its measurement (Hippler et al., 2014).

Controls

These were age, gender (1: female, 2: male), educational level (1: secondary/high school to 6: doctorate degree), time in the appointment (measured in months), number of UN missions served as volunteer before the current mission, continent of current basis [two dummies: Continent 1 (1: Africa, 0: other), Continent 2 (1: Asia, 0: other)], country of origin (1: developing, 2: developed), marital status (1: married, 2: non-married), type of hot spot (1: family duty station, 2: non-family duty station). These factors are known to affect the relationships between the variables in our model. For example, Oberholster et al. (2013) in their study with regular employees in humanitarian organizations concluded that motives for accepting an international assignment may be different for those originating from developing vs. developed countries.

The discriminant and convergent validity of the measures were supported by three Confirmatory Factor Analyses (CFAs - EQS 6.1, maximum likelihood robust method, Bentler, 2004). To assess model fit we employed the comparative fit index (CFI) and the incremental fit index (IFI). These fit indexes with values of .90 or higher suggest an adequate fit (Bentler & Bonett, 1980). In addition, the root mean square error of approximation (RMSEA) was used, with values of .08 or lower indicating a reasonable fit and .05 or lower indicating a good fit (Browne & Cudeck, 1992). First, a CFA on IRB ($\alpha=0.92$) and OCB-Locals ($\alpha=0.91$) scales was performed. The two-factor model fit the data reasonably well, Satorra–Bentler scaled $\chi^2(8, N=191) = 20.83, p < .05$; CFI = .983; IFI = .983; RMSEA = .078, with all factor loadings significant at the .001 level (range from .78 to .96). Second, a CFA was conducted on the measures of agreeableness, expatriate adjustment, and openness to experience. After removing items with low and nonsignificant factor loadings, we retained three items for agreeableness ($\alpha=0.61$), nine items for expatriate adjustment ($\alpha=0.91$), and three items for openness to experience ($\alpha=0.81$). The three-factor model had acceptable fit, Satorra–Bentler scaled $\chi^2(87, N=191) = 150.45, p < .05$; CFI = .925; IFI = .927; RMSEA = .077, with all factor loadings significant at the .05 level (range from .44 to .90). Finally, another CFA was performed on the scales of commitment to local population, sense of personal accomplishment ($\alpha=0.81$), and intention to apply for another UN assignment ($\alpha=0.65$). This procedure led us to retain three items (from the initial pool of four) for the commitment to local population (one item was dropped due to nonsignificant factor loading; $\alpha=0.72$). This three-factor model had satisfactory fit, Satorra–Bentler scaled $\chi^2(25, N=191) = 29.30, ns$; CFI = .987; IFI = .988; RMSEA = .030, with all factor loadings significant at the .001 level (range from .49 to .93).

Analysis and results

Intercorrelations are presented in Table 1. We tested our hypotheses using Structural Equation Modelling (SEM - EQS 6.1, maximum likelihood robust method) that enabled us to estimate multiple causal relationships simultaneously. To preserve statistical power given the complexity of our hypothesized model that includes multiple direct, indirect, and moderating effects, all multi-item scales of our study variables were averaged (by calculating the arithmetic mean) and treated as manifest variables in the structural model. Further, in the calculation of the interaction terms for testing our moderation hypotheses, all related variables (i.e., commitment to local population, agreeableness, expatriate adjustment, sense of personal accomplishment, and openness to

Table 1. Descriptive statistics and inter-correlations (N= 191).

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Age	41.95	8.16																	
2. Gender	1.62	.49	.25**																
3. Education	4.09	1.22	.03	-.12															
4. Time in mission	9.75	5.79	.26**	.19**	-.06														
5. Missions	2.74	1.68	.23**	.09	-.05	.26**													
6. Continent 1	.80	.40	-.01	.00	-.16*	-.16*	-.07												
7. Continent 2	.08	.27	.05	-.13	.07	.18*	.01	-.57**											
8. Origin	1.34	.48	.06	-.06	.22**	-.05	-.02	.01	-.13										
9. Marital Status	2.19	1.69	-.33**	-.24**	.04	-.14	-.02	.05	-.02	.25**									
10. Hot spot	1.76	.43	.02	.06	-.19**	-.22**	-.07	.53**	-.34**	-.05	-.08								
11. Intentions to re-apply	3.61	.72	-.02	-.01	-.00	.10	.02	-.24**	.08	-.03	-.01	-.25**							
12. Sense of personal accomplishment	4.02	.53	.17*	-.01	.05	.11	-.00	.05	-.02	-.00	-.03	-.06	.17*						
13. Commitment to local population	3.14	.76	.02	.06	.17*	-.03	-.01	-.07	.02	-.18*	-.00	-.01	.06	.03					
14. Expatriate Adjustment	3.29	.80	-.00	.09	.20**	.14*	-.00	-.36**	.09	.11	.06	-.41**	.19**	-.00	.34**				
15. Agreeableness	3.96	.56	-.09	-.13	.10	-.08	-.13	-.03	-.04	.15*	.34**	-.01	-.08	.25**	.11	.14			
16. Openness	3.67	.70	.02	-.07	.24**	.00	.05	.02	-.13	.16*	.22**	.03	-.08	.24**	.08	.08	.36**		
17. In-Role Behaviours (IRB)	4.35	.51	.04	-.10	.09	.01	-.16*	-.10	.08	-.02	.14*	-.06	.19**	.49**	.05	.07	.32**	.22**	
18. OCB-Local	3.20	.83	.08	.06	.08	.07	-.00	-.01	.03	-.04	.10	-.02	-.00	.25**	.42**	.18*	.34**	.25**	.14*

Note. * $p < .05$, ** $p < .01$.

experience) were mean centred to reduce multicollinearity and obtain unbiased parameter estimates.

The path-analytic structural model demonstrated a good fit to the data, Satorra–Bentler scaled $\chi^2(153, N=191) = 158.46$, *ns*; CFI = .958; IFI = .964; RMSEA = .033. Standardized path estimates partially supported Hypothesis 1, as commitment to local population was significantly positively related to OCB-Locals ($\beta = .36$, $p < .01$ —H1b), but its corresponding relationship with IRB was nonsignificant ($\beta = .03$, *ns*—H1a). Hypothesis 2 was supported, as agreeableness was positively related to both IRB ($\beta = .36$, $p < .01$ —H2a) and OCB-Locals ($\beta = .18$, $p < .05$ —H2b). Similarly, Hypothesis 3 was also supported, both IRB and OCB-Locals were positively related to sense of personal accomplishment ($\beta = .51$, $p < .01$ —H3a; $\beta = .20$, $p < .05$ —H3b; respectively). Further, the path-analytic model provided support for Hypothesis 4, as sense of personal accomplishment was positively related to intention to apply for another UN assignment ($\beta = .18$, $p < .05$).

To test the mediation hypotheses (i.e., Hypotheses 5 to 7), we estimated indirect effects using bias-corrected bootstrapping analysis with 10,000 repetitions and 95% confidence intervals (95% CI). The indirect effect of commitment to the local population on sense of personal accomplishment via OCB-Locals was .05 and significant (95% CI [.02, .09]), while the corresponding indirect effect via IRB was .01 and nonsignificant (95% CI [-.04, .05]); thus, Hypothesis 5b was supported while Hypothesis 5a was not. Further, the indirect effects of agreeableness on sense of personal accomplishment via IRB and OCB-Locals were .15 and .05, respectively, and significant (95% CI [.07, .24], 95% CI [.02, .10], respectively), which lent support to Hypotheses 6a and 6b. The indirect effects of IRB and OCB-Locals on intention to apply for another UN assignment through sense of personal accomplishment were .12 and .04, respectively, and significant (95% CI [.02, .23], 95% CI [.01, .07], respectively). Hence, Hypotheses 7a and 7b were supported.

With respect to the moderation hypotheses, H8a was supported, as the interaction of expatriate adjustment \times agreeableness (Figure 2) was significantly positively related with IRB ($\beta = .24$, $p < .01$), but H8b was not because the interaction was significantly but negatively related with OCB-Locals ($\beta = -.24$, $p < .01$). The interaction is plotted in Figure 3, which shows that the highest OCB-Locals were displayed in the condition of high agreeableness and low expatriate adjustment. H8c and H8d were not supported: the interaction of expatriate adjustment \times commitment to local population was nonsignificant for both IRB ($\beta = -.05$, *ns*) and OCB-Locals ($\beta = .04$, *ns*). Hypothesis 9 was not supported, because the interaction of openness to experience \times sense of personal accomplishment was significantly but negatively related with the intention to apply for another UN assignment ($\beta = -.12$,

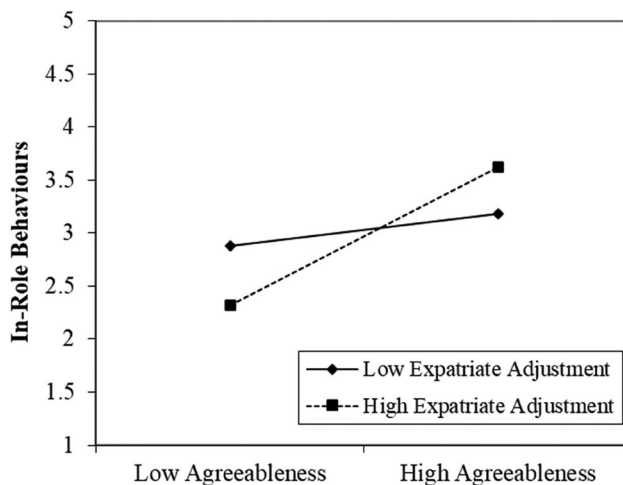


Figure 2. In-Role Behaviours (IRBs): Interaction between agreeableness and expatriate adjustment.

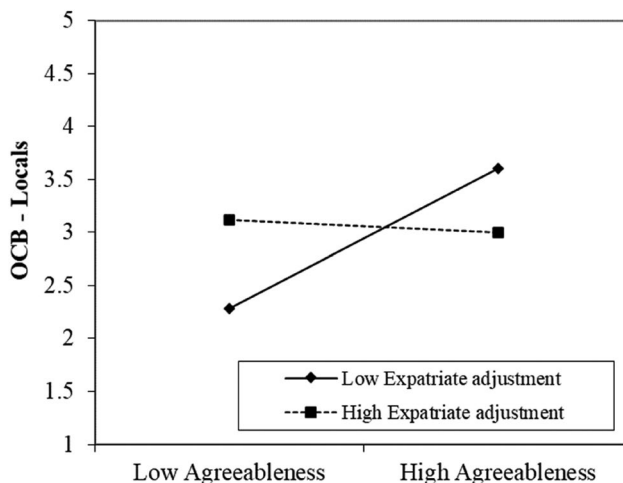


Figure 3. OCB-Locals: Interaction between agreeableness and expatriate adjustment.

$p < .05$). Figure 4 plots the interaction, with the strongest intentions to re-apply appearing in the combination of low openness and high sense of personal accomplishment. The plot also indicates that for those who scored high on openness, intentions to re-apply were constant across levels of sense of personal accomplishment. Overall, the R^2 for the intention to apply for another UN assignment was .20.

Supplementary analysis

Hypotheses 5 and 6 in concert with Hypothesis 7 imply two additional indirect paths - not formally hypothesized in our model - from

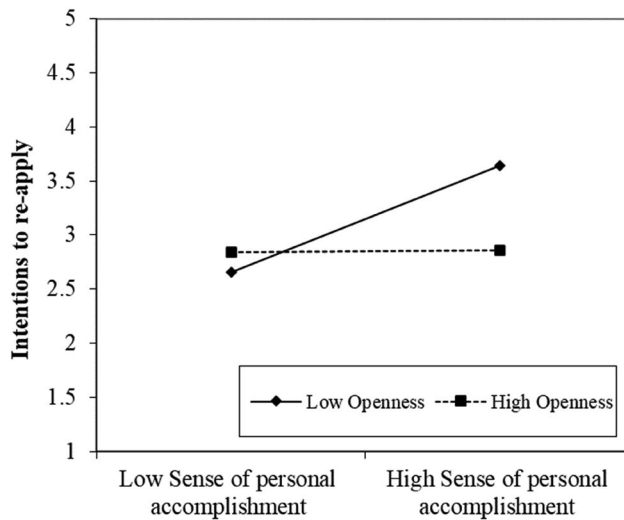


Figure 4. Intentions to re-apply: Interaction between sense of personal accomplishment and openness.

commitment to the local population and agreeableness via IRB and OCB-Locals, and via sense of personal accomplishment to intention to apply for another UN assignment. Bootstrapping analysis showed that of the indirect effects that originated from commitment to the local population, the first (i.e., commitment to the local population → IRB → sense of personal accomplishment → intention to apply for another UN assignment) had a path coefficient with value of .00 and was nonsignificant (95% CI [-.01, .01]); while the other (i.e., commitment to the local population → OCB-Locals → sense of personal accomplishment → intention to apply for another UN assignment) had a path coefficient with value of .01 and was significant (95% CI [.003, .03]). The indirect effects that originated from agreeableness (i.e., agreeableness → IRB → sense of personal accomplishment → intention to apply for another UN assignment; and agreeableness → OCB-Locals → sense of personal accomplishment → intention to apply for another UN assignment) had path coefficients with values of .04 and .01, respectively, and were both significant (95% CI [.01, .08], 95% CI [.003, .04], respectively).

Discussion

The study developed and tested a context-specific model to predict the intentions of UN civilian volunteers in hot spots to apply for another mission upon the end of the current one. The model contained personality, attitudinal and performance variables that were chosen for their theoretical relevance to the nature of the expatriates—international

volunteers in the non-profit sector—and the nature of the mission—humanitarian. Person-Environment (P-E) fit, which suggests that the degree of fit of the characteristics of the person with those of the broad environment determines the favourability of outcomes, served as additional theoretical backdrop behind these choices. In this way the study responds to highlighted needs for research in expatriation in the non-profit sector along with research that takes into account the context of expatriation. Here the emphasis was on volunteers in humanitarian missions for an organization (the UN) that has as one of its main aims to offer aid and relief to people in locations that are afflicted by war or natural disaster.

In general, and with some notable and interesting exceptions that we will discuss, the results supported the hypotheses and, hence, vindicated the suggestions that context-specific research can shed additional light on mechanisms for expatriate experiences and outcomes. Intention to apply for another UN assignment upon completion of the present one was related to whether volunteers felt that they were accomplishing their purposes. Our assumption, based on theoretical reasoning and earlier qualitative studies, was that people who join UN missions as volunteers do so mostly because they see it as a calling towards a superordinate goal that is of moral importance to them. The result concurred with that reasoned assumption because it showed that the stronger the belief that they were fulfilling the purpose of their mission, the more likely they were to be thinking of going on another mission.

Also in line with hypotheses that were formed taking into account the presumed mission-centred mind frame of the volunteers, IRB and OCB-Locals each played a role in the formation of intention to pursue another mission via their relation to sense of personal accomplishment. That reinforced the importance of taking into account the characteristics of the expatriates—in our case their mission was presumably central to their lives –, and the context: job performance measures were context-specific, especially OCB-Locals, discretionary helping behaviours oriented specifically towards the local population. We should point out that IRB, performance in formally prescribed roles, was more strongly related to sense of accomplishment than OCB-locals was. This pattern was somewhat unexpected (though no formal hypothesis had been posited). A potential explanation is that the mission-centredness of volunteers made them see their formal duties as absolute priority.

Finally, enacting the hypothesized mechanism, the two variables chosen with the nature of the expatriates and the context in mind, agreeableness and commitment towards the local population, were related to job performance, albeit only agreeableness was related to both IRB and OCB-Locals. We expected that commitment towards the local population

would manifest itself strongly as OCB to help and contribute to the welfare of locals, which it did. However, we also expected it to show in IRB, which it did not. Because of that pattern, the influence of agreeableness on intentions to go to yet another UN mission was more consistent (it was directed via both performance measures) than the influence of commitment to the local population (it was directed via a single performance manifestation, OCB-Locals). Personality traits are enduring characteristics that encompass action tendencies that manifest themselves in a variety of situations (e.g., Fleeson, 2001; Roberts et al., 2007), and this may be the reason why agreeableness was related to both performance measures. Overall, therefore, agreeableness, which as a personality trait is deeply entrenched, was shown to be more salient and consistent in the tested model than commitment to the local population, which is an attitude and therefore less deeply rooted than personality (Schleicher et al., 2011).

Nonetheless, the general suggestion of the results is that the part of the hypothesized model that was concerned with bi-variate and mediated relationships carries substantial validity. The picture, however, was different with respect to the moderating effects. Three moderating effects were identified (out of the five hypothesized), but only one of those concurred with expectations: UN volunteers who scored high on both agreeableness and adjustment to the hot spot were rated highest in IRB. The two other significant interactions contrasted with expectations, and could be described as “arresting”. Specifically, the highest levels of OCB-Locals were displayed by those scoring high on agreeableness but reporting low adjustment. That was surprising, one potential explanation being that low adjustment for expatriates may reflect especially poor conditions for locals, which acts as a motivator for those with strong empathy and altruism (i.e., high agreeableness) to apply themselves beyond their formal work duties in order to help, which would be reflected on strong OCB-Locals. The fact that the relationship of agreeableness with OCB-Locals was rather flat under the condition of high adjustment (Figure 3) supports this tentative explanation.

It was also intriguing that the combination of strong feelings of personal accomplishment and low (instead of high) openness was associated with the strongest intentions to apply for another mission. For volunteers with high openness, the intention to re-apply was apparently independent from their levels of sense of personal accomplishment (Figure 4), and considerably lower than for those in the low openness–strong accomplishment combination. An admittedly *post hoc* explanation is that discourse about openness and expatriation has thus far viewed the trait as a simple antecedent or correlate of expatriation intentions or adjustment (e.g., Huang et al., 2005; Remhof et al., 2014) rather than as part of a more

complex relationship that involves interaction with other factors. High levels of openness can be associated with inability to maintain focus for long on a particular objective (Dougherty et al., 2008; Rose et al., 1994). Our participants were already in a UN mission, hence, those who were high on openness may have been desirous of an experience of a different nature afterwards. Equally, seeking variety in experiences may not have been a priority for those low on openness, of whom those who felt they were fulfilling their mission wished to repeat that experience. This account, along with the previous one to explain the interaction effect for OCB-Locals, was developed on a *post hoc* basis and needs to be tested empirically.

Overall, especially because many of them were counter to expectations, the results of the testing of our moderation hypotheses further underline the importance of considering expatriation in context.

Implications for practice

While further research is required before we might be able to generalize, the study already provides insights for the UN itself and perhaps for other organizations posting workers to humanitarian hot spots.

Sense of personal accomplishment, satisfaction that the volunteers derived from knowing or believing they were fulfilling their mission of humanitarian nature, was central in the model. Source of that feeling of fulfilment was good performance in the expatriate mission, both in prescribed duties and in discretionary acts to help the local population. The clear implication is that the UN and organizations of similar nature should consistently reinforce the sense of accomplishment in their employees, especially those in special missions. This could be achieved by regularly praising volunteers (but also permanent employees in hot spots) for good performance or effort, and by providing frequent constructive performance feedback. Line managers have a role to play in this part, and making them aware of it should be part of induction and training.

Agreeableness emerged as a strong predictor of a range of outcomes. Those outcomes included both measures of job performance, in-role and organizational citizenship towards the locals - which is certainly what the UN and organizations of similar nature desire from their volunteers - and intentions to take another mission. The implication is that agreeableness could be explicitly considered when developing selection criteria for recruiting volunteers.

Given the potential for individuals' transferring learning from one mission to the next, there is an obvious benefit in attracting more people who are likely to undertake multiple missions (despite that the UN stresses that "volunteering is not a career"), and in supporting those people. On the other hand, the UN might consider deploying those

individuals who are less likely to undertake another mission to hot spots from which transfer of learning is less likely and therefore less is lost if it proves to be their one and only UN undertaking. Moreover, since we found that those high on openness have weaker intentions to apply for another mission because they might be looking for new experiences, assigning them into an atypical mission would make it easier for the UN to find a second mission of different nature for them.

Finally, it appears important to have discussions on deployment openly with the volunteer candidates—we are individuals not demographic profiles. No potential conflict of interest was reported by the author(s), and such discussions might also incorporate some elements of realistic job preview. It has been found that people contracted on a tour-to-tour basis find it difficult to imagine the reality of what it would be like before their first tour (Matuszewski & Blenkinsopp, 2011). Hence, employers can do more to make them aware of some of the elements of life and work on the mission that frequently surprise first-timers. The UN might consider how it might give similar previews, with the aim of maximising the probability of desired outcomes.

Limitations and suggestions for future research

In the study we make assumptions about causal relationships. Though these assumptions were based on logical reasoning, theory, and earlier research, the design of the study (cross-sectional) does not permit absolute certainty about causality. Further, despite the use of all recommended statistical procedures for testing for indirect effects, the cross-sectional nature of our data may raise concerns about the validity of the findings with respect to mediation hypotheses and the attached indirect effect estimates (e.g., O’Laughlin et al., 2018). Properly designed panel studies that employ carefully chosen multiple points in measurement can alleviate relevant concerns (Spector, 2019).

The measurement of job performance, IRB and OCB-Locals utilized the ratings of line managers. This is typically seen as a methodological advantage (in terms of validity of assessment and in terms of lowering the possibility of common method bias, for a recent discussion on the veracity of this assumption, see Bozionelos and Simmering, 2022). However, supervisor-ratings of performance may have limitations within the specific conditions of our study. In particular, line managers may not have always had the opportunity to adequately observe OCB the volunteers were performing towards the local population, which could fully or partly explain why IRB was more strongly related than OCB-Locals to sense of accomplishment.

To test our hypotheses, we conducted causal path analysis. Although our sample size of 191 participants exceeds the minimum recommended

sample size of 100 to attain valid statistical conclusions with SEM (Bollen, 1989; Hair et al., 2010), the complexity of our path model that includes multiple direct, indirect, and moderating effects may call for a larger sample size. Further, while our measurement models indicated reasonably good fit to the data, there might be cases (i.e., factor loadings below .50) that could constrain our models. Therefore, future research with larger samples that replicate our measurement approach could add further credence to our findings.

The expatriates in this study bear characteristics of both assigned expatriates and self-initiated expatriates. Though the literature has generally treated the two groups as distinct (e.g., Andresen et al., 2015; Linder, 2019; c.f. McNulty & Vance, 2017) it appears that there are expatriate populations, like the one we studied, who fall into both categories. Furthermore, individuals who volunteer for humanitarian missions outside their home countries under the conscious understanding of exposing themselves to significant danger without the promise of a career may have not been given the attention they deserve in existing typologies of internationally mobile workers (see, for example, Baruch et al., 2013). Considering the large number of non-profit organizations that operate internationally and rely on volunteers, the size of this population should be large enough to warrant further research.

Finally, the model was developed having in mind the characteristics of the particular expatriates (international volunteers in the non-profit sector serving in humanitarian missions) and the context (geographical areas where crises of humanitarian nature take place). This was dictated by the motives behind the study. Therefore, and exactly for the reasons behind the intended contribution of the study, potential generalizability of findings is confined to expatriates of a similar nature and contexts that resemble that of this study. Future research should therefore try to replicate and extend the present study. For example, the UN is an inter-governmental organization that arguably has worldwide acceptance and recognition. It would be worth looking at expatriate volunteers in non-profit organizations that are private, such as non-government organizations (NGOs) or religious organizations. Though these organizations often operate under the humanitarian premise, the nature of their operations and the characteristics and motives of the volunteers they attract may differ from the UN.

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Disclosure statement

No potential conflict of interest was reported by the authors.

ORCID

Nikos Bozionelos  <http://orcid.org/0000-0002-5644-8109>

John Blenkinsopp  <http://orcid.org/0000-0002-1548-0583>

Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

References

- Aguinis, H., Edwards, J. R., & Bradley, K. J. (2017). Improving our understanding of moderation and mediation in strategic management research. *Organizational Research Methods*, 20(4), 665–685. <https://doi.org/10.1177/1094428115627498>
- Alfes, K., Antunes, B., & Shantz, A. D. (2017). The management of volunteers: What can human resources do? A review and research agenda. *International Journal of Human Resource Management*, 28(1), 62–97.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment. *Journal of Occupational Psychology*, 63(1), 1–18. <https://doi.org/10.1111/j.2044-8325.1990.tb00506.x>
- Andersen, N. (2019). Mapping the expatriate literature: A bibliometric review of the field from 1998 to 2017 and identification of current research fronts. *International Journal of Human Resource Management*, 32(22), 4687–4724.
- Andresen, M., Bergdolt, F., Margenfeld, J., & Dickmann, M. (2014). Addressing international mobility confusion—developing definitions and differentiations for self-initiated and assigned expatriates as well as migrants. *International Journal of Human Resource Management*, 25(16), 2295–2318.
- Andresen, M., Biemann, T., & Pattie, M. W. (2015). What makes them move abroad? Reviewing and exploring differences between self-initiated and assigned expatriation. *International Journal of Human Resource Management*, 26(7), 932–947.
- Andresen, M., Pattie, M. W., & Hippler, T. (2020). What does it mean to be a ‘self-initiated’ expatriate in different contexts? A conceptual analysis and suggestions for future research. *International Journal of Human Resource Management*, 31(1), 174–201.
- Arseneault, R. (2020). Intercultural adjustment challenges of Korean and Canadian self-initiated expatriates in the workplace: An exploratory bidirectional investigation. *International Journal of Cross Cultural Management*, 20(2), 181–199. <https://doi.org/10.1177/1470595820915630>
- Barrett, M., Cox, A., & Woodward, B. (2017). The psychological contract of international volunteers: An exploratory study. *Journal of Global Mobility: The Home of Expatriate Management Research*, 5(2), 123–145. <https://doi.org/10.1108/JGM-03-2017-0009>
- Baruch, Y., Dickmann, M., Altman, Y., & Bournois, F. (2013). Exploring international work: Types and dimensions of global careers. *International Journal of Human Resource Management*, 24(12), 2369–2393.

- Becker, T. E. (2016). Multiple foci of workplace commitments. In J. P. Meyer (Ed.), *The handbook of employee commitment* (pp. 43–55). Elgar Publishing.
- Bentler, P. M. (2004). *EQS 6 structural equations program manual*. Multivariate Software.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588–606. <https://doi.org/10.1037/0033-2909.88.3.588>
- Bettencourt, L. A., & Brown, S. W. (1997). Contact employees: Relationships among workplace fairness, job satisfaction and prosocial service behaviors. *Journal of Retailing*, 73(1), 39–61. [https://doi.org/10.1016/S0022-4359\(97\)90014-2](https://doi.org/10.1016/S0022-4359(97)90014-2)
- Bjerregaard, T. (2014). Engaging institutions in global careers: Highly skilled self-initiated expatriates' journeys through a Nordic welfare state. *European Management Journal*, 32(6), 903–915. <https://doi.org/10.1016/j.emj.2014.04.003>
- Black, J. S., Mendenhall, M., & Oddou, G. R. (1991). Towards a comprehensive model of international adjustment: An integration of multiple theoretical perspectives. *The Academy of Management Review*, 16(2), 291–317. <https://doi.org/10.2307/258863>
- Black, J. S., & Stephens, G. K. (1989). Expatriate adjustment and intent to stay in Pacific Rim overseas assignments. *Journal of Management*, 15(4), 529–544. <https://doi.org/10.1177/014920638901500403>
- Bollen, K. A. (1989). *Structural equations with latent variables*. Wiley.
- Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, 10(2), 99–109. https://doi.org/10.1207/s15327043hup1002_3
- Bozionalos, N. (2019). Career barriers of Chinese self-expatriate women: Neither double jeopardy nor ethnic prominence. *Frontiers in Psychology*, 10, 3024. <https://doi.org/10.3389/fpsyg.2019.03024>
- Bozionalos, N., & Simmering, M. J. (2022). Methodological threat or myth? Evaluating the current state of evidence on common method variance in human resource management research. *Human Resource Management Journal*, 32(1), 194–215. <https://doi.org/10.1111/1748-8583.12398>
- Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods & Research*, 21(2), 230–258. <https://doi.org/10.1177/0049124192021002005>
- Cerdin, J.-L., & Dickmann, M. (2011). Expatriation success in an inter-governmental organization. *Academy of Management Proceedings*, 2011(1), 1–6. <https://doi.org/10.5465/ambpp.2011.65869485>
- Cerdin, J. L., & Selmer, J. (2014). Who is a self-initiated expatriate? Towards conceptual clarity of a common notion. *International Journal of Human Resource Management*, 25(9), 1281–1301.
- Chatman, J. (1991). Matching people and organizations: Selection and socialization in public accounting firms. *Administrative Science Quarterly*, 36(3), 459–484. <https://doi.org/10.2307/2393204>
- Chatman, J. A. (1989). Improving interactional organizational research: A model of person-organization fit. *The Academy of Management Review*, 14(3), 333–349. <https://doi.org/10.2307/258171>
- Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Psychological Assessment Resources.
- DeYoung, C. G. (2015). Cybernetic big five theory. *Journal of Research in Personality*, 56(1), 33–58. <https://doi.org/10.1016/j.jrp.2014.07.004>
- Dickmann, M., & Cerdin, J.-L. (2018). Exploring the development and transfer of career capital in an international governmental organization. *International Journal of Human Resource Management*, 29(15), 2253–2283.

- Dickmann, M., Doherty, N., Mills, T., & Brewster, C. (2008). Why do they go? Individual and corporate perspectives on the factors influencing the decision to accept an international assignment. *International Journal of Human Resource Management*, 19(4), 731–751.
- Doherty, N., Richardson, J., & Thorn, K. (2013). Self-initiated expatriation and self-initiated expatriates: Classification of the research stream. *Career Development International*, 18(1), 97–112. <https://doi.org/10.1108/13620431311305971>
- Dougherty, T. W., Cheung, Y. H., & Florea, L. (2008). The role of personality in employee developmental networks. *Journal of Managerial Psychology*, 23(6), 653–669. <https://doi.org/10.1108/02683940810894738>
- Dries, N. (2020). Individual career outcomes: Conceptual and methodological concerns in the study of career success. In H. Gunz, M. Lazarova, & W. Mayrhofer (Eds.), *The Routledge companion to career studies* (pp. 143–161). Routledge.
- Edwards, J. R. (1991). Person-job fit: A conceptual integration, literature review, and methodological critique. In C. L. Cooper & I. T. Robertson (Eds.), *International Review of Industrial and Organizational Psychology*, Vol. 6, Wiley, New York, NY. pp. 283–357.
- Edwards, J. R. (1996). An examination of competing versions of the person-environment fit approach to stress. *Academy of Management Journal*, 39(2), 292–339.
- Edwards, J. A., & Billsberry, J. (2010). Testing a multi-dimensional theory of person-environment fit. *Journal of Managerial Issues*, 22(4), 476–493.
- Englert, B., Thaler, J., & Helmig, B. (2020). Fit themes in volunteering: Ho do volunteers perceive person-environment fit? *Nonprofit and Voluntary Sector Quarterly*, 49(2), 336–356. <https://doi.org/10.1177/0899764019872005>
- Fallon, B. J., & Rice, S. M. (2015). Investment in staff development within an emergency services organisation: Comparing future intention. *International Journal of Human Resource Management*, 26(4), 485–500.
- Fee, A., & Gray, S. J. (2011). Fast-tracking expatriate development: The unique learning environments of international volunteer placements. *International Journal of Human Resource Management*, 22(3), 530–552.
- Fee, A., & McGrath-Champ, S. (2017). The role of human resources in protecting expatriates: Insights from the international aid and development sector. *The International Journal of Human Resource Management*, 28(14), 1960–1985. <https://doi.org/10.1080/09585192.2015.1137617>
- Ferreira, M. R., Proenca, T., & Proenca, J. F. (2015). Volunteering for a Lifetime? Volunteers' intention to stay in Portuguese hospitals. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 26(3), 890–912. <https://doi.org/10.1007/s11266-014-9466-x>
- Fleeson, W. (2001). Toward a structure- and process-integrated view of personality: Traits as density distributions of states. *Journal of Personality and Social Psychology*, 80(6), 1011–1027. <https://doi.org/10.1037/0022-3514.80.6.1011>
- French, J. R. P., Jr., Caplan, R. D., & Harrison, R. V. (1982). *The mechanisms of job stress and strain*. Wiley.
- French, J. R. P., Jr., Rodgers, W. L., & Cobb, S. (1974). Adjustment as person-environment fit. In G. Coelho, D. Hamburg & J. Adams (Eds.), *Coping and adaptation* (pp. 316–333). Basic Books.
- Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality Psychology in Europe* (Vol. 7, pp. 7–28). Tilburg University Press.

- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective*. (7th Ed.). Pearson.
- He, G. H., An, R., & Zhang, F. (2019). Cultural intelligence and work-family conflict: A moderated mediation model based on conservation of resources theory. *International Journal of Environmental Research and Public Health*, 16(13), 2406. <https://doi.org/10.3390/ijerph16132406>
- Hippler, T. (2009). Why do they go? Empirical evidence of employees' motives for seeking or accepting relocation. *The International Journal of Human Resource Management*, 20(6), 1381–1401. <https://doi.org/10.1080/09585190902909889>
- Hippler, T., Caligiuri, P., & Johnson, J. (2014). Revisiting the construct of expatriate adjustment. *International Studies of Management & Organization*, 44(3), 8–24. <https://doi.org/10.2753/IMO0020-8825440301>
- Hoff, K. A., Song, Q. C., Wee, C. J., Phan, W. M. J., & Rounds, J. (2020). Interest fit and job satisfaction: A systematic review and meta-analysis. *Journal of Vocational Behavior*, 123, 103503. <https://doi.org/10.1016/j.jvb.2020.103503>
- Holland, J. L. (1959). A theory of vocational choice. *Journal of Counseling Psychology*, 6(1), 35–45. <https://doi.org/10.1037/h0040767>
- Huang, T.-J., Chi, S.-C., & Lawler, J. J. (2005). The relationship between expatriates' personality traits and their adjustment to international assignments. *International Journal of Human Resource Management*, 16(9), 1656–1670.
- Hudson, S., & Inkson, K. (2006). Volunteer overseas development workers: The hero's adventure and personal transformation. *Career Development International*, 11(4), 304–320. <https://doi.org/10.1108/13620430610672522>
- Inkson, K., Arthur, M. B., Pringle, J., & Barry, S. (1997). Expatriate assignment versus overseas experience: Contrasting models of international human resource development. *Journal of World Business*, 32(4), 351–368. [https://doi.org/10.1016/S1090-9516\(97\)90017-1](https://doi.org/10.1016/S1090-9516(97)90017-1)
- Inkson, K., & Myers, B. A. (2003). The big OE': Self-directed travel and career development. *Career Development International*, 8(4), 170–181. <https://doi.org/10.1108/13620430310482553>
- Istiani & Muetia, R. (2016). The association of traits personality and pro-social behavior among volunteers in Jakarta. *Advanced Science Letters*, 22(5), 1738–1741. <https://doi.org/10.1166/asl.2016.6752>
- Jansen, K. J., & Kristof-Brown, A. (2006). Toward a multidimensional theory of person-environment fit. *Journal of Managerial Issues*, 8(2), 193–212.
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big-Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins & L. A. Pervin (Eds.), *Handbook of Personality: Theory and Research* (pp. 114–158). Guilford Press.
- Jokinen, T., Brewster, C., & Suutari, V. (2008). Career capital during international work experiences: Contrasting self-initiated expatriate experiences and assigned expatriation. *International Journal of Human Resource Management*, 19(6), 979–998.
- Kristof, A. L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49(1), 1–49. <https://doi.org/10.1111/j.1744-6570.1996.tb01790.x>
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person–job, person–organization, person–group, and person–supervisor fit. *Personnel Psychology*, 58(2), 281–342. <https://doi.org/10.1111/j.1744-6570.2005.00672.x>

- Kumar, R., & Chhokar, J. (2019). Self-initiated expatriates in the local organizations of developing countries. *Management Decision*, 57(7), 1659–1674. <https://doi.org/10.1108/MD-04-2017-0432>
- Kutaula, M., Gillani, A., Leonidou, L. C., & Dayananda, P. (2020). Exploring frontline employee-customer linkages: A psychological contract perspective. *International Journal of Human Resource Management*. <https://doi.org/10.1080/09585192.2020.1791222>
- Lai, J. Y., Chow, C. W., & Loi, R. (2018). The interactive effect of LMX and LMX differentiation on followers' job burnout: Evidence from tourism industry in Hong Kong. *The International Journal of Human Resource Management*, 29(12), 1972–1998. <https://doi.org/10.1080/09585192.2016.1216875>
- Li, Y., Ahlstrom, D., & Ashkanasy, N. M. (2010). A multilevel model of affect and organizational commitment. *Asia Pacific Journal of Management*, 27(2), 193–213. <https://doi.org/10.1007/s10490-010-9193-9>
- Linder, C. (2019). Expatriates' motivations for going abroad: The role of organisational embeddedness for career satisfaction and job effort. *Employee Relations: The International Journal*, 41(3), 552–570. <https://doi.org/10.1108/ER-11-2017-0284>
- Makkonen, P. (2015). Employer perceptions of self-initiated expatriate employability in China: A person-environment fit perspective. *Journal of Global Mobility*, 3(3), 303–330. <https://doi.org/10.1108/JGM-12-2014-0054>
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2(2), 99–113. <https://doi.org/10.1002/job.4030020205>
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach burnout inventory manual*. Consulting Psychologists Press.
- Matuszewski, I., & Blenkinsopp, J. (2011). New kids on the ship': Organisational socialisation and sensemaking of new entrants to cruise ship employment. *Journal of Hospitality and Tourism Management*, 18(1), 79–87. <https://doi.org/10.1375/jhtm.18.1.79>
- McCormick, L., & Donohue, R. (2019). Antecedents of affective and normative commitment of organisational volunteers. *International Journal of Human Resource Management*, 30(18), 2581–2604.
- McCrae, R. R., Costa, P. T., & Martin, T. A. (2005). The NEO-PI-3: a more readable revised NEO Personality Inventory. *Journal of Personality Assessment*, 84(3), 261–270. https://doi.org/10.1207/s15327752jpa8403_05
- McNulty, Y., & Brewster, C. (2017). Theorizing the meaning(s) of 'expatriate': Establishing boundary conditions for business expatriates. *International Journal of Human Resource Management*, 28, 27–61.
- McNulty, Y., & Vance, C. M. (2017). Dynamic global careers: a new conceptualization of expatriate career paths. *Personnel Review*, 46(2), 205–221. <https://doi.org/10.1108/PR-06-2015-0175>
- McNulty, Y., Vance, C. M., & Fisher, K. (2017). Beyond corporate expatriation: Global mobility in the sports, religious, education, and non-profit sectors. *Journal of Global Mobility: The Home of Expatriate Management Research*, 5(2), 110–122. <https://doi.org/10.1108/JGM-04-2017-0014>
- Mercurio, Z. A. (2015). Affective commitment as a core essence of organizational commitment: An Integrative literature review. *Human Resource Development Review*, 14(4), 389–414. <https://doi.org/10.1177/1534484315603612>
- Muchinsky, P. M., & Monahan, C. J. (1987). What is person-environment congruence? Supplementary versus complementary models of fit. *Journal of Vocational Behavior*, 31(3), 268–277. [https://doi.org/10.1016/0001-8791\(87\)90043-1](https://doi.org/10.1016/0001-8791(87)90043-1)

- Oberholster, A. J., Clarke, R., Bendixen, M., & Dastoor, B. (2013). Expatriate motivation in religious and humanitarian non-profit-organizations. *Journal of Global Mobility: The Home of Expatriate Management Research*, 1(1), 7–27. <https://doi.org/10.1108/JGM-09-2012-0007>
- Oh, I. S., Guay, R. P., Kim, K., Harold, C. M., Lee, J. H., Heo, C. G., & Shin, K. H. (2014). Fit happens globally: A meta-analytic comparison of the relationships of person–environment fit dimensions with work attitudes and performance across East Asia, Europe, and North America. *Personnel Psychology*, 67(1), 99–152. <https://doi.org/10.1111/peps.12026>
- O’Laughlin, K. D., Martin, M. J., & Ferrer, E. (2018). Cross-sectional analysis of longitudinal mediation processes. *Multivariate Behavioral Research*, 53(3), 375–402.
- Organ, D. W. (1988). *Issues in organization and management series. Organizational citizenship behavior: The good soldier syndrome*. Lexington Books/D. C. Heath & Com.
- Organ, D. W. (1997). Organizational citizenship behavior: It’s construct clean-up time. *Human Performance*, 10(2), 85–97. https://doi.org/10.1207/s15327043hup1002_2
- Penner, L. A. (2002). Dispositional and organizational influences on sustained volunteerism: An interactionist perspective. *Journal of Social Issues*, 58(3), 447–467. <https://doi.org/10.1111/1540-4560.00270>
- Perry, J. L., & Hondeghem, A. (2008). *Motivation in public management: The call of public service*. Oxford University Press.
- Remhof, S., Gunkel, M., & Schlaegel, C. (2014). Goodbye Germany! The influence of personality and cognitive factors on the intention to work abroad. *International Journal of Human Resource Management*, 25(16), 2319–2343.
- Renshaw, P. S. J., Parry, E., & Dickmann, M. (2018). Seconded national experts and global mobility -extending the paradigm. *Thunderbird International Business Review*, 60(6), 897–909. <https://doi.org/10.1002/tie.21951>
- Riketta, M. (2002). Attitudinal organizational commitment and job performance: A meta-analysis. *Journal of Organizational Behavior*, 23(3), 257–266. <https://doi.org/10.1002/job.141>
- Roberts, B. W., Kuncel, N. R., Shiner, R., Caspi, A., & Goldberg, L. R. (2007). The power of personality: The comparative validity of personality traits, socioeconomic status, and cognitive ability for predicting important life outcomes. *Perspectives on Psychological Science: a Journal of the Association for Psychological Science*, 2(4), 313–345.
- Rose, R. M., Fogg, L. F., Helmreich, R. L., & McFadden, T. J. (1994). Psychological predictors of astronaut effectiveness. *Aviation, Space, and Environmental Medicine*, 65(10 Pt 1), 910–915.
- Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: A policy-capturing approach. *The Journal of Applied Psychology*, 87(1), 66–80.
- Rungtusanatham, M., Miller, J. W., & Boyer, K. K. (2014). Theorizing, testing, and concluding for mediation in SCM research: Tutorial and procedural recommendations. *Journal of Operations Management*, 32(3), 99–113. <https://doi.org/10.1016/j.jom.2014.01.002>
- Rusbult, C. E., Coolsen, M. K., Kirchner, J. L., & Clarke, J. (2006). Commitment. In A. Vangelisti & D. Perlman (Eds.), *The Cambridge handbook of personal relationships* (pp. 615–635). Cambridge University Press.
- Salgado, J. F., & Bastida, M. (2017). Predicting expatriate effectiveness: The role of personality, cross-cultural adjustment, and organizational support. *International Journal of Selection and Assessment*, 25(3), 267–275. <https://doi.org/10.1111/ijsa.12178>

- Sato, T., Fukuda, M., Kameyama, M., Suda, M., Uehara, T., & Mikuni, M. (2012). Differential relationships between personality and brain function in monetary and goal-oriented subjective motivation: Multichannel near-infrared spectroscopy of healthy subjects. *Psychiatry and Clinical Neurosciences*, 66(4), 276–284.
- Schleicher, D. J., Hansen, S. D., & Fox, K. E. (2011). Job attitudes and work values. In S. Zedeck (Ed.), *APA Handbook of Industrial and Organizational Psychology: Volume 3: Maintaining, Expanding, and Contracting the Organization*. American Psychological Association.
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40(3), 437–453. <https://doi.org/10.1111/j.1744-6570.1987.tb00609.x>
- Silva, M., Sanchez-Oliva, D., Brunet, J., Williams, G., Teixeira, P., & Palmeira, A. (2017). What goes around comes around": Antecedents, mediators, and consequences of controlling vs. need-supportive motivational strategies used by exercise professionals. *Annals of Behavioral Medicine: a Publication of the Society of Behavioral Medicine*, 51(5), 707–717.
- Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behaviour: Its nature and antecedents. *Journal of Applied Psychology*, 68(4), 653–663. <https://doi.org/10.1037/0021-9010.68.4.653>
- Solinger, O. N., Van Olffen, W., & Roe, R. A. (2008). Beyond the three-component model of organizational commitment. *The Journal of Applied Psychology*, 93(1), 70–83.
- Solnet, D. J., Ford, R. C., Robinson, R. N. S., Ritchie, B. W., & Olsen, M. (2014). Modeling locational factors for tourism employment. *Annals of Tourism Research*, 45, 30–45. <https://doi.org/10.1016/j.annals.2013.11.005>
- Spector, P. E. (2019). Do not cross me: Optimizing the use of cross-sectional designs. *Journal of Business and Psychology*, 34(2), 125–137. <https://doi.org/10.1007/s10869-018-09613-8>
- Stukas, A. A., Hoyer, R., Nicholson, M., Brown, K. M., & Aisbett, L. (2016). Motivations to volunteer and their associations with volunteers well-being. *Nonprofit and Voluntary Sector Quarterly*, 45(1), 112–132. <https://doi.org/10.1177/0899764014561122>
- Suutari, V., & Brewster, C. (2000). Making their own way: International experience through self-initiated foreign assignments. *Journal of World Business*, 35(4), 417–436. [https://doi.org/10.1016/S1090-9516\(00\)00046-8](https://doi.org/10.1016/S1090-9516(00)00046-8)
- Takeuchi, R. (2010). A critical review of expatriate adjustment research through a multiple stakeholder view: Progress, emerging trends, and prospects. *Journal of Management*, 36(4), 1040–1064. <https://doi.org/10.1177/0149206309349308>
- Tharenou, P. (2015). Researching expatriate types: The quest for rigorous methodological approaches. *Human Resource Management Journal*, 25(2), 149–165. <https://doi.org/10.1111/1748-8583.12070>
- United Nations Volunteers (2020a). International UN volunteer handbook: Conditions of service. Accessed on November 2 2020 from https://www.unv.org/sites/default/files/International_UN_Volunteers_Conditions_of_Service_0.pdf
- United Nations Volunteers. (2020b). Frequently asked questions: In which language should I register my profile? Accessed on November 7 2020 from <https://www.unv.org/faq-page#t311n737>
- United Nations Volunteers. (2021). Volunteerism and the global goals. Accessed on August 8 2021 from <https://www.unv.org/volunteerism-and-global-goals>
- United Nations. (2020). United Nations careers: Volunteer program. Accessed on November 2 2020 from <https://careers.un.org/lbw/home.aspx?viewtype=VOL&lang=en-US>

- Vaiman, V., Haslberger, A., & Vance, C. M. (2015). Recognizing the important role of self-initiated expatriates in effective global talent management. *Human Resource Management Review*, 25(3), 280–286. <https://doi.org/10.1016/j.hrmr.2015.04.004>
- Van Bogaert, P., Peremans, L., Van Heusden, D., Verspuy, M., Kureckova, V., Van de Cruys, Z., & Franck, E. (2017). Predictors of burnout, work engagement and nurse reported job outcomes and quality of care: A mixed method study. *BMC Nursing*, 16(5), 5. <https://doi.org/10.1186/s12912-016-0200-4>
- Van Emmerik, I. J. H., & Euwema, M. C. (2009). The international assignments of peacekeepers: What drives them to seek future expatriation? *Human Resource Management*, 48(1), 135–151. <https://doi.org/10.1002/hrm.20270>
- Van Vianen, A. E. M. (2018). Person-environment fit: A review of its basic tenets. *Annual Review of Organizational Psychology and Organizational Behavior*, 5(1), 75–101. <https://doi.org/10.1146/annurev-orgpsych-032117-104702>
- Vance, C. M. (2005). The personal quest for building global competence: A taxonomy of self-initiating career path strategies for gaining business experience abroad. *Journal of World Business*, 40(4), 374–385. <https://doi.org/10.1016/j.jwb.2005.08.005>
- Voigt, E., & Hirst, G. (2015). High and low performers' intention to leave: Examining the relationship with motivation and commitment. *International Journal of Human Resource Management*, 26(5), 574–588.
- Wechtler, H. (2018). Life if elsewhere”: A diary study of female self-initiated expatriates' motivations to work abroad. *Career Development International*, 23(3), 291–311. <https://doi.org/10.1108/CDI-06-2017-0103>



Trait emotional intelligence and social capital: The emotionally unintelligent may occasionally be better off

Georgios Bozionelos^a, Nikos Bozionelos^{b,*}

^a Department of Public Health and Psychiatry, Sotiria General Hospital, Greece

^b EMLyon Business School, France

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ABSTRACT

The relationship of trait emotional intelligence (EI) with workplace social capital was investigated in 172 individuals in middle and middle-upper organizational ranks. Social capital was operationalized as: mentoring provision for protégés, expressive networking ties, and instrumental network ties. Two out of the three identified relationships were quadratic. In particular, the relationship of mentoring provision and expressive network ties with EI were of U-shaped nature with overall positive linear trends, while that of instrumental network ties with EI was purely linear and positive. The findings suggest that though in most cases the strongest social capital is possessed by those with high scores on trait EI, low EI may also often offer advantages. Extant knowledge about trait EI is utilized to provide an account for the findings, while there is brief discussion of their implications for theory and future research.

1. Introduction

Social capital means resources, such as support, influence and information individuals possess by means of their relationship ties with others within a particular social context (Adler & Kwon, 2002). Social capital is connected with favourable social and psychological outcomes in all life domains (e.g., Jovanovic, 2016). Given its importance, it is of value to identify individual characteristics, such as traits, that contribute to the accumulation of social capital (Gibson, Hardy, & Buckley, 2014). Such a candidate trait is trait emotional intelligence (EI) (Bar-On, 1997; Petrides & Furnham, 2001). Trait EI is located at the lower levels of trait personality hierarchies (De Raad, 2005; Petrides, Pita, & Kokkinaki, 2007; Van der Linden et al., 2017) and personality plays a major role in inter-personal interactions that produce the ties of social capital (Wolff & Kim, 2012). Indeed, high trait EI is associated with closer and more satisfying inter-personal relationships (Maher, Winston, & Rani, 2017; Mavroveli, Petrides, Rieffe, & Bakker, 2007), which form the basis of social capital. Furthermore, it appears that the definition and measurement of EI as a trait stands on firmer grounds than the definition and, especially, measurement of EI as ability (Matthews, Zeidner, & Roberts, 2012; Petrides, 2011; Petrides et al., 2016). Finally, it appears that in general trait EI is more strongly associated with outcomes than ability EI is (e.g., O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011; Sánchez-Álvarez, Extremera, & Fernández-Berrocal, 2016).

Workplace social capital is comprehensively understood as the sum of all inter-personal network ties and any mentoring relationships the individual maintains within the workplace (Bozionelos, 2015). A mentoring relationship is an exclusive one-to-one tie between a senior (the mentor) and a junior colleague (the protégé) that involves substantial intimacy and mutuality (Kram, 1985). In the present work we consider mentoring from the perspective of being a mentor because participants found themselves in middle and middle-upper hierarchical ranks, hence, they are able to provide mentoring for less senior colleagues. Network ties are distinguished into instrumental and expressive, whose primary functions are socio-emotional support and the advancement of career and professional interests of the individual, respectively (Saint-Charles & Mongeau, 2009). Therefore, the work at hand investigated the relationship of EI with social capital, viewed in terms of mentoring provision, expressive network ties and instrumental network ties.

2. Hypotheses

Considering the characteristics (higher-order factors and facets) of trait EI (Bar-On, 1997; Petrides, 2009; Petrides & Furnham, 2001) it is sensible to expect associations with provision of mentoring and network ties. For example, providing mentoring is partly a prosocial act (Allen, 2003), and the empathy facet of EI should prompt the individual to provide mentoring support to less senior colleagues. Furthermore,

* Corresponding author at: 23 avenue Guy de Collongue, CS40203, 69134 Ecully, France.
E-mail address: bozionelos@em-lyon.com (N. Bozionelos).

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particular domain characteristics of EI, such as perceived interpersonal competence, optimism and self-esteem, make people attractive as mentors (Olian, Carroll, Giannantonio, & Feren, 1988).

Hypothesis 1. EI will be positively related to mentoring provision.

EI facets include empathy, ability to develop fulfilling personal relationships, capacity to detect others' emotions and to communicate one's own emotions. These capacities should favour the formation of expressive ties in the workplace because the individual will show interest in others' issues and perspectives along with willingness to intimate. Furthermore, the EI facets of optimism and happiness should make the individual attractive as an expressive tie because people with a positive outlook of life are preferred as friends (e.g., Vollmann, Renner, & Weber, 2007).

Hypothesis 2. EI will be positively related to expressive network ties.

Domain EI characteristics such as flexibility and willingness to adapt (the adaptability facet), confidence, and feelings of being successful (Bar-On, 1997; Petrides, 2009) should motivate the development of relationship ties in the workplace with the purpose of increasing the individual's prospects of success. Further, EI facets such as social awareness, ability to manage others' emotions and to regulate own emotions should also favour the building of instrumental ties.

Hypothesis 3. EI will be positively related to instrumental network ties.

Though hypotheses assumed positive linear associations, recent work reveals non-linear, and in particular quadratic, relationships between social capital and personality, (e.g., Bozionelos, 2017; Bozionelos, Bozionelos, Polychroniou, & Kostopoulos, 2014). It was therefore considered prudent to also test for quadratic associations because presuming linear relationships without testing for non-linearity may compromise our knowledge and accuracy of prediction (e.g., Jorm & Christensen, 2004). No specific expectations for the form of quadratic relationships could be contemplated because the type of non-linearity (for example, U-shaped or inverted U-shaped) depends on the particular personality trait (Bozionelos, 2017; Bozionelos et al., 2014), and EI relates differentially with each big-five and Giant Three trait (De Raad, 2005; Petrides et al., 2007).

2.1. Research question

To investigate whether quadratic equations describe the relationship of EI with mentoring provision, expressive and instrumental network ties more accurately than linear equations.

3. Method

3.1. Participants

Participants were 172 (72 women, 100 men) British origin individuals occupying positions in medium to upper hierarchical levels of a large financial services institution in the United Kingdom. They were fulfilling a variety of roles ranging from software development and IT support management, to accounting, fund management, senior financial analysis, and department management. The organization had no formal mentoring system in place, hence, the mentoring tapped in the study was informal. Table 1 presents demographic statistics.

3.2. Measures

3.2.1. Emotional intelligence

This was assessed with 15 items from Schutte et al.'s (1998) scale. These items formed the largest factor of the unrotated solution in a factor analysis (maximum likelihood estimate) of the 28 unambiguous items of the scale identified by Gignac, Palmer, Manocha, and Stough (2005). A confirmatory factor analysis (CFA) indicated satisfactory data

fit (χ^2 [53] = 116.75, $p < .001$; CFI = 0.965; TLI = 0.930; RMSEA = 0.081; SRMR = 0.046). Cronbach α was 0.90.

3.2.2. Expressive and instrumental network ties

These were measured with the respective three-item scales of Bozionelos' (2003) instrument. The measure is unaffected by social desirability (Bozionelos, 2003) and it has been extensively validated in empirical research, for example, it predicts supervisor-rated job performance and employability (Van der Klink, Van der Heijden, Boon, & Van Rooij, 2014; Wei, Chiang, & Wu, 2012). Cronbach alphas were 0.63 and 0.65, which are marginally acceptable (Nunnally & Bernstein, 1994). A CFA with items loading on their hypothesized factors indicated acceptable data fit (χ^2 [7] = 16.79, $p < .05$; CFI = 0.982; TLI = 0.961; RMSEA = 0.090; SRMR = 0.083), hence, adequate discriminant validity between the scales to utilize as measures of distinct constructs.

3.2.3. Mentoring provision

That was measured with the eight-item scale of Bozionelos (2004). Cronbach α was 0.97. The scale has proven validity, for example, it predicts outcomes such as probabilities of promotion, financial attainment and job performance (Bozionelos, Bozionelos, Kostopoulos, & Polychroniou, 2011; Liu, Liu, Kwan, & Mao, 2009), while responses on it are not affected by social desirability (Bozionelos, 2004).

3.2.4. Controls

These included the big-five, assessed with the NEO Five-Factor Inventory (Costa & McCrae, 1992), gender (male: 1, female: 2), age, educational attainment, organizational tenure, and technical vs. generalist position.

4. Results

Hypotheses were tested with hierarchical regressions. The controls (first step) were followed by the big-five traits (second step), and EI (third step). To test the research question, squared EI scores were added as fourth step (Cohen, Cohen, West, & Aiken, 2003). EI scores were centred (Cohen et al., 2003).

The research question was tested first because hypotheses presumed linear relationships that could be examined only once quadratic associations had been ruled out. The squared term of EI significantly added to the variance accounted for in expressive network ties ($\beta = 0.19$, $t = 2.89$, $p < .01$; $\Delta R^2_{adj.} = 0.021$; $F\Delta[1, 159] = 8.33$, $p < .01$; total $R^2_{adj.} = 0.533$; total $F[12, 159] = 17.29$, $p < .001$) over and above the first-order EI term ($\beta = 0.44$, $t = 4.41$, $p < .001$; $\Delta R^2_{adj.} = 0.035$; $F\Delta[1, 160] = 12.56$, $p < .001$), the big-five ($\Delta R^2_{adj.} = 0.192$; $F\Delta[5, 161] = 12.51$, $p < .001$) and the controls ($\Delta R^2_{adj.} = 0.296$; $F\Delta[5, 166] = 15.36$, $p < .001$). Similarly, EI squared significantly contributed to mentoring provision ($\beta = 0.34$, $t = 6.62$, $p < .001$; $\Delta R^2_{adj.} = 0.077$; $F\Delta = 43.87$, $p < .001$; total $R^2_{adj.} = 0.714$; total $F = 36.53$, $p < .001$) over and above the first-order EI term ($\beta = 0.12$, $t = 1.52$, ns ; $\Delta R^2_{adj.} = 0$; $F\Delta = 0.6$, ns), the big-five ($\Delta R^2_{adj.} = 0.211$; $F\Delta = 20.47$, $p < .001$) and the controls ($\Delta R^2_{adj.} = 0.426$; $F\Delta = 26.35$, $p < .001$). This meant quadratic relationships, hence, hypotheses 1 and 3 could not be tested as such. The positive signs of the squared and the first-order terms indicated U-shaped curves with overall positive linear trends (Cohen et al., 2003). The points of bending were at 0.17 and 1.16 SDs below the mean EI scores. The curves are presented in Figs. 1 and 2.

The squared term of EI did not significantly improve the variance accounted for in instrumental network ties ($\beta = -0.04$, $t = -0.59$, ns ; $\Delta R^2_{adj.} = 0$; $F\Delta[1, 159] = 0.34$, ns ; total $R^2_{adj.} = 0.580$; total $F[12, 159] = 20.68$, $p < .001$), which allowed testing of Hypothesis 2. The first-order coefficient of EI in the three-step hierarchical regression (without the squared term) was significant and positive ($\beta = 0.59$, $t = 6.75$, $p < .001$; $\Delta R^2_{adj.} = 0.116$; $F\Delta[1, 160] = 45.61$, $p < .001$;

Table 1
Descriptive statistics and inter-correlations ($N = 172$).

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Gender	1.42	2.31	–													
2. Age	36.78	7.71	0.02	–												
3. Education	4.64	0.83	–0.17*	0.02	–											
4. Org. tenure (months)	88.87	81.88	0.12	0.45	–0.27***	–										
5. Technical vs. generalist	1.16	0.36	0.22**	0.11	0.10	0.27***	–									
6. Emotional stability	29.28	8.62	–0.03	0.02	–0.16*	0.19*	0.27***	–								
7. Extraversion	42.29	6.02	–0.11	0.04	–0.21**	0.15*	0.26***	0.65***	–							
8. Openness	42.05	6.37	0.17*	0.30***	0.23**	–0.05	0.06	–0.15*	–0.22**	–						
9. Agreeableness	51.29	6.14	0.16*	0.37***	–0.25*	0.22**	0.26***	0.38***	0.45***	–0.05	–					
10. Conscientiousness	48.15	6.33	–0.01	–0.11	–0.39***	0.35***	0.16*	0.20**	0.21*	–0.18*	–0.24**	–				
11. Emotional intelligence	38.20	6.82	–0.03	0.13	–0.03	0.17*	0.18*	0.28***	0.06	0.50***	0.41***	–0.02	–			
12. Mentoring provision	20.75	8.24	–0.02	0.53***	–0.11	0.54***	0.33*	0.25**	0.27***	0.44***	0.16*	0.21**	0.30***	–		
13. Expressive network ties	11.51	2.31	0.29***	0.37***	–0.14†	0.48***	0.20**	0.02	–0.01	0.44***	0.16*	0.13†	0.42***	0.32***	–	
14. Instrumental network ties	10.76	2.08	–0.13†	–0.03	–0.41***	0.15†	0.25*	0.48***	0.47***	0.08	0.26***	0.14†	0.45***	0.20*	0.44***	–

† $p < .1$.
* $p < .05$.
** $p < .01$.
*** $p < .001$.

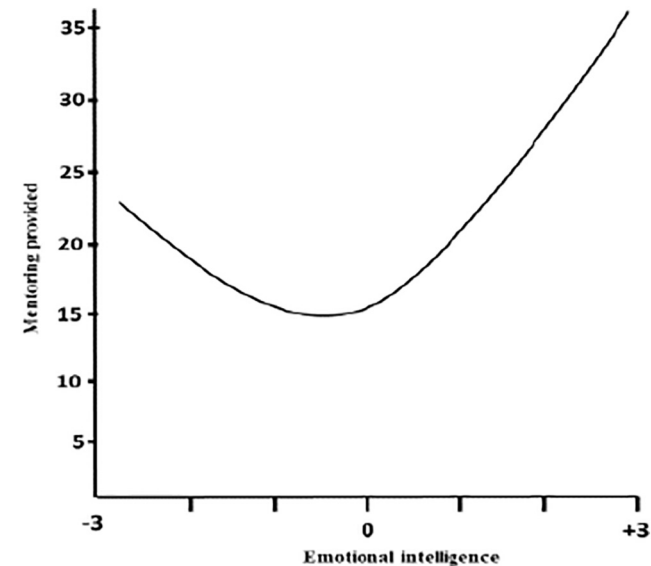


Fig. 1. The relationship between EI and mentoring provision.

total $R^2_{adj.} = 0.582$; total $F[11, 160] = 20.62$, $p < .001$) beyond the contribution of the big-five ($\Delta R^2_{adj.} = 0.214$; $F\Delta[5, 161] = 14.28$, $p < .001$) and the controls ($\Delta R^2_{adj.} = 0.252$; $F\Delta[5, 166] = 12.53$, $p < .001$), lending support to H2.

5. Discussion

Overall, the findings indicate a substantial role of trait EI in the accumulation of social capital. The results suggest that though in most cases those with the highest EI scores possess most workplace social capital, individuals low on trait EI may sometimes enjoy advantages. Indeed, the relationships were more complex than the hypothesized linear patterns, two out of the three being of quadratic U-shaped form. The U-shaped patterns confirmed the point that low trait EI scores do not necessarily associate with the least desirable outcomes (Davis & Nichols, 2016; Petrides, 2011). The most complicated pattern was for mentoring provision, where the range of EI scores for which the relationship was negative occupied nearly half the EI continuum.

It is important to note that EI explained substantial amounts of unique variance in all measures of social capital beyond the considerable variance (ranging from 19.2% to 21.4%) explained by the big-five.

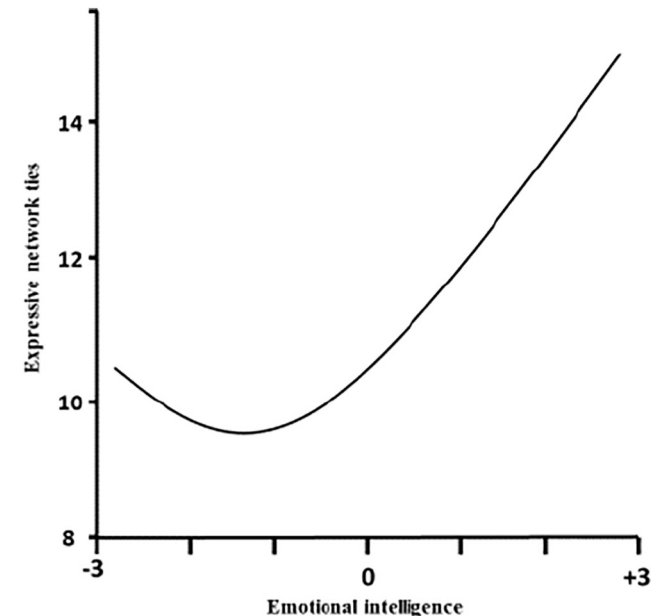


Fig. 2. The relationship between EI and expressive network ties.

The associations of the big-five traits with social capital were generally in line with the literature (Bozionelos, 2015). However, it is interesting to note that agreeableness was related more strongly to instrumental than to expressive network ties, while emotional stability and extraversion were not related to expressive ties. It is reminded, however, that the big-five were utilized as controls, hence, under the linearity assumption. It could be that some non-significant linear relationships simply hide significant quadratic ones.

The U-shaped relationships may be accounted for by considering that various EI facets may have opposing effects on the formation of relationship ties. For example, no attempt to regulate one's own emotions or to manage the emotions of others may make the individual appear more genuine and, hence, more desirable as mentor or as expressive tie. Or strong impulsiveness may render the individual more prone to actively initiate relationships with others, those being protégés or expressive ties. The beneficial effects of finding oneself in the low poles of particular EI facets may, therefore, for a specific range of scores overwhelm the effects of finding oneself in the high poles of other facets (these could be empathy, social awareness, and capability to communicate one's feelings) that help the formation of social capital ties. In

such cases, the most disadvantaged would normally be those who find themselves near or around the middle of the trait EI continuum. In our study those who scored one standard deviation below and above the mean EI score were least likely to report ties with protégés.

The study has limitations of course. Data were collected via self-reports, which allegedly may invite common method variance. Notwithstanding this possibility, our social capital measures are unaffected by social desirability, which is a common cause of common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Most important, evidence (Fuller, Simmering, Atinc, Atinc, & Babin, 2016; Lance, Dawson, Birkelbach, & Hoffman, 2010; Simmering, Fuller, Richardson, Ocal, & Atinc, 2015) shows that bias in relationship estimates as result of common method variance is a remote possibility that should be of minimal concern. There is also some likelihood that, in line with the Dunning-Kruger effect (Kruger & Dunning, 1999), low EI participants have over-reported their social capital, which could be partly responsible for the U-shaped patterns. Though we adopted the trait EI approach while the Dunning-Kruger phenomenon is caused by actual ability, this possibility needs to be pointed.

Our speculative account of the findings needs empirical confirmation, maybe with more fine-grained measures of EI (for example, the EQ-i, Bar-On, 1997, or the TEIQue, Petrides, 2009) that will allow investigation of how particular EI facets interact in the production of social capital ties. Furthermore, future studies should investigate how EI relates to behaviours that create social capital in order to shed light on the exact mechanism that links EI with social capital. Finally, though we adopted the trait EI approach, ability EI with its strategic branch that involves capacity to understand emotions and figure out strategies that utilize these towards goal achievement (Matthews et al., 2012; Mayer, Salovey, Caruso, & Sitarenios, 2003), may also be able to account for the accumulation of particular aspects of social capital, such as instrumental network ties. Future research, therefore, may also utilize the ability EI approach.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.paid.2018.06.037>.

References

- Adler, P. S., & Kwon, S.-W. (2002). Social capital: Prospects for a new concept. *Academy of Management Review*, 27, 17–40.
- Allen, T. D. (2003). Mentoring others: A dispositional and motivational approach. *Journal of Vocational Behavior*, 62, 134–154.
- Bar-On, R. (1997). *Bar-on emotional quotient inventory: Technical manual*. Toronto, Canada: Multihealth Systems.
- Bozionelos, G. (2017). The relationship of the big-five with workplace network resources: More quadratic than linear. *Personality and Individual Differences*, 104, 374–378.
- Bozionelos, N. (2003). Intra-organizational network resources: Relation to career success and personality. *International Journal of Organizational Analysis*, 11, 41–66.
- Bozionelos, N. (2004). Mentoring provided: Relation to mentor's career success, personality, and mentoring received. *Journal of Vocational Behavior*, 64, 24–46.
- Bozionelos, N. (2015). Social capital and careers: Indisputable evidence and note for caution. In A. De Vos, & B. I. J. M. Van der Heijden (Eds.). *Handbook of research on sustainable careers* (pp. 67–82). Northampton, MA: Edward Elgar Publishing.
- Bozionelos, N., Bozionelos, G., Kostopoulos, K., & Polychroniou, P. (2011). How providing mentoring relates to career success and organizational commitment: A study in the general managerial population. *Career Development International*, 16, 446–468.
- Bozionelos, N., Bozionelos, G., Polychroniou, P., & Kostopoulos, K. (2014). Mentoring receipt and personality: Evidence for non-linear relationships. *Journal of Business Research*, 67, 171–181.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.
- Davis, S. K., & Nichols, R. (2016). Does emotional intelligence have a “dark” side? A review of the literature. *Frontiers in Psychology*, 7, 1316.
- De Raad, B. (2005). The trait-coverage of emotional intelligence. *Personality and Individual Differences*, 38, 673–687.
- Fuller, C. M., Simmering, M. J., Atinc, G., Atinc, Y., & Babin, B. J. (2016). Common methods variance detection in business research. *Journal of Business Research*, 69, 3192–3198.
- Gibson, C., Hardy, J. H., & Buckley, M. R. (2014). Understanding the role of networking in organizations. *Career Development International*, 19, 146–161.
- Gignac, G. E., Palmer, B. R., Manocha, R., & Stough, C. (2005). An examination of the factor structure of the Schutte self-report emotional intelligence (SSREI) scale via confirmatory factor analysis. *Personality and Individual Differences*, 39, 1029–1042.
- Jorm, A. F., & Christensen, H. (2004). Religiosity and personality: Evidence for non-linear associations. *Personality and Individual Differences*, 36, 1433–1441.
- Jovanovic, V. (2016). Trust and subjective well-being: The case of Serbia. *Personality and Individual Differences*, 98, 284–288.
- Kram, K. E. (1985). *Mentoring in the workplace: Development relationships in organizational life*. Glenview, IL: Scott, Foresman.
- Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology*, 77, 1121–1134.
- Lance, C. E., Dawson, B., Birkelbach, D., & Hoffman, B. J. (2010). Method effects, measurement error, and substantive conclusions. *Organizational Research Methods*, 13, 435–455.
- Liu, D., Liu, J., Kwan, H. K., & Mao, Y. N. (2009). What can I gain as a mentor? The effect of mentoring on the job performance and social status of mentors in China. *Journal of Occupational and Organizational Psychology*, 82, 871–895.
- Maher, H., Winston, C. N., & Rani, S. U. (2017). What it feels like to be me: Linking emotional intelligence, identity, and intimacy. *Journal of Adolescence*, 56, 162–165.
- Matthews, G., Zeidner, M., & Roberts, R. D. (2012). Emotional intelligence: A promise unfulfilled? *Japanese Psychological Research*, 54, 105–127.
- Mavroveli, S., Petrides, K. V., Rieffe, C., & Bakker, F. (2007). Trait emotional intelligence, psychological well-being and peer-rated social competence in adolescence. *British Journal of Developmental Psychology*, 25, 263–275.
- Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2003). Measuring emotional intelligence with the MSCEIT V2.0. *Emotion*, 3, 97–105.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw Hill.
- O'Boyle, E. H., Humphrey, R. H., Pollack, J. M., Hawver, T. H., & Story, P. A. (2011). The relation between emotional intelligence and job performance: A meta-analysis. *Journal of Organizational Behavior*, 32, 788–818.
- Olian, J. D., Carroll, S. J., Giannantonio, C., & Feren, S. J. (1988). What do protégés look for in a mentor? Results of three experimental studies. *Journal of Vocational Behavior*, 33, 15–37.
- Petrides, K. (2011). Ability and trait emotional intelligence. In T. Chamorro-Premuzic, S. von Stumm, & A. Furnham (Eds.). *The Wiley-Blackwell handbook of individual differences* (2nd ed.). Oxford: Wiley-Blackwell.
- Petrides, K. V. (2009). *Technical manual for the Trait Emotional Intelligence Questionnaires (TEIQue)*. London: London Psychometric Laboratory.
- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality*, 15, 425–448.
- Petrides, K. V., Mikolajczak, M., Mavroveli, S., Sanchez-Ruiz, M.-J., Furnham, A., & Pérez-González, J.-C. (2016). Developments in trait emotional intelligence research. *Emotion Review*, 8, 335–341.
- Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology*, 98, 273–289.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903.
- Saint-Charles, J., & Mongeau, P. (2009). Different relationships for coping with ambiguity and uncertainty in organizations. *Social Networks*, 31, 33–39.
- Sánchez-Álvarez, N., Extremera, N., & Fernández-Berrocal, P. (2016). The relation between emotional intelligence and subjective well-being: A meta-analytic investigation. *The Journal of Positive Psychology*, 11, 276–285.
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, 25, 167–177.
- Simmering, M. J., Fuller, C. M., Richardson, H. A., Ocal, Y., & Atinc, G. M. (2015). Marker variable choice, reporting, and interpretation in the detection of common method variance: A review and demonstration. *Organizational Research Methods*, 18, 473–511.
- Van der Klink, M., Van der Heijden, B. I. J. M., Boon, J., & Van Rooij, S. W. (2014). Exploring the contribution of formal and informal learning to academic staff member employability: A Dutch perspective. *Career Development International*, 19, 337–356.
- Van der Linden, D., Pekaar, K. A., Bakker, A. B., Schermer, J. A., Vernon, P. A., Dunkel, C. S., & Petrides, K. V. (2017). Overlap between the general factor of personality and emotional intelligence: A meta-analysis. *Psychological Bulletin*, 143, 36–52.
- Vollmann, M., Renner, B., & Weber, H. (2007). Optimism and social support: The providers' perspective. *The Journal of Positive Psychology*, 2, 205–215.
- Wei, L.-Q., Chiang, F. F. T., & Wu, L.-Z. (2012). Developing and utilizing network resources: Roles of political skill. *Journal of Management Studies*, 49, 381–402.
- Wolff, H.-G., & Kim, S. (2012). The relationship between networking behaviors and the big five personality dimensions. *Career Development International*, 17, 43–66.

CHAPTER 6

IN SEARCH OF CHALLENGE

Flow at Work and the Development of Occupational Expertise

Georgios Bozionelos
General Hospital of Katerini

Nikos Bozionelos
EM Lyon Business School

Beatrice I. J. M. Van der Heijden
Radboud University

Izabela Marzec
Katowice School of Economics

In this chapter, we focus on the development and testing of a model that involves constructs seen under the umbrella of challenge, conceptualized by Mainiero and Sullivan (2006) as an individual's need to learn, grow, and find stimulation in one's work. In particular, we propose and test a mechanism of antecedents of occupational expertise, defined as proficiency in

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125

one's work role by means of possessing up-to-date skills, knowledge, and dexterities (Van der Heijde & Van der Heijden, 2006). Establishing expertise is one way for individuals to fulfill their need for challenge (Mainiero & Sullivan, 2006). In today's rapidly changing work environment, the development of expertise is important not only as a motivational force, but also as a means for individuals to remain employable (Baruch & Bozionelos, 2011; Bozionelos & Bozionelos, 2015). Likewise, employee expertise is important to organizations because it is associated with performance and competitive advantage (Harms & Brummel, 2013; McQuaid & Lindsay, 2005). Despite the relevance of expertise for individual and organizational effectiveness, there is limited knowledge regarding its antecedents (Bozionelos et al., 2016; van der Heijden, Gorgievski, & De Lange, 2016).

We explore the macro-level construct of learning climate and the micro-level construct of learning value of the job as potential antecedents of occupational expertise. The learning value of the job is specific to the job itself and whether the demands and opportunities contained within the confines of a particular job provide nutrient for development of skills and knowledge (Van der Heijden, 2006). In contrast, the learning climate is a characteristic of the wider organizational environment and refers to the extent to which organizational policies (e.g., information sharing, communication between teams and departments), practices (e.g., formal and informal training opportunities, rewards), and mentalities (e.g., tolerance for learning-related errors) facilitate the creation, acquisition, and transfer of knowledge by employees (Marsick & Watkins, 2003; Nikolova, Van Ruysseveldt, De Witte, & Van Dam, 2014). The learning value of the job and organizational learning climate are clearly different constructs (e.g., Evers, Van der Heijden, & Kreijns, 2016; Van der Heijden, 2006). For example, there can be jobs with low learning value within organizations with strong learning climates and vice versa (see Van der Heijden, 2006). Challenge is associated by many with learning and growing by means of taking difficult job assignments and projects (Mainiero & Sullivan, 2006), while for others learning serves as a means of confirming their identity (Mainiero & Sullivan, 2006). Hence, both learning related variables in the model are clearly linked with challenge.

Additionally, we propose that flow, defined as a state in which the individual is fully absorbed and engaged in what he or she is doing (Csikszentmihalyi, 1990; Csikszentmihalyi, Abuhamdeh, & Nakamura, 2005), mediates the relationship between organizational learning climate and learning value of the job, respectively, and occupational expertise. Considering that a condition for the experience of flow is to constantly seek, or be offered, challenges, the experience of flow is clearly a necessary condition for challenge (Bakker, 2005; Csikszentmihalyi, 1990). Under the experience of flow learning reaches its peak (Bakker, 2008; Csikszentmihalyi, 1990); hence,

flow should maximize the benefits of learning for the development of occupational expertise.

Finally, we propose that the family-to-work interference moderates the relationship between organizational learning climate and learning value of the job, respectively, and occupational expertise. In prior research, it has been found that the interference between the family and the work domain has substantial effects on work experiences and career outcomes (Boyd, Keeney, Sinha, & Ryan, 2015). We suggest that responsibilities and obligations in the non-work domain affect one's ability to benefit from learning experiences offered by the job or encouraged by a positive organizational learning climate.

Beyond having challenge as an overarching element, hence contributing to the consolidation of the kaleidoscope career metaphor, the study adds to extant literature in a number of ways. First, despite learning climate being an established construct, there is a dearth of studies looking at its implications for employee outcomes (Eldor & Harpaz, 2016; Kyndt & Dochy, 2013). Second, there is also a shortage of empirical studies on the presumed benefits of the job as a learning resource for employees' developmental outcomes (Van der Heijden et al., 2016). Both flow at work and occupational expertise are treated as outcomes of learning in the model, and they bear value for employees, employers, and the society in general. Third, there is still limited knowledge about antecedents of employability and its dimensions (Bozionelos et al., 2016; van der Heijden et al., 2016). Employability is the construct that is of most concern in the contemporary career-related literature (Baruch, Szucs, & Gunz, 2015) and has been so for a substantial amount of time (Bozionelos, 2001). Professional expertise is the largest dimension of employability (Van der Heijde & van der Heijden, 2006). Hence, gaining knowledge regarding antecedents of professional experience will be a valuable addition to the literature. Fourth, despite being a highly researched construct, family-to-work interference (and its reverse, work-to-family interference) has not been investigated for its relationships with learning and the outcomes of learning. Hence, the study contributes by assigning to family-to-work interference the important role of moderator in the way micro- and macro-level learning variables relate to important contemporary outcomes, such as flow and occupational expertise. In addition, family-to-work interference pertains to another parameter of the kaleidoscope career metaphor, balance (Mainiero & Sullivan, 2005; 2006); hence, the study also serves as a bridge for two out of the three elements of the kaleidoscope career model (KCM). Fifth, the study contributes by utilizing the conservation of resources (COR) theory as theoretical backdrop, a theory that has been developed within the context of stress (Hobfoll, 1988, 1989), but whose applicability in the work setting (Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014) and to interference between the

work and the family domain (ten Brummelhuis & Bakker, 2012) has only recently drawn attention. Finally, there is still limited knowledge on important career-related outcomes and their antecedents, including employability and its causes, within the Eastern European cultural cluster, where participants in the study were drawn from (Bozionellos, 2014; Bozionellos & Bozionellos, 2015; Bozionellos et al., 2016). There are considerable cultural differences between the Eastern European cluster and the Anglo-Saxon and the Northern European clusters (e.g., House, Hanges, Javidan, Dorfman, & Gupta, 2004) where most conceptual and empirical research in careers, but also in flow and learning, has been conducted so far. Hence, generalizations of extant knowledge cannot be safely made, unless actual empirical research within that cluster is conducted.

Theoretical Background

COR theory (Hobfoll, 1988, 1989, 2002) posits that individuals seek to retain, protect, and gain resources. Resources are objects, conditions, energies, or personal characteristics that individuals value either in their own right or because they facilitate attaining valued goals (Halbesleben et al., 2014; Hobfoll, 1988, 1989). Resources, in turn, are distinguished into personal and contextual (Hobfoll, 2002). Personal resources are located within the person (e.g., skills, knowledge, personality traits, intellectual capacity, psychological capacities; Hobfoll, 2002). Hence, occupational expertise is a personal resource.

Contextual resources are located within the individual's immediate environment (Hobfoll, 2002). Therefore, properties of the job, such as its learning value, or characteristics of the wider organizational environment, such as the learning climate, are contextual resources. As seen, the learning value of the job refers to whether the job contains elements (e.g., challenging goals, autonomy, complexity, variety, feedback) that allow practice and extension of the job holder's capabilities that result in gaining new knowledge and skills or updating these (Van der Heijden & Bakker, 2011). Thus the job, by means of its learning value, acts as a resource for the individual employee. Likewise, the learning climate of the organization is a contextual resource, because it reflects encouragement and opportunities for learning within the organization (Mikkelsen & Gronhaug, 1999).

Model Development

The hypothesized model is shown in Figure 6.1. COR theory posits that access to resources increases the likelihood of acquisition of further

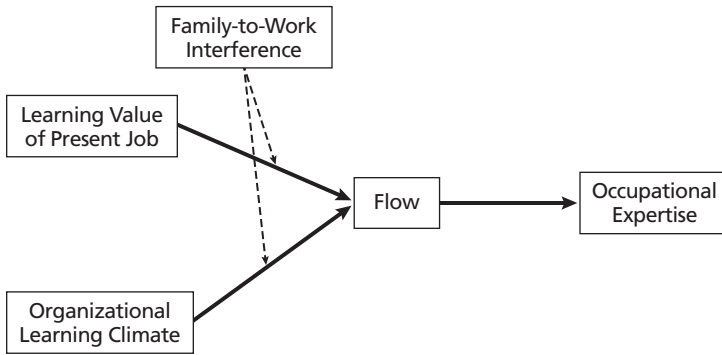


Figure 6.1 The hypothesized model. Dotted lines represent moderation effects.

resources (Hobfoll, 1989, 2002). This process is referred to as “gain spiral,” meaning that extant resources enable the individual to gain additional resources (Hobfoll, 2001, 2011; ten Brummelhuis & Bakker, 2012), and is supported by empirical work (Weigl et al., 2010). The process of gain spiral often starts from contextual resources that stimulate and foster the generation of personal resources (Hobfoll, 2011; ten Brummelhuis & Bakker, 2012). Hobfoll (2011) stresses that whether employees are able to develop themselves and grow on the job is contingent upon whether the organizational environment provides the relevant opportunities, policies, and mentality. COR theory, therefore, leads to the following hypotheses:

Hypothesis 1: *Learning value of the present job (H1a) and organizational learning climate (H1b) positively relate to occupational expertise.*

Flow at work is experienced when employees perceive that they have the resources to meet job demands (Bakker, 2005; Peters, Poutsma, Van der Heijden, Bakker, & de Bruijn, 2014). Workplace contextual resources assist individuals to meet the demands of the job along with enabling their own personal growth (Bakker & Demerouti, 2017; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). This relationship means that availability of substantial contextual resources in the form of jobs that have learning value and an organizational climate that encourages learning and skills acquisition will make it more likely for individuals to experience flow.

Hypothesis 2: *Learning value of the present job (H2a) and organizational learning climate (H2b) positively relate to flow at work.*

Authors suggest that under the experience of flow, learning reaches its peak (Bakker, 2008; Csikszentmihalyi, 1990). It follows that flow should

maximize the benefits of learning towards the development of occupational expertise. People who are absorbed in their work should reach greater expertise because of greater internalization of what they experience and better consolidation of acquired knowledge. In line with the above contemplation, a recent study with students found that those who were more focused and absorbed in their studies achieved better knowledge outcomes (Ketonen et al., 2016).

Hypothesis 3: *Flow at work positively relates to occupational expertise.*

Hypotheses 1 to 3 imply an intervening role for flow in the respective relationships. Hence, the following mediating hypothesis is posed:

Hypothesis 4: *Flow at work mediates the relationship of the learning value of the present job (H4a) and of the organizational learning climate (H4b) with occupational expertise.*

Interference between family and work life refers to the extent to which the demands imposed by the family sphere take away resources the individual needs in order to meet the demands of the job (ten Brummelhuis & Bakker, 2012). Family-to-work interference imposes substantial psychological strain (Kalliath, Kalliath, & Chan, 2015) that necessitates that individuals utilize existing personal resources (e.g., psychological, attentional, temporal) in order to deal with it (see Hobfoll, 1988). According to COR theory, the process of resource gain may be facilitated or inhibited by environmental conditions (Hobfoll, 2011; ten Brummelhuis & Bakker, 2012). This idea helps account for cases where the principle of gain spiral (i.e., access to resources increases the probability of further resource acquisition) does not seem to work—that is, where resources appear to be in abundance, but no noticeable gains in valued resources are evident (Hobfoll, 2001; Halbesleben et al., 2014). In this line, strong family-to-work interference may inhibit personal resources from translating into gains in personal resources. Hence, a job with high learning value or an organizational climate with strong learning elements may not lead to significant experience of flow if there is substantial interference between family and work life that depletes resources (e.g., time, attention, alertness) that otherwise the individual would pump into performing the job (Demerouti, Bakker, Sonnentag, & Fullagar, 2012). In line with the above reasoning, recent research found that family-to-work interference depleted work-related resources and subsequently reduced job satisfaction (Unruh, Raffenaud, & Fottler, 2016), which is a manifestation of flow (see Bakker, 2008). This conjecture directs to the following hypothesis:

Hypothesis 5: *Family-to-work interference negatively moderates the relationship of flow at work with both the learning value of the present job (H4a) and the organizational learning climate (H4b), such that under strong family-to-work interference the relationships are weaker.*

METHOD

Participants and Procedure

Participants were 282 (181 males and 101 females) information technology (IT) professionals (people who were involved in the design, development, implementation, maintenance and support of IT products and services) in two European countries, Greece ($n = 94$) and Poland ($n = 188$), which belong to the Eastern European cultural cluster (House et al., 2004). Their line manager completed the questionnaire that assessed occupational expertise. All participants were natives of these countries; hence, they shared similar cultural values while their employing organizations were embedded into similar cultures. This similarity made measurement variance due to differences in work values less likely. For example, the level of performance orientation of a society may influence the way jobs are designed and evaluated, that is, their learning value, but also the extent to which employees pursue development of expertise (see Javidan, 2004). Using respondents from the same cultural cluster reduced the possibility of confounding due to country-level effects.

Data for this study were collected as part of a larger project that sought to develop and validate the construct and measure of employability, including antecedents and consequences. The project employed a random selection of companies in each country who agreed to participate, chosen from the geographic regions that accounted for the majority of IT activity. The total numbers of participant companies was 51 from Greece and 72 from Poland. All IT professionals and their line managers in each of these companies were then approached independently by the research team and were asked to complete the questionnaires on a purely voluntary basis. Questionnaires were primarily completed electronically, but paper-and-pencil forms were also available upon request and were utilized very occasionally. Software or codes imprinted in the paper-and-pencil forms allowed the matching of employees' and their line managers' responses.

Mean age, tenure with current employer, length of total work experience, and educational attainment were 32.88 ($SD = 8.2$) years, 4.18 ($SD = 8.94$) years, 8.22 ($SD = 7.73$) years, and 2.57 ($SD = 1.26$) years, respectively. Of the participants, 144 were single, 120 married or cohabiting, and 18 were divorced or widowed, while most ($n = 197$) had no dependents and the rest had from one

($n = 57$) to three ($n = 4$) dependents. Line managers' (211 males, 67 females and 11 who did not report their sex) mean age was 41.45 ($SD = 8.42$) years.

Measures

Questionnaires were administered to the respondents in their primary language, after having utilized the translation-back-translation procedure (e.g., Behling & Law, 2000) to ensure semantic equivalence with the original English versions of the scales. Unless otherwise stated, the measurement format was 5-point (1: *not at all*, 5: *to a great extent*).

Flow

This construct was measured with five items (e.g., "I feel a lot of enjoyment in doing my work," "I do this work without asking myself what will be the result for me") from Bakker's (2001) Work-Related Flow scale (WOLF) that has been extensively utilized in the literature (see Fullagar & Delle Fave, 2017). Cronbach alpha was .86.

Learning Value of Present Job

This construct was measured with five items (e.g., "My job enables me to further develop my talents," "I can learn more and more from my job") from the scale developed by Van der Heijden and her associates (Van der Heijden et al., 2005; Van der Heijden & Bakker, 2011) that has been validated through extensive research across populations and cultures (Bozionellos et al., 2016; Van der Heijden et al., 2005). Cronbach alpha was .83.

Organizational Learning Climate

This construct was measured with five items (e.g., "If I have a question about my job there is someone available to answer it," "Everyone here shares information relevant to the job") from the Learning Climate Questionnaire (Bartram, Foster, Lindley, Brown, & Nixon, 1993). Cronbach alpha was .79.

To confirm the discriminant and convergent validity, hence distinctiveness, of learning value of present job and organizational learning climate measures, a confirmatory factor analysis (CFA) was performed using the MPLUS 7.0 program (Muthén & Muthén, 1998/2012) and employing the maximum likelihood robust method that corrects for non-normality in the data. Model fit was assessed with the consultation of four widely utilized fit indices: the comparative fit index (CFI), the incremental fit index (IFI), the root mean squared error of approximation (RMSEA) and the standardized root mean square residual (SRMR). CFI and IFI values above .90 are considered to indicate acceptable fit, while values above .95

are viewed as indicative of very good fit (Bentler & Bonett, 1980). Values of SRMR below .08 are viewed as indicating good fit (Hu & Bentler, 1999), while values of RMSEA below .10 are viewed as acceptable and below .05 as very good (Hu & Bentler, 1999; Steiger, 1990). The χ^2 value was also reported, though this test is sensitive to the sample size; hence, with sufficiently large sample sizes, like the one in our study, it is of substantive value only if non-significant. The two-factor model demonstrated acceptable data fit ($\chi^2 [34, n = 282] = 93.12, p < .001$; CFI = .957; TLI = .943; RMSEA = .080; SRMR = .043). Factor loadings ranged from .564 to .859 and were all significant at .001 level. In comparison, the single factor model (all items loading on a single factor) showed very poor fit ($\chi^2 [27, n = 282] = 371.71, p < .001$; CFI = .633; TLI = .510; RMSEA = .213; SRMR = .132). These results clearly suggested that the two measures tapped different constructs.

Family-to-Work Interference

This interference was measured with the five item scale of Netemeyer, Boles, and McMurrian (1996). Sample items include “the demands of my family or spouse/partner interfere with my work-related activities” and “what I want to do at work doesn’t get done because of family demands.” Cronbach alpha was .91.

Occupational Expertise

This variable was measured with five items from the line manager version of the instrument developed by Van der Heijden and her associates (Van der Heijde & Van der Heijden, 2006; Van der Heijden et al., 2005). Line managers rated participants on various aspects of professional expertise using a 6-point response format (1: *not at all*, 2: *not really*, 3: *not very*, 4: *fairly*, 5: *sufficiently*, 6: *extremely*). Sample items include “During the past year, this employee was generally competent to perform his/her work accurately and with few mistakes” and “I have a lot of confidence in this employee’s capacities within his/her area of expertise.” Cronbach alpha was .92.

Controls

Information on each control variable, including participants’ age (assessed using an open-ended question, “What is your year of birth?” and then deducting from the year of data collection), sex (1: male, 2: female), educational attainment (1: secondary school, 2: college/some university, 3: bachelor’s degree or recognized equivalent, 4: master’s degree or recognized equivalent, 5: doctorate), marital status (1: single, 2: married/cohabitating, 3: divorced, 4: widowed), number of dependents, tenure with current employer, and length of total work experience was obtained with single items. These factors may impact the experience of flow (see Ainley, Enger, & Kennedy, 2008; Bakker, 2008) and the development of occupational

expertise (van der Heijden, 2002; van der Heijde & van der Heijden, 2006; van der Heijden & Verhelst, 2002; Wittekind, Raeder, & Grote, 2010). Line managers' age and sex as well as length of time they had worked with each particular participant were collected because these may influence how line managers evaluate their subordinates (Roberson, Galvin, & Charles, 2007).

RESULTS

Descriptive statistics and intercorrelations are presented in Table 6.1. Cur-sory inspection of the correlation coefficients suggested presence of the hypothesized bivariate relationships. In particular, learning value of the present job was significantly related to flow ($r = .20, p < .001$), and so was the organizational learning climate ($r = .18, p < .01$). In addition, flow was significantly positively related to occupational expertise ($r = .18 p < .05$).

Hypotheses were tested with structural equation modeling (SEM) using the MPlus 7 program with the maximum likelihood robust method along with the fit indices described earlier. The measurement model was tested in the first step, followed by the structural model (i.e., significance of path coefficients; Anderson & Gerbing, 1988). Only those controls that dem-onstrated significant relationships were included in the structural model (e.g., Wu, Tsui, & Kinicki, 2010), while items within factors were allowed to correlate freely in the process. Hypotheses contained specific directional relationships, hence, one-tailed significance testing was utilized.

TABLE 6.1 Descriptive Statistics and Intercorrelations ^a										
Variable	Mean	SD	1	2	3	4	5	6	7	8
1. Age	32.88	8.20	—							
2. Educational level	2.57	1.26	.10	—						
3. Tenure (in years)	4.18	8.94	.58	.10	—					
4. Dependents	.41	.70	.33	.14	.21	—				
5. Flow	18.82	5.79	.13	.13	.07	.00	—			
6. Occupational expertise	22.45	4.37	.03	.23	.16	-.03	.13	—		
7. Learning value of present job	17.36	3.61	-.13	.06	0.0	-.08	.20	.26	—	
8. Organizational learning climate	17.54	3.56	-.22	.06	-.19	-.11	.18	.24	.35	—
9. Family-to-work interference	14.10	6.79	.01	-.03	-.05	.05	.04	-.14	.03	-.07

Note: Correlations $\geq .12, .16$, and $.19$ are significant at $.05, .01$, and $.001$, respectively.
^a ($n = 282$)

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The measurement model with the four latent factors (learning value of present job, organizational learning climate, flow, and occupational expertise) showed satisfactory data fitting properties (χ^2 [142, $n = 282$] = 243.22, $p < .001$; CFI = .962; TLI = .955; RMSEA = .050; SRMR = .055). Three alternative measurement models were also estimated: a single factor model (i.e., all items assumed to represent a single underlying construct; χ^2 [147, $n = 282$] = 1246.66, $p < .001$; CFI = .529; TLI = .452; RMSEA = .163; SRMR = .151); a three-factor model, in which flow and occupational expertise formed distinct factors while learning value of the job and organizational learning climate formed a single factor (χ^2 [141, $n = 282$] = 325.41, $p < .001$; CFI = .921; TLI = .904; RMSEA = .068; SRMR = .081); and a three-factor model in which learning value and organizational learning climate formed distinct factors while flow and occupational expertise formed a single factor (χ^2 [135, $n = 282$] = 255.44, $p < .001$; CFI = .948; TLI = .935; RMSEA = .056; SRMR = .088). These models were inferior to the four-factor model.

The structural models were created by adding the hypothesized paths into the measurement model. To test Hypothesis 1, a structural model that included the three latent factors of learning value of the job, learning climate, and occupational expertise was estimated. The model demonstrated satisfactory data fit (χ^2 [96, $n = 282$] = 172.16, $p < .001$; CFI = .961; TLI = .952; RMSEA = .053; SRMR = .052). Both paths towards occupational expertise, from learning value of the present job ($\beta = .27$, $z = .3.31$, $p < .01$) and from organizational learning climate ($\beta = .18$, $z = .2.37$, $p < .05$) were significant, lending support to H1a and H1b.

To test Hypotheses 2 and 3 flow was added to the structural model. The new model fitted the data reasonably well with only SRMR slightly above the recommended cut-off value (χ^2 [177, $n = 282$] = 328.31, $p < .001$; CFI = .945; TLI = .935; RMSEA = .055; SRMR = .086). The path from the learning value of the present job towards flow was positive and significant ($\beta = .23$, $z = 2.37$, $p < .01$), which lent support to H2a. By contrast, the path from organizational learning climate towards flow was not significant ($\beta = .14$, $z = 1.59$, ns); therefore, H2b was not supported. The path from flow towards occupational expertise was significant ($\beta = .13$, $z = 1.87$, $p < .05$), lending support to Hypothesis 3.

Hypothesis 4 postulated a mediating role for flow in the relationship of learning value and learning climate with occupational expertise. However, the non-significant relationship of learning climate with flow, as already seen in the testing of H2b, indicated that only the first part of hypothesis 4 (H4a) was meaningful to test (Judd & Kenny, 1981). Calculations suggested that the indirect effect of learning value on professional expertise via flow was marginally significant ($\beta_{\text{indirect}} = .025$, $z = 1.50$, $p < .07$). The direct effect was also significant ($\beta_{\text{direct}} = .26$, $z = 3.68$, $p < .001$). Hence, H4a was marginally supported, the findings suggesting partial mediation. Utilization

of bootstrapping that corrects for the non-normality of the distribution of product terms (MacKinnon, Lockwood, & Williams, 2004) yielded an identical result.

Hypothesis 5, which postulated moderating effects of family-to-work interference on the relationship of learning value and learning climate with flow, was tested by adding the respective interaction terms to the model, along with family-to-work interference as a main effect. Following recommendations (Cohen, Cohen, West, & Aiken, 2003), variable scores were centered. The interaction term of learning value \times family-to-work interference was significant in the hypothesized negative direction ($\beta = -.13$, $z = -1.96$, $p < .05$), lending support to H4a. The interaction term for organizational learning climate was not significant ($\beta = .01$, $z = .15$, ns). As a result, H4b was unsupported.

To facilitate interpretation of findings and provide a clearer picture, a final model that included only the significant paths was estimated ($\chi^2 [213] = 386.19$, $p < .001$, CFI = .938, TLI = .928, RMSEA = .054, SRMR = .068), which is presented in Figure 6.2. An alternative model that reversed the causal order between flow and occupational expertise (i.e., where occupational expertise assumed the role of the mediator and flow the role of outcome variable) showed inferior data fit ($\chi^2 [232] = 472.19$, $p < .001$, CFI = .916, TLI = .904, RMSEA = .061, SRMR = .081).

DISCUSSION

The chapter focused on the development of a model that included variables of high contemporary importance that can be viewed under the umbrella

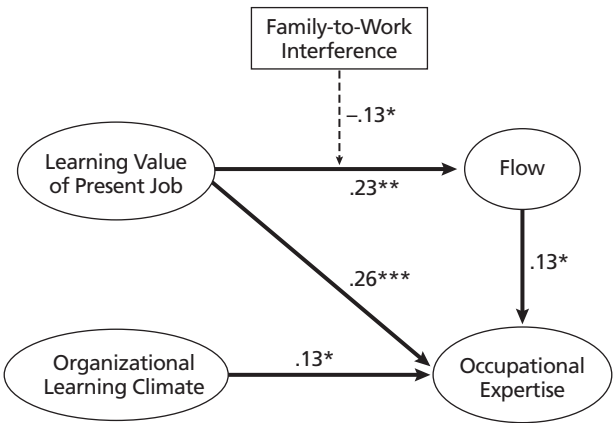


Figure 6.2 The supported model ($\chi^2 [213] = 386.19$, $p < .001$, CFI = .938, TLI = .928, RMSEA = .054, SRMR = .068). *Note:* Dotted line represents moderator effects.

of challenge. Its contribution lies in informing regarding antecedents of occupational expertise—a key quality nowadays for individuals, employers, and the economy. Further, there is still limited knowledge about the factors that cultivate occupational expertise. Flow at work is the product of the process of meeting challenges, while the development of personal expertise represents a constant challenge for most individuals. The model included two learning related variables, learning value of the job and organizational learning climate, as factors that nourish expertise. Despite the significance of learning in the contemporary work environment, there is still inadequate knowledge on its relationship with employee outcomes. Flow was treated as an intervening factor, both a cause and effect. Flow is a pleasurable state that also has motivating properties (Knight & Waples, 2017), hence, it is of strong present-day importance, too. Finally, an out-of-work factor, demands of personal or family life, was considered, because work life does not exist in a vacuum, but instead it is influenced by what happens outside work.

The results largely, albeit not fully, supported the theoretical arguments. First, the extent to which the job allows consolidation along with updating and expansion of existing skills and knowledge—that is, when it has high learning value—is connected with the achievement of the end challenge factor in our model, occupational expertise. Similarly, organizational environments that cultivate learning in terms of encouraging and allowing experimentation and personal development as well as knowledge sharing and circulation are also conducive to the development of occupational expertise. What we also found was that flow at work is enhanced by jobs with high learning value, meaning that jobs that provide opportunities for learning and evolution of skills and knowledge render employees absorbed in, engaged with, and driven by what they do.

What was also found was that the link of the job's learning value with flow becomes more pronounced when interference from family life is minimal, while a strong spillover from family to work life apparently acts as inhibitor to the nutrient effect of a job with strong learning value. Hence, the beneficial effects of jobs with strong learning value on flow may not be realized when family life and work life impose conflicting demands. In such cases, individuals apparently do not have the resources (such as time, attention, energy) to be fully immersed into their job.

Implications for Practice

The implication for employers is that providing learning opportunities to employees within their work roles along with encouragement for experimentation and knowledge sharing is instrumental in meeting today's imperative of having a motivated and competent workforce. Apparently, jobs

with high learning value and environments that promote and encourage learning provide employees with the resources and motives to meet the challenge of establishing expertise and to grow at the personal and the professional level, making them happy and genuinely focused in what they do (Bakker, 2005, 2008). Apart from further enhancing the expertise of the workforce, flow at work may have other beneficial consequences (Luthans, Youssef-Morgan, & Avolio, 2015; Thoresen, Kaplan, Barsky, Warren, & de Chermont, 2003). For example, a positive emotional state at the individual level is likely to spill over at team or unit level, with collective increase in morale and motivation (e.g., Newman, Ucbasaran, Zhu, & Hirst, 2014), which in essence means amplification of benefits. It is important to keep in mind that to experience flow there must be a match between the resources and the demands of the job. Substantial discrepancy between the two leads either to burnout or to boredom. It is therefore important that there is a match between employees' personal and organizationally-supplied resources and requirements of the job.

Another implication for employers is that taking an interest by means of facilitating the family life of their employees can be of benefit in meeting the challenges associated with today's business environment. Though taking an active interest into the personal life of employees is a sensitive issue, organizations can still work their way into it by providing assistance to employees to deal with family or other out-of-work matters (e.g., providing counseling services or facilitating access to such services), or facilitating employees' family life (e.g., by helping employees to access day care facilities, offering flexible work schedules or patterns). Such support initiatives, especially when not legally required, can pay off by reducing the tension between family and work life (see Purohit, Simmers, Sullivan, & Baugh, 2015).

The implications for individuals, who may be the most interested parties, are twofold: First, jobs are instrumental in finding and meeting key challenges, such as absorbing work and developing professional expertise. Considering that the job itself, by means of its learning value, is a source of finding and meeting challenge, individuals can themselves take responsibility for enhancing the learning value of their job. They can add elements into their job by means of job crafting, a process via which employees themselves add to and alter tasks, scope, responsibilities, meaning, and variety for their own job (Dik et al., 2015; Wrzesniewski, Berg, & Dutton, 2010).

Limitations and Future Directions

The study had a number of limitations. Though we presumed causal relationships, the cross-sectional design does not allow certainty on causal order regardless of the data-fitting properties of our model and however logically

and theoretically sound our argumentation may have been (e.g., Bozionelos, 2003). Future research will benefit from longitudinal or experimental designs.

In addition, though we did evaluate occupational expertise by using line managers' assessments, which is a strength of the study, there are still some issues with our measurement. For example, the learning-related factors were assessed by employees themselves, which may impose issues of common method variance. It has to be noted, however, that the relationships between the contextual factors and occupational expertise (that were measured from different sources) were stronger than the relationships of the contextual factors and flow that were all measured from the same source (employees themselves). These facts somewhat alleviate concerns over common method effects (Bozionelos, Bozionelos, Polychroniou, & Kostopoulos, 2014). Moreover, the learning factors were contextual but were measured at the same level as individual-level factors were measured. Future research will thus benefit from the utilization of multi-level designs.

The study was conducted with IT professionals (participants were mostly software developers). Within the IT profession, the requirements for concentration on the task at hand over long work hours are strong. Similarly, the pace of progress within IT makes it imperative for IT professionals to constantly update their skills and knowledge in order to maintain their professional expertise so as to be employable in a highly competitive job market. Within these types of environments, factors such as the learning qualities of the job and organizational encouragement for learning may play a more important role than in industries or occupations with slower pace of change. Future research might seek to replicate our findings in less learning intensive occupations and industries in order to explore whether occupation or industry serves as boundary condition on the generalizability.

Finally, in this study we considered the interaction between family and work in negative terms—family life was treated as a burden for the individual that depletes available resources. However, the spillover between the domains of family and life can also be positive (Greenhaus & Powell, 2006) and, in fact, the two, positive and negative spillover, can co-exist (Chen, Powell, & Cui, 2014; Greenhaus & Powell, 2006). Hence, though we considered only the effects of interference from family towards work, family-to-work enrichment may have also been in operation. From the reverse point of view, flow at work can be a source of enrichment for family life. That is, flow caused by a job with high learning value may create benefits for the personal life of the individual—for example, the positive mood and the energy gains resulting from the experience of flow may be transferred to the family domain (ten Brummelhuis & Bakker, 2012), which may create a feedback loop (Timms et al., 2015). In this respect meeting challenge can itself serve as a resource that by means of a gain spiral brings further challenge. Future

research, therefore, should look in more detail at the interaction between family and work, especially from the perspective of positive spillover.

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REFERENCES

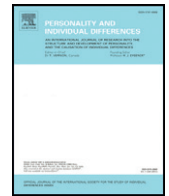
- Ainley, M., Enger, L., & Kennedy, G. (2008). The elusive experience of “flow”: Qualitative and quantitative indicators. *International Journal of Educational Research*, 47, 109–121.
- Anderson, J., & Gerbing, D. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411–423.
- Bakker, A. B. (2001). Vragenlijst voor het meten van werkgerelateerde flow: De WOLF [Questionnaire for the assessment of work-related flow: The WOLF]. Utrecht University, Utrecht, The Netherlands: Department of Social and Organizational Psychology.
- Bakker, A. B. (2005). Flow among music teachers and their students: The crossover of peak experiences. *Journal of Vocational Behavior*, 66, 26–44.
- Bakker, A. B. (2008). The work-related flow inventory: Construction and initial validation of the WOLF. *Journal of Vocational Behavior*, 72, 400–414.
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22, 273–285.
- Bartram, D., Foster, J., Lindley, P. A., Brown, A. J., & Nixon, S. (1993). *Learning climate questionnaire (LCQ): A user's guide*. Hull, England: Newland Park Associates.
- Baruch, Y., & Bozionelos, N. (2011). Career issues. In S. Zedeck (Ed.), *APA handbook of industrial and organizational psychology (Vol. 2): Selecting and developing members of the organization* (pp. 67–113). Washington, DC: American Psychological Association.
- Baruch, Y., Szucs, N., & Gunz, H. (2015). Career studies in search of theory: The rise and rise of concepts. *Career Development International*, 20, 3–20.
- Behling, O., & Law, K. S. (2000). *Translating questionnaires and other research instruments: Problems and solutions*. Thousand Oaks, CA: SAGE.
- Bentler, P. M., & Bonett, D. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588–606.
- Boyd, E. M., Keeney, J., Sinha, R., & Ryan, A. M. (2015). A qualitative exploration of reactions to work–life conflict events. In S. G. Baugh & S. E. Sullivan (Eds.), *Research in careers (Vol. 3): Striving for balance*. Charlotte, NC: Information Age.
- Bozionelos, N. (2001). Organizational downsizing and career development. *Career Development International*, 6, 87–92.

- Bozionelos, N. (2003). Causal path analysis: What it does and what it does not tell us. *Career Development International*, 8, 5–11.
- Bozionelos, N. (2014). Career patterns in Greek academia: Social capital and intelligent careers, but for whom? *Career Development International*, 19, 264–294.
- Bozionelos, G., & Bozionelos, N. (2015). Employability and key outcomes in times of severe change: The role of career orientation. *Human Resource Management (Poland)* [Zarządzanie Zasobami Ludzkimi], 6(107), 11–32.
- Bozionelos, N., Bozionelos, G., Polychroniou, P., & Kostopoulos, K. (2014). Mentoring receipt and personality: Evidence for non-linear relationships. *Journal of Business Research*, 67, 171–181.
- Bozionelos, N., Kostopoulos, K., Van der Heijden, B., Rousseau, D. M., Bozionelos, G., Hoyland, T., . . . Van der Heijde, C. (2016). Employability and job performance as links in the relationship between mentoring receipt and career success: A study in SMEs. *Group & Organization Management*, 41, 135–171.
- Chen, Z., Powell, G. N., & Cui, W. (2014). Dynamics of the relationships among work and family resource gain and loss, enrichment, and conflict over time. *Journal of Vocational Behavior*, 84, 293–302.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Erlbaum.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York, NY: Harper & Row.
- Csikszentmihalyi, M., Abuhamdeh, S., & Nakamura, J. (2005). Flow. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 598–608). New York, NY: Guilford Press.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86, 499–512.
- Demerouti, E., Bakker, A. B., Sonnentag, S., & Fullagar, C. (2012). Work-related flow and energy at work and at home: A study on the role of daily recovery. *Journal of Organizational Behavior*, 33, 276–295.
- Dik, B. J., Duffy, R. D., Allan, B. A., O'Donnell, M. B., Shim, Y., & Steger, M. F. (2015). Purpose and meaning in career development applications. *Counseling Psychologist*, 43, 558–585.
- Eldor, L., & Harpaz, I. (2016). A process model of employee engagement: The learning climate and its relationship with extra-role performance behaviors. *Journal of Organizational Behavior*, 37, 213–235.
- Evers, A. T., Van der Heijden, B. I. J. M., & Kreijns, K. (2016). Organisational and task factors influencing teachers' professional development at work. *European Journal of Training and Development*, 40, 36–55.
- Fullagar, C., & Delle Fave, A. (Eds.). (2017). Flow at work: Measurement and implications. In A. B. Bakker (Series Ed.), *Current issues in work and organizational psychology*. New York, NY: Routledge.
- Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review*, 31, 72–92.
- Halbesleben, J. R. B., Neveu, J.-P., Paustian-Underdahl, S. C., & Westman, M. (2014). Getting to the "COR": Understanding the role of resources in conservation of resources theory. *Journal of Management*, 40, 1334–1364.

- Harms, P. D., & Brummel, B. J. (2013). The importance of developing employability. *Industrial and Organizational Psychology*, 6, 20–24.
- Hobfoll, S. E. (1988). *The ecology of stress*. New York, NY: Hemisphere.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44, 513–524.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review*, 50, 337–369.
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, 6, 307–324.
- Hobfoll, S. E. (2011). Conservation of resource caravans and engaged settings. *Journal of Occupational and Organizational Psychology*, 84, 116–122.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Thousand Oaks, CA: SAGE.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1–55.
- Javidan, M. (2004). Performance orientation. In R. J. House, P. J. Hanges, M. Javidan, P. W. Dorfman, & V. Gupta (Eds.), *Culture, leadership, and organizations: The GLOBE study of 62 societies* (pp. 239–281). Thousand Oaks, CA: SAGE.
- Judd, C. M., & Kenny, D. A. (1981). Process analysis: Estimating mediation in evaluation research. *Evaluation Research*, 5, 602–619.
- Kalliath, P., Kalliath, T., & Chan, C. (2015). Work–family conflict and family–work conflict as predictors of psychological strain: Does social support matter? *British Journal of Social Work*, 45, 2387–2405.
- Ketonen, E. E., Haarala-Muhonen, A., Hirsto, L., Hanninen, J. J., Wahala, K., & Lonka, K. (2016). Am I in the right place? Academic engagement and study success during the first years at university. *Learning and Individual Differences*, 51, 141–148.
- Knight, P., & Waples, C. (2017). Flow in the context of work and organizational psychology: The case of work motivation. In C. Fullagar & A. Delle Fave (Eds.), *Flow at work: Measurement and implications* (pp. 140–156). New York, NY: Routledge.
- Kyndt, E., & Dochy, F. (2013). Antecedenten van een succesvolle organisatieontwikkeling en hun relatie met het leerklimaat van de organisatie: Een “mixed method”-studie [The relation between learning climate and antecedents for a successful development of organizations]. *Gedrag & Organisatie*, 26, 357–378.
- Luthans, F., Youssef-Morgan, C. M., & Avolio, B. J. (2015). *Psychological capital and beyond*. Oxford, England: Oxford University Press.
- Mainiero, L. A., & Sullivan, S. E. (2005). Kaleidoscope careers: An alternate explanation for the “opt-out” revolution. *Academy of Management Executive*, 19(1), 106–123.
- Mainiero, L. A., & Sullivan, S. E. (2006). *The opt-out revolt: Why people are leaving companies to create kaleidoscope careers*. Mountain View, CA: Davies-Black.

- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39, 99–128.
- Marsick, V. J., & Watkins, K. E. (2003). Demonstrating the value of an organization's learning culture: The Dimensions of Learning Organizations Questionnaire. *Advances in Developing Human Resources*, 5, 132–151.
- McQuaid, R. W., & Lindsay, C. (2005). The concept of employability. *Urban Studies*, 42, 197–219.
- Mikkelsen, A., & Gronhaug, K. (1999). Measuring organizational learning climate: A cross-national replication and instrument validation study among public sector employees. *Review of Public Personnel Administration*, 19(4), 31–44.
- Muthén, L. K., & Muthén, B. O. (1998/2012). *Mplus user's guide* (7th ed.). Los Angeles, CA: Muthén & Muthén.
- Newman, A., Ucbasaran, D., Zhu, F., & Hirst, G. (2014). Psychological capital: A review and synthesis. *Journal of Organizational Behavior*, 35, S120–S138.
- Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, 81, 400–410.
- Nikolova, I., Van Ruysseveldt, J., De Witte, H., & Van Dam, K. (2014). Learning climate scale: Construction, reliability, and initial validity evidence. *Journal of Vocational Behavior*, 85, 258–265.
- Peters, P., Poutsma, E., Van der Heijden, B. I. J. M., Bakker, A. B., & de Bruijn, T. (2014). Enjoying new ways to work: An HRM-process approach to study flow. *Human Resource Management*, 53, 271–290.
- Purohit, Y. S., Simmers, C. A., Sullivan, S. E., & Baugh, S. G. (2015). Do organizational efforts to help employees achieve balance matter? An empirical study of organizational support initiatives on worker attitudes. In S. G. Baugh & S. E. Sullivan (Eds.), *Research in careers (Vol. 3): Striving for balance*. Charlotte, NC: Information Age.
- Roberson, L., Galvin, B. M., & Charles, A. C. (2007). When group identities matter. *Academy of Management Annals*, 1, 617–650.
- Steiger, J. H., (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research*, 25, 173–180.
- ten Brummelhuis, L. L., & Bakker, A. B. (2012). A resource perspective on the work-home interface: The work-home resources model. *American Psychologist*, 67, 545–556.
- Timms, C., Brought, P., O'Driscoll, M., Kalliath, T., Siu, O. L., Sit, C., & Lo, D. (2015). Positive pathways to engaging workers: Work-family enrichment as a predictor of work engagement. *Asia Pacific Journal of Human Resources*, 53, 490–510.
- Thoresen, C. J., Kaplan, S. A., Barsky, A. P., Warren, C. R., & de Chermont, K. (2003). The affective underpinnings of job perceptions and attitudes: A meta-analytic review and integration. *Psychological Bulletin*, 129, 914–945.
- Unruh, L. Y., Raffenaud, A., & Fottler, M. (2016). Work-family conflict among newly licensed registered nurses: A structural equation model of antecedents and outcomes. *Journal of Healthcare Management*, 61, 129–145.

- Van der Heijden, B. I. J. M. (2006). Age differences in career activities among higher-level employees in the Netherlands: A comparison between profit sector and non-profit sector staff. *International Journal of Training and Development*, 10, 98–120.
- Van der Heijde, C. M., & Van der Heijden, B. I. J. M. (2006). A competence-based and multidimensional operationalization and measurement of employability. *Human Resource Management*, 45, 449–476.
- Van der Heijden, B. I. J. M. (2002). Prerequisites to guarantee life-long employability. *Personnel Review*, 31, 44–61.
- Van der Heijden, B. I. J. M., & Bakker, A. B. (2011). Toward a mediation model of employability enhancement: A study of employee-supervisor pairs in the building sector. *Career Development Quarterly*, 59, 232–248.
- Van der Heijden, B. I. J. M., Gorgievski, M. J., & De Lange, A. H. (2016). Learning at the workplace and sustainable employability: A multi-source model moderated by age. *European Journal of Work and Organizational Psychology*, 25, 13–30.
- Van der Heijden, B. I. J. M., & Verhelst, N. D. (2002). The psychometric evaluation of a multidimensional measurement instrument of professional expertise: Results from a study in small- and medium-sized enterprises in the Netherlands. *European Journal of Psychological Assessment*, 18, 165–178.
- Van der Heijden, B. I. J. M., Scholarios, D., Bozionellos, N., Van der Heijde, C. M., Epitropaki, O., & the Indic@tor consortium. (2005). *Report on final results. Indic@tor Report: A crosscultural study on the measurement and enhancement of employability in small and medium-sized ICT-companies*. Brussels, Belgium: European Commission.
- Weigl, M., Hornung, S., Parker, S. K., Petru, R., Glaser, J., & Angerer, P. (2010). Work engagement accumulation of task, social, personal resources: A three-wave structural equation model. *Journal of Vocational Behavior*, 77, 140–153.
- Wittekind, A., Raeder, S., & Grote, G. (2010). A longitudinal study of determinants of perceived employability. *Journal of Organizational Behavior*, 31, 566–586.
- Wrzesniewski, A., Berg, J. M., & Dutton, J. E. (2010). Turn the job you have into the job you want. *Harvard Business Review*, 88(6), 114–117.
- Wu, J. B., Tsui, A. S., & Kinicki, A. J. (2010). Consequences of differentiated leadership in groups. *Academy of Management Journal*, 53, 90–106.



The relationship of the big-five with workplace network resources: More quadratic than linear

Georgios Bozionelos *

Department of Psychiatry, General Hospital of Katerini, Greece



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ABSTRACT

The relationship of the big-five of personality with workplace expressive and instrumental network resources was investigated in 183 individuals working for a large organization. Nine out of the ten identified relationships were of quadratic nature, U-shaped or inverted U-shaped, clearly indicating that linear only considerations provide an incomplete if not misleading picture. There were some differences in the patterns and strengths of associations for expressive and instrumental network resources, and big-five traits accounted for somewhat greater variance in expressive resources. With respect to emotional stability, openness and agreeableness, the findings indicated that they are the individuals who score around the middle of the trait distribution rather than those near the low end who are most disadvantaged in terms of workplace network resources. On the other hand, they were the moderately strong, but not the highest, levels of conscientiousness that appeared most beneficial. The relationship of extraversion with network resources had a positive overall trend, though at very strong levels it may prove detrimental for instrumental network resources.

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The importance of relationship ties in the form of network resources for well-being and success has been established and stressed extensively that is now a truism (e.g., Batty, 2013; Porter & Woo, 2015). The focus of the present work was on workplace network resources that are unequivocally linked with work well-being and professional success (Bozionelos, 2015). In turn, well-being and success at work affects personal life and general well-being (e.g., Pierce, Garnder, & Crowley, 2016).

A task for scholars has been the identification of individual characteristics that increase the likelihood of accumulating network resources. Personality is such a factor (e.g., Gibson, Hardy, & Buckley, 2014; Roberts, Wilson, Fedurek, & Dunbar, 2008). Accumulation and maintenance of network resources depends on interaction with others, and personality plays a major role in inter-personal interaction (e.g., Wiggins & Trapnell, 1997). Personality traits being antecedents of network resources means that certain individuals have an inherent advantage (or disadvantage) in developing and maintaining such resources.

Extant research, and notwithstanding how well designed it has been, has assumed a linear relationship (see, for example, the recent meta-analysis by Fang et al., 2015). This assumption, however, may lead to under-estimations of the magnitude and breadth of the relationship (e.g., Iversen, Malchow-Moller, & Sorensen, 2010; Vasilopoulos, Cucina, & Hunter, 2007). In addition, it may also lead to misconceptions about the complexity of the association.

1. The present study

This study investigated the relationship between the big-five of personality and workplace network resources from both a linear and a quadratic perspective. Along with the fundamental traits of emotional stability and extraversion identified by Eysenck (e.g., Eysenck, 1967) the big-five also includes, openness to experience (hereinafter “openness”), agreeableness and conscientiousness, and has accumulated substantial acceptance among scholars (e.g., John, Naumann, & Soto, 2008).

Workplace network resources are distinguished into expressive and instrumental (Bozionelos, 2003, 2015). The main function of the former is the provision of socio-emotional support to the individual, while the main purpose of the latter is the advancement of one's professional and career interests (Fombrun, 1983; Ibarra, 1993; Kram & Isabella, 1985). These constructs relate to the notions of strong and weak relationship ties (Granovetter, 1973). Strong ties are characterized by high frequency of interaction, strong reciprocity and high intimacy, while weak ties contain weak emotional attachment and low reciprocal obligation (Granovetter, 1973, 1995). Strong ties are more likely to provide expressive resources while weak ties are more likely to offer instrumental ones such as bridging between individuals (Granovetter, 1995). On the other hand, this distinction is not exclusive: strong ties often provide instrumental assets (e.g., information and influence) while weak ties may occasionally provide socio-emotional benefits (e.g., Krackhardt, 1992; McGuire & Bielby, 2016). For this reason, the notions of expressive and instrumental network resources were chosen.

* Corresponding author at: Xanthou 31/B Street, Neo Psychico, 15451 Athens, Greece.
E-mail address: gbozionelos@gmail.com.

2. Hypotheses development

Considering that studies testing curvilinear relationships between the big-five and outcome variables are scarce, hypotheses were naturally developed using research that assumed linear associations. Nevertheless, effort was spent to include empirical studies that incorporated non-linearity, where these were available.

Low emotional stability (or neuroticism) encompasses suspiciousness, irritability, and hostility, along with lack of confidence and composure, features that dissipate and reverse as emotional stability increases. Because of their suspicious nature and lack of confidence, individuals who score low on the trait should hesitate to approach others. Indeed, low scores on the trait are associated with distancing social behaviour (Brookings, Zembar, & Hochstetler, 2003). In addition, others may find these individuals difficult and unpleasant to associate and work with. Therefore, a relationship of overall upwards trend with workplace network resources, expressive and instrumental, is expected. On the other hand, individuals low on emotional stability may invoke feelings of sympathy (Holmqvist, 2000), hence, they may benefit from others' conscious attempts to provide them with help and social resources. In addition, those low on emotional stability are more likely to abide to and honour social norms and conventions (Watson & Casillas, 2003), which should help establishing and maintaining relationship ties. This means a negative relationship with network resources in the range of low scores on the trait that turns positive as one approaches its mean.

Hypothesis 1. : The relationship of emotional stability with workplace expressive (H1a) and instrumental (H1b) network resources will be U-shape, while the overall trend of the relationship will be positive (upwards) for both expressive (H1c) and instrumental (H1d) resources.

Extraverts seek social encounters, hence, they should initiate and establish relationship ties in the workplace. Due to their optimistic and warm nature, extraverts should also be approached by others. Therefore, a relationship of overall upwards trend with workplace network resources is expected. However, although extraversion should offer a general advantage, very high levels of it may not be of benefit. Strong extraversion makes the person unable to inhibit impulsive and socially inappropriate behaviours (Zabelina, Robinson, & Anicha, 2007), which may be to the detriment of forming relationship ties. Furthermore, extraversion is associated with ambition (Akhtar, Boustani, Tsvirikos, & Chamorro-Premuzic, 2015; John, 1990), hence, extreme extraverts may be too ambitious for others to consider forming meaningful relationships with them. Indeed, Grant (2013) found an inverted U-shaped relationship between extraversion and sales performance, and attributed it to the tendency of extreme extraverts to be over-assertive, impulsive and domineering. Hence, as scores on extraversion approach the high pole of the trait the relationship with network resources may turn negative.

Hypothesis 2. : The relationship of extraversion with expressive (H2a), and instrumental network resources (H2b) will be of inverted U-shape, and the overall trend for both expressive (H2c) and instrumental resources (H2d) will be positive.

Openness encompasses inquisitiveness, attraction to novel ideas and points of view, multiplicity of interests, imagination and propensity to find outlets to express one's emotions and ideas (John, 1990). Naturally, these people should seek ties with others to discuss their views and find an outlet for their emotions. Indeed, those who score high on openness show preference for establishing numerous workplace ties as means to satisfy their needs for accessing novelty and for expressing their own ideas and emotions (Dougherty, Cheung, & Florea, 2007). This suggests an overall positive trend in the relationship with network resources, expressive and instrumental. Furthermore, it does not appear any reason to assume that the relationship may change to negative either at high or low levels of openness.

Hypothesis 3. : The relationship of openness with expressive network resources (H3a) and instrumental network resources (H3b) will be linear and positive.

The characteristics of agreeableness should render high scorers prone to approach others, to offer to others and to reciprocate positive acts (Ben-Ner & Halldorsson, 2010). In addition, because of their modesty, altruism and sensitivity agreeable people would be preferable as social ties (Selfhout et al., 2010). Therefore, the overall trend in the relationship with network resources, expressive and instrumental, should be positive. However, low agreeableness encompasses self-serving tendencies along with machiavellianism (O'Connor, 2013). Hence, low agreeableness individuals may see workplace ties as instrumental towards fulfilling their own career ambitions and other interests, and may develop analogous tactics to develop such ties. Thus, at low levels of agreeableness we might witness a reversal of the slope, so as agreeableness approaches its low pole individuals report more instrumental network resources.

Hypothesis 4. : The relationship of agreeableness with expressive network resources will be linear and positive (H4a), with instrumental network resources will be U-shaped (H4b), while the overall trend of that relationship will be positive (H4c).

Conscientiousness should make the individual attractive as a workplace tie, which is suggestive of an overall positive trend in the relationship with network resources, expressive and instrumental. On the other hand, very high levels of conscientiousness may act as an impediment in the formation and maintenance of relationship ties. Highly conscientious people tend to display perfectionism (Egberink, Meijer, & Veldkamp, 2010) and excessive pre-occupation with their tasks (Aziz & Tronzo, 2011). Such tendencies may lead them to neglect social interaction while may make them appear aloof that can repel others. Recent research identified an inverted U-shaped relationship between conscientiousness and organizational citizenship behaviours (Le et al., 2011), which represent the extent to which individuals go beyond their formal work duties to help others in the workplace. This means that very conscientious individuals are less likely to engage in socially constructive behaviours, and that may be detrimental to formation and maintenance of relationship ties.

Hypothesis 5. : The relationship of conscientiousness with expressive (H5a) and with instrumental network resources (H5b) will be of inverted U-shape, while the overall trend for both expressive (H5c) and instrumental (H5d) resources will be positive.

3. Method

3.1. Setting and participants

Participants were 183 (72 women and 111 men) full-time employees in the Information Systems function a large British financial services company. These were selected from 201 respondents on the basis of having more than two years of tenure, the minimal length of time required for detectable personality effects on social outcome, such as networks (Helmreich, Sawin, & Garsrud, 1986). Table 1 presents descriptive statistics.

3.2. Measures

3.2.1. Big-five traits

These were assessed with the NEO Five-Factor Inventory (Costa & McCrae, 1992) that includes 60 personal statements in a 5-point response format (1: strongly disagree, 5: strongly agree). Cronbach alphas were 0.87, 0.81, 0.79, 0.83 and 0.86 for emotional stability, extraversion, openness, agreeableness and conscientiousness, respectively.

Table 1
Descriptive statistics and inter-correlations ($N = 183$).

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11
1. Age	36.77	7.58	–										
2. Educational attainment	4.64	0.81	–0.01	–									
3. Organizational grade	2.25	1.27	0.32***	–0.10	–								
4. Tenure	6.99	6.83	0.44***	–0.25**	0.34***	–							
5. Technical vs. generalist	1.21	0.41	0.09	–0.10	0.66***	0.11	–						
6. Expressive network resources	11.51	2.27	0.33***	–0.11	0.25**	0.46***	0.18*	–					
7. Instrumental network resources	10.80	2.03	–0.02	–0.41***	0.16*	0.12	0.26***	0.42***	–				
8. Emotional stability	29.81	8.62	–0.01	–0.15	0.34***	0.12	–0.35***	0.03	0.48***	–			
9. Extraversion	30.48	5.96	0.01	–0.18*	0.32***	0.12	0.29***	0.02	0.46***	0.65***	–		
10. Openness	29.74	6.39	0.26***	0.25**	0.11	0	–0.04	0.45***	0.06	0.19*	–0.20**	–	
11. Agreeableness	38.62	6.57	0.35***	–0.23**	0.10	0.29***	0	0.12	0.21**	–0.23**	0.32***	0.01	–
12. Conscientiousness	36.26	6.15	–0.11	–0.39***	0.14†	0.33***	0.18*	0.13	0.14†	–0.21**	0.22**	–0.19*	–0.24**

† $p < 0.1$.

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

3.2.2. Expressive and instrumental network resources

These were measured with the scales developed and validated by Bozionelos (2003) that have been extensively utilized in empirical research (e.g., Van der Klink, Van der Heijden, Boon, & Van Rooij, 2014; Wei, Chiang, & Wu, 2012). Each construct is measured with three statements on a five-point response metric (1: completely disagree, 5: completely agree). Cronbach alphas were 0.68 and 0.70, respectively.

3.2.3. Demographic controls

Gender (male: 1, female: 2); age (in years); educational attainment (1: CSE or below to 6: Graduate degree), organizational tenure (in years); current organizational grade (1: subordinate to 7: CEO), and technical (coded 1) vs. generalist (coded 2) position were assessed with single items.

To reduce the probability of common-method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), completion of the personality questionnaire was temporally separated by the rest of the measures by two weeks. In addition, participation was entirely voluntary whereas respondents were promised (and given) their personality profiles.

4. Results

Comparison of mean scores on the big-five traits (Table 1) with norms for the general British population (Egan, Deary, & Austin, 2000) suggested differences of substance primarily in agreeableness (38.62, $SD = 6.57$ for the sample vs. 29.68, $SD = 5.75$ for the population) and secondarily in conscientiousness (36.26, $SD = 6.15$ vs. 31.99, $SD = 6.62$) – participants scored higher on both.

Hypotheses were tested with two hierarchical regressions. Controls were entered first using the stepwise method, so only significant controls were included in the final equations. Following recommendations for detecting quadratic relationships (Cohen, Cohen, West, & Aiken, 2003), the first order terms of the personality traits were forcibly entered in the second step, and the second-order (i.e., squared) terms were forcibly entered in the third step. Scores on the personality traits were centred to assist the interpretation of results (Cohen et al., 2003). The results are presented in Table 2.

The second-order term of emotional stability significantly contributed to scores on expressive ($\beta = 0.53$, $t = 6.84$, $p < 0.001$) and instrumental network resources ($\beta = 0.46$, $t = 5.6$, $p < 0.001$) beyond the first-order terms ($\beta = -0.53$, $t = -6.38$, $p < 0.001$; $\beta = -0.11$, $t = -1.2$, ns , respectively) and the controls. The positive signs of the second-order coefficients indicated curvatures of U-shape, hence, support for H1a and H1b. The signs of coefficients of first-order terms inform on the direction of the relationships at the mean scores of the predictors and, hence, provide information on the overall trend of the data (Cohen et al., 2003). These signs, both negative, suggested that at

the mean score of emotional stability the relationship with expressive network resources is still negative, therefore, lending no support to either H1c or H1d. The point where the slope changes direction (the bending point) was calculated by resolving the first derivative of the quadratic equation for zero (Cohen et al., 2003). That point was 0.5 and 0.12 SDs above the mean score of emotional stability, respectively.

Regarding extraversion, the second-order term was not significantly related to expressive network resources ($\beta = -0.09$, $t = -1.27$, ns), while the coefficient of the first-order term was positive and significant ($\beta = 0.21$, $t = 2.94$, $p < 0.01$). This suggested a strictly positive linear relationship, hence, no support for H2a that had postulated a curvature of inverted U-shape, and rendered testing of H2c redundant. On the other hand, the squared term of extraversion significantly contributed to

Table 2
Results of hierarchical regressions testing the hypotheses ($N = 183$).

	Expressive network resources		Instrumental network resources	
	β	<i>t</i> value	β	<i>t</i> value
Step 1: stepwise				
Age	0.09	1.66†	Not retained	
Gender	0.17	3.16**	–0.25	–4.33***
Educational attainment	Not retained		–0.43	–7.68***
Tenure	0.45	6.93***		Not retained
Technical vs. generalist	–0.12	2.26*	0.23	4***
$\Delta R^2/\Delta F$	0.272/17.98***		0.255/21.78***	
Step 2: forcible entry				
Emotional stability	–0.53	–6.38***	–0.11	–1.2
Extraversion	0.21	2.94**	0.13	1.69†
Openness	0.25	5.28***	0.18	3.37**
Agreeableness	0.13	1.84†	0.24	3.10**
Conscientiousness	0.22	2.95**	0.15	2.12*
$\Delta R^2/R^2$	0.170/0.442		0.192/0.447	
$F\Delta/F$	11.9***/17.04***		13.38***/19.35***	
Step 3: forcible entry				
Emotional stability ²	0.53	6.84***	0.46	5.6***
Extraversion ²	–0.09	–1.27	–0.16	–2.09*
Openness ²	0.39	7.74***	0.19	3.62***
Agreeableness ²	0.52	6.79***	0.32	3.79***
Conscientiousness ²	–0.13	–2.35*	–0.33	–6.17***
$\Delta R^2/R^2$	0.247/0.689		0.167/0.614	
$F\Delta/F$	28.51***/29.85***		16.16***/23.31***	

Notes. Beta coefficients in the final models are presented. Adjusted R^2 values are presented.

† $p < 0.1$.

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

instrumental network resources ($\beta = -0.16, t = -2.09, p < 0.05$) beyond the first-order term ($\beta = 0.13, t = 1.79, p < 0.1$) and the controls. The negative sign of the squared term suggested a curvature of inverted U-shape, supporting H2b, while the positive sign of the first-order term indicated an overall upwards trend in the data (the point where the relationship turned negative was at 0.41 SDs above the mean score of extraversion), hence, support for H2d.

The second-order term of openness was significantly related to expressive ($\beta = 0.39, t = 7.74, p < 0.001$) and to instrumental network resources ($\beta = 0.19, t = 3.62, p < 0.001$) over and above the first-order terms ($\beta = 0.25, t = 5.28, p < 0.001$; $\beta = 18, t = 3.37, p < 0.01$, respectively) and the controls. The signs of the coefficients suggested curvatures of U-shape with an overall positive trend (the points of bending were 0.32 and 0.47 SDs below the mean score of the trait, respectively). Therefore, H3a and H3b, which postulated strictly positive linear relationships, were not supported, though the overall trend in the data was positive.

The second-order terms of agreeableness were significantly related to expressive ($\beta = 0.52, t = 6.79, p < 0.001$) and to instrumental network resources ($\beta = 0.32, t = 3.79, p < 0.001$) beyond the first-order terms ($\beta = 0.13, t = 1.84, p < 0.1$; $\beta = 24, t = 3.10, p < 0.01$, respectively) and the controls. The positive signs of the squared terms coefficients suggested curvatures of U-shape (the points of bending were at 0.12 and 0.38 SDs below the mean score of the trait). This was in line with H4b, but at odds with H4a that had postulated a positive linear relationship with expressive resources that was thus not supported. The positive sign of the first-order term for instrumental resources indicated overall positive trend in the data, lending support to H4c. Though no relevant hypothesis had been posed, the trend for expressive resources was also positive.

Finally, the squared terms of conscientiousness were significantly related to expressive ($\beta = -0.13, t = -2.35, p < 0.05$) and to instrumental network resources ($\beta = -0.33, t = -6.17, p < 0.001$) over and above the first-order terms ($\beta = 0.22, t = 2.95, p < 0.01$; $\beta = 15, t = 2.12, p < 0.05$, respectively) and the controls. The negative signs of the second-order coefficients indicated curvatures of inverted-U shape, in line with H5a and H5b. The positive signs of the first-order terms suggested overall upwards linear trends in the data (the points of bending were at 0.85 and 0.23 SDs above the mean score of the trait), lending support to both H5c and H5d.

5. Discussion

Confirming the motives behind the study, the findings suggested that quadratic equations provide a considerably more accurate picture of the way personality traits relate to workplace network resources. Nine out of the 10 identified relationships were of quadratic nature (hypotheses had postulated seven quadratic relationships), while the quadratic terms accounted for an additional 24.7% and 16.7% of variance in expressive and instrumental network resources, respectively, beyond the linear terms and the controls.

The results make the interesting revelation that low levels of emotional stability, openness and agreeableness are not necessarily detrimental for accumulation of workplace network resources. This contrasts the general assumption that low poles of these traits are connected with poorer social outcomes. Instead, it appears that those who are most disadvantaged in terms of workplace network resources are those who find themselves near the middle of the distribution of these traits. The U-shaped relationship form had been anticipated for emotional stability and agreeableness, but not for openness. A post-hoc account pertains to the setting, a large corporation. Low levels of openness are associated with preference for routines, and well-defined activities and procedures (McCrae, 1996). Large corporations are notorious for their numerous and rigid procedures and routines. It is likely, therefore, that low openness individuals being comfortable with adhering to procedures and following routines fit well into such

an environment and are therefore seen as useful ties. Furthermore, such individuals may be regularly attending structured social activities (e.g., coffee breaks in common areas) or workplace social events that provide opportunities to build ties. Future studies should be able to test the veracity of this account.

In line with expectations, those who were mostly disadvantaged in terms of workplace network resources were the least conscientious individuals. Those who scored highest on conscientiousness fared well, but still they were not those with the most network resources. Very strong conscientiousness may lead to over-concentration on one's narrow work tasks resulting in neglect of social interaction that builds relationship ties.

The results suggested an overall beneficial effect of extraversion, but this benefit was less constrained for expressive network resources where the relationship was simply linear. The inverted U-shaped curvature for instrumental resources suggests that, as hypothesized, very strong levels of extraversion may hinder the building of instrumental ties. The reason may be that people are more careful and strategic in building ties for instrumental purposes (Porter & Woo, 2015), hence, in such cases deviations from behavioural protocols, which can be caused by the impulsivity element of extraversion, are less likely to be overlooked or forgiven. On the other hand, expressively-oriented relationships serve as an outlet of emotions and personal views, hence, they depend more on "personal chemistry" and should require fewer behavioural protocols.

This presumed difference in behaviours required for building expressive and instrumental network resources may also help account for the finding that the quadratic terms of the personality traits explained greater variance in expressive than in instrumental network resources. Development of expressive ties depends more on spontaneous behaviour, which is less calculative (see Bozionelos, 2003; Kram & Isabella, 1985). Personality should play a potent role in this case. On the other hand, the development of instrumental ties should abide more to calculated behaviours, which could be part of career strategies, on which personality may play a lesser role, leading to less concavity in the shape of the respective curves.

As a note to limitations, self-reports can be seen as such. On the other hand, self-reports are the established way to assess network resources, while they are arguably the most valid way to assess personality (Paunonen & O'Neill, 2010). Nevertheless, informant reports of personality could be utilized in future studies. Furthermore, the cross-sectional design limits confidence on causality. Non-withstanding the stability of the big-five traits over adulthood, causality concerns can be fully removed only with longitudinal or experimental studies.

Future research should seek to replicate these findings in other contexts, such as that of small and medium-sized organizations, and to the general population. This is important for generalizability cannot be taken for granted. As an example, scores on agreeableness were much (more than one standard deviation) above the population norm. This means that even participants who found themselves in the lower part of the trait distribution were moderately agreeable compared to the general norm. Therefore, whether the gains in network resources that were associated with moving from the middle to the low part of the agreeableness distribution in this study apply to samples that resemble the general norm is an issue to investigate. The same applies, though to a lower extent and with respect to the opposite side of the trait distribution, to conscientiousness.

References

- Akhtar, R., Boustani, L., Tsivrikos, D., & Chamorro-Premuzic, T. (2015). The engageable personality: Personality and trait EI as predictors of work engagement. *Personality and Individual Differences*, 73, 44–49.
- Aziz, S., & Tronzo, C. L. (2011). Exploring the relationship between workaholism facets and personality traits: A replication in American workers. *Psychological Record*, 61, 269–286.
- Batty, R. (2013). How important is networking for career success? 80,000 hours. <https://80000hours.org/2013/05/how-important-is-networking-for-career-success/> Accessed from May 6

- Ben-Ner, A., & Halldorsson, F. (2010). Trusting and trustworthiness: What are they, how to measure them, and what affects them. *Journal of Economic Psychology*, 31, 64–79.
- Bozionelos, N. (2003). Intra-organizational network resources: Relation to career success and personality. *International Journal of Organizational Analysis*, 11, 41–66.
- Bozionelos, N. (2015). Social capital and careers: Indisputable evidence and note for caution. In A. De Vos, & B. I. J. M. Van der Heijden (Eds.), *Handbook of research on sustainable careers* (pp. 67–82). Northampton, MA: Edward Elgar Publishing.
- Brookings, J. B., Zembar, M. J., & Hochstetler, G. M. (2003). An interpersonal circumplex/five-factor analysis of the rejection sensitivity questionnaire. *Personality and Individual Differences*, 34, 449–461.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.
- Dougherty, T. W., Cheung, Y. H., & Florea, L. (2007). The role of personality in employee developmental networks. *Journal of Managerial Psychology*, 23, 653–669.
- Egan, V., Deary, I., & Austin, E. (2000). The NEO-FFI: Emerging British norms and an item-level analysis suggest N, A and C are more reliable than O and E. *Personality and Individual Differences*, 29, 907–920.
- Egberink, I. J. L., Meijer, R. R., & Veldkamp, B. P. (2010). Conscientiousness in the workplace: Applying mixture IRT to investigate scalability and predictive validity. *Journal of Research in Personality*, 44, 232–244.
- Eysenck, H. J. (1967). *The biological basis of personality*. Springfield, MA: Thomas.
- Fang, R. L., Landis, B., Zhang, Z., Anderson, M. H., Shaw, J. D., & Kilduff, M. (2015). Integrating personality and social networks: A meta-analysis of personality, network position, and work outcomes in organizations. *Organization Science*, 26, 1243–1260.
- Fombrun, C. J. (1983). Attributions of power across a social network. *Human Relations*, 36, 493–508.
- Gibson, C., Hardy, J. H., & Buckley, M. R. (2014). Understanding the role of networking in organizations. *Career Development International*, 19, 146–161.
- Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360–1380.
- Granovetter, M. S. (1995). *Getting a job*. Chicago: University of Chicago Press.
- Grant, A. M. (2013). Rethinking the extraverted sales ideal: The ambivert advantage. *Psychological Science*, 24, 1024–1030.
- Helmreich, R. L., Sawin, L. L., & Garsrud, A. L. (1986). The honeymoon effect in job performance: Temporal increases in the predictive power of achievement motivation. *Journal of Applied Psychology*, 71, 185–188.
- Holmqvist, R. (2000). Associations between staff feelings toward patients and treatment outcome at psychiatric treatment homes. *Journal of Nervous and Mental Disease*, 188, 366–371.
- Ibarra, H. (1993). Personal networks of women and minorities in management: A conceptual framework. *Academy of Management Review*, 8, 56–87.
- Iversen, J., Malchow-Moller, N., & Sorensen, A. (2010). Returns to schooling in self-employment. *Economic Letters*, 109, 179–182.
- John, O. P. (1990). The “big five” factor taxonomy: Dimensions of personality in the natural language and in questionnaires. In L. A. Pervin, & O. P. John (Eds.), *Handbook of personality: Theory and research* (pp. 66–100). New York: Guilford Press.
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative big-five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114–158). New York: Guilford Press.
- Krackhardt, D. (1992). The strength of strong ties: The importance of philos in organizations. In N. Nohria, & R. Eccles (Eds.), *Networks and organizations: Structure, form, and action*. Cambridge, MA: Harvard Business School Press.
- Kram, K. E., & Isabella, L. A. (1985). Mentoring alternatives: The role of peer relationships in career development. *Academy of Management Journal*, 28, 110–132.
- Le, H., Oh, I. -S., Robbins, S. B., Ilies, R., Holland, E., & Westrick, P. (2011). Too much of a good thing: Curvilinear relationships between personality traits and job performance. *Journal of Applied Psychology*, 96, 113–133.
- McCrae, R. R. (1996). Social consequences of experiential openness. *Psychological Bulletin*, 120, 323–337.
- McGuire, G. M., & Bielby, W. T. (2016). The variable effects of tie strength and social resources: How type of support matters. *Work and Occupations*, 43, 38–74.
- O'Connor, P. J. (2013). The intervening role of agreeableness in the relationship between trait emotional intelligence and machiavellianism: Reassessing the potential dark side of EI. *Personality and Individual Differences*, 55, 750–754.
- Paunonen, S. V., & O'Neill, T. A. (2010). Self-reports, peer ratings and construct validity. *European Journal of Personality*, 24, 189–206.
- Pierce, J. L., Garnder, D. G., & Crowley, C. (2016). Organization-based self-esteem and well-being: Empirical examination of a spillover effect. *European Journal of Work and Organizational Psychology*, 25, 181–199.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. -Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903.
- Porter, C. M., & Woo, S. E. (2015). Untangling the networking phenomenon: A dynamic psychological perspective on how and why people network. *Journal of Management*, 41, 1477–1500.
- Roberts, S. G. B., Wilson, R., Fedurek, P., & Dunbar, R. I. M. (2008). Individual differences and personal social network size and structure. *Personality and Individual Differences*, 44, 954–964.
- Selfhout, M., Burk, W., Branje, S., Denissen, J., van Aken, M., & Meeus, W. (2010). Emerging late adolescent friendship networks and big five personality traits: A social network approach. *Journal of Personality*, 78, 509–538.
- Van der Klink, M., Van der Heijden, B. I. J. M., Boon, J., & Van Rooij, S. W. (2014). Exploring the contribution of formal and informal learning to academic staff member employability: A Dutch perspective. *Career Development International*, 19, 337–356.
- Vasilopoulos, N. L., Cucina, J. M., & Hunter, A. E. (2007). Personality and training proficiency: Issues of bandwidth-fidelity and curvilinearity. *Journal of Occupational and Organizational Psychology*, 80, 109–131.
- Watson, D., & Casillas, A. (2003). Neuroticism: Adaptive and maladaptive features. In E. C. Chang, & L. J. Sanna (Eds.), *Virtue, vice, and personality: The complexity of behavior* (pp. 145–161). Washington, DC: American Psychological Association.
- Wei, L. -Q., Chiang, F. F. T., & Wu, L. -Z. (2012). Developing and utilizing network resources: Roles of political skill. *Journal of Management Studies*, 49, 381–402.
- Wiggins, J. S., & Trapnell, P. D. (1997). Personality structure: The return of the big five. In R. Hogan, J. A. Johnson, & S. R. Briggs (Eds.), *Handbook of personality and social psychology* (pp. 737–765). San Diego, CA: Academic Press.
- Zabelina, D. L., Robinson, M. D., & Anicha, C. L. (2007). The psychological tradeoffs of self-control: A multi-method investigation. *Personality and Individual Differences*, 43, 463–473.

Emotion Work in the Arab Context: Its Relationship to Job Satisfaction and the Moderating Role of Trust to the Employer

Georgios Bozionelos

General Hospital of Katerini, Katerini, Greece

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Abstract

The research investigated the relationship of emotion work directed towards customers and towards coworkers with job satisfaction in Saudi Arabia. Emotion work means the requirement to display particular emotions as part of the job and includes surface acting where actual emotions differ from displayed emotions and deep acting where displayed and felt emotions are congruent. Participants were 147 flight attendants (31 men, 116 women; mean age = 36.9 years, $SD = 7.5$) employed by a major Saudi Arabian airline, who were either Saudi nationals or nationals of other Gulf Arab countries. Data were collected with questionnaires. Analysis was based on the General Linear Model and indicated that deep acting towards customers and towards coworkers was positively related to job satisfaction. On the other hand, the hypothesized negative relationship between surface acting and job satisfaction was not supported. Organizational trust moderated the relationship of emotion work with job satisfaction. The findings indicate the importance of considering emotion work in interactions with coworkers along with the influence of national culture in the relationships of emotion work with key variables.

Keywords

emotion work, surface acting, deep acting, employee attitudes, job satisfaction, organizational trust

Corresponding Author:

Georgios Bozionelos, General Hospital of Katerini, Psychiatric Department, Katerinis-Arona Avenue, Katerini 60100, Greece.

Email: gbozionelos@gmail.com

Introduction

Emotion work (also known as “emotional labor”) refers to the management of displayed emotions according to the requirements of the job (Zapf & Holz, 2006). In particular, emotion work signifies the job holder’s regulation of emotional display so the emotions conveyed match those expected by employers and customers (Hochschild, 1983; Morris & Feldman, 1996; Rafaeli & Sutton, 1987). For example, flight attendants must show courtesy, friendliness, and confidence while bank tellers should behave politely and display confidence. These emotions should be expressed with temporal and situational consistency. Furthermore, they must be conveyed regardless of the employee’s actually felt emotions. Emotion work is mostly associated with service jobs and is becoming increasingly prevalent as a result of the shift of economies towards service provision.

Emotion work often necessitates the disguise or modification of the job holder’s actual emotions (Ashforth & Humphrey, 1993). The literature identifies two major strategies that employees deploy in order to regulate their emotional display, surface acting, and deep acting (e.g., Holman, Martinez-Inigo, & Totterdell, 2008; Hulsheger & Schewe, 2011). Surface acting refers to modifying the observable aspects of an emotion, so the expressed emotion is what the customer (and the employer) expects (Morris & Feldman, 1996). Hence, surface acting is associated with dissonance between true and expressed emotion. Alternatively, emotion work may also be performed by means of modifying one’s felt emotions so the employee’s actual emotions are aligned with the expressed emotions. This means consonance between actual and displayed emotions, and the process is referred to as deep acting (Hochschild, 1983).

The distinction between surface and deep acting has been a major theme in the literature because of their potentially differential consequences. Surface acting pertains to suppression of felt emotions along with adopting an emotional mask. This process imposes strain because it requires considerable mental effort to constantly monitor actual and required emotions and to adjust one’s emotional display accordingly (e.g., Grandey, 2003). According to the conservation of resources theory (Hobfoll, 1989, 2002), individuals have limited psychological resources at their disposal and their first priority is to preserve these, which means that resource demanding situations impose strain and reduce well-being. In addition, due to the discrepancy between actual and expressed emotions, surface acting can give rise to self-perceptions of inauthenticity that cause distress (Brotheridge & Lee, 2002; Hulsheger & Schewe, 2011). For these reasons, surface acting is likely to impose a toll on the well-being of the employee. Deep acting, on the other hand, normally results in reduction of dissonance between actual and displayed emotions. Furthermore, deep acting is allegedly less demanding to mental resources because it takes place only at the initial stages of emotion formation rather than through the whole process (Totterdell & Holman, 2003). Hence, deep acting has been presumed to have more favorable

consequences than surface acting for individual well-being at work (e.g., Ashforth & Tomiuk, 2000; Brotheridge & Lee, 2003; Grandey, 2003; Morris & Feldman, 1996; Zapf, 2002).

Additionally, employees' emotional displays when interacting with customers are effective (i.e., have the desired consequences) only when perceived as genuine, and customers are able to differentiate authentic from inauthentic emotional expressions (e.g., Hennig-Thurau, Groth, Paul, & Gremler, 2006). This means that surface acting is likely to result in negative reactions by customers, which would harm service employee's experience on the job and result in lower job satisfaction. In contrast, deep acting should elicit positive customer reactions that should, therefore, increase job satisfaction. Empirical research, conducted mostly within the Anglo-Saxon context (i.e., North America, the UK, and Australia) is generally supportive of the negative relationship between surface acting and job satisfaction, but equivocal on the relationship of deep acting and job satisfaction (Blau, Bentley, & Eggerichs-Purcell, 2012; Bono & Vey, 2005; Chou, Hecker, & Martin, 2012; Hulsheger & Schewe, 2011). Therefore, additional work is needed, especially in different cultural contexts, to consolidate the findings about surface acting and add to the evidence regarding deep acting.

Hypothesis 1. Surface and deep acting towards customers will be negatively (H1a) and positively (H1b) related to job satisfaction, respectively.

Emotion work in interaction with coworkers

Although emotion work has been initially conceived with reference to customers, the concept has been expanded to include interaction with coworkers (Ashforth & Humphrey, 1993; Tschan, Rochat, & Zapf, 2005). The idea is that employees also need to regulate their emotional display when they interact with colleagues. This is necessitated not only by organizational and societal behavioral norms but also by workplace necessities (e.g., how to approach a colleague to ask for help or to disclose a mistake). Empirical research suggests that emotion work when interacting with coworkers is indeed a valid construct. In particular, Tschan et al. (2005), in a diary study with a sample of employees in a variety of occupations, found that one third of all interactions with colleagues involved regulation of their emotional display. Notwithstanding that employees are sometimes strategic and political in the way they behave towards colleagues (Liu, Liu, & Wu, 2012), coworkers are more acquainted with each other while many interactions among them are not of critical nature. This is in contrast to interactions with customers, with whom in most cases there is limited or no acquaintance and where the behavior of the employer is much more likely to be judged and to have consequences. Indeed, Tschan et al. (2005) found that nearly 90% of interactions with customers involved some form of emotional

display regulation. The above discussion directs to the expectation that emotion work with coworkers is less intense than it is with customers.

Hypothesis 2. Surface acting and deep acting towards customers will be stronger than surface acting (H2a) and deep acting (H2b) towards coworkers, respectively.

In contrast to emotion work oriented towards customers, there is paucity of research on correlates and outcomes of emotion work towards coworkers. Surface acting, regardless of its target individual, requires substantial effort expenditure that may cause strain but can also create perceptions of inauthenticity of the self (Brotheridge & Lee, 2002). Therefore, surface acting towards coworkers should be negatively related to job satisfaction. Engagement in deep acting towards coworkers, on the other hand, should nourish perceptions of being authentic, which has been found to relate to satisfaction at work (Van den Bosch & Taris, 2014).

Hypothesis 3. Surface and deep acting towards coworkers will be negatively (H3a) and positively (H3b) related to job satisfaction, respectively.

Organizational trust as moderator

Trust signifies an individual's willingness to accept vulnerability to the actions of someone else under the expectation that the other person has positive intentions (Mayer, Davis, & Schoorman, 1995). In line with the general definition of trust, trust towards the organization refers to the extent employees are confident that the organization as an entity is benevolent in its interaction with employees, makes its best to treat and reward them fairly, and does not try to take unfair advantage of them (Gillespie & Dietz, 2009; Rousseau, Sitkin, Burt, & Camerer, 1998). Trust plays an important role in organizational settings, including setting boundary conditions in relationships between other key factors (Farndale, Hope-Hailey, & Kelliher, 2011). Here, we pose and test the idea that organizational trust moderates the relationship of emotion work with job satisfaction.

Employees engage in emotion work towards customers to meet job demands. Meeting their job demands should help the organization to meet its own goals. Trust in the organization means that employees perceive the organization as benevolent, fair, and willing to reward them for appropriate behaviors. Emotion work, whether it is surface or deep acting, requires effort expenditure to meet the demands it imposes. Trusting employees are more likely to believe that the organization poses these demands because it is really necessary and also to believe that their efforts will be acknowledged and rewarded (e.g., Maley & Moeller, 2014; Mone, Eisinger, Guggenheim, Price, & Stine, 2011). These beliefs

should abate the negative effect of surface acting towards customers on job satisfaction, while they should also magnify the positive relationship of deep acting towards customers with job satisfaction.

Similarly, when engaging in emotion work with coworkers, those who trust the organization should be more confident that their emotional display, whether genuine or not, will be interpreted positively. It should be stressed that trust towards the organization is different from trust towards coworkers (Lehmann-Willenbrock, Grohmann, & Kauffeld, 2013), meaning that high trust towards the organization does not necessarily mean trusting one's colleagues and being less likely to perform emotion work towards them. When engaging in surface acting with coworkers, employees who trust their employers should feel less threatened that their fake behavior or lack of authenticity will have negative consequences. Hence, the toll to their job satisfaction will be lower than it will be to their less trusting counterparts.

Hypothesis 4. Organizational trust will moderate the relationship of surface acting towards customers (H4a) and towards coworkers (H4b) in such a way that the negative relationship will be attenuated at high levels of organizational trust.

Hypothesis 5. Organizational trust will moderate the relationship of deep acting towards customers (H5a) and towards coworkers (H5b) in such a way that the positive relationship will be stronger at high levels of organizational trust.

The present work was conducted in Saudi Arabia and employed cabin crew members who were native Arabs. The construct of emotion work has been conceived with reference to Western societies, and empirical research has been predominantly conducted in such societies, notably North America and Europe. However, there are differences across cultures in the acceptability of emotion regulation and on how emotion work is performed (Brotheridge & Taylor, 2006; Matsumoto et al., 2008). National cultures can be distinguished into institutionally oriented and impulsively oriented with respect to emotion regulation (Gordon, 1989). Institutionally oriented societies, such as North American or Northern European, have strong explicit norms about the expression and regulation of emotions, while impulsively oriented societies, like Latin or Arab, impose less constraint on the way emotions are displayed and managed. The Arab culture can be considered impulsively oriented (Al Soufi, 2005), which means more personal control over the expression of emotions and the strategies individuals choose in emotion regulation. This greater control may offer protection to well-being when they engage in surface acting (Grandey, Fisk, & Steiner, 2005; Hulsheger & Schewe, 2011). In addition, a significant value in the Arab world is hospitality (Almaney, 1981), which in the context of flight attendant work may influence the extent and the way in which surface and deep acting are

performed, along with their relationships with job satisfaction. For example, if hospitality is a deeply entrenched value, deep acting may be exceptionally strong among flight attendants, which may result in stronger relationships with job satisfaction. For this reason, empirical research within this context is important.

Method

Participants and procedure

Participants were 147 (31 men; 116 women), all Arabs—either Saudi nationals or Arabs from neighboring countries—employed as air cabin crew members (flight attendants) in a Saudi airline company. Mean age was 36.9 years ($SD = 7.5$) and tenure 15.0 years ($SD = 8.9$), respectively. These statistics indicate that participants had on average long experience as cabin crew members.

Measures

Responses were given on a five-point scale ranging from 1 (*Not at all*) to 5 (*To a great extent*), unless otherwise stated. All measures have been extensively utilized in earlier research. The questionnaire was administered in both Arabic and English (each item was stated in English with the Arabic translation below it) because participants were fluent in both languages. The translation/back-translation technique (Behling & Law, 2000), English to Arabic and back to English, was utilized to ensure semantic equivalence of the two versions.

Surface and deep acting towards customers. These were measured with the scales developed by Brotheridge and Lee (2003) that are composed of three items each. Respondents were asked to imagine themselves on a “typical day on the job” and indicate “to what extent,” 1 (*Never*) to 5 (*Always*), they engaged in a number of actions pertinent to emotion work towards customers. Sample items for surface acting and deep acting, respectively, are “I pretend to have emotions that I do not really have” and “I make an effort to actually feel the emotions that I need to display to others?” Cronbach’s α were .68 and .72 for surface and deep acting, respectively.

Surface and deep acting towards coworkers. These were measured with an adaptation of Brotheridge and Lee’s (2003) scales to tap the extent to which respondents engaged in surface and deep acting when interacting with colleagues. Cronbach’s α were .74 and .78, respectively. To reduce the potential for common method bias, the emotion work scales towards coworkers and customers were separated by other scales in the questionnaire.

Job satisfaction. This was measured with 10 items from Spector's scale (1985). Sample items included: "I sometimes feel that my job is meaningless" (reverse scored) and "I feel I am being paid a fair amount for the work I do." Cronbach's α was .81.

Organizational trust. This was measured with Cummings and Bromiley's (1996) scale that contains 12 items (e.g., "I think that management negotiates with us honestly," "I feel that management tries to get the upper hand"—reverse scored) on a seven-point scale ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*). Cronbach's α was .87.

Controls. Demographics were measured with single items and included: sex (1: male; 2: female), age, tenure with the organization, and educational attainment (1: high school, 2: Bachelor's degree, and 3: postgraduate degree).

Analysis

The general linear model was employed to test hypotheses. Hypotheses 1, 3, 4, and 5 were tested with hierarchical linear regression, while Hypothesis 2 was tested with within-subjects analysis of variance (ANOVA).

In the hierarchical linear regressions, the controls were entered first, followed by the variables that pertained to emotion work (i.e., surface acting and deep acting), which were entered in the second step. That second step tested hypotheses about main effects (i.e., Hypotheses 1 and 3). The coefficient output of the second step (and not of the final model) informed decisions about whether Hypotheses 1 and 3 were upheld. The third step contained the moderator (i.e., organizational trust). The final step included the interaction terms that were operationalized as the products of scores on the respective variables (e.g., Surface acting towards customers \times Trust and Deep acting towards customers \times Trust for Hypothesis 4). That step tested the hypotheses that involved moderator effects, namely Hypotheses 4 and 5. Standard scores were utilized in the calculations of the interaction terms (Dunlap & Kemery, 1987; Frazier, Tix, & Barron, 2004). Utilization of standard scores increases the accuracy of the estimation of the coefficients of the interaction terms without affecting those of the main effects (Dunlap & Kemery, 1987).

Results

Descriptive statistics and intercorrelations are presented in Table 1. An interesting indication of these statistics was that participants reported relatively low job satisfaction ($M = 2.7$, $SD = 1.3$), but on the other hand they were quite trusting towards their employer ($M = 3.9$, $SD = 1.3$). The strong trust may be explained

Table 1. Descriptive statistics and intercorrelations (*N* = 147).

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Age	36.90	7.54	–							
2. Educational level	1.47	.99	–.08	–						
3. Tenure (years)	14.98	8.94	.83	–.09	–					
4. Surface acting towards customers	3.33	1.18	0	–.12	.05	–				
5. Deep acting towards customers	4.05	.88	.05	–.01	.01	–.22	–			
6. Surface acting towards coworkers	3.05	1.28	–.13	–.03	–.13	–.09	.02	–		
7. Deep acting towards coworkers	3.55	1.07	–.22	.06	–.26	–.11	.34	.02	–	
8. Job satisfaction	2.65	1.26	.07	–.13	.09	–.01	.67	–.05	.36	–
9. Organizational trust	3.86	1.28	.01	–.02	.04	.10	.49	–.05	.18	.69

Note. Correlations $\geq .16$, $.19$ and $.26$ are significant at $.05$, $.01$ and $.001$, respectively.

by the fact that all participants were Arab who had either tenured or long-term (25 years) contracts with the airline.

The correlation coefficients between surface and deep acting suggested that the participants engaged in both of them when interacting with customers and coworkers. There is an ongoing debate on whether surface and deep acting are mutually exclusive (i.e., people show preference for and perform either the one or the other but not both of them) or whether they are performed in combination (Cossette & Hess, 2015). The weak correlation between surface and deep acting towards customers ($r = -.22$, $p < .01$) and the effectively zero correlation between surface and deep acting towards coworkers ($r = .02$, *ns*) indicated that the two aspects of emotion work are largely independent and that individual participants utilize both of these in their interactions with others.

The results are presented in Table 2. Scores on deep acting towards customers were significantly positively related to scores on job satisfaction ($\beta = .70$, $t = 11.21$, $p < .001$), yielding support for H1b. Scores on surface acting towards customers were not related to job satisfaction ($\beta = .12$, $t = 1.97$, *ns*); hence, H1a was not supported. With respect to Hypothesis 3, scores on deep acting towards coworkers were significantly positively related to scores on job satisfaction ($\beta = .41$, $t = 5.15$, $p < .001$), yielding support for H3b. Scores on surface acting towards coworkers were not related to job satisfaction ($\beta = -.04$, $t = -.53$, *ns*); hence, H3a was not supported.

As can be seen in Table 2, the interaction term of Surface acting towards customers \times Trust made a significant addition to the total variance accounted

Table 2. The hierarchical regressions that tested Hypotheses 1, 3, 4 and 5 (N = 147).

Variables	Job satisfaction							
	B	SE	β	t	B	SE	β	t
Step 1								
Sex	.06	.11	.05	0.61	.06	.11	.05	0.61
Age	-.01	.18	-.01	-0.04	-.01	.18	-.01	-0.04
Educational attainment	-.15	.11	-.11	-1.37	-.15	.11	-.11	-1.37
Organizational tenure	.11	.18	.08	0.61	.11	.18	.08	0.61
$R^2/\Delta R^2/\Delta F/\Delta df$	.02/.87/4,142							
Step 2								
Surface acting towards customers	.16	.08	.12	1.97†				
Deep acting towards customers	.88	.08	.70	11.21***				
Surface acting towards coworkers				-.05	.10	-.04	-.053	
Deep acting towards coworkers				.51	.10	.41	5.15***	
$R^2/\Delta R^2/\Delta F/\Delta df$	.49/.47/62.93***/ 2,140							
Step 3								
Trust in organization	.59	.08	.47	7.69***	.81	.07	.64	11.1***
$R^2/\Delta R^2/\Delta F/\Delta df$	.62/.16/58.8***/ 1,139							
					.54/.39/ 123.09***/ 1,139			

(continued)

Table 2. Continued.

Variables	Job satisfaction					
	B	SE	β	t	SE	t
Step 4						
Surface acting towards customers \times Trust	.19	.08	.13	2.35*		
Deep acting towards customers \times Trust	.09	.08	.07	1.16		
Surface acting towards coworkers \times Trust					.07	-.01
Deep acting \times towards coworkers Trust					.08	-.20
$R^2/\Delta R^2/\Delta F/df$		.63/.01/2.97 [†] / 2,137			.58/.04/ 6.06**/2,137	-.22
F/df		28.74***/ 9,137			22.92***/ 9,137	-3.48**

Note: Adjusted R^2 values are presented. Beta coefficients from each step and not from the final models are presented.
[†] $p < .05$. * $p < .01$. ** $p < .001$. *** $p < .001$.

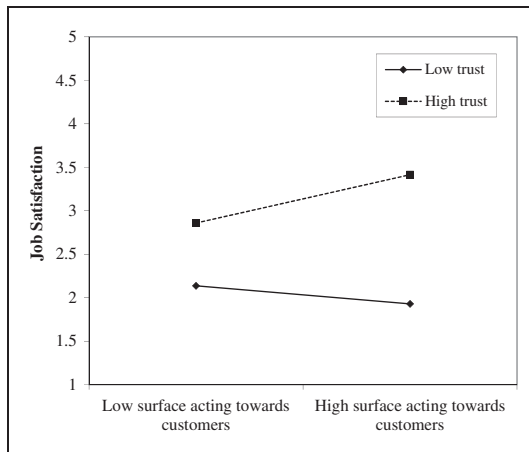


Figure 1. The interaction between surface acting towards customers and organizational trust (H4a).

for over and above the contributions of the controls, the two emotion work variables, and trust ($\beta = .13$, $t = 2.35$, $p < .05$). The interaction effect was interpreted according to the guidelines recommended by Aiken and West (1991). The plot of the interaction is presented in Figure 1 and shows that the highest scores on job satisfaction were observed under the condition of high trust towards the organization and stronger surface acting, which provided support for H4a. The lowest job satisfaction scores were under the condition of higher surface acting and low trust. On the other hand, the interaction term of Deep acting towards customers \times Trust was not significant ($\beta = .07$, $t = 1.16$, *ns*), suggesting no support for H4b.

The interaction term of Deep acting towards coworkers \times Trust made a significant addition to the total variance accounted for ($\beta = -.20$, $t = -3.48$, $p < .01$). Inspection of the interaction pattern, which is plotted in Figure 2, indicated support for H5b, as higher scores on job satisfaction occurred with higher scores for deep acting and high organizational trust. On the other hand, the interaction term of Surface acting towards coworkers \times Trust was not significant ($\beta = -.01$, $t = -.22$, *ns*), suggesting no support for H5a.

In testing Hypotheses 2, posing differences between scores on emotion work towards customers and towards coworkers, within-subjects ANOVA was utilized. Visual inspection of the means suggested differences on surface and deep acting towards customers and towards coworkers in the hypothesized direction ($M = 3.33$, $SD = 1.18$ and $M = 3.05$, $SD = 1.28$, respectively, for surface acting towards customers and coworkers; $M = 4.05$, $SD = .88$ and $M = 3.55$, $SD = 1.07$, respectively, for deep acting towards customers and coworkers). The ANOVAs

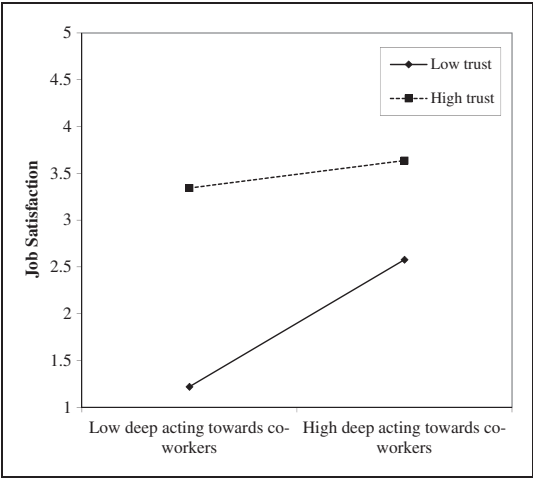


Figure 2. The interaction between deep acting towards coworkers and organizational trust (H5b).

indicated that the difference for deep acting was significant (Wilks’ $\lambda = .84$, $F(1, 145) = 28.82$, $p < .001$) while the difference for surface acting was not (Wilks’ $\lambda = .98$, $F(1, 145) = 3.3$, ns). Hence, H2b was supported while H2a was not supported.

Discussion

The aim of the research was to investigate the relationship of the two dimensions of emotion work, surface and deep acting, with the key work attitude of job satisfaction in a non-western service environment and with non-western service providers: Arab air cabin crew in Saudi Arabia. Both emotion work towards customers and emotion work towards coworkers were considered. The latter, despite being an established aspect of emotion work, has so far received only scant attention in the literature. The results indicated that, in line with expectations, emotion work towards colleagues is less intense than emotion work towards customers, but they also indicated that emotion work towards colleagues also relates to important outcomes, such as job satisfaction, and is therefore of importance.

The findings confirmed the expectation for positive relationship between deep acting, which means consonance between felt and displayed emotion, and job satisfaction. The relationship was present in both interaction with customers and interaction with coworkers, and its strong magnitude is in line with the view that deep acting has beneficial effects for employees’ well-being. Extant empirical literature with respect to deep acting towards customers is equivocal, with the

most recent meta-analysis suggesting no relationship (Hulsheger & Schewe, 2011). The national cultural context may be responsible for the finding of the present study. Deep acting is strongly related to customer satisfaction (Hulsheger & Schewe, 2011). As noted, hospitality is a central value in the Arab world, which means that Arab cabin crew should gain substantial satisfaction when they feel that passengers (whom they would perceive as their guests) are satisfied. There is a paucity of empirical work related to deep acting towards coworkers; hence, the present work has extended the idea that deep acting entails advantages beyond the domain of serving customers and to the domain of interaction with coworkers. Expenditure of effort to align one's actual emotions with the emotions that are necessary to express when dealing with colleagues seems to pay off in terms of greater enjoyment of the job and by extension the other positive outcomes this may bring. Overall, the findings show that employees should be alerted on the importance of making an effort to actually feel the emotion they display, and employers may provide training in this direction. It is noted that such training is available (e.g., Shani, Uriely, Reichel, & Ginsburg, 2014).

On the other hand, the findings did not support the expectation for negative association of surface acting with job satisfaction. The hypothesis for negative relationship had been built using theory and logic and was in line with findings of extant research vis-a-vis surface acting towards customers. The reasons for the discrepancy can only be speculated upon, but there are two explanations, not mutually exclusive. The first explanation is cultural and pertains to the impulsive orientation of the Arab society. Flight attendants of this study felt more control over how to manage surface acting, which reduced its negative consequences on their well-being, in line with what is speculated in the literature (Grandey et al., 2005; Hulsheger & Schewe, 2011). The other explanation builds upon job security and the long tenure of participants. The long tenure may mean that they were by now able to perform surface acting automatically, given that they have rehearsed the expressions myriads of times over the years, hence, without any conscious effort that requires utilization of psychological resources and leads to negative feelings towards the job. As noted, these explanations are not mutually exclusive and future research could test their relative explanatory power.

Considered overall, the findings on main effects suggest that deep acting is more important than surface acting as far as positive outcomes are concerned and suggest that it is deep acting that employers and trainers must be mostly focusing on. In addition, the findings allude to the importance of taking into account national culture in the study of emotion work and its outcomes, considering that surface acting did not appear harmful for job satisfaction while deep acting was strongly related to it, in contrast to what empirical research that has been conducted predominantly in Western contexts suggests so far. Both these findings can be accounted for by national cultural characteristics, making a strong point on the importance of culture.

Beyond main effects, the study was also set to investigate whether trust in the employer moderates the relationships of deep and surface acting with job satisfaction. Trust so far has received only scant attention as a moderator (Farndale et al., 2011). Trust towards the organization is a contextual factor and contextual factors are seen as important in the manifestation of outcomes of emotion work (Koskina & Keithley, 2010), but they have generally been overlooked in empirical research (Lewis, 2012). Indeed, the findings suggested that surface acting towards customers and deep acting towards coworkers were more strongly linked with job satisfaction when employees also trust the employer. The lack of moderating effect as far as deep acting towards customers was concerned could be attributed to that the main effect of deep acting towards customers was already very strong ($\beta = .70$) to allow the moderating effect of trust to manifest itself.

It is interesting that the highest job satisfaction was reported by those who were engaging in stronger (rather than lower) surface acting within an environment of high trust towards the organization. This may be a further manifestation of the effect of national culture and specifically the impulsive orientation of the Arab culture. When they trust the organization, employees may feel more at ease to engage in surface acting with customers under their own conditions because they believe that this will not be misunderstood, but it will be rather appreciated by the employer as effort expenditure, which is translated into greater satisfaction with the job.

Limitations and future directions

The cross-sectional design cannot address causal attributions. In addition, the use of self-reports raises concerns over common method bias. Although it appears that the nature of the constructs assessed was such that self-reports were arguably the only way to measure these (see Spector, 1994, 2006) and that certain precautions were taken (assuring anonymity, not providing hints in the instructions about what was measured, separating the emotion work scales), the possibility of common method cannot be dismissed.

Future research should investigate further the relationship of emotion work towards coworkers with outcomes such as employees' well-being, withdrawal behaviors, and performance. Although under-researched so far, it appears that this type of emotion work also has consequences of substantial magnitude. The national cultural element is also an issue that must be looked at more systematically in future studies. Research not only in non-Western contexts but also comparative studies work necessary.

Employees may adopt particular tactics to ameliorate the consequences of emotion work, especially of surface acting. For example, they may use humor to divert attention and deal with feelings of inauthenticity (Sandiford & Seymour, 2011; Williams, 2013). Future research can examine the success of strategies such

as humor in improving the well-being of those who perform emotion work. Finally, most research so far has focused on emotion work that involves the expression of positive feelings. Although this indeed pertains to most jobs and professions where emotion work is performed, there are also jobs (e.g., debt collectors, correction officers, customs officers) where emotion work requires the display of negative or neutral emotional mask. It is worth investigating whether the theorized relationships of deep and surface acting with outcomes in that type of emotion work are similar to the emotion work that involves positive emotions.

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References

- Aiken, L., & West, S. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Almaney, A. J. (1981). Cultural traits of the Arabs: Growing interest for international management. *Management International Review*, 21(3), 10–18.
- Al Soufi, A. H. (2005). *Cultural differences between Arabs and Danes: The intracultural diversity's effect on intercultural negotiations* (Unpublished master's thesis). Aarhus University, Denmark.
- Ashforth, B. E., & Humphrey, R. H. (1993). Emotional labor in service roles: The influence of identity. *Academy of Management Review*, 18, 88–105.
- Ashforth, B. E., & Tomiuk, M. A. (2000). Emotional labour and authenticity: Views from service agents. In S. Fineman (Ed.), *Emotion in organization* (2nd ed., pp. 184–203). London, England: Sage.
- Behling, O., & Law, K. S. (2000). *Translating questionnaires and other research instruments: Problems and solutions*. Thousand Oaks, CA: Sage.
- Blau, G., Bentley, M. A., & Eggerichs-Purcell, J. (2012). Testing the impact of emotional labor on work exhaustion for three distinct emergency medical service (EMS) samples. *Career Development International*, 17, 626–645.
- Bono, J., & Vey, M. (2005). Toward understanding emotional management at work: A quantitative review of emotional labor research. In C. Hartel, W. Zerbe & N. Ashkanasy (Eds.), *Emotions in Organizational Behavior* (pp. 213–233). Mahwah, NJ: Erlbaum.
- Brotheridge, C. M., & Lee, R. T. (2002). Testing a conservation of resources model of the dynamics of emotional labor. *Journal of Occupational Health Psychology*, 7, 57–67.
- Brotheridge, C. M., & Lee, R. T. (2003). Development and validation of the emotional labour scale. *Journal of Occupational and Organizational Psychology*, 76, 365–379.

- Brotheridge, C. M., & Taylor, I. (2006). Cultural differences in emotional labor in flight attendants. In N. M. Ashkanasy, W. J. Zerbe & C. E. J. Hartel (Eds.), *Research on emotion in organizations, Vol. 2: Individual and organizational perspectives on emotion management and display* (pp. 167–191). Bingley, England: Emerald.
- Chou, H. Y., Hecker, R., & Martin, A. (2012). Predicting nurses' well-being from job demands and resources: A cross-sectional study of emotional labour. *Journal of Nursing Management*, 20, 502–511.
- Cossette, M., & Hess, U. (2015). Service with style and smile. How and why employees are performing emotional labour? *Revue Europeenne de Psychologie Appliquee*, 65, 71–82.
- Cummings, L., & Bromiley, P. (1996). The organizational trust inventory (OTI). In R. Kramer & T. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 302–330). Thousand Oaks, CA: Sage.
- Dunlap, W. P., & Kemery, E. R. (1987). Failure to detect moderating effects: Is multicollinearity the problem? *Psychological Bulletin*, 102, 418–420.
- Farndale, E., Hope-Hailey, V., & Kelliher, C. (2011). High commitment performance management: The roles of justice and trust. *Personnel Review*, 40, 5–23.
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, 51, 115–134.
- Gillespie, N., & Dietz, G. (2009). Trust repair after an organization-level failure. *Academy of Management Review*, 34, 127–145.
- Gordon, S. L. (1989). Institutional and impulsive orientations in selective appropriating emotions to self. In D. D. Franks & D. McCarthy (Eds.), *The sociology of emotions: Original essays and research papers* (pp. 115–136). Greenwich, CT: JAI Press.
- Grandey, A. A. (2003). When “the show must go on”: Surface acting and deep acting as determinants of emotional exhaustion and peer-rated service delivery. *Academy of Management Journal*, 46, 86–96.
- Grandey, A. A., Fisk, G. M., & Steiner, D. D. (2005). Must “service with a smile” be stressful? The moderating role of personal control for American and French employees. *Journal of Applied Psychology*, 90, 893–904.
- Hennig-Thurau, T., Groth, M., Paul, M., & Gremler, D. D. (2006). Are all smiles created equal? How emotional contagion and emotional labor affect service relationships. *Journal of Marketing*, 70, 58–73.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524.
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, 6(4), 307–324.
- Hochschild, A. R. (1983). *The managed heart: Commercialization of human feeling*. Berkeley, CA: University of California Press.
- Holman, D., Martinez-Inigo, D., & Totterdell, P. (2008). In C. L. Cooper & S. Cartwright (Eds.), *Emotional labour, well-being and performance* *The Oxford handbook of organizational well-being* (pp. 331–355). Oxford, England: Oxford University Press.
- Hulsheger, U. R., & Schewe, A. F. (2011). On the costs and benefits of emotional labor: A meta-analysis of three decades of research. *Journal of Occupational Health Psychology*, 16, 361–1361.

- Koskina, A., & Keithley, D. (2010). Emotion in a call centre SME: A case study of positive emotion management. *European Management Journal*, 28, 208–219.
- Lehmann-Willenbrock, N., Grohmann, A., & Kauffeld, S. (2013). Promoting multifoci citizenship behavior: Time-lagged effects of procedural justice, trust, and commitment. *Applied Psychology: An International Review*, 62, 454–485.
- Lewis, L. (2012). It's people's whole lives': Gender, class and the emotion work of user involvement in mental health services. *Gender, Work and Organization*, 19, 276–305.
- Liu, Y., Liu, J., & Wu, L. (2012). Strategic emotional display: Its interpersonal and career outcomes. *Career Development International*, 17, 518–536.
- Maley, J. F., & Moeller, M. (2014). Global performance management systems: The role of trust as perceived by country managers. *Journal of Business Research*, 67, 2803–2810.
- Matsumoto, D., Yoo, S. H., Nakagawa, S., Alexandre, J., Anguas-Wong, A. M., Arriola, M., & Zenggeya, A. (2008). Culture, emotion regulation, and adjustment. *Journal of Personality and Social Psychology*, 94, 925–937.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20, 709–734.
- Mone, E., Eisinger, C., Guggenheim, K., Price, B., & Stine, C. (2011). Performance management at the wheel: Driving employee engagement in organizations. *Journal of Business and Psychology*, 26, 205–212.
- Morris, J. A., & Feldman, D. C. (1996). The dimensions, antecedents, and consequences of emotional labor. *Academy of Management Review*, 21, 986–1010.
- Rafaeli, A., & Sutton, R. I. (1987). Expression of emotion as a part of the work role. *Academy of Management Review*, 12, 23–37.
- Rousseau, D. S., Sitkin, S., Burt, R., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23, 393–404.
- Sandiford, P. J., & Seymour, D. (2011). Reacting to the demands of service work: Emotional resistance in the Coaching Inn Company. *Service Industries Journal*, 31, 1195–1217.
- Shani, A., Urieli, N., Reichel, A., & Ginsburg, L. (2014). Emotional labor in the hospitality industry: The influence of contextual factors. *International Journal of Hospitality Management*, 37, 150–158.
- Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the job satisfaction survey. *American Journal of Community Psychology*, 13, 693–713.
- Spector, P. E. (1994). Using self-report questionnaires in OB research: A comment on the use of a controversial method. *Journal of Organizational Behavior*, 15, 385–392.
- Spector, P. E. (2006). Method variance in organizational research: Truth or urban legend? *Organizational Research Methods*, 9, 221–232.
- Totterdell, P., & Holman, D. (2003). Emotion regulation in customer service roles: Testing a model of emotional labor. *Journal of Occupational Health Psychology*, 8, 55–73.
- Tschan, F., Rochat, S., & Zapf, D. (2005). It's not only clients: Studying emotion work with clients and co-workers with an event-sampling approach. *Journal of Occupational and Organizational Psychology*, 78, 195–220.
- Van den Bosch, R., & Taris, T. W. (2014). The authentic worker's well-being and performance: The relationship between authenticity at work, well-being, and work outcomes. *Journal of Psychology*, 148, 659–681.

- Williams, A. (2013). The strategies used to deal with emotion work in student paramedic service. *Nurse Education in Practice*, 13, 207–212.
- Zapf, D. (2002). Emotion work and psychological well-being: A review of the literature and some conceptual considerations. *Human Resource Management Review*, 12, 237–268.
- Zapf, D., & Holz, M. (2006). On the positive and negative effects of emotion work in organizations. *European Journal of Work and Organizational Psychology*, 15(1), 1–28.

Author Biography

Georgios Bozionelos (BSc Hons, MSc, MSc) holds an MSc with Commendation in the Psychology of Health and Mental Performance from the University of Bristol (UK), and an MSc in Public Health Management from the Hellenic School of Public Health (Greece). He works as Clinical Psychologist in the General Hospital of Katerini (Greece). He has published a substantial number of articles in journals indexed by Thompson Reuters, including *Journal of Health Psychology*, *Health Psychology*, *Personality and Individual Differences*, *International Journal of Human Resource Management*, *Career Development International*, *Journal of Business Research*, *Academy of Management Perspectives*, and *Psychological Reports*. His h-index equals 9.

Employability and Job Performance as Links in the Relationship Between Mentoring Receipt and Career Success: A Study in SMEs

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**Nikos Bozionelos¹, Konstantinos Kostopoulos²,
Beatrice Van der Heijden^{3,4,5},
Denise M. Rousseau⁶, Giorgos Bozionelos⁷,
Thomas Hoyland⁸, Rentao Miao⁹,
Izabela Marzec¹⁰, Piotr Jędrzejowicz¹¹,
Olga Epitropaki¹², Aslaug Mikkelsen¹³,
Dora Scholarios¹⁴, and Claudia Van der Heijde¹⁵**

Abstract

This study developed and tested a model that posited employability and job performance as intervening variables in the relationship between receipt of

¹Audencia Nantes School of Management, Nantes, France

²University of Pireaus, Greece

³Radboud University, Nijmegen, The Netherlands

⁴Open Universiteit, Heerlen, Netherlands

⁵University of Twente, Enschede, The Netherlands

⁶Carnegie Mellon University, Pittsburgh, PA, USA

⁷General Hospital of Katerini, Greece

⁸University of Hull, UK

⁹Capital University of Economics and Business, Beijing, China

¹⁰Katowice School of Economics, Poland

¹¹Gdynia Maritime University, Gdańsk, Poland

¹²ALBA Graduate Business School, Athens, Greece

¹³University of Stavanger, Norway

¹⁴University of Strathclyde, Glasgow, UK

¹⁵University of Amsterdam, the Netherlands

Corresponding Author:

Nikos Bozionelos, Audencia Nantes Ecole de Management, 8 route de la Jonelière, 44312, Nantes, France.

Email: nbozionelos@audencia.com

mentoring and career success. Participants were 207 information technology (IT) professionals employed in small and medium-sized enterprises (SMEs) in three European countries. Mentoring receipt was related to both employability and job performance. Employability mediated the relationship of mentoring receipt with objective and subjective career success, as well as its relationship with job performance. The findings indicate that receipt of mentoring is connected to job performance, a link that has hitherto lacked empirical evidence. In addition, they suggest a pivotal role for employability in the relationship of mentoring receipt with job performance and career success. Overall, this study helps unveil the mechanism through which mentoring affects career outcomes. Moreover, it shows that the benefits of mentoring hold outside the context of large corporations.

Keywords

mentoring receipt, employability, job performance, career success, mediation, SMEs, IT professionals, non-Anglo-Saxon

Mentoring has been a social phenomenon throughout history from its early mention in Homer's *Odyssey*. Traditionally, it refers to a developmental relationship between two individuals of unequal status, the mentor and the protégé. Within this relationship, the mentor provides a variety of professional development functions (including challenging assignments, exposure and visibility, coaching, protection, and direct forms of sponsorship) and socio-emotional support, which includes friendship, counseling, acceptance and confirmation, and role modeling (e.g., Kram, 1985; Tepper, Shaffer, & Tepper, 1996). As originally conceptualized, the mentoring relationship develops and evolves without formal intervention and operates outside formal work duties (e.g., Kram, 1983, 1985). It is this kind of informal mentoring and its outcomes and contexts that the present study focused on.

Mentoring research has primarily addressed the career outcomes of protégés and has documented the effect of mentoring on protégés' career success (meta-analysis by Allen, Eby, Poteet, Lentz, & Lima, 2004). Yet, there are still essential issues to resolve. First, career success is a rather distant outcome that takes shape and materializes over a relatively long time (Eby, Durley, Evans, & Ragins, 2006). Authors have theorized that mentoring enhances career success because it benefits other, less distal, indices such as work expertise and job performance, which in turn help career progression (Kammeyer-Mueller & Judge, 2008; Ramaswami & Dreher, 2007). These proximal outcomes are thus the intermediary mechanisms that account for

the relationship between receipt of mentoring and career success (Ramaswami & Dreher, 2007; Wanberg, Welsh, & Hezlett, 2003). The precise nature of these mechanisms, however, still evades us (Chandler, Kram, & Yip, 2012; Pan, Sun, & Chow, 2011; also Bozionelos, 2015). The second issue is that, while career success is important mainly to individual employees (e.g., protégés), certain theorized intervening factors, such as employability and job performance, are of interest to a larger array of stakeholders, including organizations (Ramaswami & Dreher, 2007) and society. This means that studying the relationship of these factors to mentoring is equally or even more significant. For example, organizational agents view mentoring as a tool for transferring knowledge and increasing performance for the benefit of organizations rather than as a career enhancement tool for individuals (Laiho & Brandt, 2012). However, the extent to which mentoring actually contributes to such outcomes has not yet been empirically proven.

To address these gaps, this study designed and tested a model that posited employability and job performance as two variables that intervene in the relationship between mentoring receipt and career success.

Theoretical Background and Construction of the Model

Theoretical work suggests that the causal path from receipt of mentoring to career success contains three steps (Ramaswami & Dreher, 2007). First, mentoring enhances individual capacities such as work-related knowledge and skills as well as the ability to understand the organizational environment, the employer's needs and the general labor market, and to modify one's actions accordingly. Second, these enhanced capacities enable improvements in job performance. Finally, job performance is rewarded and translated into career success (e.g., promotions, subjective feelings of success; Kammeyer-Mueller & Judge, 2008; Ramaswami & Dreher, 2007). The capacities cultivated by mentoring in the first step refer to the notion of employability; hence, the present study built and tested a model that posits employability and job performance as intervening factors in the link between receipt of mentoring and career success.

Mentoring and Employability

Employability concerns individuals, organizations, and societies (Forstenlechner, Selim, Baruch, & Madi, 2014; Harms & Brummel, 2013; McQuaid & Lindsay, 2005). It is comprehensively defined as an individual's

work-centered adaptability that enhances his or her ability to find and use job and career opportunities within or outside the current workplace (Forrier & Sels, 2003; Fugate, Kinicki, & Ashforth, 2004; Van der Heijde & Van der Heijden, 2006). Employability has acquired particular importance recently for a host of reasons that include the reduction in job security due to frequent organizational restructuring, the shift of responsibility for career management from employer to worker, technological advances that replace certain jobs with the parallel creation of other jobs, and the flattening of firms, forcing individuals to change organizations or to transfer within their company to advance their careers (Baruch & Bozionelos, 2011; Hoffman, Casnocha, & Yeh, 2013). As we will see below, there is reason to believe that receipt of mentoring promotes employability.

In the present research, employability was viewed through the lens of Van der Heijde and Van der Heijden's (2006) comprehensive model. This model regards employability as a set of competencies and, therefore, as subject to development (Boyatzis, 2008), with five dimensions: professional expertise, that is, the extent to which a person possesses up-to-date professional knowledge and skills and is proficient in the job; anticipation and optimization, that is, whether the individual anticipates changes in the work environment and in the job market and proactively responds to them; personal flexibility, which is a person's degree of resilience and adaptability to changes in the immediate work environment and in the job market; corporate sense, which mirrors the extent to which an individual is aware of, involved in, and integrated in the workplace; and finally, balance reflects the capacity to balance one's personal interests and priorities with those of the work team and the organization. This model encompasses both the individual (anticipation, optimization, and personal flexibility are qualities that primarily serve the individual) and the organizational perspective (employees' corporate sense and balance are also an advantage for the employer). Furthermore, this model incorporates other formulations of employability, such as Fugate's (2006; Fugate & Kinicki, 2008) and van Dam's (2004). For example, core dimensions in Fugate's idea of employability are openness to changes at work, work and career resilience, and work and career proactivity. The two former overlap with personal flexibility, and the latter with anticipation and optimization in Van der Heijde and Van der Heijden's model, respectively.

Starting from the professional development functions of mentoring, challenging assignments should enhance professional expertise because they force protégés to engage in tasks that stretch their capacities. In turn, stretching should lead to consolidating and expanding existing knowledge and skills, and to developing new ways of approaching problems (see also Ramaswami & Dreher, 2007). In line with this reasoning, empirical studies have indicated

that challenging assignments improve work-role competencies (Dragoni, Tesluk, Russell, & Oh, 2009) and enhance on-the-job learning (Preenen, De Pater, Van Vianen, & Keijzer, 2011), both of which have been found to relate to employability (van Emmerik, Schreurs, de Cuyper, Jawahar, & Peeters, 2012). Challenging assignments may also necessitate an active search of the environment. This process nurtures proactivity and alertness, which fall into the employability dimension of anticipation and optimization.

The exposure and visibility function of mentoring should foster corporate sense and balance. This is because contact with key organizational members should enable protégés to develop a panoramic view of the organization and its operations and a better understanding of how their roles and careers fit into the firm's mission, systems, and structures. Moreover, the mentoring function of coaching should enhance protégés' professional expertise because coaching assists in transferring tacit knowledge (Laiho & Brandt, 2012) and allows protégés to discuss optimal ways to accomplish work (Evered & Selman, 1989). Direct sponsorship involves public support (to superiors and peers) and promotion of the protégé's talents and potential by the mentor. Such sponsorship may not only lead to the protégé being invited to and involved in demanding projects and other activities (e.g., task groups) that improve professional skills and knowledge, but also enable a better understanding of organizational functioning, structures, priorities, and needs. These in turn enhance the protégé's professional expertise and corporate sense, respectively. Involvement in the affairs of the firm may also cultivate balance because individuals will come to appreciate the difficulties and needs of the employer, which may motivate them to adapt their personal priorities accordingly. Finally, through the function of protection, the mentor acts as a buffer against potentially damaging encounters and negative or no value-adding experiences for the protégé (e.g., spending all one's energy on a project of low value, nondevelopmental criticism). Those who are shielded from such negative situations are more likely to develop positive attitudes toward the employer (O'Driscoll et al., 2011). Hence, protégés should then be more willing to integrate themselves into and align their own interests with those of the employer, which means greater corporate sense and balance.

With respect to psychosocial functions, counseling, friendship, and confirmation nourish psychological resources such as self-efficacy (Giblin & Lakey, 2010), optimism (Higgins, Dobrow, & Roloff, 2010), and resilience (Saks & Gruman, 2011). These resources are associated with greater organizational commitment (Avey, Reichard, Luthans, & Mhatre, 2011), which should encourage protégés to participate in organizational affairs and to align their own career interests with those of the organization, in line with the employability dimensions of corporate sense and balance. Furthermore,

self-efficacy and resilience facilitate responsiveness to change in the work setting (Avey, Wernsing, & Luthans, 2008), which corresponds to the employability dimension of personal flexibility. Moreover, optimism can drive the creation of realistic scenarios for the future (Davis & Asliturk, 2011), which shares elements with the anticipation and optimization dimension.

Finally, role modeling, which according to some authors stands alone from other psychosocial functions (Pellegrini & Scandura, 2005), heightens protégés' beliefs that the organization cares about them (Baranik, Roling, & Eby, 2010). According to the reciprocity principle of social exchange (Cropanzano & Mitchell, 2005), such a belief should increase the likelihood that protégés will consider organizational interests along with own career interests. From another viewpoint, role modeling presumes identification with the mentor, and personal identification with the organizational agent brings greater identification with the organization itself (Zhu, Wang, Zheng, Liu, & Miao, 2012). Therefore, modeling the mentor should enhance protégés' identification with the organization and provide them with mental frameworks and skills for fulfilling personal aspirations while simultaneously keeping in mind those of the employer, in line with the employability aspect of balance.

Though by no means exhaustive, the above discussion is sufficiently comprehensive to justify the hypothesis that mentoring receipt relates to employability.

Hypothesis 1 (H1): Mentoring receipt will be positively related to employability.

Employability as Mediator in the Relationship Between Mentoring and Career Success

Career success signifies the accomplishments of individuals in their work histories and is viewed in both objective and subjective terms (Baruch & Bozionelos, 2011). Objective career success encompasses achievements that are externally verifiable (e.g., promotions), while subjective success corresponds to individuals' own personal evaluations of their careers (Gattiker & Larwood, 1988). Employability and career success are clearly distinct constructs (Hogan, Chamorro-Premuzic, & Kaiser, 2013; Van der Heijde & Van der Heijden, 2006): the former refers to the individual's present capacity to retain or to find new employment, while the latter concerns actual or perceived career achievements over a long period of time. However, they are causally related because, by virtue of its definition, employability has career enhancement properties (Fugate et al., 2004; Makikangas, De Cuyper, Mauno, & Kinnunen, 2013; Van der Heijde & Van der Heijden, 2006; Van der

Heijden, de Lange, Demerouti, & Van der Heijde, 2009). Therefore, and in line with theory that attests to intervening, and temporally more proximal, factors in the relationship of mentoring with career outcomes (Ramaswami & Dreher, 2007; Wanberg et al., 2003), the present research posits that employability mediates in the established link between receipt of mentoring and a protégé's career success. Beyond general theory, however, there are specific reasons to expect this relationship.

Presumably, organizational decision-makers positively regard people who are knowledgeable and competent in their work domains, in other words, those who demonstrate strong professional expertise. Furthermore, anticipation and optimization should increase a worker's awareness of career opportunities, internal or external, and the probability of acting upon such opportunities. As for personal flexibility, it should augment the odds of survival under adverse work or job market conditions. Corporate sense and balance should also increase the odds of earning objective career rewards. This is because exhibition of corporate sense sends signals to decision-makers that the individual is a committed organizational player who should be rewarded; and balance enables workers to meet their own work and career objectives while satisfying their managers. Indeed, employees who are seen as committed and dedicated organizational players are also seen as having career potential and as promotable (Shore, Barksdale, & Shore, 1995).

Employability should also affect subjective career success. Those who are employable are more likely to feel optimistic about their future work life and career prospects (Nicholson & de Waal-Andrews, 2005). Furthermore, in their own personal career evaluations, individuals take into account their objective accomplishments (Poole, Langan-Fox, & Omodei, 1993). We have already argued that employability relates to objective success, which means that it should also, as a result, enhance subjective success.

Hypothesis 2 (H2): Employability will be positively related to objective career success (H2a) and to subjective career success (H2b), while its relationship with subjective career success will be mediated by objective career success (H2c).

In conjunction with H1, the second hypothesis posits a mediating role for employability (e.g., Shrout & Bolger, 2002) in the connection between receipt of mentoring and career success.

Hypothesis 3 (H3): Employability will mediate the relationship of mentoring receipt with objective career success (H3a) and with subjective career success (H3b).

Mentoring Receipt and Job Performance: Employability as Mediator

Job performance signifies the extent to which an employee's output meets job requirements (e.g., Christen, Iyer, & Soberman, 2006) and is naturally a highly sought after outcome by employers and managers alike. It is reasonable to expect that job performance is reflected in career success, that is, those who perform better also earn career rewards, such as promotions. However, empirical findings suggest only a weak relationship between the two, at best (Cannings & Montmarquette, 1991; Carmeli, Shalom, & Weisberg, 2007; Van Scotter, Motowidlo, & Cross, 2000). The explanation for this absence of relationship of strength is that career success depends on many other factors that are dissociated from job performance, such as organizational reward systems, whether performance on the job is noticed, career choices, and the state of the economy (Baruch & Bozionelos, 2011; Mizruchi, Stearns, & Fleischer, 2011). Therefore, having established that receipt of mentoring enhances career success does not necessarily mean that it also benefits protégé's job performance—empirical evidence is needed and this is thus one of this study's aims.

The idea that receipt of mentoring is beneficial for protégés' performance is widespread in the mentoring literature (e.g., Joo, Jeung, & Yoon, 2010) and is found as early as the seminal works of Kram (1985) and Zey (1984). However, empirical confirmation of this idea is still lacking. To illustrate, the meta-analysis by Eby, Allen, Evans, Ng, and DuBois (2008) yielded a near zero effect size for the association of workplace mentoring with protégé job performance.

Yet, as job performance is a critical issue and considering the widespread recognition of mentoring as a development tool, whether mentoring is actually connected to protégé performance deserves further investigation. Unlike most extant studies that have relied on self-report measures, the present study utilized line managers' assessments of job performance. In addition, this research was conducted on the information technology (IT) industry, which is characterized by strong orientation toward results (Adolph, Kruchten, & Hall, 2012; Ebert, 2009) coupled with very rapid product refresh rates and short product lifecycles (Kennedy & Umphress, 2011). In such an environment, the effects of mentoring on protégés' performance is more likely to be detected because new skills and knowledge must be acquired or updated in short intervals and then applied swiftly on-the-job (Miller, 2009; Woldring, 1995), as this cycle occurs relentlessly in this industry (Tsai, Compeau, & Haggerty, 2007). In addition, in a competitive industry such as IT, employee productivity is critical (Sanyal & Sett, 2011), and hence it is particularly important for line managers to monitor and have accurate knowledge of employees' output. For the above reasons, the IT industry was an appropriate

environment for uncovering whether the developmental properties of mentoring are reflected in protégés' job performance. We believe that receipt of mentoring is linked with job performance through employability; in other words, employability acts as a mediator in the relationship.

There is good reason to consider that employability is reflected in job performance. First, professional expertise intuitively translates into work output (e.g., McKnight & Wright, 2011). Personal flexibility should also contribute to job performance because those who can acclimatize themselves to changing conditions should be quicker to reestablish their performance levels after planned or unplanned changes. In addition, corporate sense and balance should also benefit performance: Those who are involved in organizational activities and take into account organizational and personal interests should reach greater outputs by being cognizant of organizational needs and focusing their efforts accordingly. Involvement in organizational activities should also increase an individual's tacit knowledge by means of interacting with other employees (Ling, Hong, & Zhang, 2011). This in turn should be reflected in job performance because tacit knowledge represents most of the knowledge that flows within organizations (Polanyi, 1966) and, hence, it is critical for task and job accomplishment (Nonaka & von Krogh, 2009).

Hypothesis 4 (H4): Employability will be positively related to job performance.

Combined with H1, the above hypothesis posits that employability acts as mediator in the relationship between mentoring receipt and job performance.

Hypothesis 5 (H5): Employability will mediate the relationship between mentoring receipt and job performance.

Moreover, we also posit that job performance will be related to career success. Beyond mentoring theory that attests to this relationship (Kammeyer-Mueller & Judge, 2008; Ramaswami & Dreher, 2007), it is logical to assume that employees who perform better are more likely to receive organizational rewards as well as to feel more positive about their accomplishments and future career prospects.

Hypothesis 6 (H6): Job performance will be positively related to objective career success (H6a) and to subjective career success (H6b), while its relationship with subjective career success will be mediated by objective career success (H6c).

Hypotheses, in the form of a causal model, are shown in Figure 1.

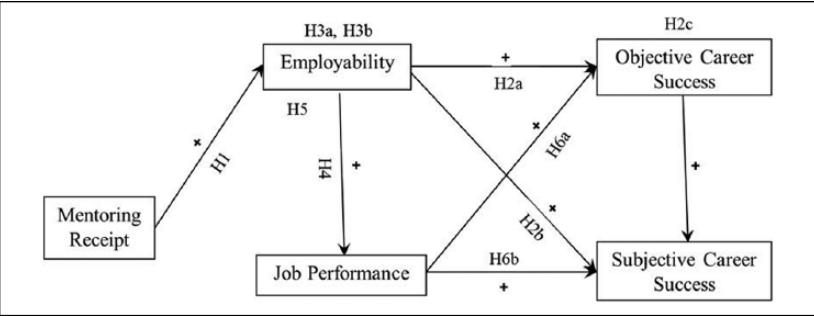


Figure 1. The conceptual model of the relationships among mentoring receipt, employability, job performance, and career success.

As noted above, the major motive behind this study was to posit and empirically investigate employability and job performance as explanatory factors in the relationship of mentoring receipt with career success. However, this research offers other secondary contributions pertaining to the setting, and in particular to conducting the investigation in the IT sector in small and medium-sized enterprises (SMEs) in a non-Anglo-Saxon cultural environment. The IT industry epitomizes organizational and employment forms of the modern era, with constant changes in tools and skill requirements, flat structures, and substantial worker mobility across and within organizational borders (Barley & Kunda, 2004; Pruijt, 2013; Scholarios et al., 2008). SMEs comprise the largest portion of organizational entities and account for most employment. To illustrate, in the European Union and in the United States, SMEs account for over 99% of all registered companies and for two thirds to one half of total employment, respectively (Eurostat, 2011; U.S. International Trade Administration, 2013). In the empirical and managerial literature, mentoring has been typically described in and implicitly linked with large corporations (Kanter, 1977; Roche, 1979; Underhill, 2006; Zellers, Howard, & Barcic, 2008). The way in which mentoring may operate in smaller organizations where career ladders are short or underdeveloped is open to speculation (Haggard, Dougherty, Turban, & Wilbanks, 2011). In SMEs, hierarchical layers are limited in number, and organizational members are likely to be acquainted with and visible to one another (O'Regan & Ghobadian, 2004). This may attenuate the benefits of mentoring because certain mentoring functions, like exposure and visibility of the protégé, may be less needed in small workplaces where hierarchical (and physical) distances are shorter and roles and functions are more interconnected.

Furthermore, it is still unclear whether the benefits of mentoring are generalizable across cultures, considering that the bulk of mentoring research so

far has taken place in Anglo-Saxon societies (Chen, Liao, & Wen, 2014; Hu, Pellegrini, & Scandura, 2011). The three countries that provided the cultural setting for this research, Greece, Italy, and Poland, are substantially different from the Anglo-Saxon world (Ronen & Shenkar, 1985), while they have similarities with each other (Gupta, Hanges, & Dorfman, 2002). All three, for example, are ranked substantially higher than Anglo-Saxon countries in power distance (e.g., Hofstede, 2001). High power distance may render protégés reluctant to seek advice or guidance from their mentors, and may also render mentors more reserved in their treatment of protégés. Indeed, in high-power-distance-societies, junior employees restrain themselves from approaching and asking advice from superiors (Zaidman & Brock, 2009), while senior employees view themselves as “untouchable” and are less willing to share knowledge with junior employees (Zaidman & Brock, 2009). Such segregation may impede the mentoring relationship, rendering it less effective as a development process. Hence, by investigating the relationship of mentoring receipt with career and other key outcomes in these cultures, the study at hand also contributes to our knowledge about the benefits of mentoring in different national cultural contexts. It should be noted that we have considered here the national culture and not the professional culture (in this case, the culture of the IT profession) as an issue of generalizability. This is because the culture of professions tends to be relatively invariant across national cultures (e.g., Hofstede, 2001; Karahanna, Evaristo, & Srite, 2005; Merritt, 2000). Therefore, we expect that the culture of the IT profession is similar in Anglo-Saxon and non-Anglo Saxon countries, which leaves the national culture as the main extraneous cultural influence.

Method

Participants and Procedure

Participants were IT professionals employed in SMEs in three European countries, Greece, Italy, and Poland (in alphabetical order). IT professionals were defined as “individuals professionally involved in the design, development, implementation, maintenance and support of IT products and services” (adapted from the Council of European Professional Informatics Societies, 2002). SMEs were defined as companies that employ less than 250 employees (Eurostat, 2011). The first step in data collection involved the mapping of the three countries with respect to the density of IT business activity. Estimates were derived by combining data found in publications of international bodies (Organisation for Economic Co-Operation and Development [OECD]), national professional associations, reputable specialist sources (e.g.,

Computerworld Magazine), and official national sources (e.g., the Polish Central Statistical Office, Greek General Confederation of Labor). A small number of regions (three geographic regions in Greece and Italy and four in Poland) accounted for the majority of IT activity in each country, which led to our decision to focus only on those geographic regions (to optimize resource efficiency). In the second step, a random sample of SMEs in those geographic regions were approached that were either exclusively in the IT sector themselves or had at least a dedicated IT department (e.g., retail companies with their own IT department). Companies with fewer than 10 employees were excluded at this stage, because firms of such a small size may not have developed hierarchies and job roles that would provide sufficient opportunities for traditional mentoring relationships or internal careers to unfold. As a result, 51, 47, and 72 companies from Greece, Italy, and Poland, respectively, agreed to participate (out of the 175, 1,000, and 418, respectively, that were approached). None of these companies had formal mentoring schemes in place. Each participant company then identified all their IT professionals and their line managers who were asked independently to complete questionnaires on a purely voluntary basis. Questionnaires were primarily completed electronically. Paper-and-pencil forms were also available and were utilized in a limited number of cases.

Overall, 352 usable pairs (subordinate–line manager) of questionnaires were returned (94, 70, and 188 from Greece, Italy, and Poland, respectively). Of those, 207 (50, 43, and 114, respectively) were utilized because they corresponded to IT professionals who responded positively to the item about whether they had had at least one mentor since they joined their present employer, following the definition of the mentor we provided on the basis of earlier work (Kram, 1985; Ragins & McFarlin, 1990):

A mentor is generally defined as a higher-ranking and more experienced individual in the work environment who is committed to providing personal or career support to another individual, the protégé. A person's mentor need not be one's immediate superior and the relationship needs not be formally arranged by the organization. Some people have had no mentors while others have had many different mentors in their work careers.

Those respondents were subsequently instructed to complete a scale that assessed amount of mentoring receipt.

Hence, participants were 207 (142 men and 65 women) IT professionals employed in SMEs in three European countries, Greece ($n_{Greece} = 50$, 36 men and 14 women), Italy ($n_{Italy} = 43$, 29 women and 14 men), and Poland ($n_{Poland} = 114$, 77 men and 37 women). Mean age, tenure with current employer, and length of total work experience were 32.51 ($SD = 7.47$), 4.4 ($SD = 3.93$), and

8.24 ($SD = 7.43$) years, respectively. Line managers' (160 men, 47 women) mean age was 40.36 ($SD = 8$) years.

Measures

Questionnaires were delivered in the official and dominant language of each country. The translation-back-translation procedure (e.g., Behling & Law, 2000) was utilized to ensure semantic equivalence with the original English versions. Data on mentoring receipt, objective, and subjective career success were collected with self-reporting, while data on employability and job performance were collected from line managers. Unless otherwise stated, a 5-point Likert-type measurement format (1 = *not at all*, 5 = *to a great extent*) was employed.

Mentoring receipt. This was measured with five items (e.g., “given or recommended you for assignments that increased your contact with higher level individuals,” “conveyed feelings of respect to you as individual,” “served as a role model”) from Dreher and Ash (1990). Respondents completed the items with the following instruction: “If you have had at least one mentor during your career in this firm, regardless of whether you currently have a mentor or not, please indicate the extent to which your mentor(s) has(have) . . .” These items have shown reliability and validity as a short global scale of mentoring receipt (e.g., Bozionelos, 2004; Bozionelos & Wang, 2006). Utilization of protégés’ reports to assess receipt of mentoring represents standard methodology in the mentoring literature. Furthermore, there is some evidence that protégés’ assessments of the amount of mentoring within the relationship are more accurate than assessments of mentors (Waters, McCabe, Kiellerup, & Kiellerup, 2002), who were the alternative source of measurement. Cronbach’s α was .83.

Subjective career success. This was measured with three items from Gattiker and Larwood (1986; for example, “I am pleased with the promotions I have received so far,” “I am drawing a high income compared to my peers”). Cronbach’s α was .65. Concerns for the marginal alpha were alleviated by testing the adequacy of the measurement model (below).

The discriminant and convergent validity of the mentoring receipt and subjective career success measures were supported by a confirmatory factor analysis (CFA) using the EQS 6.1 Structural Equations Program (Bentler, 2004) and employing the maximum likelihood robust method that corrects for nonnormality in the data. To assess model fit across all our measurement (CFA) and structural models, we employed the chi-square test along with two

widely used goodness-of-fit criteria: the comparative fit index (CFI) and the incremental fit index (IFI). Values of 0.90 or higher of these two criteria suggest an adequate fit (Bentler & Bonett, 1980). We also used the root mean square error of approximation (RMSEA) that estimates the discrepancy between the original and reproduced covariance matrices in the population. An RMSEA of 0.08 or lower shows a good data fit (Browne & Cudeck, 1992). The two-factor model had very good fit, Satorra–Bentler scaled $\chi^2(19, N = 207) = 27.12, p > .10$; CFI = .981; IFI = .981; RMSEA = .046, and improved over the independence model ($\Delta\chi^2 = 423.48, p < .001$). All factor loadings exceeded .50 and were significant at the .001 level.

Employability. Line managers rated participants using the managerial version of Van der Heijde and Van der Heijden's (2006) measure. It contains a pool of 47 items on a 6-point response format that assesses employability's five dimensions: professional expertise (e.g., "I consider this employee competent to indicate when his/her knowledge is insufficient to perform a task or solve a problem"), anticipation and optimization (e.g., "this employee takes responsibility for maintaining his/her labor market value"), personal flexibility (e.g., "how easily would you say this employee could adapt to changes in the workplace?"), corporate sense (e.g., "this employee supports the operational processes within the organization"), and balance (e.g., "this employee achieves a balance in alternating between reaching their own work goals and supporting colleagues").

A CFA (EQS 6.1, maximum likelihood robust method) was performed on the responses of all 352 line managers in the initial sample. Employability was modeled as a second-order latent factor with five first-order factors representing its constituent dimensions. This procedure dictated the retention of 23 items from the initial pool (those that were not retained had less-than-satisfactory, that is, low and nonsignificant, factor loadings): eight items for professional expertise ($\alpha = .92$), four for anticipation and optimization ($\alpha = .90$), four for personal flexibility ($\alpha = .84$), three for corporate sense ($\alpha = .82$), and four for balance ($\alpha = .81$). The second-order factor model with these 23 items had acceptable fit, Satorra–Bentler scaled $\chi^2(225, N = 352) = 469.15, p < .001$; CFI = .930; IFI = .931; RMSEA = .056, with all first- and second-order factor loadings significant at the .001 level. The second-order factor model also demonstrated improvement over the independence model ($\Delta\chi^2 = 3,263.66, p < .001$).

Alternative models were also tested. These included a model with all items loading on one factor and a number of other models that were conceived using logical reasoning (e.g., both corporate sense and balance have the employer as point of reference) and other models of employability (e.g., van Dam, 2004

views technical competence and career interests and preferences as forming a single employability factor, which dictates toward merging professional expertise and balance into a single factor): A two-factor model (Factor 1: professional expertise, anticipation and optimization, personal flexibility; Factor 2: corporate sense, balance), a three-factor model (Factor 1: professional expertise; Factor 2: anticipation and optimization, personal flexibility; Factor 3: corporate sense, balance), another three-factor model (Factor 1: professional expertise, balance; Factor 2: anticipation and optimization, personal flexibility; Factor 3: corporate sense), and a four-factor model in which corporate sense and balance formed a single factor while the rest of the items loaded on their intended dimensions. All these alternative factor structures demonstrated very poor fit to the data (see Table 1), and we thus relied on our original measurement model of employability. Finally, to satisfy power concerns, the multi-item scales for the five dimensions of employability were averaged (by calculating the arithmetic mean) and were treated as observed indicators (i.e., manifest variables) in the structural model.

Job performance. This was assessed by line managers who were given two options: first, if the employee “was appraised or evaluated for his/her performance in the past 12 months” to choose on a 1 to 5 scale (1 = *poor*, 5 = *excellent*) the number that most resembled the outcome of that evaluation (“which of the following best describes how this particular employee’s performance was evaluated?”); second, if there had been no performance evaluation of the employee in the past 12 months, to rate his/her performance during that period themselves (“how would you evaluate this employees’ performance in the last 12 months?”) on the same scale format (1 = *poor*, 5 = *excellent*). Line managers are accustomed to evaluating the performance of subordinates on single-item scales (Bretz, Milkovich, & Read, 1992). Furthermore, single-item measures of performance correlate strongly with multi-item measures and do not substantially lag behind these in reliability (Wanous & Hudy, 2001) or validity (Bergkvist & Rossiter, 2007).

Objective career success. This was operationalized as total number of promotions (defined as “any increases in level and/or any significant increases in job responsibilities or job scope”) achieved since joining the current employer. Controls included total length of employment, tenure with the current employer, and organizational size due to their potential impact on promotion opportunities. Hierarchical promotion rate is a widely utilized index of objective career success (Ng, Eby, Sorensen, & Feldman, 2005), which also cuts across national borders and organizational sizes. Nevertheless, we would have liked to supplement it with earnings for reasons that included the culture

Table 1. Confirmatory Factor Analysis Results of the Measurement Models of Employability ($N = 352$).

	Model χ^2_{a}	df	$\Delta\chi^2_{b}$	CFI	IFI	RMSEA
Baseline five-factor model	469.15	225	—	.930	.931	.056
Single-factor model	939.98	230	470.83**	.796	.797	.095
Two-factor model (Factor 1: Professional expertise, anticipation and optimization, and personal flexibility; Factor 2: Corporate sense, and balance)	692.04	228	222.89**	.867	.868	.077
Three-factor model (Factor 1: Professional expertise; Factor 2: Anticipation and optimization, and personal flexibility; Factor 3: Corporate sense, and balance)	675.07	227	205.92**	.871	.872	.076
Three-factor model (Factor 1: Professional expertise, and balance; Factor 2: Anticipation and optimization, and personal flexibility; Factor 3: Corporate sense)	726.14	227	256.99**	.857	.858	.080
Four-factor model (Factor 1: Professional expertise; Factor 2: Anticipation and optimization; Factor 3: Personal flexibility; Factor 4: Corporate sense, and balance)	628.30	226	159.15**	.884	.885	.072

Note. CFI = comparative fit index; IFI = incremental fit index; RMSEA = root mean square error of approximation.

^aModel χ^2 is the Satorra-Bentler scaled χ^2 of each model.

^b $\Delta\chi^2$ is the change of Satorra-Bentler scaled χ^2 compared with our original (baseline) measurement model.

** $p < .01$.

of the IT industry and the limited vertical hierarchies found in SMEs. However, that did not prove feasible. Though items on earnings were included (providing the option to report monthly or annual earnings, fixed salary, and bonuses), in most cases these were left uncompleted. Even when completed (which happened in less than 100 cases), however, the information could not be trusted for reasons such as cultural factors (in certain countries like Greece or Italy referring to money is a kind of taboo) and the large variance across and within these countries in calculating and reporting monetary compensation. Nevertheless, our utilization of subjective career success should compensate to a significant extent and provide a quite complete picture. Subjective success is geared toward the nature of the IT industry because subjective evaluations are seen as especially fit in today's environment of constant change and uncertainty (e.g., Baruch & Bozionelos, 2011).

Measures of Controls

Organizational learning climate. Four items (e.g., "everyone here shares information relevant to the job") were used from the Learning Climate Questionnaire (Bartram, Foster, Lindley, Brown, & Nixon, 1993). Cronbach's α was .79. Learning climate was controlled for because it may influence the extent and quality of mentoring in the work context (Lankau & Scandura, 2007) as well as career outcomes (Joo & Ready, 2012). Furthermore, learning occupies a pivotal role in the development of employability (Fugate, 2006; Van der Heijde & Van der Heijden, 2006; van der Heijden & Baker, 2010). Therefore, variations in encouragement and opportunities for learning between organizations may introduce variance in career success, mentoring receipt, and employability scores.

Demographics. Taking into account evidence on individual characteristics that influence objective and subjective career success (Melamed, 1995; Ng et al., 2005), as well as the course and outcomes of mentoring (Kammeyer-Mueller & Judge, 2008), a number of demographic factors were controlled for: participants' age, gender (1 = *male*, 2 = *female*), educational attainment (1 = *secondary school*, 2 = *college/some university*, 3 = *bachelor's degree or recognized equivalent*, 4 = *master's degree or recognized equivalent*, 5 = *doctorate*), marital status (1 = *single*, 2 = *married/cohabitating*), number of dependents, tenure with current employer, and length of total work experience. These were reported by participants themselves. Line managers' age and gender were also controlled for because these may influence performance ratings (Roberson, Galvin, & Charles, 2007). Organizational size (1 = 10-49, 2 = 50-99, 3 = 100-149; 4 = 150-199; 5 = 200-249 employees) was also

included (the relevant information was provided by our contact in each company, who was either the CEO or another senior officer) because promotion opportunities may be greater in larger organizations.

Measurement Equivalence

Because data were collected from three different countries, the assumption that the measures assessed equivalent constructs across national settings (i.e., measurement equivalence, Mullen, 1995) was tested. CFAs were performed across all possible country pairs using a one-factor (employability) and a two-factor (mentoring receipt and subjective career success) measurement model based on the different raters (i.e., employees vs. corresponding line managers), as well as a three-factor model that included all latent constructs across raters. Factor loadings were constrained to be equal across each pair and error variances were left free to be estimated (Vandenberg & Lance, 2000). In all cases, the one- and two-factor models demonstrated good fit (CFI range = .945-.985; RMSEA range = .046-.061). Factor loadings were similar across countries for both models (range = .449-.867, $p < .001$). Finally, there was no significant change in the chi-square between the constrained and unconstrained models in all CFAs, providing further support for the measures' metric equivalence across countries.

Results

Descriptive statistics and intercorrelations are presented in Table 2. Cursory inspection of the correlation coefficients suggested that mentoring receipt had sizable significant associations with both job performance ($r = .25$, $p < .001$) and employability ($r = .30$, $p < .001$). Structural equation modeling (SEM) tested the hypotheses. Analyses were performed using the EQS 6.1 program with the maximum likelihood robust method, and the same fit indexes described in the CFA were used to assess model fit. Following Anderson and Gerbing (1988), the fit of the measurement model (i.e., factor loadings) was assessed first, which was followed by testing the structural model (i.e., hypothesized path coefficients). To preserve statistical power, only those controls that demonstrated significant relationships were included in the final structural model (see Wu, Tsui, & Kinicki, 2010). These controls were age, educational attainment, tenure, total work experience, and learning climate.

The measurement model containing four latent constructs (i.e., mentoring receipt, employability, subjective career success, and organizational learning climate) fit the data very well, Satorra-Bentler scaled $\chi^2(98, N = 207) = 161.68$, $p < .01$; CFI = .959; IFI = .960; RMSEA = .056. All factor loadings

Table 2. Descriptive Statistics and Intercorrelations ($n = 207$).

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age	32.51	7.47													
2. Gender ^a	NA	NA	.02												
3. Educational attainment	2.75	1.21	.20**	-.06											
4. Tenure	4.40	3.93	.63**	.10	.01										
5. Total work experience	8.24	7.43	.87**	.06	.13	.69**									
6. Organizational size	2.81	1.23	.01	-.13	.12	.06	.02								
7. Country 1 ^a	NA	NA	.08	.02	.35**	-.03	.13	.01							
8. Country 2 ^a	NA	NA	-.09	-.04	-.45**	-.06	-.15*	-.30**	-.62**						
9. Learning climate	2.90	.59	-.14*	.04	.14*	-.06	-.14*	-.03	-.08	.08					
10. Mentoring receipt	3.68	.80	.02	.00	.12	.01	.03	.09	-.02	-.09	.32**				
11. Employability	4.28	.69	.02	.01	.17*	.09	.02	.12	-.11	.02	.30**	.30**			
12. Job performance	3.52	.90	.16*	-.02	.15*	.19**	.14*	.09	-.13	.02	.16*	.25**	.69**		
13. Objective career success	.94	1.19	.22**	.04	.06	.34**	.24**	.02	.00	-.01	-.01	.17*	.19**	.22**	
14. Subjective career success	2.89	.90	.19**	-.05	.17*	.16*	.18*	.12	-.05	-.02	.28**	.39**	.31**	.24**	.27**

^aDummy variable.

* $p < .05$. ** $p < .01$.

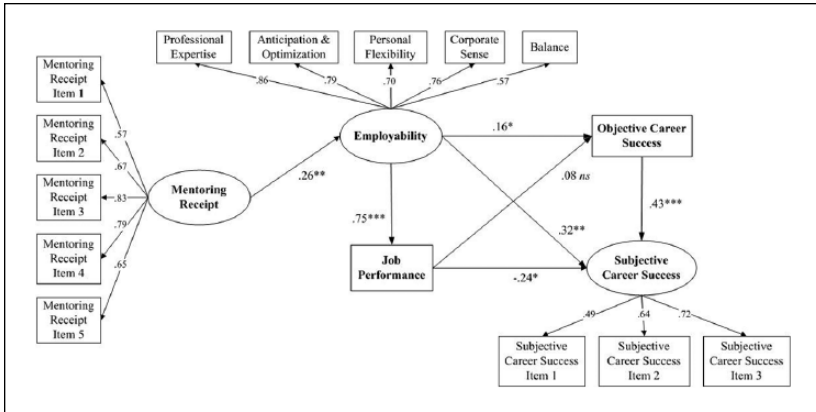


Figure 2. The final structural model.

Note. For reasons of simplicity, control variables and error variances are not shown in this path diagram. Standardized parameter estimates are reported. All factor loadings of the indicators of the latent constructs are significant at the .001 level. Satorra–Bentler scaled $\chi^2(306, N = 207) = 365.30, p < .01$; CFI = .950; IFI = .952; RMSEA = .041. CFI = comparative fit index; IFI = incremental fit index; RMSEA = root mean square error of approximation.

* $p < .05$. ** $p < .01$. *** $p < .001$.

were significant at the .001 level. To further strengthen confidence in our measurement, we tested alternative measurement models, including a model where employability and subjective career success loaded on a single factor. That model showed poor fit to the data, Satorra–Bentler scaled $\chi^2(102, N = 207) = 245.69, p < .001$; CFI = .861; IFI = .863; RMSEA = .10, and in all cases our measurement model performed better than the alternative models.

The final structural model (Figure 2) demonstrated good data fit, Satorra–Bentler scaled $\chi^2(306, N = 207) = 365.30, p < .01$; CFI = .950; IFI = .952; RMSEA = .041. Standardized path estimates supported H1, as mentoring receipt was significantly positively related to employability ($\beta = .26, p < .01$). H2a and H2b were also supported, as employability was positively related to both objective ($\beta = .16, p < .05$) and subjective career success ($\beta = .32, p < .01$). Similarly, the structural model supported H4 as employability was positively related to job performance ($\beta = .75, p < .001$).

Job performance was unrelated to objective career success ($\beta = .08, ns$), leading to rejection of H6a. Job performance was related to subjective career success, but in the opposite direction of our expectations ($\beta = -.24, p < .05$), leading to rejection of H6b as well.

To test for mediation, which pertained to H2c, H3, H5, and H6c, direct and indirect effects in the SEM tests were calculated (Hempel, Zhang, & Tjosvold,

2008; Zhang, Hempel, Han, & Tjosvold, 2007) following relevant procedures in EQS that generated standard errors and path coefficients for these effects (Bentler, 2004). The indirect effect of employability on subjective career success was nonsignificant ($\beta = -.09$, *ns*), while the corresponding direct effect was found to be significant as per H2b ($\beta = .32$, $p < .01$). To further investigate this indirect effect (as EQS calculates total indirect effects) and account for the two simultaneous mediating paths in our model linking employability with subjective career success (i.e., employability \rightarrow objective career success \rightarrow subjective career success; employability \rightarrow job performance \rightarrow subjective career success), we followed the procedures suggested by Preacher and Hayes (2008). Results show that the effect of employability on subjective career success through objective career success was not significant ($Z = 1.46$, $p > .10$). Hence, H2c suggesting mediation was not supported. H6c was not supported either because the relationship of job performance with objective career success was not significant (as per the testing of H6a above), which rendered further testing for mediation redundant (Kenny, Kashy, & Bolger, 1998).

The indirect effects of mentoring receipt on objective career success, subjective career success, and job performance were significant ($\beta = .12$, $p < .05$; $\beta = .10$, $p < .05$; $\beta = .19$, $p < .05$, respectively), whereas the corresponding direct effects were not ($\beta = .08$, *ns*; $\beta = .05$, *ns*; $\beta = .08$, *ns*). Employability thus mediated the relationship of mentoring receipt with objective (H3a) and subjective career success (H3b) and with job performance (H5). To explore further the multiple indirect effects of mentoring receipt on subjective career success (as the path from job performance on objective career success was nonsignificant) through the two simultaneous mediating paths proposed in our model, that is, (a) mentoring receipt \rightarrow employability \rightarrow subjective career success, and (b) mentoring receipt \rightarrow employability \rightarrow job performance \rightarrow subjective career success, we again followed Preacher and Hayes (2008). The results indicated that the indirect effect of mentoring receipt on subjective career success through both mediating paths were significant, $Z = 1.98$, $p < .05$ for (a) path, and $Z = 2.11$, $p < .05$ for (b) path. Therefore, taking all testing together, H3 (both parts) and H5 were supported.

Alternative structural models were also tested. These included (a) a model with a direct path linking mentoring receipt with job performance, and then job performance pointing to employability (i.e., reversing the flow of the initial hypothesized relationship). This model demonstrated poor data fit, Satorra–Bentler scaled $\chi^2(306, N = 207) = 618.34$, $p < .001$; CFI = .827; IFI = .831; RMSEA = .073; (b) a model where mentoring receipt mediated the relationship that employability and job performance each had with objective and subjective career success. The reasoning behind such a model would be

that more employable and better performing employees would be more likely to receive mentoring, which would in turn lead to better career outcomes. All five variants of that model (assuming all possible plausible links between the variables) yielded substantially poorer fit than the proposed model (range of Satorra–Bentler scaled $\chi^2 = 618.34\text{--}693.88$, $p < .001$ in all models; range of CFI = .786–.827; range of IFI = .792–.831; range of RMSEA = .073–.081; detailed fit statistics for each model are presented in Table 3). Hence, the proposed structural model performed better than all logical alternatives.

Post Hoc Robustness Analysis

We tested the robustness of our findings by using the initial total sample of 352 respondents (which included those who reported not having had mentor[s]) and their line managers and assigning the value of 1 (i.e., the lowest response score) to all items of the mentoring receipt scale for the nonmentored employees. The results of this post hoc analysis exactly replicated the pattern of our original SEM findings. Specifically, the structural model ($N = 352$) showed satisfactory data fit, Satorra–Bentler scaled $\chi^2(306, N = 352) = 519.98$, $p < .001$; CFI = .950; IFI = .950; RMSEA = .049, while it also supported H1, H2a, H2b, and H4 ($\beta = .14$, $p < .05$; $\beta = .13$, $p < .05$; $\beta = .26$, $p < .01$; $\beta = .77$, $p < .001$; respectively). Furthermore, in line with our original results, H6a and H6b did not hold ($\beta = .07$, ns ; $\beta = -.19$, $p < .05$, respectively), while mediation tests provided support for H3 and H5 but failed to support H2c. Overall, this analysis demonstrated the robustness of our findings and suggested that the model holds under alternative operationalizations of mentoring receipt (Haggard et al., 2011).

Discussion

The present work responds to calls in the literature (Pan et al., 2011) and complements theoretical arguments (Kammeyer-Mueller & Judge, 2008; Ramaswami & Dreher, 2007; Wanberg et al., 2003) for temporally more proximal outcomes that are realized in the way receipt of mentoring shapes career success. These outcomes represent the mechanism that accounts for the career benefits of mentoring, which have up until now been poorly understood. Employability and job performance, along with the way these are connected, were postulated as providing this intervening mechanism. In particular, this study found evidence for the link between mentoring receipt and protégés' job performance, which has hitherto been lacking. In addition, this research has demonstrated that mentoring receipt relates to another important outcome, employability, and that employability acts as intervening factor in

Table 3. Alternative Structural Models ($n = 207$).

	Model χ^2 ^a	df	$\Delta\chi^2$ ^b	CFI	IFI	RMSEA
Hypothesized structural model						
Model 1 (mentoring receipt → job performance; job performance → employability, objective career success, subjective career success; employability → objective career success, subjective career success)	365.30	306	—	.950	.952	.041
Model 2 (employability → job performance, mentoring receipt; job performance → mentoring receipt; mentoring receipt → objective career success, subjective career success)	618.34	306	253.04**	.827	.831	.073
Model 3 (employability → job performance; job performance → mentoring receipt; mentoring receipt → objective career success, subjective career success)	650.18	307	284.88**	.810	.815	.077
Model 4 (employability → job performance, mentoring receipt, objective career success, subjective career success)	693.88	308	328.58**	.786	.792	.081
Model 5 (employability → job performance, mentoring receipt, objective career success, subjective career success; job performance → mentoring receipt; mentoring receipt → objective career success, subjective career success)	643.20	305	277.90**	.813	.818	.076
Model 6 (employability → job performance, mentoring receipt; job performance → mentoring receipt, objective career success, subjective career success; mentoring receipt → objective career success, subjective career success)	644.13	305	278.83**	.812	.817	.076
Model 7 (employability → job performance, mentoring receipt; job performance → objective career success, subjective career success; mentoring receipt → objective career success, subjective career success)	644.24	306	278.94**	.813	.818	.076

Note. CFI = comparative fit index; IFI = incremental fit index; RMSEA = root mean square error of approximation.

^aModel χ^2 is the Satorra–Bentler scaled χ^2 of each model.

^b $\Delta\chi^2$ is the change of Satorra–Bentler scaled χ^2 compared with our hypothesized structural model.

** $p < .01$.

the relationship between mentoring and protégé performance. Not only are employability and performance gains more temporally proximal than career success, but they are also arguably of more relevance and importance to a variety of stakeholders that include employers, governments, and society in addition to protégés (see also McQuaid & Lindsay, 2005; Ramaswami & Dreher, 2007).

Mentoring receipt was directly related to employability, with an effect size that fell on the upper side of the moderate range (i.e., $\beta = .26$, Cohen, 1992). Employability represents a key quality in the present era of fast changes in job content, employer demands, and fluctuating labor market opportunities. This finding, therefore, signifies that receipt of mentoring relates to the very capacity of individuals to adapt to the demands imposed by their professions, employers, and the labor market. It is noteworthy that mentoring was connected to the other outcomes through its relationship with employability, suggesting that employability plays a pivotal role in the way mentoring relates to protégé performance and career success.

This study also provided empirical evidence for the connection of mentoring receipt with protégés' job performance. This is of importance because job performance is a highly sought after bottom-line index, and although the link had been presumed in the theoretical and practitioner literature, concrete evidence was lacking. The magnitude of the association ($r = .25$, $\beta = .19$) also suggests a relationship of substance. To provide anchors for comparison, the effect sizes for the established relationship of mentoring receipt with objective and subjective career success in Allen et al.'s (2004) meta-analysis were .18 and .21, respectively, and in the meta-analysis by Eby et al. (2008), .09 and .19, respectively. This finding considerably boosts the mentoring argument because while career success is of prime interest mainly to employees, job performance is of interest to all parties: firms, employees, and governments. Therefore, managers and human resource practitioners have an additional motive to create conditions that encourage informal mentoring, as well as to provide mentoring for junior colleagues themselves.

Beyond the above findings, this study also makes two additional, albeit of smaller proportions, contributions. First, it reveals the functionality of mentoring across the whole spectrum of organizational sizes, by showing that mentoring receipt is associated with positive outcomes in the SME environment. Due to fewer resources, SMEs lag behind larger organizations in formal systems for employee development (Garcia-Morales, Llorens-Montes, & Verdu-Jover, 2007), including formal mentoring schemes (Laiho & Brandt, 2012). This renders informal mentoring of particular importance in the SME context. Those mentoring functions that affect protégé learning, such as challenging assignments, coaching, and role modeling, may thus have special value for protégé outcomes in the SME setting.

Second, the cultural context provides evidence about the generalizability of benefits of mentoring outside Anglo-Saxon countries. The implication is that mentoring is a developmental resource across national boundaries. However, it is important to keep in mind that this does not necessarily mean that mentoring operates similarly across cultures. The various dimensions of mentoring may contribute to career success with different weights that depend on key cultural features (see Hu et al., 2011), while the overall outcome remains relatively invariant. For example, exposure and visibility may play greater role in high-power-distance cultures because of the importance they attach to formal authority, while the reverse may hold for coaching because in low-power-distance cultures, subordinates hold fewer expectations for guidance from their superiors (Dickson, Den Hartog, & Mitchelson, 2003). This is something that future research should address in greater detail.

Finally, job performance was not related to objective career success and, in sharp contrast to expectations, it was negatively related to subjective success. Though this did not alter the overall positive relationship of mentoring with career success, it is worth discussing because it reiterates the distinct nature of job performance and career success (Baruch & Bozionelos, 2011). Objective success also depends on factors other than job performance, including available opportunities and structural constraints. It is not unlikely, for example, that good performers are deemed too valuable in their current positions for firms to be willing to allow them to move. This may be especially pronounced in SMEs where talent pools are limited and budgets for hiring new staff or retraining existing staff are tighter. Furthermore, regardless of firms' willingness to promote, vertical advancement opportunities may be inherently constrained in SMEs. For either reason, good performers may not see their output translated into objective career outcomes. Given that good performers are likely to have heightened career expectations, the frustration incurred by nonmaterialization of these expectations may also explain the negative relationship of performance with subjective success. The fact that objective success did not mediate the relationship of job performance or employability with subjective success is in line with this observation.

Limitations and Directions

Causality cannot be directly inferred from a cross-sectional design, a limitation we sought to mitigate by statistically testing competing causal models. However, sophisticated statistical techniques cannot replace measurements at multiple points in time. Only longitudinal or experimental designs can completely remove causality concerns.

Multisource measurement was employed to protect against common method bias. Beyond guarding against common method bias, the use of line managers' ratings of employability was another minor contribution of the study as self-report measures of employability have dominated extant empirical research. Yet, we cannot rule out the possibility of common method effects in the relationship of employability to job performance, which were both assessed by line managers. Nevertheless, it is not unusual for distinct constructs to associate very strongly (e.g., cognitive ability and job performance, Salgado et al., 2003; or job satisfaction and affective organizational commitment, Meyer, Stanley, Herscovitch, & Topolnysky, 2002). In any case, future research may use different sources to assess employability and performance.

Our measure of mentoring did not take into account the hierarchical position of the mentor (e.g., whether the mentor is also the line manager), which apparently relates to mentoring outcomes (Thomas & Lankau, 2009). Future research, therefore, may incorporate this factor into the design.

Only those respondents who indicated having been in one or more mentoring relationships completed the mentoring receipt scale and were included in the analysis. That was a conscious choice to make certain that what was measured was in line with the typical and most unambiguous notion of mentoring, which refers to an intense and exclusive relationship (Eby, 1997; Higgins & Kram, 2001; Kram, 1983, 1985). Mentoring functions may occasionally and unsystematically be provided by various individuals in a person's relationship constellation (e.g., intraorganizational network ties), but "none of those relationships meet the standard for being considered a mentoring relationship" (Haggard et al., 2011, p. 284). Our approach precluded the possibility of tapping such occasions, which might contaminate measurement. Though a conscious choice, however, this contains the limitation of no direct comparison between mentored and nonmentored individuals. Notwithstanding the robustness analysis we conducted, future research should attempt replications using designs that allow for direct comparison between mentored and nonmentored employees.

The occupational context of the IT profession epitomizes the modern economy. However, this very context may have been partly responsible for the dominant role of employability in the present study. In settings characterized by a slower pace in the flow of new knowledge, the role of employability may not be as high. The same caveat holds for the relationship between mentoring receipt and job performance. The nature of the IT industry necessitates constant and efficient on-the-job learning as well as the capacity to apply this learning swiftly and accurately. Such an environment is ideal for realizing

performance benefits from developmental relationships. In contexts that impose fewer learning demands, however, the link of mentoring with protégé performance may be more limited or more difficult to discern. Future research should, therefore, investigate whether the identified relationships generalize across occupational contexts.

Taking into account the central role employability played in the relationship of mentoring receipt to work and career outcomes in the present study, and considering that employability also predicts general and mental health (Berntson & Marklund, 2007), future work should also direct attention to whether mentoring relates to physical and mental health outcomes. These constitute key human resource management concerns too, but have been generally overlooked in mentoring research.

Finally, this study focused exclusively on traditional informal mentoring. Although this enhanced certainty on the validity and applicability of findings (Allen, Eby, O'Brien, & Lentz, 2008; Haggard et al., 2011), it naturally restricted generalizability to other mentoring forms. For example, though generally seen as less effective, formal mentoring is now an established development tool (e.g., Baugh & Fagenson-Eland, 2007; Menges, 2015). Hence, future research ought to investigate whether it is linked with these same key outcomes. Peer mentoring and reverse mentoring (i.e., where the junior colleague assumes the role of mentor, Zanni, 2009) are also of particular interest today. Flattened hierarchies with an increased span of supervisory control and intensified work conditions may make traditional mentoring more difficult, while rapid technological and societal change may render junior employees more knowledgeable and experienced in particular domains than senior organizational members (Murphy, 2012). Finally, the employability benefits of mentoring relationships that transcend organizational boundaries (external mentoring) should also be investigated. Such relationships may be especially useful in today's environment of heightened interorganizational mobility.

The present study demonstrates that mentoring relates to career outcomes via its association with the temporally more proximal key outcomes of employability and job performance. This finding reaffirms the developmental properties of mentoring that had been questioned as a result of its relatively weak effect on career success, however firmly established (for example, Kammeyer-Mueller & Judge, 2008). Furthermore, it underlines the importance of considering mentoring benefits other than career success. This study also suggests that the beneficial properties of mentoring extend to organizations of small and medium size and are not limited to particular national cultural contexts, raising the need for more fine-grained research in various cultural and occupational contexts.

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References

- Adolph, S., Kruchten, P., & Hall, W. (2012). Reconciling perspectives: A grounded theory of how people manage the process of software development. *Journal of Systems and Software*, 85, 1269-1286.
- Allen, T. D., Eby, L. T., O'Brien, K. E., & Lentz, E. (2008). The state of mentoring research: A qualitative review of current research methods and future research implications. *Journal of Vocational Behavior*, 73, 343-357.
- Allen, T. D., Eby, L. T., Poteet, M. L., Lentz, E., & Lima, L. (2004). Career benefits associated with mentoring for protégés: A meta-analysis. *Journal of Applied Psychology*, 89, 127-136.
- Anderson, J., & Gerbing, D. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411-423.
- Avey, J. B., Reichard, R. J., Luthans, F., & Mhatre, K. H. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors and performance. *Human Resource Development Quarterly*, 22, 127-152.
- Avey, J. B., Wernsing, T. S., & Luthans, F. (2008). Can positive employees help positive organizational change? Impact of psychological capital and emotions on relevant attitudes and behaviors. *Journal of Applied Behavioral Science*, 44, 48-70.
- Baranik, L. E., Roling, E. A., & Eby, L. T. (2010). Why does mentoring work? The role of perceived organizational support. *Journal of Vocational Behavior*, 76, 366-373.
- Barley, S., & Kunda, G. (2004). *Gurus, hired guns, and warm bodies: Itinerant experts in a knowledge economy*. Princeton, NJ: Princeton University Press.
- Bartram, D., Foster, J., Lindley, P. A., Brown, A. J., & Nixon, S. (1993). *Learning Climate Questionnaire (LCQ): A user's guide*. Hull, UK: Newland Park Associates.
- Baruch, Y., & Bozionelos, N. (2011). Career issues. In S. Zedeck (Ed.), *APA handbook of industrial and organizational psychology, volume 2: Selecting & developing members of the organization* (pp. 67-113). Washington, DC: American Psychological Association.
- Baugh, S. G., & Fagenson-Eland, E. A. (2007). Formal mentoring programs: A "poor cousin" to informal relationships? In B. R. Ragins & K. E. Kram (Eds.), *The handbook of mentoring at work: Theory, research, and practice* (pp. 249-271). Thousand Oaks, CA: SAGE.

- Behling, O., & Law, K. S. (2000). *Translating questionnaires and other research instruments: Problems and solutions*. Thousand Oaks, CA: SAGE.
- Bentler, P. M. (2004). *EQS 6 structural equations program manual*. Encino, CA: Multivariate Software.
- Bentler, P. M., & Bonett, D. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588-606.
- Bergkvist, L., & Rossiter, J. R. (2007). The predictive validity of multiple-item versus single-item measures of the same constructs. *Journal of Marketing Research*, 44, 175-184.
- Berntson, E., & Marklund, S. (2007). The relationship between perceived employability and subsequent health. *Work & Stress*, 21, 279-292.
- Boyatzis, R. E. (2008). Competencies in the 21st century. *Journal of Management Development*, 27, 5-12.
- Bozionelos, N. (2004). Mentoring provided: Relation to mentor's career success, personality and mentoring received. *Journal of Vocational Behavior*, 64, 24-46.
- Bozionelos, N. (2015). Social capital and careers: Indisputable evidence and note for caution. In A. De Vos & B. I. J. M. Van der Heijden (Eds.), *Handbook of research on sustainable careers* (pp. 67-82). Northampton, MA: Edward Elgar Publishing.
- Bozionelos, N., & Wang, L. (2006). The relationship of mentoring and network resources with career success in the Chinese organizational environment. *International Journal of Human Resource Management*, 17, 1531-1546.
- Bretz, R. D., Jr., Milkovich, G. T., & Read, W. (1992). The current state of performance appraisal research and practice: Concerns, directions, and implications. *Journal of Management*, 18, 321-352.
- Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods & Research*, 21, 230-258.
- Cannings, K., & Montmarquette, C. (1991). Managerial momentum: A simultaneous model of the career progress of male and female managers. *Industrial and Labor Relations Review*, 44, 212-228.
- Carmeli, A., Shalom, R., & Weisberg, J. (2007). Considerations in organizational career advancement: What really matters. *Personnel Review*, 36, 190-205.
- Chandler, D. E., Kram, K. E., & Yip, J. (2012). An ecological systems perspective of mentoring at work: A review and future prospects. *The Academy of Management Annals*, 5, 517-570.
- Chen, C., Liao, J., & Wen, P. (2014). Why does formal mentoring matter? The mediating role of psychological safety and the moderating role of power distance orientation in the Chinese context. *The International Journal of Human Resource Management*, 25, 1112-1130.
- Christen, M., Iyer, G., & Soberman, D. (2006). Job satisfaction, job performance, and effort: A reexamination using agency theory. *Journal of Marketing*, 70, 137-150.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112, 155-159.
- Council of European Professional Informatics Societies. (2002). *Information technology practitioner skills in Europe*. Frankfurt, Germany: Author.

- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31, 874-900.
- Davis, C. G., & Asliturk, E. (2011). Toward a positive psychology of coping with anticipated events. *Canadian Psychology*, 52, 101-110.
- Dickson, M. W., Den Hartog, D. N., & Mitchelson, J. K. (2003). Research on leadership in a cross-cultural context: Making progress, and raising new questions. *Leadership Quarterly*, 14, 729-768.
- Dragoni, L., Tesluk, P. E., Russell, J. E. A., & Oh, I.-S. (2009). Understanding managerial development: Integrating developmental assignments, learning orientation, and access to developmental opportunities in predicting managerial competencies. *Academy of Management Journal*, 52, 731-743.
- Dreher, G. F., & Ash, R. A. (1990). A comparative study of mentoring among men and women in managerial, professional, and technical positions. *Journal of Applied Psychology*, 75, 539-546.
- Ebert, C. (2009). Software product management. *CrossTalk: The Journal of Defense Software Engineering*, 22(1), 15-19.
- Eby, L. T. (1997). Alternative forms of mentoring in changing organizational environments: A conceptual extension of the mentoring literature. *Journal of Vocational Behavior*, 51, 125-144.
- Eby, L. T., Allen, T. D., Evans, S. C., Ng, T., & DuBois, D. L. (2008). Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals. *Journal of Vocational Behavior*, 72, 254-267.
- Eby, L. T., Durley, J. R., Evans, S. C., & Ragins, B. R. (2006). The relationship between short-term mentoring benefits and long-term mentor outcomes. *Journal of Vocational Behavior*, 69, 424-444.
- Eurostat. (2011). *Key figures on European business with a special future on SMEs*. Luxembourg: European Union.
- Evered, R. D., & Selman, J. C. (1989). Coaching and the art of management. *Organizational Dynamics*, 18(2), 16-32.
- Forrier, A., & Sels, L. (2003). Temporary employment and employability: Training opportunities and efforts of temporary and permanent employees in Belgium. *Work, Employment and Society*, 17, 641-666.
- Forstenlechner, I., Selim, H., Baruch, Y., & Madi, M. (2014). Career exploration and perceived employability within an emerging economy context. *Human Resource Management*, 53, 45-66.
- Fugate, M. (2006). Employability. In J. Greenhaus & G. Callanan (Eds.), *Encyclopedia of career development* (Vol. 1, pp. 267-271). Thousand Oaks, CA: SAGE.
- Fugate, M., & Kinicki, A. J. (2008). A dispositional approach to employability: Development of a measure and test of implications for employee reactions to organizational change. *Journal of Occupational and Organizational Psychology*, 81, 503-527.
- Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior*, 65, 14-38.

- Garcia-Morales, V. J., Llorens-Montes, F. J., & Verdu-Jover, A. J. (2007). Influence of personal mastery on organizational performance through organizational learning and innovation in large firms and SMEs. *Technovation*, 27, 547-568.
- Gattiker, U. E., & Larwood, L. (1986). Subjective career success: A study of managers and support personnel. *Journal of Business and Psychology*, 1, 78-94.
- Gattiker, U. E., & Larwood, L. (1988). Predictors for managers' career mobility, success and satisfaction. *Human Relations*, 41, 569-591.
- Giblin, F., & Lakey, B. (2010). Integrating mentoring and social support research within the context of successful medical training. *Journal of Social & Clinical Psychology*, 29, 771-796.
- Gupta, V., Hanges, P. J., & Dorfman, P. (2002). Cultural clusters: Methodology and findings. *Journal of World Business*, 37, 11-15.
- Haggard, D. L., Dougherty, T. W., Turban, D. B., & Wilbanks, J. E. (2011). Who is a mentor? A review of evolving definitions and implications for research. *Journal of Management*, 37, 280-304.
- Harms, P. D., & Brummel, B. J. (2013). The importance of developing employability. *Industrial and Organizational Psychology*, 6, 20-24.
- Hempel, P. S., Zhang, Z. H., & Tjosvold, D. (2008). Conflict management between and within teams for trusting relationships and performance in China. *Journal of Organizational Behavior*, 30, 41-65.
- Higgins, M. C., Dobrow, S. R., & Roloff, K. S. (2010). Optimism and the boundary-less career: The role of developmental relationships. *Journal of Organizational Behavior*, 31, 749-769.
- Higgins, M. C., & Kram, K. E. (2001). Reconceptualizing mentoring at work: A developmental network perspective. *Academy of Management Review*, 26, 264-288.
- Hoffman, R., Casnocha, B., & Yeh, C. (2013). Tours of duty: The new employer-employee contract. *Harvard Business Review*, 91(6), 48-58.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Thousand Oaks, CA: SAGE.
- Hogan, R., Chamorro-Premuzic, T., & Kaiser, R. B. (2013). Employability and career success: Bridging the gap between theory and reality. *Industrial and Organizational Psychology*, 6, 3-16.
- Hu, C., Pellegrini, E. K., & Scandura, T. A. (2011). Measurement invariance in mentoring research: A cross-cultural examination across Taiwan and the U.S. *Journal of Vocational Behavior*, 78, 274-282.
- Joo, B.-K., Jeung, C. W., & Yoon, H. J. (2010). Investigating the influences of core self-evaluations, job autonomy, and intrinsic motivation on in-role job performance. *Human Resource Development Quarterly*, 21, 353-371.
- Joo, B.-K., & Ready, K. J. (2012). Career satisfaction: The influences of proactive personality, performance goal orientation, organizational learning culture, and leader-member exchange quality. *Career Development International*, 17, 276-295.
- Kammeyer-Mueller, J. D., & Judge, T. A. (2008). A quantitative review of mentoring research: Test of a model. *Journal of Vocational Behavior*, 72, 269-283.

- Kanter, R. M. (1977). *Men and women of the corporation*. New York, NY: Basic Books.
- Karahanna, E., Evaristo, J. R., & Srite, M. (2005). Levels of culture and individual behavior: An integrative perspective. *Journal of Global Information Management, 13*(2), 1-20.
- Kennedy, M. R., & Umphress, D. A. (2011). An agile systems engineering process: The missing link? *CrossTalk: The Journal of Defense Software Engineering, 24*(3), 16-20.
- Kenny, D. A., Kashy, D. A., & Bolger, N. (1998). Data analysis in social psychology. In D. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (4th ed., Vol. 1, pp. 233-265). New York, NY: McGraw-Hill.
- Kram, K. E. (1983). Phases of the mentor relationship. *Academy of Management Journal, 26*, 608-625.
- Kram, K. E. (1985). *Mentoring in the workplace: Developmental relationships in organizational life*. Glenview, IL: Scott Foresman.
- Laiho, M., & Brandt, T. (2012). Views of HR specialists on formal mentoring: Current situation and prospects for the future. *Career Development International, 17*, 435-457.
- Lankau, M. J., & Scandura, T. A. (2007). Mentoring as a forum for personal learning in organizations. In B. R. Ragins & K. E. Kram (Eds.), *The handbook of mentoring at work: Theory, research, and practice* (pp. 95-122). Thousand Oaks, CA: SAGE.
- Ling, H., Hong, D. C., & Zhang, C. H. (2011). Research on tacit knowledge integration: A synthesis of social ties and TMS. *Knowledge Management Research & Practice, 9*, 256-262.
- Makikangas, A., De Cuyper, N., Mauno, S., & Kinnunen, U. (2013). A longitudinal person-centered view on perceived employability: The role of job insecurity. *European Journal of Work & Organizational Psychology, 22*, 490-503.
- McKnight, C. A., & Wright, W. F. (2011). Characteristics of relatively high-performance auditors. *Auditing: A Journal of Practice & Theory, 30*, 191-206.
- McQuaid, R. W., & Lindsay, C. (2005). The concept of employability. *Urban Studies, 42*, 197-219.
- Melamed, T. (1995). Career success: The moderating effect of gender. *Journal of Vocational Behavior, 47*, 35-60.
- Menges, C. (2015). Toward improving the effectiveness of formal mentoring programs: Matching by personality matters. *Group & Organization Management*. Advance online publication. doi:10.1177/1059601115579567
- Merritt, A. (2000). Culture in the cockpit: Do Hofstede's dimensions replicate? *Journal of Cross-Cultural Psychology, 31*, 283-301.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnysky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior, 61*, 20-52.
- Miller, B. (2009, June 16). *Key performance indicators of software developers* [Web log post]. Retrieved from <http://www.customsoftwarebypreston.com/application-development-performance-indicators>

- Mizruchi, M. S., Stearns, L. B., & Fleischer, A. (2011). Getting a bonus: Social networks, performance, and reward among commercial bankers. *Organization Science*, 22, 42-59.
- Mullen, M. R. (1995). Diagnosing measurement equivalence in cross-national research. *Journal of International Business Studies*, 26, 573-596.
- Murphy, W. M. (2012). Reverse mentoring at work: Fostering cross-generational learning and developing millennial leaders. *Human Resource Management*, 51, 549-574.
- Ng, T. W. H., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology*, 58, 367-408.
- Nicholson, N., & de Waal-Andrews, W. (2005). Playing to win: Biological imperatives, self-regulation, and trade-offs in the game of career success. *Journal of Organizational Behavior*, 26, 137-154.
- Nonaka, I., & von Krogh, G. (2009). Tacit knowledge and knowledge conversion: Controversy and advancement in organizational knowledge creation theory. *Organization Science*, 20, 635-652.
- O'Driscoll, M. P., Cooper-Thomas, H. D., Bentley, T., Catley, B. E., Gardner, D. H., & Trenberth, L. (2011). Workplace bullying in New Zealand: A survey of employee perceptions and attitudes. *Asia Pacific Journal of Human Resources*, 49, 390-408.
- O'Regan, N., & Ghobadian, A. (2004). Testing the homogeneity of SMEs: The impact of size on managerial and organizational processes. *European Business Review*, 16, 64-77.
- Pan, W., Sun, L.-Y., & Chow, I. H. S. (2011). The impact of supervisory mentoring on personal learning and career outcomes: The dual moderating effect of self-efficacy. *Journal of Vocational Behavior*, 78, 264-273.
- Pellegrini, E. K., & Scandura, T. A. (2005). Construct equivalence across groups: An unexplored issue in mentoring research. *Educational and Psychological Measurement*, 65, 323-335.
- Polanyi, M. (1966). *The tacit dimension*. Chicago, IL: University of Chicago Press.
- Poole, M. E., Langan-Fox, J., & Omodei, M. (1993). Contrasting subjective and objective criteria as determinants of perceived career success: A longitudinal study. *Journal of Occupational and Organizational Psychology*, 66, 39-54.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879-891.
- Preenen, P. T. Y., De Pater, I. E., Van Vianen, A. E. M., & Keijzer, L. (2011). Managing voluntary turnover through challenging assignments. *Group & Organization Management*, 36, 308-344.
- Pruijt, H. (2013). Employability, empowerment and employers, between debunking and appreciating action: Nine cases from the ICT sector. *The International Journal of Human Resource Management*, 24, 1613-1628.

- Ragins, B. R., & McFarlin, D. B. (1990). Perceptions of mentor roles in cross-gender mentoring relationships. *Journal of Vocational Behavior*, 37, 321-339.
- Ramaswami, A., & Dreher, G. F. (2007). The benefits associated with workplace mentoring relationships. In T. D. Allen & L. T. Eby (Eds.), *The Blackwell handbook of mentoring: A multiple perspectives approach* (pp. 211-231). Oxford, UK: Blackwell.
- Roberson, L., Galvin, B. M., & Charles, A. C. (2007). When group identities matter. *The Academy of Management Annals*, 1, 617-650.
- Roche, G. R. (1979). Much ado about mentors. *Harvard Business Review*, 57, 14-28.
- Ronen, S., & Shenkar, O. (1985). Clustering countries on attitudinal dimensions: A review and synthesis. *Academy of Management Review*, 10, 435-454.
- Saks, A. M., & Gruman, J. A. (2011). Organizational socialization and positive organizational behavior: Implications for theory, research, and practice. *Canadian Journal of Administrative Sciences*, 28, 14-26.
- Salgado, J. F., Anderson, N., Moscoso, S., Bertua, C., de Fruyt, F., & Rolland, J. P. (2003). A meta-analytic study of general mental ability validity for different occupations in the European Community. *Journal of Applied Psychology*, 88, 1068-1081.
- Sanyal, S., & Sett, P. K. (2011). Managing human resources in dynamic environments to create value: Role of HR options. *International Journal of Human Resource Management*, 22, 1918-1941.
- Scholarios, D., Van der Heijden, B. I. J. M., Van der Schoot, E., Bozionelos, N., Epitropaki, O., Jedrzejowicz, P., . . . Van der Heijde, C. M. (2008). Employability and the psychological contract in European ICT sector SMEs. *International Journal of Human Resource Management*, 19, 1035-1055.
- Shore, L. M., Barksdale, K., & Shore, T. H. (1995). Managerial perceptions of employee commitment to the organization. *Academy of Management Journal*, 38, 1593-1615.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7, 422-445.
- Tepper, K., Shaffer, B. C., & Tepper, B. J. (1996). Latent structure of mentoring function scales. *Educational and Psychological Measurement*, 56, 848-857.
- Thomas, C. H., & Lankau, M. J. (2009). Preventing burnout: The effects of LMX and mentoring on socialization, role stress, and burnout. *Human Resource Management*, 48, 417-432.
- Tsai, H. Y., Compeau, D., & Haggerty, N. (2007). Of races to run and battles to be won: Technical skill updating, stress, and coping of IT professionals. *Human Resource Management*, 46, 395-409.
- Underhill, C. M. (2006). The effectiveness of mentoring programs in corporate settings: A meta-analytical review of the literature. *Journal of Vocational Behavior*, 68, 292-307.
- U.S. International Trade Administration. (2013). *U.S. exporting companies 2011*. Washington, DC: Office of Trade and Industry Information.
- van Dam, K. (2004). Antecedents and consequences of employability orientation. *European Journal of Work & Organizational Psychology*, 13, 29-52.

- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*, 3, 4-70.
- Van der Heijde, C. M., & Van der Heijden, B. I. J. M. (2006). A competence-based and multidimensional operationalization and measurement of employability. *Human Resource Management*, 45, 449-476.
- van der Heijden, B. I. J. M., & Baker, A. B. (2010). Toward a mediation model of employability enhancement: A study of employee-supervisor pairs in the building sector. *Career Development Quarterly*, 59, 232-248.
- Van der Heijden, I. J. M., de Lange, A. H., Demerouti, E., & Van der Heijde, C. M. (2009). Age effects on the employability-career success relationship. *Journal of Vocational Behavior*, 74, 156-164.
- van Emmerik, I. J. H., Schreurs, B., de Cuyper, N., Jawahar, I. M., & Peeters, M. C. W. (2012). The route to employability: Examining resources and the mediating role of motivation. *Career Development International*, 17, 104-119.
- Van Scotter, J. R., Motowidlo, S. J., & Cross, T. C. (2000). Effects of task performance and contextual performance on systemic rewards. *Journal of Applied Psychology*, 85, 526-535.
- Wanberg, C. R., Welsh, E. T., & Hezlett, S. A. (2003). Mentoring research: A review and dynamic process model. *Research in Personnel and Human Resources Management*, 22, 39-124.
- Wanous, J. P., & Hudy, M. J. (2001). Single-item reliability: A replication and extension. *Organizational Research Methods*, 4, 361-375.
- Waters, L., McCabe, M., Kiellerup, D., & Kiellerup, S. (2002). The role of formal mentoring on business success and self-esteem in participants of a new business start-up program. *Journal of Business and Psychology*, 17, 107-121.
- Woldring, R. (1995). Learning to live with the learning curve. *Computing Canada*, 21(15), 22.
- Wu, J. B., Tsui, A. S., & Kinicki, A. J. (2010). Consequences of differentiated leadership in groups. *Academy of Management Journal*, 53, 90-106.
- Zaidman, N., & Brock, D. M. (2009). Knowledge transfer within multinationals and their foreign subsidiaries: A culture-context approach. *Group & Organization Management*, 34, 297-329.
- Zanni, G. R. (2009). Reverse mentoring: An effective strategy for career growth. *The Consultant Pharmacist*, 24, 465-467.
- Zellers, D. F., Howard, V. M., & Barcic, M. A. (2008). Faculty mentoring programs: Reenvisioning rather than reinventing the wheel. *Review of Educational Research*, 78, 552-588.
- Zey, M. (1984). *The mentor connection*. Homewood, IL: Dow Jones-Irwin.
- Zhang, Z.-X., Hempel, P. S., Han, Y.-L., & Tjosvold, D. (2007). Transactive memory system links work team characteristics and performance. *Journal of Applied Psychology*, 92, 1722-1730.
- Zhu, W., Wang, G., Zheng, X., Liu, T., & Miao, Q. (2012). Examining the role of personal identification with the leader in leadership effectiveness: A partial nomological network. *Group & Organization Management*, 38, 36-67.

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Author Biographies

Nikos Bozionelos is Professor of Organizational Behaviour and Human Resource Management and Head of the Organizational and Value Change Management in Audencia Nantes School of Management, France. His research interests include careers, employability, social capital, personality psychology, and high-performance work systems.

Konstantinos Kostopoulos is Assistant Professor of Corporate Strategy in the University of Pireaus, Greece. His research interests are in the areas of strategic innovation management, human resource management, organizational learning, and organizational ambidexterity.

Beatrice Van der Heijden is Professor and Head of the Department of Strategic HRM in Radboud University, the Netherlands. She is also affiliated with the Open University of the Netherlands and the University of Twente, Enschede, the Netherlands. Her research interests include employability, aging at work, age-related stereotyping and career development.

Denise M. Rousseau is the H. J. Heinz II University Professor of Organizational Behavior and Public Policy at H. John Heinz III College and the Tepper School of Business of Carnegie Mellon University, USA. She is the author of multiple articles and three award winning research books, and her research interests extend over the areas of worker well-being and career development, organizational effectiveness, change management and industrial relations.

Giorgos Bozionelos (BSc MSc MSc) works as Clinical & Health Psychologist in the Department of Psychiatry of the General Hospital of Katerini, Greece. His research interests focus on career issues and on the interaction of the work environment with physical and psychological health.

Thomas Hoyland is Assistant Professor in Human Resource Management and Organizational Behavior at Hull University Business School, UK. His research interests include implicit leadership theories, individual differences in the workplace, and team conflict and innovation.

Rentao Miao is Assistant Professor in the School of Labor Economics of Capital University of Economics and Business, Beijing, P. R. China. His research interests include high performance work systems, psychological capital, multi-level modeling and organizational performance.

Izabela Marzec is Assistant Professor in the Department of Public Management and Social Science of the University of Economics of Katowice, Poland. Her research

focuses on employability, career management, and comparative HR practices between the public and the private sector.

Piotr Jędrzejowicz is Professor and Head of the Information Systems Department in Gdynia Maritime University, Poland. His research interests include machine learning, data analytics and big data mining.

Olga Epitropaki is Professor of Organizational Behavior and the “Stavros Costopoulos” Chair in Human Resource Management and Development at ALBA Graduate Business School at the American College of Greece. Her research interests include implicit leadership theories, leader-member exchanges, creative leadership, leader identity, psychological contracts and employability.

Aslaug Mikkelsen (MPhil, PhD) is Professor in Management at UiS Business School, University of Stavanger and Professor II at the Western Norway Regional Health Authorities, Stavanger, Norway. Her research lies within the areas of management of organizational change, occupational health, strategic human resource management, and corporate social responsibility.

Dora Scholarios is Professor of Organisational Behaviour in the Department of Human Resource Management of the Business School of the University of Strathclyde, Glasgow, UK. Her current research activity focuses on job quality, graduate underemployment, and employers’ use of social media in recruitment and selection.

Claudia Van der Heijde is Senior Research Scientist in the Department of Research, Development and Prevention at the Student Health Services of the University of Amsterdam. Her research interests include health, employability, Strategic HRM, career development, and diversity and life phase issues.

Giorgos Bozionelos and Nikos Bozionelos

Employability and Key Outcomes in Times of Severe Economic Crisis: The Role of Career Orientation

Research serves as the basis for the construction of a model of the antecedents and consequences of employability within an organization undertaking significant change as a response to severe financial crisis. The study was conducted in a state-owned public utility in Greece and involved 157 participants. The central idea was that a boundaryless career mindset and a protean career orientation would be positively related to employability, which in turn would be related to openness towards organizational change and the willingness to expend effort at work. Results confirmed the hypothesized relationship of protean career orientation and boundaryless mindset with employability. Furthermore, in line with expectations, employability was related to the willingness to expend effort and also mediated the relationship of boundaryless mindset and protean career orientation with it. On the other hand, employability was not related to openness towards change and the hypothesis for a moderating role of perceived organizational support did not materialized. The findings are discussed within the context of career and employability theory as well as in terms of their implications for the management of the workforce in times of severe change.

Key words: employability, financial crisis, career orientation, protean, boundaryless, restructuring, motivation, openness towards change

Employability refers to an individual's adaptability with respect to work that enables him or her to find and seize employment and career opportunities inside or outside the current workplace or to rebound from a period of voluntary or involuntary unemployment [e.g., Fugate, Kinicki, and Ashforth, 2004; Van der Heijde and Van der Heijden, 2006]. Though important under any circumstances and economic conditions, employability has acquired particular significance in the present era because of reasons that include reduced employment certainty due to the constant restruc-

turing of firms that is typically accompanied by redundancies, transfers and changes in job content, the shift of responsibility for career management from employers to employees, technological advances that lead to the disappearance of certain jobs with a parallel creation of jobs of a different nature [Baruch and Bozionelos, 2010]. Under such circumstances, the ability to find and take advantage of employment opportunities becomes essential, hence, employability becomes a key quality for individuals who are in the job market. Not only individuals, however, firms and governments also have an interest in the employability of their workforce because an employable workforce is inherently more flexible and more contributive to firm and country growth [McQuaid and Lindsay, 2005; Nauta, Van Vianen, Van der Heijden, Van Dam, and Willemssen, 2009]. Given its pivotal importance, therefore, the identification of factors that antecede employability as well as the specific consequences of employability becomes essential [Van der Heijden and Baker, 2010].

The present work has contributed in this direction by developing and testing a model that posed career orientation as an antecedent of employability and openness towards organizational change and willingness to expend effort as consequences of it. The model was tested in an organization that was undertaking extensive restructuring amidst severe financial crisis, which added to the contribution of the study given that employability and its outcomes acquire even greater importance under such conditions.

Model Development

Protean and Boundaryless Career Orientation as Antecedents of Employability.

Considering that employability is by definition linked with career development and enhancement [Van der Heijden, De lange, Demerouti, and Van der Heijde, 2009], it is sensible to expect that it should relate to the individual's career orientation. In particular, individual differences in employability should be a function of their differences in propensity to lead their careers in particular ways. Two notions of career orientation appear relevant in this sense—the protean and the boundaryless. The concepts of boundaryless and protean career represent two of the most celebrated notions in career theory.

Protean Career

The idea of protean career, and consequent career orientation, was introduced in the nineteen-seventies [Hall, 1976], but it attracted the attention of scholars much latter, in the nineteen-nineties [Hall and Mirvis, 1996]. The reason for its initial

overlooking was that the nineteen-seventies were still a period of relative economic stability for the “Western” world, but also in other parts of the world such as the Soviet Union and the People’s Republic of China. During such a period, the qualities of protean career, such as ability to drive one’s career by values and personal initiative, were not as critical. This was because navigating one’s way in the world of work was relatively simple. Indeed, the nineteen-seventies were still a period of the dominance of the notion of the traditional career—a career relatively free of “trouble” and characterized by employment security and steady upwards moves within large bureaucratic structures that would manage careers on behalf of employees while demanding little initiative on their part [e.g., Arthur and Rousseau, 1996; Baruch and Bozionelos, 2010]. Movement across functions or organizations did exist during that period, but it was typically voluntary and not a result of forces such as redundancy or redeployment. That changed after the nineteen-eighties as a result of increased competition and immense reshuffling in the global political landscape (the dissolution of the Soviet Union with its consequent adoption of capitalist economic models by the resulting countries as well as the parallel gradual introduction of economic reforms in People’s Republic of China).

Protean career refers to the extent to which individuals, or career actors, (a) drive their careers by their own values (that is, what they themselves consider worthwhile and important) and (b) direct their careers by personal choice and initiative rather than relying simply on employers, forces of the environment, and “chance” [Briscoe and Hall, 2006; Hall, 2004]. As already noted, the notion of protean career seems to fit very well with the environment that was shaped after the nineteen-eighties in pretty much the whole world and is characterized by employment uncertainty and the need for frequent moves.

To successfully lead one’s career in this era, employability is needed and a protean career orientation should be beneficial for employability. Indeed, taking the initiative in the development of one’s career should make it more likely to scan the environment in order to identify work opportunities, find such opportunities, and move towards seizing them. This is critical in employability [e.g., van der Heijde and van der Heijden, 2006]. Furthermore, a greater degree of self-directedness should make it more likely for individuals to seek, by themselves, opportunities for updating and upgrading skills and for the acquisition of knowledge in domains that are demanded by the labor market, which should also maintain or augment their employability. Similarly, following one’s personal values in career choices should make it more likely to set career goals that are intrinsically appealing and rewarding and, as a consequence, the likelihood to persevere in the achievement of these goals should be greater, which should also be beneficial for employability. In accordance

with this line of reasoning, protean career orientation has been found to relate to greater pro-activity in career enhancing acts [De Vos and Soens, 2008]. Therefore, the following hypothesis has been posed:

Hypothesis 1: Protean career orientation will be positively associated with perceived employability.

Boundaryless Career

The notion of boundaryless career was introduced as a direct response to the rapidly changing economic conditions of the nineteen-eighties that led to organizational reshuffling with consequent instability in the labor market that impacted career patterns. However, changes in individual career mindsets brought about by an increase in individualism also rendered people less loyal towards their employers if this could serve their own career interests and aspirations [Baruch and Bozionelos, 2010; Reitman and Schneer, 2008]. The definition of boundaryless career has gone through a process of refinement over the years. Current thinking considers it as reflecting (a) mental flexibility as far as career changes are concerned as well as psychological preparedness and moving across organizational, job, and occupational or professional boundaries as acts of adaptation to environmental contingencies, and (b) actual movement across such boundaries [Briscoe and Hall, 2006; Lazarova and Taylor, 2009; Sullivan and Arthur, 2006].

Boundaryless career orientation, and in particular the boundaryless mindset, should also be linked to employability. Mental preparedness towards change in the career domain should make the individual more likely to anticipate the need to scan the environment for employment threats and opportunities and to identify such threats and opportunities. Moreover, individuals who have a mindset for change in the work and career domain would be more open to learning new skills, to updating existing skills, and even to changing their job content, which should also enhance their employability. Therefore, the following hypothesis has been posed:

Hypothesis 2: The boundaryless career mindset will be positively associated with perceived employability.

Interaction between Protean and Boundaryless Career Orientation

Apart from individual relationships with employability, an interactive effect of protean career orientation and the boundaryless mindset is also a logical assumption. Indeed, a combination of strong self-direction, value drive, and preparedness to cross organizational or job domains should be associated with uniquely high levels of employability. For example, individuals who are mentally prepared to face changes in the work environment, but also have the capacity to take initiative in order to

successfully handle such change, must be more likely to act proactively and identify threats and opportunities earlier. They should also be more capable of preparing themselves (e.g., by acquiring skills or cultivating and using their social capital, e.g., Bozionelos, 2015) to bypass or seize these, respectively, in a timely way. Therefore, the following hypothesis has been posed:

Hypothesis 3: There will be an interaction between protean career orientation and the boundaryless mindset in the sense that strong levels of both of these will be associated with the highest scores on employability.

Consequences of Employability

Openness towards Organizational Change.

The openness of employees towards change, which is normally inconvenient and stressing, is a fundamental capacity at any time [Ford, Ford, and D'Amelio, 2008; Hon, Bloom and Crant, 2014; Huang, 2015]. This is especially the case at times of economic downturn that make change imperative. At times of crisis change is normally painful and is likely to necessitate a worsening of work conditions (e.g., working longer hours, assuming additional tasks, and having reduced resources at one's disposal) as well as a reduction in financial rewards (e.g., lower salary and cuts or elimination of overtime payment and bonuses) along with an implicit reduction in employment certainty. Such situations inevitably cause strain on employees, hence, the degree to which employees are open towards change and willing to embrace it becomes critical for employers if they are to get through the crisis successfully.

Employability should render employees more accepting of and open towards change in the work environment, especially change that is extensive and intense. Indeed, one aspect of employability is personal flexibility that reflects resilience and adaptability to changes in the work environment and to the conditions of the labor market in general [Fugate and Kinicki, 2008; van der Heijde and van der Heijden, 2006]. This automatically means that more employable individuals should report greater openness and willingness to embrace change. Corporate sense, which is another aspect of employability and reflects the extent to which the individual is integrated and involved in the workplace [van der Heijde and van der Heijden, 2006] should also enable greater openness towards change because individuals with greater corporate sense would understand better the need for change, and hence should be more positive towards it. Therefore, the following hypothesis has been posed:

Hypothesis 4: Employability will be positively related to openness towards organizational change.

Willingness to Expend Effort

The willingness of employees to expend effort in the work place must also be critical at times of crisis and painful change. Economic crisis creates uncertainty that may reduce employee morale and, hence, capacity to expend effort at work. For example, at times of crisis employees tend to be stressed and anxious, and stress and anxiety reduce the ability to concentrate on tasks and activities [e.g., Robinson, Vytal, Cornwell, and Grillon, 2013]. In addition, the uncertainty caused by crisis is likely to render employees pre-occupied with their fate. This can result in a reduction of their ability or willingness to focus on their work and expend effort towards the proper execution of their tasks. Furthermore, when organizations resort to change as a response to crisis it is not unlikely for employees to blame the employer for the situation [e.g., Strebel, 1996] and hence feel less obliged and willing to expend effort in their work.

Employability should ameliorate the negative impact of crisis and consequent change on employee motivation and should render them more willing to expend effort at work. Indeed, personal flexibility should make individuals more able to rebound from the strain of change and pressures caused by the crisis and, hence, more willing to apply themselves at work. Balance, the aspect of employability that relates to the ability of the individual to take care of both personal and organizational needs [van der Heijde and van der Heijden, 2006], along with corporate sense, should render employees more motivated to work. Therefore, the following hypothesis has been posed:

Hypothesis 5: Employability will be positively related to willingness to expend effort at work.

The above hypothesis points towards a mediating role for employability in the relationship of career orientation with the employability consequences. Therefore:

Hypothesis 6: Employability will mediate the relationship of protean career orientation with openness towards organizational change [H6a] and willingness to expend effort [H6b].

Hypothesis 7: Employability will mediate the relationship of the boundaryless mindset with openness towards organizational change [H7a] and willingness to expend effort [H7b].

Organizational Support

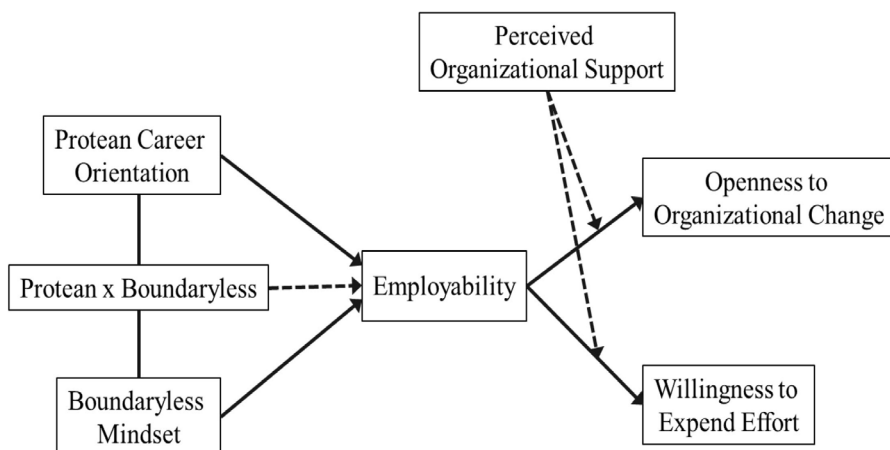
The extent to which employees perceive that the organization is supportive of them in terms of valuing them, providing resources, and showing care plays a substantial role in the shaping of employee attitudes and behaviors [e.g., Riggle, Edmondson, and Hansen, 2009; Gavino, Wayne, and Erdogan, 2012], especially in times of organizational change [Chen and Wang, 2014]. We have hypothesized that when employees perceive that they are employable they will be more motivated to ex-

pend effort and more open towards organizational change. It is reasonable then to expect that when employees perceive that organizational support towards them is strong their willingness to expend effort and accept change will be especially strong. Employees who perceive that the organization cares about them are more affectively committed towards the employer [Caesens, Marique, and Stinglhamber, 2014]. Therefore, possession of feelings of affection towards the employer and a willingness to expend effort and to accept change should be higher.

Hypothesis 8: Perceived organizational support will moderate the relationship of employability with openness towards change [H8a] and willingness to expend effort [H8b] in such a way that the relationship will be strongest under conditions of high perceived organizational support.

Hypotheses, in the form of a causal path model, are depicted in Figure No. 1.

Figure 1. Hypotheses in visual form



Note: Dotted lines represent interaction effects.

Method

Setting

The setting of the study was a Greek state-owned public utility enterprise and the time of data collection was the end of 2010 and beginning of 2011. That time falls within a period of severe restructuring in all state-owned public utility enterprises as a consequence of the Greek government's effort to dramatically reduce operational losses, cut costs, and improve efficiency. This was the result of the realization at the end of 2009 that the Greek debt had reached disproportional levels and

could not be managed unless immediate and drastic measures (including severe cost cutting and extensive structural reforms) were taken. Measures assumed in the case of state-owned public utility enterprises included reduction in available budgets, changes in organizational structures, additional supervision and reporting in internal auditing, lowering employee compensation, and compulsory transfer of employees to other parts of the wider public sector. These features make this setting ideal for the present study.

Participants and Procedure

Participants were 157 individuals (126 men and 31 women) who were employed in a state-owned public utility enterprise in Greece. The mean age was 47.89 [SD = 9.05] years and the mean tenure with the employer was 20.89 [SD = 10.09] years. Nearly half of the participants held undergraduate [32.5%] or graduate [21%] degrees and most of them [82.2%] were married. After special permission was given by senior officials, questionnaires, a cover letter in printed form, and an envelope for the return of the completed questionnaires were individually handed out by one of the researchers to a random sample of employees. The cover letter explained briefly and in very general terms the purposes of the study without revealing any details. Completed questionnaires were handed directly back to the researcher in a sealed envelope. In addition, questionnaires were e-mailed in electronic form to a sample of employees whose email addresses were provided by the human resource department of the enterprise. The e-mail contained the same brief and general description of the study, ensured anonymity, and requested that participants return the electronically completed questionnaire to the researcher by e-mail.

Measures

Response format was 5-point unless otherwise stated. The original measures were in the English language and were translated into Greek. For this reason the procedure of translation-back-translation was employed in order to ensure semantic equivalence between the English and the utilized Greek version of the scales [e.g., Behling and Law, 2000]. Special attention was paid in the procedure: translated items were scrutinized by three bilingual employees who cooperated with the researchers in order to ensure that the meaning of the original scale was fully transmitted by the translated items, but were also understood by the employees. There were extensive discussions over the wording, which caused the process to take longer than anticipated, but on the other hand, it assured that the intended meaning was being transmitted. The translated items were then back-translated by a bilingual graduate

student who was not involved in the research and then the researchers compared the original with the back-translated items.

Employability. Employability was measured using four items adapted from De Vos, Buyens, and Schalk [2003]. Participants indicated the extent to which (1 – not at all, 5 – to a great extent) they were engaged in a number of activities that enhance employability (e.g., “participate in training courses outside working hours,” “enhancing my human capital more than ever in order to perform my duties more effectively”). Cronbach α was 0.76.

Protean career orientation. This was measured applying twelve items from Briscoe and Hall’s [2006; Briscoe, Briscoe, Hall, and DeMuth, 2006] scale. Items assess both value driven career (e.g., “what is most important to me is how I feel about my career success, not how other people feel”) and self-directedness (e.g., “freedom to choose my own career path is one of my most important values”). Combined together the items indicate the degree of protean orientation in one’s career. Cronbach α was 0.79.

Boundaryless career mindset. This was also measured with seven items (e.g., “I enjoy jobs that require me to interact with people in many different organizations”) from Briscoe and Hall [2006; Briscoe et al., 2006]. Cronbach α was 0.75.

Openness towards organizational change. This was measured with an adaptation of Oreg’s [2003] scale of dispositional resistance to change. Respondents were asked to indicate the extent to which “lately” they were positive or negative towards eighteen issues that pertain to change in the work environment (e.g., “I like to do the same old things rather than try new and different ones,” “when I am informed of a change of plans, I tense up a bit,” “I feel a bit uncomfortable even about changes that may potentially improve my life”). Negatively worded items (which indicate resistance to change) were reversed in the scoring process. Cronbach α was 0.82.

Willingness to expend effort. This was measured applying sixteen items adapted from De Vos et al. [2003] that assess perceived obligations of the employee towards the organization. Respondents were asked to indicate the extent to which “under the pressure of the present economic and social conditions” they were felt obliged to engage in a number of acts that indicate their intention to expend effort at work (e.g., “to work extra hours, whether paid or not, to get the job done,” “volunteer to do tasks that are strictly no part of my job if necessary,” “to follow the norms and policies of the organization”). Cronbach α was 0.92. Scores on the scale were strongly correlated with scores on a scale based on the Utrecht work engagement scale [Schaufeli and Bakker, 2004], which provides evidence of concurrent validity and, hence, of the validity of the measure of willingness to expend effort at work.

Perceived organizational support. This was measured using sixteen items adapted from De Vos et al. [2003]. The items assess the extent to which respondents perceive that the organizational environment under the present circumstances meets a number of positive conditions (e.g., “a safe environment,” “opportunities to grow,” “good mutual cooperation”). Cronbach α was 0.91.

Controls. Demographics were measured with single items and included gender (1 – male; 2 – female), age, educational attainment (1 – elementary school, 2 – secondary school, 3 – university, 4 – graduate degree), marital status (1 – single, 2 – married), number of dependents, tenure with the employer, and time in the present position.

Qualitative Interpretation of Descriptive Statistics

These statistics reveal that participants had very long tenures with the organization ($M = 20.89$ years, $SD = 10.09$ years) as well as in their present positions ($M = 15.69$ years, $SD = 11.22$ years). This was not surprising given that the Greek public sector and its affiliated services (such as state-owned public utilities) offers lifetime employment along with (in the past and until the beginning of the financial crisis that started at the end 2009 and is still ongoing) very good provisions (e.g., healthcare) along with minimal input requirements [e.g., see Bozionelos, 2014]. Hence, under normal circumstance those who join stay for the rest of their working lives, especially as Greeks are very adverse to uncertainty [Hofstede, 2001]. On the other hand, it was interesting and rather surprising to find that participants reported moderately strong protean career orientation ($M = 3.88$, $SD = 0.45$) while their boundaryless mindset was also well above the mid-point of the scale ($M = 3.44$, $SD = 0.49$). Given the popular belief within Greece that employees in the public and its affiliated sectors are under-motivated and indifferent to their work obligations it was also unanticipated to find that the desire to expend effort at work was moderately high ($M = 3.82$, $SD = 0.78$). Scores on openness to change was near the mid-point of the scale ($M = 3.16$, $SD = 0.56$), which indicates mediocre preparedness or eagerness to embrace change. Nevertheless, this finding was also at odds with the stereotype that depicts employees of state-owned enterprises in Greece as extremely rigid and averse to any change. Finally, participant responses suggested moderately strong perceptions of their employability ($M = 3.82$, $SD = 0.90$), which can be interpreted as substantial confidence in the level of their skills and their ability to find work.

Results

Descriptive statistics and inter-correlations are presented in Table No. 1 (page 23).

Hypotheses Testing

Hypotheses were tested with path analysis using manifest variables that was conducted with the MPlus program [Muthén and Muthén, 1998–2012]. Standardized path estimates were consulted to conclude on hypotheses retention or rejection. Path analysis enables the simultaneous estimation of multiple causal relationships along with testing hypothesized moderation and mediation effects [Kline, 2005]. The sample size of 157 exceeded the recommended minimum sample size of 100 [Bollen, 1989] and the use of manifest variables enabled the significant exceeding of the recommended ratio of five observations per model parameter to-be-estimated [Kline, 2005].

All variables were mean centered and in the calculation of interaction terms (protean career orientation x boundaryless mindset, employability x organizational support) mean-centered values of variables were employed, a technique that reduces multicollinearity and provides less biased parameter estimates [Cohen, Cohen, West, and Aiken, 2003; Aiken and West, 1991]. Controls were included in the analysis on the basis of whether they demonstrated significant correlations with the respective endogenous variables (i.e. employability, openness to organizational change, willingness to expend effort).

The first step in the analysis included an estimation of the model of Figure No. 1 without the interaction and moderation effects. The model in Figure No. 1 assumes perfect mediation by employability of the relationship between career orientation with the two hypothesized outcomes. That model showed unsatisfactory data fit [χ^2 [16] = 29.89, $p < 0.001$; RMSEA = 0.074, CFI = 0.920, TLI = 0.866, SRMR = 0.038]. For this reason it was modified to include direct paths from protean career orientation and boundaryless mindset towards openness towards change and willingness to expend effort, which in essence means a model that assumes partial mediation by employability. That model showed excellent data fit with a non-significant chi-square index (χ^2 [12] = 13.23, ns) and very good performance in the other fit indices (RMSEA = 0.026, CFI = 0.993, TLI = 0.984, SRMR = 0.024). Therefore, that model was utilized as the basis for hypotheses testing.

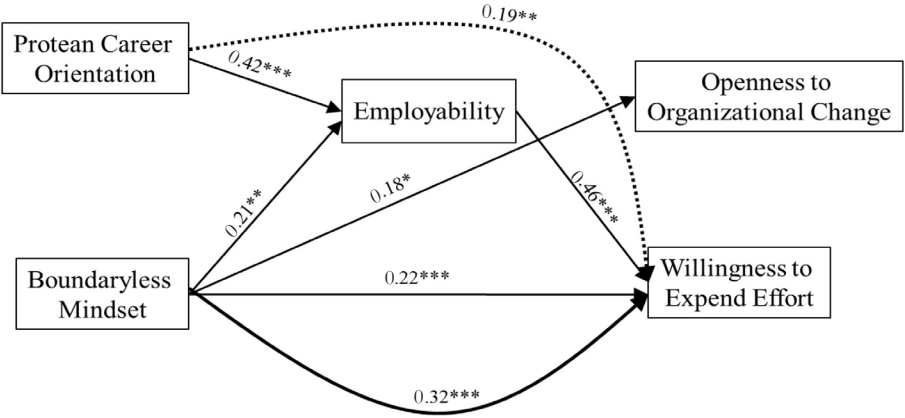
Hypotheses 1 and 2, which suggested a relationship of protean career orientation ($\beta = 0.42$, $z = 6.39$, $p < 0.001$) and boundaryless mindset ($\beta = 0.21$, $z = 3.03$, $p < 0.01$) with employability were both supported. H5, which postulated a positive

relationship of employability with willingness to expend effort, was also supported ($\beta = 0.46, z = 7.46, p < 0.001$). On the other hand, H4 was not supported because the employability–openness path was not significant ($\beta = 0.02, z = 0.21, ns$).

To test H3, which postulated an interaction between protean career orientation and the boundaryless mindset, the interaction term of these variables was added to the model. The interaction effect, however, was not significant ($\beta = 0.04, z = 0.55, ns$), leading to rejection of H3, while the inclusion of the effect substantially reduced the data fitness of the model. Therefore, the interaction effect was removed from subsequent analysis.

Hypothesis 8 postulated a moderating effect of perceived organizational support on the relationship of employability with openness to change [H8a] and willingness to expend effort [H8b]. To test it, perceived organizational support and its product term with employability (i.e. employability x perceived organizational support) were added to the model. None of the moderation effects were significant ($\beta = 0.02, z = 0.21, ns; \beta = -0.03, z = -0.44, ns$, respectively) leading to rejection of both parts of Hypothesis 8. Again, the moderation effects were removed from the model in order to retain its data–fitness. The final model is presented in Figure No. 2.

Figure No. 2. The supported model ($\chi^2 [12] = 13.23, ns$, RMSEA = 0.026, CFI = 0.993, TLI = 0.984, SRMR = 0.024)



Note 1: Only significant relationships are depicted.
Note 2: Standardized parameter estimates are reported.
Note 3: Bent lines (doted for full mediation and solid for partial mediation) represent total effects.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table No. 1. Descriptive Statistics and Intercorrelations [N = 157]

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Employability	3.82	0.90	—										
2. Protean career orientation	3.88	0.48	0.48	—									
3. Boundaryless mindset	0.44	0.49	0.34	0.31	—								
4. Openness to change	3.16	0.56	0.02	-0.04	0.18	—							
5. Willingness to expend effort	3.82	0.78	0.56	0.33	0.36	0.05	—						
6. Age	47.89	9.05	0.01	0.04	0	-0.16	0.34	—					
7. Gender*	0.04	0.18	-0.07	-0.06	0.18	-0.06	—						
8. Marital status*	4.25	1.42	0.05	-0.04	-0.08	-10	0.29	0.47	0.19	—			
9. Dependents	1.39	0.49	-0.14	0.02	0	-0.06	-0.12	-0.36	0.03	-0.35	—		
10. Education	2.75	0.78	-0.08	-0.04	0.21	0.26	-0.02	-0.03	-0.04	-0.05	0.14	—	
11. Organizational tenure	20.89	10.09	0	0.10	0.11	-0.11	0.32	0.82	0.06	0.37	-0.29	-0.16	—
12. Job tenure	15.69	11.22	0.03	0.09	0.09	-0.25	0.25	0.51	0.13	0.32	-0.26	-0.23	0.66

Note. Coefficients $\geq |0.16|$, $|0.20|$ and $|0.27|$ are significant at 0.05, 0.01, and 0.001, respectively.

* binary variable

Hypotheses 6 and 7 postulated a mediating role for employability in the relationship of career orientation with openness to change and willingness to expend effort. The testing of H4 had already shown that the employability–openness path was not significant, which automatically rendered H6a and H7a non-tenable [Baron and Kenny, 1986; Judd and Kenny, 1981]. On the other hand, the testing of H5 indicated a significant path from employability towards willingness to expend effort, which justified further testing for mediation [Judd and Kenny, 1981]. Hence, direct and indirect effects of protean orientation and the boundaryless mindset on willingness to expend effort were calculated using the relevant procedures in MPlus. This analysis showed that the indirect effect of protean career orientation on willingness to expend effort, via employability, was significant ($\beta_{\text{indirect}} = 0.19$, $z = 4.68$, $p < 0.001$) while the direct effect was non-existent ($\beta_{\text{direct}} = 0$, $z = 0$, $n.s.$). The indirect effect of the boundaryless mindset on willingness to expend effort, via employability, was significant ($\beta_{\text{indirect}} = 0.10$, $z = 2.82$, $p < 0.01$) and the direct one was significant, too ($\beta_{\text{direct}} = 0.22$, $z = 3.65$, $p < 0.001$). In both cases the total effect was significant ($\beta_{\text{total}} = 0.19$, $z = 2.84$, $p < 0.01$ and 0.32 , $z = 4.85$, $p < 0.001$, respectively). Overall, testing lent support to both H6b and H7b, the difference being that full mediation was shown in the former while partial mediation was shown in the latter.

To increase certainty over the result, confidence intervals were also estimated using bootstrapping, which corrects for the bias inherent in the non-normality of the distribution of the interaction terms [MacKinnon, 2008; MacKinnon, Lockwood and Williams, 2004], also using the relevant procedures in MPlus [Muthén and Muthén, 1998–2012]. The results of bootstrapping testing were in line with those of the conventional testing. In particular, the 1% confidence interval [CI] for the indirect effect of protean career orientation on willingness to expend effort did not contain zero (0.067 to 0.319) while the 5% CI for the respective direct effect contained zero (−0.132 to 0.132). The 1% CI for the total effect did not contain zero either (0.008 to 0.378), results that are in line with full mediation. Regarding the boundaryless mindset, the findings were also analogous to those obtained with the traditional method (5% CI − 0.013 to 0.182 for the indirect effect; 1% CI − 0.058 to 0.385 for the direct effect; and 1% CI − 0.129 to 0.509 for the total effect).

Finally, a number of alternative models that represented logically feasible causal orderings that were different from the one assumed in our model were tested. These included a model that treated employability as an exogenous variable and the career orientation variables as mediators ($\chi^2 [24] = 64.07$, $p < 0.001$, RMSEA = 0.103, CFI = 0.829, TLI = 0.715, SRMR = 0.076), and a model that treated employability as the final effect variable with openness towards change and willingness to expend effort as mediators ($\chi^2 [13] = 24.89$, $p < 0.05$, RMSEA = 0.076, CFI = 0.932,

TLI = 0.858, SRMR = 0.035). Both of these models showed substantially inferior, and in fact non-satisfactory, data fitting than our chosen model. We must note that in the above exercise we restrained ourselves from testing models that considered the career orientation variables as final effect variables because, and regardless of any data fitting properties, such models were contrary to theory and logical reasoning and therefore should not be considered under any circumstances [Bozionelos, 2003].

Discussion

The aim of the research was to develop and test a model that revolved around employability in order to account for important employee outcomes at times of severe organizational changes caused by serious economic crisis. Another purpose of the study was to investigate the role of individual career orientation in the shaping of perceptions of employability. Organizational change imposes a heavy toll on employees, both in terms of increased job demands and of uncertainty and psychological strain. Attitudes such as positivity towards change and employee willingness to expend effort during the time of change become critical for the success of change, the sustenance of organizational performance, and the relatively smooth transition to normality. Therefore, identification of factors that are likely to enhance such positive attitudes is an important endeavor in order to develop a better understanding of how the negative effects of change can be minimized.

The findings were supportive of the hypothesized relationship of both protean career orientation and the boundaryless mindset with self-perceived employability. It appears that taking one's own personal values into account along with being active in leading one's choices enhances self-confidence that one can maintain one's employment or find alternative employment under conditions of uncertainty. Similarly, being psychologically prepared to cross functional, role, and even organizational borders is also associated with perceptions of ability to be employed. Psychological readiness to move has an apparent conceptual overlap with readiness to face change, and this should be the reason that the boundaryless mindset demonstrated a direct relationship with openness towards change.

To the extent, therefore, to which psychological readiness to move along the value drive and taking a personal drive in one's career can be cultivated, it represents a way to enhance perceptions of employability. The findings further suggest that nourishing these career orientations increases the likelihood for employees to express positivity towards change and motivation to work for the organization at times of change and uncertainty. The study suggests that the mechanisms are both direct and indirect, via employability. Employability mediated the relationship of

both boundaryless and protean career orientation with employee willingness to expend effort. In fact, the totality of the relationship of protean career orientation with motivation to expend effort at work was explained by employability. This shows that employability has an important role in the way protean values and the boundaryless mentality are translated into motivation to work. This finding also implies that employability perceptions are instrumental in the development of employee motivation to expend effort at times of change, regardless of how these perceptions of employability are formed.

On the other hand, we must recognize that employability did not hold the role we expected in accounting for individual variation in openness to change. A reason for this may be that openness to organizational change is apparently more a function of reactivity rather than of proactivity and taking initiative. Normally organizational change is initialized from few organizational agents at the top, where individuals react positively or negatively to it, depending on their attitudes to change. Employability connotes an active rather than passive approach to situations and for this reason it may not have a significant role in whether individuals are accepting and welcoming of change. In support of this view is the finding that the boundaryless mindset demonstrated a direct relationship with openness to change, while the protean orientation did not show such a relationship. Protean orientation, which contains self-direction and active drive by values, denotes initiative and proactivity, which are not required or come at odds with the passive stance that openness to change implies. On the other hand, the preparedness for movement (rather than actual movement) that the boundaryless mindset symbolizes shares meaning with the reactivity and passivity inherent in openness towards change.

Finally, it is important to note that it emerged that career orientation is important by itself for employee attitudes and intentions at times of change and not simply as an antecedent of employability. The findings, therefore, imply that a workforce with strong protean career orientation and a boundaryless mindset can be an advantage at times of severe change. The fact that the boundaryless mindset had a richer relationship with outcomes may pertain to the fact that change is normally imposed, hence, reactivity and preparedness for it, rather than the proactivity contained in proteity, may be more important for employees to successfully deal with.

Finally, the failure to identify the hypothesized moderating role for perceived organizational support needs to be discussed. The overall circumstances may be responsible for this. It was not only severe change within the particular organization that was occurring, but this change was embedded within a country under severe financial crisis. In effect, it was the whole of Greece—all of the public and the private sector along with the society itself—that was under extreme pressure and

financial uncertainty, with cuts and other measures seen in every aspect of everyday life. The change within this particular organization was a decision made by the government (which controls all state-owned enterprises) rather than the heads of particular organizations, where the same changes were observed across all of the public sector and state-owned utilities. Many of these changes had been viewed with hostility and as unnecessary by many Greeks at the time, typically blaming the government. Employees, therefore, may not have been able to distinguish the specific organization they were working in from the rest of the state-owned sector and, hence, the effects of the support they received within the particular organization were overshadowed by the general negative feeling towards the government.

Limitations and Directions

The model was developed with the use of logical reasoning and earlier research findings, and demonstrated satisfactory data-fitting properties. However, it remains a fact that data were collected at a single point in time, which poses questions on causal order, regardless of how sound and sophisticated the data analytic techniques are [Bozionelos, 2003]. Furthermore, the use of self-reports makes common method bias a possibility. However, the precautions taken in the collection of data (e.g., the purposes of the study were not made explicit and measures were presented in random order in the questionnaire) and the satisfactory reliabilities of the measures somewhat alleviate concerns [Chandon, Morwitz, and Reinartz, 2005; Podsakoff, MacKenzie, Lee, and Podsakoff, 2003]. Nevertheless, and notwithstanding this limitation, individual perceptions of their own employability may be more useful in understanding attitudes and behaviors than ratings by others, and therefore self-reports may be the most appropriate measurement method in the present context [e.g., see Wittekind, Raeder and Grote, 2010]. Furthermore, the danger to validity by self-reports is probably overstated [Spector, 2006; also Bozionelos, Bozionelos, Polychroniou, and Kostopoulos, 2014].

Finally, what the model predicts is, in essence, an intention to expend effort rather than actual behavior (i.e. real effort). This is a limitation that must be acknowledged, but it should also be borne in mind that intentions are precursors [Ajzen and Fishbein, 2005] and good predictors of actual behavior [Krauss, 1995].

Future research should consider other outcomes that are important in organizational change, such as organizational citizenship behaviors oriented towards the organization and towards co-workers along with employee intentions to leave and actual turnover. In addition, under circumstances of extensive and unpleasant change, relationships and support from individuals may be more important than

support from the organization as an entity. Such factors may serve as moderators in the relationship of employability with outcomes. Finally, career orientation variables had a potent role in our model. This means that future work should try to identify determinants of career orientation and ways to develop it.

References

- Aiken, L. and West, S. [1991], *Multiple Regression: Testing and Interpreting Interactions*, Newbury Park, California, Sage.
- Ajzen, I. and Fishbein, M. [2005], "The Influence of Attitudes on Behavior," in D. Albarracín, B. T. Johnson, and M. P. Zanna [Editors], *The Handbook of Attitudes* [pp. 173–221], Mahwah, New Jersey, Erlbaum.
- Arthur, M. B. and Rousseau, D. M. [1996], "The Boundaryless Career as a New Employment Principle," in M. G. Arthur and D. M. Rousseau [Editors], *The Boundaryless Career* [pp. 3–20], New York, Oxford University Press.
- Baron, R. M. and Kenny, D. A. [1986], "The Moderator–Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic and Statistical Considerations," *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Baruch, Y. and Bozionelos, N. [2010], "Career Issues," in S. Zedeck [Editor], *APA Handbook of Industrial and Organizational Psychology*, Volume 2: Selecting and Developing Members of the Organization [pp. 67–113], Washington, D.C., American Psychological Association.
- Behling, O. and Law, K. S. [2000], *Translating Questionnaires and Other Research Instruments: Problems and Solutions*, Thousand Oaks, California, Sage.
- Briscoe, J. P. and Hall, D. T. [2006], "The Interplay of Boundaryless and Protean Careers: Combinations and Implications," *Journal of Vocational Behavior*, 69, 4–18.
- Bollen, K. A. [1989], *Structural Equations with Latent Variables*, New York, Wiley.
- Bozionelos, N. [2003], "Causal Path Analysis: What It Does and What It Does Not Tell Us," *Career Development International*, 8, 5–11.
- Bozionelos, N. [2014], "Career Patterns in Greek Academia: Social Capital and Intelligent Careers, but for Whom?," *Career Development International*, 19, 264–294.
- Bozionelos, N. [2015], "Social Capital and Careers: Indisputable Evidence and Note for Caution," in De Vos, A. and Van der Heijden B. I. J. M. [Editors], *Handbook of Research on Sustainable Careers* [pp. 67–82]. Northampton, Massachusetts, Edward Elgar Publishing.
- Bozionelos, N., Bozionelos, G., Polychroniou, P., and Kostopoulos, K. [2014], "Mentoring Receipt and Personality: Evidence for Non–Linear Relationships," *Journal of Business Research*, 67, 171–181.
- Briscoe, J. P. and Hall, D. T. [2006], "The Interplay of Boundaryless and Protean Careers: Combinations and Implications," *Journal of Vocational Behavior*, 69, 4–18.

- Briscoe, J. P., Hall, D. T., and DeMuth, R. L. F. [2006], "Protean and Boundaryless Careers: An Empirical Exploration," *Journal of Vocational Behavior*, 69, 30–47.
- Caesens, G., Marique, G., and Stinglhamber, F. [2014], "The Relationship between Perceived Organizational Support and Affective Commitment More than Reciprocity, It Is also a Question of Organizational Identification," *Journal of Personnel Psychology*, 13[4], 167–173.
- Chandon, P., Morwitz, V. G., and Reinartz, W. J. [2005], "Do Intentions Really Predict Behavior? Self-Generated Validity Effects in Survey Research," *Journal of Marketing*, 69, 1–14.
- Chen, D. S. and Wang, Z. M. [2014], "The Effects of Human Resource Attributions on Employee Outcomes during Organizational Change," *Social Behavior and Personality*, 42[9], 1431–1443.
- Cohen, J., Cohen, P., West, S. G., and Aiken, L. S. [2003], *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences* [3rd Edition], Mahwah, New Jersey, Lawrence Erlbaum.
- De Vos, A. and Soens, N. [2008], "Protean Attitude and Career Success: The Mediating Role of Self-Management," *Journal of Vocational Behavior*, 73, 449–456.
- De Vos, A., Buyens, D., and Schalk, R. [2003], "Psychological Contract Development During Organizational Socialization: Adaptation to Reality and the Role of Reciprocity," *Journal of Organizational Behavior*, 24, 537–559.
- Ford, J. D., Ford, L. W., and D'Amelio, A. [2008], "Resistance to Change: The Rest of the Story," *Academy of Management Review*, 33, 362–377.
- Fugate, M. and Kinicki, A. J. [2008], "A Dispositional Approach to Employability: Development of a Measure and Test of Implications for Employee Reactions to Organizational Change," *Journal of Occupational and Organizational Psychology*, 81, 503–527.
- Fugate, M., Kinicki, A. J., and Ashforth, B. E. [2004], "Employability: A Psycho-Social Construct, Its Dimensions, and Applications," *Journal of Vocational Behavior*, 65, 14–38.
- Gavino, M. C., Wayne, S. J., and Erdogan, B. [2012], "Discretionary and Transactional Human Resource Practices and Employee Outcomes: The Role of Perceived Organizational Support," *Human Resource Management*, 51, 665–686.
- Hall, D. T. [1976], *Careers in Organizations*, Pacific Palisades, California, Goodyear.
- Hall, D. T. [2004], "The Protean Career: A Quarter-Century Journey," *Journal of Vocational Behavior*, 65, 1–13.
- Hall, D. T. and Mirvis, P. H. [1996], "The New Protean Career: Psychological Success and the Path with a Heart," in D. T. Hall [Editor], *The Career Is Dead – Long Live the Career* [pp. 15–45], San Francisco, Jossey Bass.
- Hofstede, G. [2001], *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations across Nations*, Thousand Oaks, California, Sage.
- Hon, A. H. Y., Bloom, M., and Crant, J. M. [2014], "Overcoming Resistance to Change and Enhancing Creative Performance," *Journal of Management*, 40, 919–941.

- Huang, R. T. [2015], "Overcoming Invisible Obstacles in Organizational Learning: The Moderating Effect of Employee Resistance to Change," *Journal of Organizational Change Management*, 28, 356–368.
- Judd, C. M. and Kenny, D. A. [1981], "Process Analysis: Estimating Mediation in Evaluation Research," *Evaluation Research*, 5, 602–619.
- Kline R. B. [2005], *Principles and Practice of Structural Equation Modeling*, New York, Guilford Press.
- Kraus, S. J. [1995], "Attitudes and the Prediction of Behavior: A Meta-Analysis of the Empirical Literature," *Personality and Social Psychology Bulletin*, 21, 58–75.
- Lazarova, M. and Taylor, S. [2009], "Boundaryless Careers, Social Capital, and Knowledge Management: Implications for Organizational Performance," *Journal of Organizational Behavior*, 30, 119–139.
- MacKinnon, D. [2008], *Introduction to Statistical Mediation Analysis*, Mahwah, New Jersey, Erlbaum.
- MacKinnon, D. P., Lockwood, C. M., and Williams, J. [2004], "Confidence Limits for the Indirect Effect: Distribution of the Product and Resampling Methods," *Multivariate Behavioral Research*, 39, 99–128.
- McQuaid, R. W. and Lindsay, C. [2005], "The Concept of Employability," *Urban Studies*, 42, 197–219.
- Muthén, L. K. and Muthén, B. O. [1998–2012], "Mplus User's Guide" [7th Edition], Los Angeles, California, Muthén and Muthén.
- Nauta, A., Van Vianen, A., Van der Heijden, B., Van Dam, K., and Willemssen, M. [2009], "Understanding the Factors that Promote Employability Orientation: The Impact of Employability Culture, Career Satisfaction, and Role Breadth Self-Efficacy," *Journal of Occupational and Organizational Psychology*, 82, 233–251.
- Oreg, S. [2003], "Resistance to Change: Developing an Individual Differences Measure," *Journal of Applied Psychology*, 88, 680–693.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., and Podsakoff, N. P. [2003], "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies," *Journal of Applied Psychology*, 88, 879–903.
- Reitman, F. and Schneer, J. A. [2008], "Enabling the New Careers of the 21st Century," *Organization Management Journal*, 5, 17–28.
- Robinson, O. J., Vytal, K., Cornwell, B. R., and Grillon, C. [2013], "The Impact of Anxiety upon Cognition: Perspectives from Human Threat of Shock Studies," *Frontiers in Human Neuroscience*, 7, 203.
- Schaufeli, W. B. and Bakker, A. B. [2004], "Job Demands, Job Resources, and Their Relation with Burnout and Engagement: A Multi-Sample Study," *Journal of Organizational Behavior*, 25, 293–315.
- Spector, P. E. [2006] "Method Variance in Organizational Research: Truth or Urban Legend?" *Organizational Research Methods*, 9, 221–232.

- Strebel, P. [1996], "Why Do Employees Resist Change?" *Harvard Business Review*, 74[3], 86–92
- Sullivan, S. E. and Arthur, M. B. [2006], "The Evolution of the Boundaryless Career Concept: Examining Physical and Psychological Mobility," *Journal of Vocational Behavior*, 69, 19–29.
- Van der Heijde, C. M. and Van der Heijden, B. I. J. M. [2006], "A Competence-Based and Multidimensional Operationalization and Measurement of Employability," *Human Resource Management*, 45, 449–476.
- Van der Heijden, B. I. J. M., and Baker, A. B. [2010], "Toward a Mediation Model of Employability Enhancement: A Study of Employee–Supervisor Pairs in the Building Sector," *Career Development Quarterly*, 59, 232,248.
- Van der Heijden, I. J. M., De Lange, A. H., Demerouti, E., and Van der Heijde, C. M. [2009], "Age Effects on the Employability–Career Success Relationship," *Journal of Vocational Behavior*, 74, 156–164.
- Wittekind, A., Raeder, S., and Grote, G. [2010], "Longitudinal Study of Determinants of Perceived Employability," *Journal of Organizational Behavior*, 31, 566–586.

Zatrudnialność w czasach głębokiego kryzysu ekonomicznego.

Rola orientacji zawodowej

Streszczenie

Na potrzeby badania stworzono model antecedencji i konsekwencji zatrudnialności pracowników w organizacji podejmującej działania ukierunkowane na wprowadzenie znaczących zmian, w odpowiedzi na poważny kryzys finansowy.

Badanie zostało wykonane w państwowym zakładzie komunalnym w Grecji. Wzięło w nim udział 157 osób. Głównym celem badania było sprawdzenie, czy sposób myślenia w kategorii kariery „bez barier” i proteańska orientacja kariery mogą pozytywnie wpływać na zatrudnialność, co wiąże się ze zwiększeniem otwartości na zmiany organizacyjne oraz wzmocnieniem woli włożenia pewnego wysiłku w pracę. Wyniki potwierdziły hipotetyczny związek między proteańską orientacją kariery i nieograniczonym sposobem myślenia a zatrudnialnością. Ponadto, zgodnie z oczekiwaniami, zatrudnialność była ściśle powiązana z gotowością podjęcia wysiłków, a także stanowiła czynnik pośredni w związku z nieograniczonym sposobem myślenia i zmienną orientacją kariery. Z drugiej strony, zatrudnialność nie była powiązana z otwartością na zmianę i hipoteza o „moderującej” roli postrzeganego wsparcia organizacyjnego nie została potwierdzona. Wyniki badania są rozpatrywane w kontekście ram teoretycznych dotyczących kontekstu kariery i zatrudnialności, a także wpływu wyżej wymienionych czynników na zarządzanie zasobami ludzkimi w okresach, w których zachodzą poważne zmiany.

Giorgos Bozionelos holds a B.Sc. degree in Psychology from the University of Stirling (U.K.), an M.Sc. degree with commendation in Psychology of Health and Human Performance from the University of Bristol (U.K.), and an M.Sc. degree with distinction in Public Health from the National School of Public Health of Greece. Currently works for the Department of Psychiatry of Katerini General Hospital, Greece. Has published a significant number of articles in highly ranked Thompson Reuters indexed journals that include *Academy of Management Perspectives*, *Health Psychology*, *International Journal of Human Resource Management*, *Journal of Business Research*, *Journal of Health Psychology*, *Personality & Individual Differences*, *Psychological Reports*, *Psychology*, *Health & Medicine*, and *Social Behavior & Personality*. Research interests focus on career issues and on the interaction of the work environment with physical and psychological health. <gbozionelos@gmail.com>.

Nikos Bozionelos is Professor of Organizational Behavior and Human Resource Management at the Audencia School of Management (France). Holds a Ph.D. awarded by the Strathclyde Business School (U.K.). Senior Editor of the Thompson Reuters indexed journal *Asia Pacific Journal of Management* and serves on the editorial boards of journals such as *Group & Organizational Management*, *International Journal of Human Resource Management*, and *Human Resource Development Quarterly*. Research interests include individual differences in the workplace, organizational ambidexterity, social capital, organizational politics, High Performance Work Systems, and cross-cultural issues in management. <nbozione-los@audencia.com>.

International graduate students' perceptions and interest in international careers

Nikos Bozionelos^{a*}, Giorgos Bozionelos^b, Konstantinos Kostopoulos^c,
Chwen-Huey Shyong^d, Yehuda Baruch^{e,f} and Wenxia Zhou^g

^aAudencia School of Management, Audencia PRES L'UNAM, Audencia, France; ^bPsychiatric Hospital of Petra Olympou, Katerini, Greece; ^cNorwich Business School, University of East Anglia, Norwich, UK; ^dDurham Business School, University of Durham, Durham, UK; ^eRouen Business School, Mont-Saint-Aignan, France; ^fSouthampton Management School, University of Southampton, Southampton, UK; ^gSchool of Labor and Human Resources, Renmin University, Beijing, People's Republic of China

This research developed and tested a comprehensive model of the antecedents of international graduate students' interest in an international career. Based largely on Social Cognitive Career Theory (SCCT), the model included elements that pertain to perceptions of external constraints (perceptions of the labor market, family pressure to return), international student experience (adjustment in the foreign country during graduate studies, exposure and immersion to the international context) and individual factors (self-efficacy with respect to working abroad and outcome expectancy). Participants were 139 international graduate students in the UK. Individual factors and perceived constraints were directly related to interest in an international career. The factors that comprised current international student experience were indirectly related to interest via their relationship with self-efficacy, while adjustment moderated the relationship between self-efficacy and interest. Although the hypothesized moderating role of family pressure to return did not materialize, the findings suggest that perceptions of constraints play a more substantial role in the formation of interest than has been assumed by SCCT theory thus far. The findings are discussed with respect to their implications for the literature and for the policies of host country stakeholders.

Keywords: adjustment; exposure and immersion; graduate students; interest; international careers; international students; labor market conditions; perceived barriers; self-efficacy; Social Cognitive Career Theory

Globalization leads to a flow of knowledge, information, products, services and people across national borders (e.g. Bartlett, Ghoshal and Beamish 2007), and has naturally given substantial rise to international careers (Baruch and Bozionelos 2010). Such careers include moves to and between countries other than an individual's home nation, and are pursued as a means of seizing career and lifestyle opportunities (e.g. Suutari, Tornikoski and Makela 2012; Baruch, Dickmann, Altman and Bournois 2013). Indeed, the number of people who live and work in countries other than their country of origin is estimated to be in excess of 200 million (e.g. OECD-UNDESA 2013) and the trend is upwards (Brookfield Global Relocation Services 2012).

International graduate students and international careers

The perspective of host countries and firms

Globalization has also intensified competition, thus leaving firms with no alternative but to look for the best people irrespective of their country of origin (e.g. Ajami, Cool, Goddard

*Corresponding author. Email: nbozionelos@audencia.com

and Khambata 2006; Collings, Scullion and Dowling 2009). This even extends to companies that only operate domestically which, due to a shortage of indigenous labor in developed economies, are in need of nonnative talent (Beechler and Woodward 2009). Graduate students from abroad (referred to as ‘international graduate students’) are a prime source of such talent (Forster and Johnsen 1996) because they possess knowledge, skills and abilities that can be converted into economic benefits for the host countries (Chellaraj, Maskus and Mattoo 2008). Indeed, they are the highly skilled foreign workers who account for virtually all of the economic contributions made by international workers to their host countries (Rowthorn 2008).

Furthermore, international graduate students are typically young and, therefore, do not have family obligations. This means considerable savings in terms of the support packages for spouses and families that host country firms normally provide when they employ skilled professionals from abroad (e.g. Evan, Pucik and Barsoux 2002; and see also Peltokorpi and Froese 2009). Moreover, international graduate students comprise a substantial population; for example, there were nearly 200,000 international students studying for graduate degrees in the UK in the academic year 2012–2013 (UK Council for International Student Affairs 2014), and in excess of 300,000 international students enrolled in graduate programs in the USA during the same academic year (Institute of International Education 2013). This means a large pool of highly educated talent for firms in host countries to take advantage of. Indeed, being aware of the benefits that international graduate students can bring, the governments of countries with a tradition in the delivery of graduate studies, such as the UK (Workpermit.com 2012), have developed incentives (e.g. special work visas) to retain the best of them once they graduate (e.g. Geddie 2013).

The perspective of students themselves

From the perspective of international graduate students themselves, they are either starting their careers or have limited work experience and so are soon to enter or return to the labor market. As they live abroad for a relatively long period of time (e.g. up to 2 years for a Master’s course in North America and at least 12 months for a Master’s in Europe), they may opt to remain in the host country after their studies are complete to exploit employment opportunities (Baruch, Budhwar and Khatri 2007). One reason for this is that they may view work in a developed country as a means of accumulating human capital in the form of experience and prestigious employment that they can ‘cash in’ as enhanced career prospects when returning to their home country (Dustmann and Weiss 2007). Indeed, work experience in a developed country may well function as a signal of competence in the home country that may improve employment and career prospects (see Cerdin and Le Pargneux 2009). Furthermore, foreign-based study provides an opportunity to dip one’s toe into life abroad and explore the international environment, which can trigger thoughts of an international career (see Oosterbeek and Webbink 2011).

At this point, it should be noted that international graduate students must be distinguished from international students in general and from international undergraduate students in particular. Foreign students who move to developed countries to pursue graduate degrees are more highly selected, normally pursue more specialized studies and acquire more advanced skills than their undergraduate counterparts (see, for example, Gungor and Tansel 2008; Oosterbeek and Webbink 2011; Geddie 2013). For these reasons, they are of greater value to potential employers in host countries, but are also more attractive to employers back home (see Gungor and Tansel 2008). As a consequence, they normally have more choice when it comes to staying abroad or returning home.

The present work

Despite the rise of international careers, there is very limited research on the factors that shape the interests of students who are already living abroad to pursue such careers, and much less on graduate students (Geddie 2013; Mosneaga and Winther 2013). As referred to above, this is an important issue for both the students themselves and the host countries. The vast majority of international graduate students who stay abroad upon completion of their studies make their decision after they have moved to the host country (Gungor and Tansel 2008; Mosneaga and Winther 2013). This means that studying these students when they are pursuing their graduate degrees increases the odds of acquiring a valid idea of the factors that influence that decision and the interplay between them. Such knowledge will assist in the development of advice for host countries and host country education institutions. The present work therefore focuses on international graduate students, who comprise a numerically and substantively important population, with the aim being to develop a comprehensive model of the factors that shape their interest in international careers. This model utilizes, among other factors, perceptions of the respondents' experiences during their graduate studies in the foreign country and how these subsequently shape their interest in pursuing an international career.

Empirical work on how the interest of international students in pursuing careers abroad is shaped is very scarce. Baruch et al.'s (2007) study has been the only one thus far to look at antecedents of interest in working abroad among international students. However, though important, this work had a different scope and viewed the issue from the perspective of home countries and the brain-drain phenomenon. Nevertheless, its insights were helpful in the development of the model used in the present research. There are also a handful of studies that investigated the receptivity to working abroad of domestic higher education students and early career graduates (e.g. Tharenou 2003, 2008; Wang and Bu 2004). These studies have also provided some important insights. However, their populations of domestic students and recent graduates are substantively different from international students as the latter are already living away from their home countries; meaning that they have taken the step of moving to another culture and have already faced some of the challenges of living and performing in a foreign environment. Factors such as foreign language proficiency, for example which can be an issue for domestic students with respect to their intention to move abroad to work (Wang and Bu 2004), are much less likely to be an issue for international students. Furthermore, factors that seem to be highly pertinent to shaping the career interests of international graduate students, such as adaptation to the foreign context during their studies abroad, are not relevant to domestic students. Nevertheless, these groups also share some similarities, including the possible intention to live and work abroad. As a consequence, these studies were also taken into account in the present work.

Factors influencing students' interest in international careers

Direct experience plays an important role in the development of an interest in a particular course of action (Fazio, Zanna and Cooper 1978; Cooke and Sheeran 2004). International graduate students acquire such experience during their studies. To some extent, international graduate work can be seen as a simulation of working in the foreign environment. This is because students have to deal with cultural and life adaptation issues while simultaneously managing an intensive schedule and having to produce high-quality assessed work. That experience is likely to shape their views about whether it would be appropriate for them to pursue professional life in the same way. Although there is a lack of empirical work involving international students *per se*, studies in other domains indicate

that such experiences are important for subsequent interests. For example, the experience of internship appears to influence the intentions of students to pursue careers in the same industry (Lee and Chao 2013), or in a location with similar geographic and cultural characteristics, when they graduate (Clark et al. 2013).

Experiential factors, however, must work in concert with other influences in the development of interest toward particular career routes. The way experience, for example, shapes one's direction may be filtered by individual characteristics (Bandura 1982; Weiss, Freund and Wiese 2012; Weber, Ruch, Littman-Ovadia, Lavy and Gai 2013). Social Cognitive Career Theory (SCCT) (Lent, Brown and Hackett 1994, 1996, 2000; Lent et al. 2005) is a theory that has been especially developed to provide a tool for understanding how career interests develop, and suggests an array of factors that interact in the shaping of such interests. SCCT, therefore, can help in the construction of a comprehensive model of antecedents of the desire of international graduate students to pursue an international career.

In particular, SCCT provides a framework for understanding how people develop an interest in particular career moves, which eventually leads to career choices and outcomes. It emphasizes individual (or cognitive-person) factors and perceived external contingencies. Individual factors represent personal agency (Bandura 1986), namely self-efficacy beliefs and outcome expectations. External contingencies, meanwhile, include perceived constraints (or barriers) and opportunities (Lent et al. 2000). Empirical research suggests that SCCT is a useful general framework for understanding the formation of career interests (e.g. recent meta-analysis by Sheu et al. 2010). In addition, due to its versatility, it can potentially be deployed in various contexts (Ali and McWhirter 2006). The work at hand utilized the principles of SCCT in the context of international careers. It developed and tested a model that includes the interplay of perceptions of external (labor markets in the home country and abroad, family pressure to return), experiential (adjustment to the international study experience, exposure and immersion to the international context) and individual (self-efficacy and outcome expectancy) factors in the shaping of international graduate students interest toward the pursuit of international careers.

Hypotheses development

According to SCCT, external constraints include the conditions of the economy and the labor market, as well as perceived family ties and obligations (Lent et al. 1994, 2000). Lent et al. (2000) assigned a secondary role to such factors because they reasoned that individuals attach low likelihood and low potency to them. The findings of a recent meta-analysis (Choi et al. 2012) provided some support for this view, revealing that a belief in one's ability to make proper career decisions was unrelated to perceptions of career constraints. However, these factors are an integral part of SCCT, and Lent et al. (2000) did note that they are nevertheless real and must be taken into account. In addition, intuitively it would make sense if, for example, perceptions about the condition of the economy back in the home country influence an intention to stay abroad and pursue work there (Al Ariss and Crowley-Henry 2013), or if perceived obligations back home play a role in shaping an interest in an international career after the completion of graduate work.

Perceptions of the labor market

SCCT, in line with the push/pull model (Ravenstein 1889; Lee 1966), posits that career interests are often influenced by perceptions of labor market conditions and the employment opportunities these confer (Lent et al. 2000). Concurring with this view,

empirical research has shown that a substantial proportion of the individuals who have moved on their own initiative to work abroad (i.e. self-initiated expatriates) made that choice because they perceived that there were limited opportunities in their home country (Suutari and Brewster 2000; Froese 2012). Although international graduate students are already away from their home country, it is likely that they adopt similar reasoning: presuming that staying away from the home country to work is a career move, the respective likelihood of finding a job abroad and back home should affect the propensity of these students to pursue work in a foreign country upon completion of their studies. Indeed, if these students perceive that it is relatively easy to obtain employment abroad, but anticipate difficulties in doing so in their home country, they are likely to develop a propensity to stay abroad upon completion of their graduate work and vice versa.

Hypothesis 1. Perceptions of a strong labor market abroad along with a weak labor market back home will be positively related to interest in an international career.

Family pressure to return

Concerns about family are a very common reason for hesitation when it comes to considering international career moves (e.g. Wang and Bu 2004; Tharenou 2008; Brookfield Global Relocation Services 2011; Selmer and Luring 2011). Due to their age, the majority of international graduate students have no spouse or offspring obligations. Nevertheless, they may still be under pressure due to other family ties back home. Such ties can be emotional (e.g. attachment to immediate or extended family members, the disapproval of family in the home country), practical (e.g. caring for elderly parents, helping with the family business) or both. Indeed, Baruch et al. (2007) found that strong ties to family in the home country were negatively associated with the intention of international students to stay and work abroad. A similar conclusion was reached by Soon (2012) with respect to international students in New Zealand. As a consequence, the following hypothesis arises:

Hypothesis 2. Perceived family pressure to return will be negatively related to interest in an international career.

Current international student experience

SCCT suggests that experiences operate as learning events that shape preferences for certain career courses (Lent et al. 1994). In line with this suggestion, it is reasonable to assume that international graduate students' experiences (positive or negative) and familiarization with the international environment have an impact on their views about pursuing careers abroad.

Adjustment to the international study experience

Individuals who have pursued international careers retrospectively report that the desirability of the host country had an effect on their initial decision to work internationally (Doherty, Dickmann and Mills 2011). The implication is that anticipation of a positive experience is an influencing factor in the decision to pursue work outside one's home country. This means that the overall experience of studying in the foreign country may affect international graduate students' considerations of whether to work abroad after completing their studies. At the start of their course, international students are

newcomers to a different culture and a different education system (Edmonds 2010; Guo and Chase 2011; Al Hazmi and Nyland 2013). Accordingly, the nature of the foreign environment during their studies must trigger mechanisms that shape their attitudes toward the host country and the international experience in general. Moreover, they are likely to be more positive toward living and working abroad if they feel comfortable with the place where they are studying and satisfied with their experience. In line with this, Baruch et al. (2007) found that the satisfaction of international students with the support of their professors and fellow students was related to their intention to stay in the host country. In the present work, we generalize to the overall graduate study experience abroad and to international careers.

Exposure and immersion to the international context

International students are generally on their own when it comes to managing daily life in a foreign country and dealing with any adaptation issues. There is evidence that prior experience of living and working abroad can facilitate adjustment in a subsequent international career move (Bhaskar-Shrinivas, Harrison, Shaffer and Luk 2005). Vance's (2005) qualitative work indicated that activities that expose and familiarize the individual with the international environment (cultural, political, economic, physical), such as travel abroad, working for a foreign firm and involvement in international relations, lay the foundations for a career move abroad. Furthermore, the aforementioned work with students in internships indicates that prior exposure to a location with particular geographic and cultural characteristics increases the likelihood of an individual expressing an intention to work in a similar location upon graduation (Clark et al. 2013). It is therefore reasonable to expect that prior exposure to and immersion in the international context acts as a catalyst for the intention of international graduate students to pursue an international career.

Hypothesis 3. The international students' current experiences, adjustment to the international study experience (H3a) and exposure and immersion to the international context (H3b) will be positively related to interest in an international career.

Individual factors

Finally, SCCT posits that individual factors in the form of personal agency, which includes self-efficacy and outcome expectancy, play a shaping role in career interests. Self-efficacy (Bandura 1977, 1997) refers to an individual's evaluation of his/her capacity to implement courses of action and persist with them. According to SCCT, self-efficacy exerts a substantial influence over the shaping of interests in specific career-related activities (Lent et al. 1994). Empirical evidence that shows that interest is more likely to develop in cases of strong self-efficacy with respect to a particular career direction and vice versa (Rottinghaus, Larson and Borgen 2003) concurs with the predictions of SCCT. As far as international careers are concerned, self-efficacy is conceptualized as the confidence of individuals in their ability to work and live in countries with cultures that are dissimilar to their own (Gianni and Tharenou 2000). Working abroad has challenges in both work and nonwork domains (e.g. Black, Mendenhall and Oddou 1991; Harrison, Shaffer and Bhaskar-Shrinivas 2004). Self-efficacy increases the probability of setting challenging goals (e.g. Waung, Macneil and Vance 1995). Accordingly, international graduate students with greater self-efficacy must be more likely to believe that they are able to cope with those challenges, suggesting that they should report a greater propensity to pursue an international career.

Outcome expectancy is defined as the perceived result of following certain courses of action (Vroom 1964). SCCT proposes that people develop an interest in particular career moves when they expect overall positive outcomes (Lent et al. 1994), and this is a proposition that is supported by empirical evidence (Sheu et al. 2010). Accordingly, when international graduate students consider whether to stay abroad, they should assess the potentially positive and negative outcomes of doing so and then estimate the net value of the result. A positive net value, or valence, of the overall outcome would increase interest in working abroad and vice versa. Although this appears logically sound, studies with domestic students have produced mixed results. Wang and Bu (2004) failed to find in Canadian undergraduates a consistent relationship between perceived advantages of international over domestic careers and an interest in pursuing international assignments. On the other hand, Tharenou (2003) found that domestically employed graduates reported greater receptivity to international assignments if they had positive expectations about outcomes. Nonetheless, the logic of expectancy theory and some of the extant findings with domestic students and recent graduates justify the following hypothesis:

Hypothesis 4. Individual factors, self-efficacy in working abroad (H4a) and outcome expectancy (H4b) will be positively related to the interest of international graduate students in an international career.

Furthermore, there is reason to speculate that the influence of perceived constraints and current international student experience is materialized via the individual factors of self-efficacy and outcome expectancy. Indeed, self-efficacy is cultivated by exposure to the target object and experiences of success with respect to it (Bandura 1997, 2002; Scholz, Sniehotta, Schuz and Oeberst 2007; Grunert and Bodner 2011). Given that adjustment to the foreign context is an indication of success, it follows that the international graduate students who perceive that they have adapted well to the foreign environment and those who have gained exposure to the international context should report greater self-efficacy with respect to working abroad. Given that self-efficacy has been hypothesized to relate to interest in an international career, a mediation expectation ensues. The expectation is for partial mediation for exposure and immersion, because that factor refers to the accumulation of experiences that are not temporally restricted to the period of graduate study, but go before the individual has moved to the foreign country to pursue graduate work.

Hypothesis 5. Self-efficacy in working abroad will fully and partially mediate, respectively, the relationship of both adjustment to the international study experience (H5a) and exposure and immersion to the international context (H5b) with an interest in an international career.

Furthermore, the students who perceive a buoyant labor market abroad and a tight market back home should anticipate better outcomes from pursuing a career abroad. This means that perceptions of the labor market should relate to expectations of benefits from working in a foreign country. The latter has in turn been hypothesized to relate to interest in an international career, which directs us toward a mediating role for outcome expectancy in the relationship between labor market perceptions and interest. Moreover, those who perceive greater opportunities abroad compared to their home country may unconsciously develop inflated views of their capacity to successfully face the challenges of living and working abroad. This would then function as a self-enhancement motivation mechanism (e.g. Alicke and Sedikidis 2009; Willard and Gramzow 2009) with respect to their preference to stay and work abroad instead of going back home. This directs us

toward a mediating role for self-efficacy in the relationship between labor market perceptions and interest in an international career.

Hypothesis 6. Outcome expectancy (H6a) and self-efficacy in working abroad (H6b) will partially mediate the relationship of perceptions of labor markets with interest in an international career.

Finally, Lent et al. (2000) within the framework of SCCT suggest that apart from having a predictor role, perceived constraints may also play a moderator role in the process of forming career preferences. Indeed, it is legitimate to expect that among those students who believe in their ability to face the difficulties of living and working abroad, those who perceive more intense family pressure to return will report less interest in an international career than those who perceive less of this pressure. In other words, the highest level of interest will be expressed by those who simultaneously possess strong self-efficacy and perceive weak family pressure. Similarly, among those who hold strong outcome expectations, those who perceive strong family pressure to return should be more restrained in their interest in pursuing a career abroad than their counterparts who perceive weaker family constraints.

Hypothesis 7. Family pressure to return will moderate the relationship between individual factors and interest in an international career. In particular, the relationship of both self-efficacy in working abroad (H7a) and outcome expectancy (H7b) with interest will be stronger when family pressure is weak.

SCCT theory itself and empirical studies that employ it limit their speculation with respect to moderating effects to perceived constraints only (e.g. Lent et al. 1994, 1996, 2000, Lent et al. 2005). The context of the present work, however, justifies the belief that other factors may also assume moderator roles. In particular, it appears reasonable to consider that feeling comfortable and at ease with the foreign environment during graduate work magnifies the effects of self-efficacy on interest; those who are better adjusted to the lifestyle and study conditions of the host country and also have a strong belief in their capacity to live and work abroad must be particularly likely to develop a propensity to pursue an international career.

Hypothesis 8. Adjustment to the international study experience will moderate the relationship between self-efficacy in working abroad and interest in an international career. The relationship will be strongest when there are high levels of adjustment.

The hypotheses are depicted in Figure 1, including direct, indirect and moderator effects.

Method

Participants and procedure

Participants were 139 (45 males and 94 females) international students undertaking Master's courses at a British university (Master's courses in the UK last for one year). All of the participants were in the final stages of their studies (i.e. the dissertation stage that occupies the last 3 months of the 12-month course). These individuals were ideal for the research because they had accumulated experiences from studying and living in the host country and were near to completing their academic work. This means that decisions about

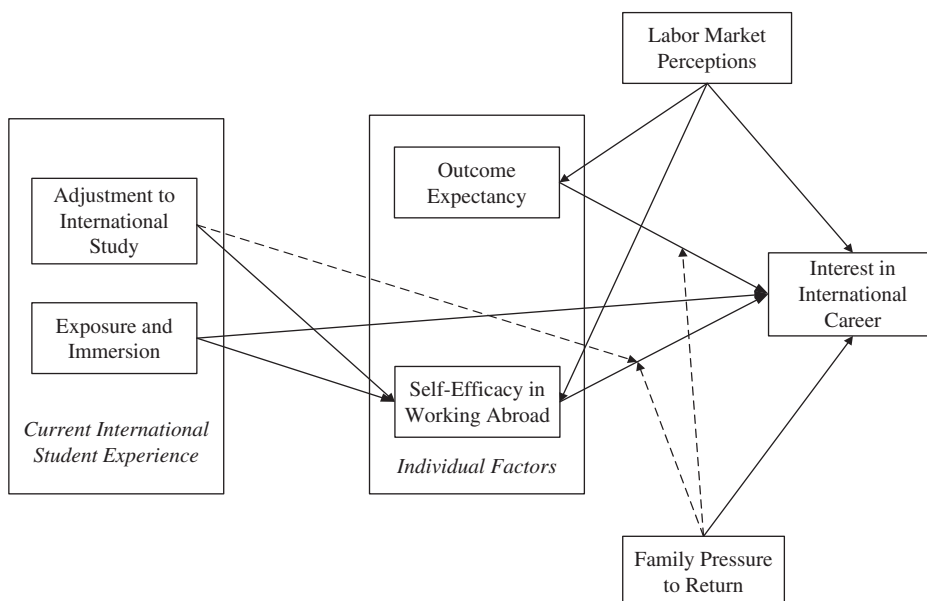


Figure 1. The model that depicts the hypothesized links. Note: Dotted lines represent moderating relationships.

whether to stay abroad or return home were imminent. Participation was solicited via the sending of emails to lists of students who were enrolled in graduate courses. Questionnaires were administered electronically using internet-based specialist software and remained open for 15 days.

The demographics of the sample are presented in Table 1. Participants came from 21 different countries and 4 continents: Asia (including the Far East, Southeast Asia and the Middle East), North America, Europe and Oceania. Two-thirds of the participants were enrolled in courses on business-related subjects.

Measures

The response format was a seven-point metric (1: strongly disagree to 7: strongly agree) unless otherwise stated. The questionnaire language was English, because all of the participants were graduate students in the UK with English as the language of instruction.

Interest in an international career

This was measured with five items adapted from Adler's (1986) scale of interest in working abroad. The participants were provided with the following definition of an international career: 'relocating abroad to work as a full-time employee in a foreign country for a substantial period of time'. Sample items included: 'I am seriously considering pursuing an international career' and 'I want my first job after graduation to be in a foreign country'. Cronbach α was 0.82.

Labor market perceptions

The participants' perceptions of the condition of the labor market in and outside their home country were assessed with two and three items, respectively. These items were

Table 1. Descriptive statistics and intercorrelations (N = 139).

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Age	27.58	3.44	–										
2. Length of work experience	3.25	2.91	0.72	–									
3. Length of international work experience	0.39	0.99	0.25	0.36	–								
4. Foreign labor market	4.25	1.42	0.05	–0.02	0.26	–							
5. Domestic labor market	4.68	1.17	–0.11	0.04	–0.13	–0.15	–						
6. Family pressure to return	4.69	1.47	0.10	–0.05	–0.34	–0.29	–0.05	–					
7. Adjustment	4.94	0.99	0.07	0.08	0	0.04	0.21	0.06	–				
8. Exposure and immersion	3.71	1.03	0.26	0.33	0.25	0.17	0.12	–0.07	0.48	–			
9. Self-efficacy	71.39%	12.90%	0.09	0.14	0.15	0.22	0.03	–0.06	0.40	0.52	–		
10. Outcome expectancy (instrumentality × valence)	54.71%	16.19%	0.06	–0.08	–0.01	0.13	0.07	0.27	0.24	0.23	0.35	–	
11. Interest	5.17	1.14	0.01	–0.08	0.12	0.24	0.05	–0.07	0.18	0.30	0.37	0.41	–

Note: Coefficients $\geq |0.17|$, $|0.22|$ and $|0.27|$ are significant at 0.05, 0.01 and 0.001, respectively.

adapted from Baruch et al. (2007) to suit international graduate students who might consider employment outside their home country. The items were positively and negatively stated, with the latter reversed in the scoring process. Sample items include: 'I have a good chance of getting a good job in my home country' and 'there are many good jobs outside my home country for those who want to get ahead'. Cronbach α values for perceptions of the home and foreign labor markets were 0.69 and 0.86, respectively.

Family pressure to return

This was measured with four items adapted from Tharenou (2003). Sample items included: 'I prefer to go back and live with my family when I graduate' and 'my family's approval would be important to my taking of a job abroad'. Cronbach α was 0.82.

Adjustment to the international study experience

This was assessed with three items adapted from Baruch et al. (2007). A sample item is: 'the adjustment process to a different culture from my own during my studies was smooth'. Cronbach α was 0.70.

Exposure and immersion to the international context

This was assessed with six items that were developed from Vance's (2005) list of foundation activities that may lay the ground for pursuing careers abroad. Sample items include: 'I have traveled abroad a lot' and 'I participated in international relations activities (e.g. clubs, associations) before the start of my postgraduate studies'. Cronbach α was 0.63. Concerns over the marginal Cronbach α were allayed by the results of both a Confirmatory Factor Analysis (CFA) and the testing for common method bias.

Self-efficacy in working abroad

This was assessed with Gianni and Tharenou's (2000) 12-item scale. The scale adopts an 11-point measurement format (from 0% to 100%, with 10% increments in-between), with each point reflecting a different level of confidence in one's capacity to work and live in a foreign country. Sample items include: 'work with co-workers who have different values from my own' and 'adapt my behavior to fit into the culture of the country in which I accept a job'. Cronbach α was 0.91.

To examine the factor structure and discriminant validity of the above measures, a CFA was performed on the final sample of 139 participants with the EQS 6.1 Structural Equations Program (Bentler 2004), employing the maximum likelihood robust method that corrects for non-normality in data. The seven-factor model demonstrated good fit (Satorra–Bentler scaled χ^2 [217, $N = 139$] = 382.5, $p < 0.001$; CFI = 0.951; IFI = 0.950; RMSEA = 0.064), and an improvement over the independence model ($\Delta\chi^2 = 1175.9$, $p < 0.001$). All of the factor loadings exceeded 0.45 and were significant at the 0.001 level.

Outcome expectancy

In line with expectancy theory, this was operationalized as the product of perceptions of instrumentality and valence (Vroom 1964). Using an 11-point response format (range from 0% to 100%, with 10% increments in-between), instrumentality was assessed as the

perceived likelihood of outcomes that might occur in the case of taking a job abroad. Valence, meanwhile, was assessed as the desirability of each of these outcomes, also using an 11-point response format (range from 0%: not at all desirable, to 100%: extremely desirable, with 10% increments in-between). Outcomes (13 overall) were developed by consulting earlier work that was relevant to the present study (e.g. Tharenou 2003, 2008; Wang and Bu 2004) and covered the four domains proposed by Tharenou (2003): personal development and cross-cultural experiences, social factors, career advancement and daily living. Sample items include: 'add to my knowledge of the world and of other cultures', 'put some of my personal relationships at risk', 'progress in my career at a faster rate' and 'need more time to establish a social network'. Negatively stated items were reversed in the scoring process. What was assessed with this measure was the participants' subjective sense of the probability of a valued outcome in the case of staying in a foreign country to work. Cronbach α was 0.86 and 0.81 for instrumentality and valence, respectively.

The discriminant and convergent validity of the instrumentality and valence scales was supported by a CFA, where the two-factor model showed good fit (Satorra–Bentler scaled χ^2 [26, $N = 139$] = 54.4, $p < 0.001$; CFI = 0.962; IFI = 0.959; RMSEA = 0.061) and was an improvement over the independence model ($\Delta\chi^2 = 386.6$, $p < 0.001$). The factor loadings were above 0.55 and significant at the 0.001 level.

To further test for the presence of common method variance (CMV), a Harman single-factor test was first conducted on all of the study's items (e.g. Podsakoff, MacKenzie, Lee and Podsakoff 2003). The test produced negative results, as no single factor explained more than 20% of the total variance. However, following the recommendations of Chang, Van Witteloostuijn and Eden (2010), and the related procedures described in Podsakoff et al. (2003), we went a step further. This involved constructing one unmeasured CMV factor that was linked to the indicators of the constructs included in the above CFA models. The CMV factor did not change the outcomes of the CFAs. Taken together, the results of these tests lead to increased confidence that CMV was not present in the data.

Pertinent, but distinct from common method bias, is the issue of self-generated validity, which refers to the possibility that the form and structure of the questionnaire (e.g. order of measures) induce participants to respond in ways that are in line with the relationships and causal ordering that the researchers have in mind (e.g. Feldman and Lynch 1988; Chandon, Morwitz and Reinartz 2005). To reduce the likelihood of self-generated response bias, a number of measures were adopted, including: reassuring respondents about anonymity, stressing in the instructions that 'there are no right or wrong answers', including the demographic questions at the start of the questionnaire, and placing the scales in a different order from the one we had in mind for the model (for example, the scale of interest was placed in the middle of the questionnaire). In addition, the questionnaire was piloted with 10 (5 female and 5 male) international graduate students, who were asked to complete the scales and verbally transfer their comments to the researchers. The pilot testing revealed that the students utilized the full range of the response scale in all measures. In addition, it suggested that the instructions were clear, the items were intelligible and had unambiguous meanings, and the electronic version of the questionnaire was functioning smoothly.

Controls

Demographics were measured with single items and included: gender (one: male; two: female); age; region of origin (countries were categorized as follows: Far East and South East Asia; Middle East and South Asia; and Western: European countries, North America, Australia and New Zealand) that was represented in the analysis with two dummies;

Master's major (coded 1: business related; 2: non-business related); length of total work experience (in months); and length of work experience outside the home country (in months). Empirical research suggests differences between genders, age cohorts (e.g. Tharenou 2003) and geographic region of origin (Baruch et al. 2007) in terms of receptivity to pursuing careers outside the home country. In addition, economic conditions vary across geographic regions, which may act as a 'push' factor influencing many parts of the model, including outcome expectancy and labor market perceptions. Furthermore, SCCT suggests that educational background influences the shaping of career interests (Lent et al. 2000), while empirical evidence indicates that business students are better at building self-efficacy than students from other disciplines (Chung, Schwager and Turner 2002). Finally, Vance's (2005) work suggested that temporary international work experience (e.g. an internship in another country) may contribute to subsequent decisions about international career moves.

Results

Descriptive statistics and intercorrelations are presented in Table 1. Generally, the participants as a group had a substantial interest in international careers ($M = 5.17$, $SD = 1.14$), and also held rather strong self-efficacy beliefs regarding living and working abroad ($M = 71.39\%$, $SD = 12.90\%$). On the other hand, perceptions of family pressure to return were also of considerable strength ($M = 4.69$, $SD = 1.47$).

Hypotheses testing

The hypotheses were tested with a path analysis (i.e. manifest variables) using the EQS 6.1 Structural Equations Program. The path analysis approach was chosen because it not only preserves power, but also permits the simultaneous estimation of multiple causal relationships and the testing of moderation and mediation effects (Kline 2005). To have confidence in the reliability of the path estimates, authors recommend a minimum sample size of 100 (Bollen 1989; Hair, Anderson, Tatham and Black 1998). Accordingly, our sample of 139 cases clearly exceeded this benchmark. In addition, because we employed path analysis with manifest variables (i.e. averaging multi-items constructs), the sample size also exceeded the recommended ratio of five observations per model parameter to be-estimated (Bentler and Chou 1988; Kline 2005).

Having established the measurement properties and discriminant validity of the measures, mean computations were utilized to create the manifest variables. Estimations (maximum likelihood robust method) took into account the controls, and so the final model was held over and above the effects of the controls. In the calculation of interaction terms (e.g. family pressure to return \times self-efficacy), the variables were mean-centered to reduce multicollinearity and produce less biased parameter estimates. Although mean-centering may not always rule out multicollinearity (Echambadi and Hess 2007), it has long been considered (Aiken and West 1991; Cohen, Cohen, West and Aiken 2003) and widely utilized (e.g. Faraj and Yan 2009; Bode, Wagner, Petersen and Ellram 2011) as one of the best available ways to alleviate pertinent concerns. In addition, we tested for multicollinearity by inspecting the variance inflation factor indices. Their mean values were well below the conservative threshold of five (Cohen et al. 2003), suggesting that multicollinearity was not a significant concern. To test the mediator hypotheses (i.e. H5 and H6), direct and indirect effects were requested following related procedures in EQS that generate standard errors and path coefficients for these effects (Bentler 2004).

The model with the path estimates (β coefficients) that tests hypotheses is presented in Figure 2. The path from self-efficacy toward outcome expectancy was not part of the hypotheses. Nevertheless, it represents a theoretically (Bandura 1986; Lent et al. 1994) and empirically established path (Sheu et al. 2010) that also depicts the indirect effect of self-efficacy on interest. The model demonstrated very good data fit with a nonsignificant Satorra–Bentler scaled χ^2 (87, $N = 139$) = 95.5 (ns) and a very satisfactory performance in the other fit statistics (CFI = 0.976; IFI = 0.980; RMSEA = 0.027).

The total effect of perceptions of labor markets on interest in an international career was significant ($\beta = 0.17$, $p < 0.05$), and H1 was thus supported. Family pressure to return was negatively related to interest ($\beta = -0.15$, $p < 0.05$), which lent support to H2. Self-efficacy in working abroad ($\beta = 0.20$, $p < 0.05$) and outcome expectancy ($\beta = 0.26$, $p < 0.01$) were positively related to interest in an international career, meaning that both parts of H4 were supported.

The total, direct and indirect effects on interest of adjustment to the international study experience ($\beta = 0.12$, $p < 0.05$) and exposure and immersion to the international context ($\beta = 0.23$, $p < 0.01$) were also significant, lending support to H3a and H3b, respectively, and therefore full support to H3. However, the total effects were significant because of the significance of the indirect effects. The direct effects of these variables on interest were not significant ($\beta = -0.04$, ns, and $\beta = 0.10$, ns, respectively). This suggested only partial support for H5, because self-efficacy fully mediated the relationship between both adjustment (H5a) and exposure and immersion (H5b) and interest, rather than just the former. On the other hand, H6 received no support. Perceptions of labor markets were related with neither outcome expectancy ($\beta = 0.06$, ns) nor self-efficacy ($\beta = -0.10$, ns), suggesting that these variables could not mediate the relationship of labor market perceptions with interest in an international career. Perceptions of labor markets were only directly related to interest ($\beta = 0.18$, $p < 0.05$).

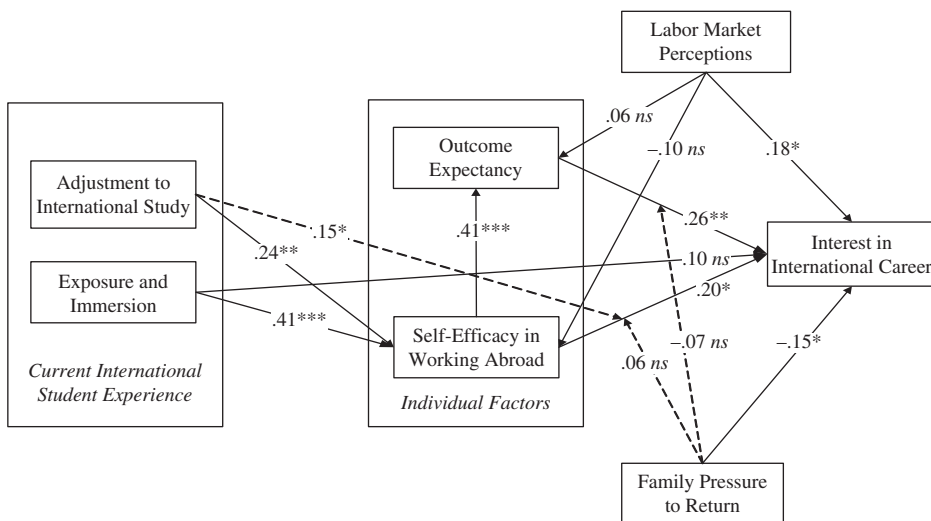


Figure 2. The final causal-path model. Notes: For reasons of simplicity, the control variables and error variances are not shown in this path diagram. Standardized parameter estimates are reported. Satorra–Bentler scaled χ^2 (87, $N = 139$) = 95.5, $p > 0.10$; CFI = 0.976; IFI = 0.980; RMSEA = 0.027. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

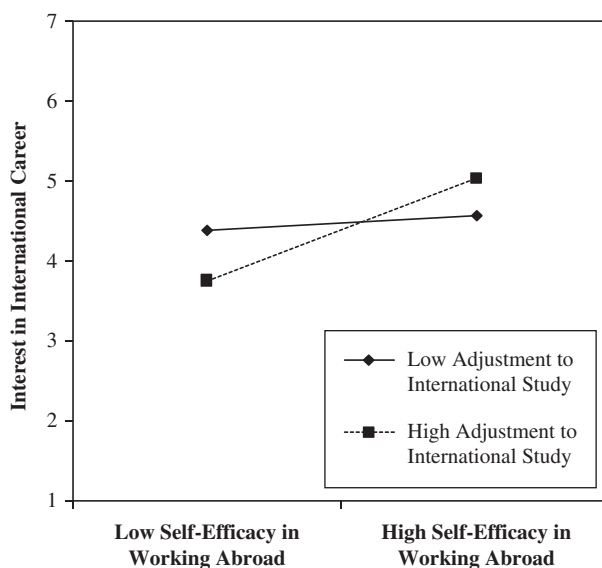


Figure 3. The moderating effect of adjustment on the relationship of self-efficacy with interest.

With respect to the moderation hypotheses, perceived family pressure to return failed to moderate the relationship of self-efficacy and outcome expectancy with interest ($\beta = 0.06$, ns, and -0.07 , ns, respectively), meaning that both parts of H7 were unsupported. On the other hand, adjustment to the international study experience had a significant moderating effect on the relationship between self-efficacy and interest ($\beta = 0.15$, $p < 0.05$). This result was interpreted using the procedure suggested by Aiken and West (1991), and the plot is shown in Figure 3. The strongest interest was expressed by those who reported high adjustment and strong self-efficacy, lending support to H8. It should be noted that the lowest interest was reported by those with high adjustment and low self-efficacy.

For reasons of elegance and clarity, a final model was prepared to include only significant paths. The model, which is presented in Figure 4, demonstrated an excellent data fit [Satorra–Bentler scaled χ^2 (58, $N = 139$) = 61.6, ns; CFI = 0.990; IFI = 0.992; RMSEA = 0.021]. The retained path coefficients revealed an identical pattern to the original path model (Figure 2).

Finally, a number of alternative models, which covered virtually all potential variable orderings, were tested. Among them were a model with the entirely reverse causality order of our proposed model (i.e. interest in self-expatriation as the exogenous variable on the left-hand side), and a model with the individual factors (self-efficacy and outcome expectancy) as exogenous variables. All of these models (seven in number) had poor data-fitting properties (range of Satorra–Bentler scaled χ^2 = 85.6–144.3, all $p < 0.001$; range of CFI = 707–864; range of IFI = 743–872; range of RMSEA = 0.13–0.09).

Discussion

The aim of the research was to develop a comprehensive model of factors, along with their interplay, that shape the interest of international graduate students in pursuing international careers. These students are a significant population, whose decisions as to

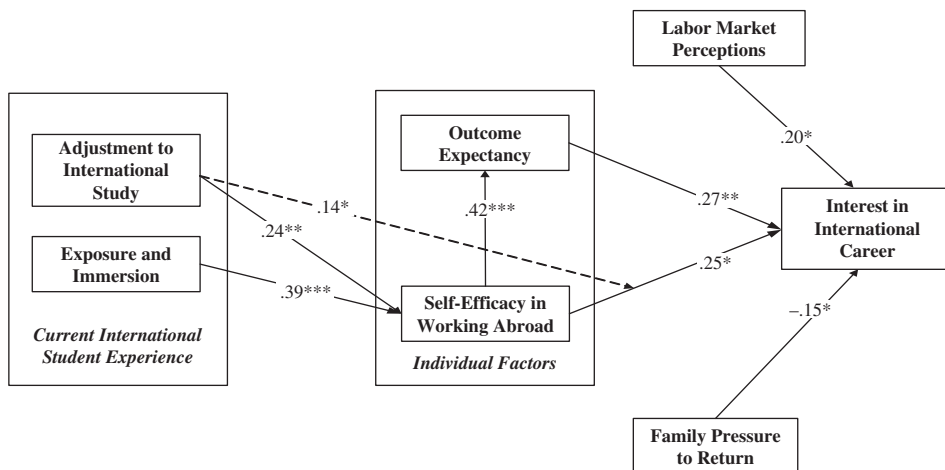


Figure 4. The final causal-path model that includes only significant paths. Notes: For reasons of simplicity, the control variables and error variances are not shown in this path diagram. Standardized parameter estimates are reported. Satorra–Bentler scaled χ^2 (58, $N = 139$) = 61.6, $p > 0.10$; CFI = 0.990; IFI = 0.992; RMSEA = 0.021. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

whether they will return home or pursue a career abroad after completion of their studies is of substantive interest to all of the parties involved, and especially to host country firms, governments and education institutions. The model included experiential, individual and perceived constraint factors, and was generally vindicated by the results. The findings attested to the important role of experiential factors, such as the experience acquired during graduate work in the host country. In addition, the study lends further support to the validity of SCCT by providing evidence on its applicability in the context of decisions made concerning an international career by individuals who are pursuing graduate studies abroad. There is, however, one caveat: the findings suggest a role for family pressure in the shaping of interest, which is somewhat at odds with the secondary role assigned to perceived constraints by the proponents of SCCT (Lent et al. 2000). Furthermore, the findings vindicate the push/pull idea, because the combination of perceptions of strong employment opportunities abroad with weak opportunities back home was directly related to an enhanced interest in staying and working abroad. Finally, the model indicated a dynamic relationship between the factors.

The degree to which international graduate students felt adjusted during their studies contributed to the shaping of their tendency to pursue international careers. Adjustment during the experience as a graduate student reflects the extent to which the foreign country is viewed as welcoming and as offering high-quality education services. As noted, in the global war for talent, governments of countries that are popular education destinations have implemented schemes to entice high-caliber foreign graduate students to stay and work there. As a consequence, relevant retention schemes will have a higher probability of success if a concerted effort is made in a variety of domains, including the quality of experience that higher education establishments offer to students from abroad and the way those students are integrated into the foreign university community. Surprisingly, higher education institutions in countries that are traditional providers of graduate education have apparently not paid enough attention to the issue (e.g. Sherry, Thomas and Chui 2010; Kim 2011; Henning, Krageloh, Moir, Doherty and Hawken 2012), even though integration

programs for international students are available and pilot research indicates that they pay dividends when properly implemented (Guo and Chase 2011). However, education establishments do not exist in a vacuum; governments and host country firms should work in tandem with those providing an education to international graduate students so that they are able to deliver the experience that these students expect (for example, quality internships). Such an approach should also seek to smooth the adaptation process and provide a pleasant environment during graduate work. Indeed, some suggest that the process of integration should start before students leave their home country, and must include preparation programs delivered by the host nation and its institutions (Cetinkaya-Yildiz, Cakir and Kondakci 2011).

The importance of adjustment was further highlighted by the results of the moderation testing, not only because they suggested that adjustment magnifies the relationship between self-efficacy and interest, but particularly because they indicated that a lack of adjustment renders self-efficacy ineffective in creating interest in an international career. This pattern grants a key role to adjustment, which means that special attention should be paid to it by host country firms and governments in their endeavors to retain international graduate students, and perhaps international students in general, upon their graduation.

Previous exposure and immersion to the international environment was also associated with a propensity toward undertaking an international career. In fact, its effect was stronger than that of adjustment during graduate work. Exposure and immersion reflects experiences that mainly occur before graduate studies in the host country. Such experiences have more time to consolidate in the memory, and this may be the reason why they contribute more to an interest in staying and working abroad.

Those international graduate students who held stronger self-efficacy beliefs in terms of dealing with the challenges of living and working in a foreign country, and expected better overall outcomes from staying abroad to work, were more positive toward an international career. The importance of self-efficacy and outcome expectancy was reiterated by two more findings. The first of these was the failure of perceived family pressure to moderate the relationship with interest. This means that those who held strong self-efficacy beliefs and expectations of substantial benefits from working abroad were not deterred by links and obligations back home. Second, the effects of adjustment and exposure and immersion were exerted exclusively via self-efficacy in working abroad. Self-efficacy and outcome expectancy have a central role in SCCT, and also appear to play a part in the propensity of domestic students to make career moves abroad (see Tharenou 2008). The present work suggested a central role for these factors, and especially for self-efficacy, in the development of a propensity toward having an international career by those who have already made the transition abroad to obtain advanced degrees. Self-efficacy is the cornerstone of personal agency (Bandura 2001), and the logical explanation for its emergence as a pivotal factor in the present work is because living and working in a foreign country are normally a challenging endeavor.

With respect to host country efforts in seeking to retain quality foreign graduate students, the substantial effect of outcome expectancy implies that host nations should carefully manage the outcome expectations of potential international careerists. If anticipated valued outcomes are not realized, retaining these talented foreigners and keeping them motivated may be difficult, while other potentially worse outcomes, such as cynicism toward the host country and its institutions, may also develop. In fact, some preliminary findings suggest that such expectations may not be properly managed, as foreigners employed in highly skilled occupations in developed countries tend to report lower job satisfaction than their native counterparts (Sabharwal 2011). Therefore,

notwithstanding their desire to retain international graduate students, host country governmental agencies and firms should take care to not create unrealistic expectations. Research in the expatriation domain suggests that forming realistic predeparture expectations about the difficulty to adapt increases the likelihood that these are met or exceeded during the assignment, which in turn favors adaptation, and vice versa (e.g. see Caligiuri, Phillips, Lazarova, Tarique and Burgi 2001). Although extrapolation to international graduate students may not be absolutely safe, the importance of creating realistic expectations and trying to meet these is clear.

Finally, the negative effect of family pressure on interest should be viewed in conjunction with the corresponding descriptive statistic, which indicated that the participants attached considerable importance to that factor. This contrasts the tentative conclusion of Lent et al. (2000) that individuals generally overlook constraints. These authors developed their theory as a general theory of career interest and choice. However, the present findings do suggest that the theory may need to be adapted according to contextual and population features. International graduate students find themselves in substantial geographical distance from their families and have already experienced the effects of that separation during their studies. Staying abroad will prolong the separation with all its inherent consequences, both emotional and practical. It appears, therefore, natural that family constraints operate as a deterrent to international career considerations. This may not be the case in decisions about domestic moves (e.g. moving to another location within the same country). It may likewise not be the case with the kinds of decisions that SCCT has mostly focused on so far, such as choice of education major or occupation. This highlights the potential importance of context, and is another contribution of the present work.

Limitations and future directions

The model in this research was developed with theory and logic in mind, and demonstrated very satisfactory data-fitting properties. In addition, no alternative causal model showed acceptable data-fitting. However, the fact remains that the data were collected at a single point in time, and only studies with multiple measurement points are able to remove all doubt about causal order (e.g. see Bozionelos 2003). As an illustration, there is some likelihood that exposure and immersion and interest in an international career simply co-vary but they are not causally linked. Both of them may represent manifestations of a general interest or preference for internationally oriented experiences. Appropriately designed longitudinal studies should allow us to look at such issues.

The use of self-reports raises the possibility of common method bias and self-generated validity. Nevertheless, precautions were taken to protect from these phenomena. Furthermore, the extensive testing conducted was overwhelmingly negative with respect to the presence of common method effects. It should also be noted that the factors in the model represented individuals' own perceptions and beliefs, and self-reports arguably represent the most appropriate method to tap these (see Spector 1994, 2006).

What the model predicts is in essence the intentions of international graduate students to pursue career moves outside their home country. Intentions are not actual behaviors, but they are good predictors of them (Kraus 1995; Sutton 1998), especially when formed by direct experience, as in the present work (Glasman and Albarracín 2006). Nonetheless, various elements and events may intervene to prevent intentions from being translated into actual behavioral outcomes (Ajzen and Fishbein 2005). Accordingly, factors that are beyond the control of graduate students may impede the conversion of interest into

actually pursuing a career abroad. These may include, for example, whether students will be able to obtain work permits and whether they will be able to find a position that meets their career aspirations. As a consequence, future research should extend the model to include factual outcomes.

Dispositional factors, which are not part of SCCT, may further help us to understand tendencies toward having an international career. Such factors include personality traits. For example, extraversion and emotional stability relate to the development of self-efficacy (Gerhardt and Brown 2006). This means that these traits may impact the interest of international graduate students in living and working abroad via their effects on self-efficacy. In fact, expatriates who score higher on extraversion and emotional stability are less likely to express an intention to prematurely terminate their assignments (Caligiuri 2000). Although international students are different from expatriates, and interest in an international career is also different from a desire to abort an international assignment, this implies that the above contemplation may hold true. Future research could therefore also take into account the impact of personality.

The present work revealed a role for constraints, in the form of perceived family pressure to return, in a deviation from the views expressed within SCCT. Future research should delve more deeply into contextual and population characteristics as determinants of the role of barriers in the shaping of interest in international careers. Whether perceptions of constraints acquire weight only under certain circumstances or for particular populations (for example, most of the participants in the present study came from collectivistic cultures where family ties play a central role) is an important issue that needs to be clarified by future research.

Finally, international careers take various forms that we are gradually coming to understand (Shaffer, Kraimer, Chen and Bolino 2012; Baruch et al. 2013). These forms differ substantially (e.g. short vs. long term, amount of travel involved, where the individual is physically based). Subsequently the weighting of factors and their interplay may differ according to the content of the international career. For example, there is some evidence that people judge international assignments differently according to whether they are short or long term (Konopaske, Robie and Ivancevich 2005). This could mean that an international career comprised of multiple short-term assignments may be viewed differently than a career that requires long-term relocation in a distant culture. Future research could therefore adopt a more fine-grained approach and seek to adapt the model to fit particular career types. Similarly, adjustment to the foreign culture and ways of living is apparently multidimensional (Haslberger, Brewster and Hippler 2013). The same may hold in the case of international graduate students' adjustment to their studies abroad. Its dimensions may affect interest toward international careers through variant routes (e.g. by impacting different intervening factors), and this is something that future research can also investigate.

References

- Adler, N.J. (1986), 'Do MBAs Want International Careers?' *International Journal of Intercultural Relations*, 10, 277–300.
- Aiken, L., and West, S. (1991), *Multiple Regression: Testing and Interpreting Interactions*, Newbury Park, CA: Sage.
- Ajami, R.A., Cool, K., Goddard, G.J., and Khambata, D. (2006), *International Business: Theory and Practice* (2nd ed.), Armonk, NY: M.E. Sharpe.
- Ajzen, I., and Fishbein, M. (2005), 'The Influence of Attitudes on Behavior,' in *The Handbook of Attitudes*, eds. D. Albarracín, B.T. Johnson, and M.P. Zanna, Mahwah, NJ: Erlbaum, pp. 173–221.

- Al Ariss, A., and Crowley-Henry, M. (2013), 'Self-Initiated Expatriation and Migration in the Management Literature: Present Theorizations and Future Research Directions,' *Career Development International*, 18, 78–96.
- Al Hazmi, A., and Nyland, B. (2013), 'The Saudi Arabian International Student Experience: From a Gender-Segregated Society to Studying in a Mixed-Gender Environment,' *Compare: A Journal of Comparative and International Education*, 43, 346–365.
- Ali, S.R., and McWhirter, E.H. (2006), 'Rural Appalachian Youth's Vocational/Educational Postsecondary Aspirations: Applying Social Cognitive Career Theory,' *Journal of Career Development*, 33, 87–111.
- Alicke, M.D., and Sedikidis, C. (2009), 'Self-Enhancement and Self-Protection: What They are and What They Do,' *European Review of Social Psychology*, 20, 1–48.
- Bandura, A. (1977), 'Self-Efficacy: Toward a Unifying Theory of Behavioral Change,' *Psychological Review*, 84, 191–215.
- Bandura, A. (1982), 'The Psychology of Chance Encounters and Life Paths,' *American Psychologist*, 37, 747–755.
- Bandura, A. (1986), *Social Foundations of Thought and Action: A Social Cognitive Theory*, Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1997), *Self-Efficacy: The Exercise of Control*, New York: Freeman.
- Bandura, A. (2001), 'Social Cognitive Theory: An Agentic Perspective,' *Annual Review of Psychology*, 52, 1–26.
- Bandura, A. (2002), 'Social Foundations of Thought and Action,' in *The Health Psychology Reader*, ed. D.F. Marks, London: Sage, pp. 94–106.
- Bartlett, C.A., Ghoshal, S., and Beamish, P. (2007), *Transnational Management: Text, Cases, and Readings in Cross-Border Management* (5th ed.), London: McGraw-Hill.
- Baruch, Y., and Bozionelos, N. (2010), 'Career Issues,' in *APA Handbook of Industrial and Organizational Psychology, Volume 2: Selecting & Developing Members of the Organization*, ed. S. Zedeck, Washington DC: American Psychological Association, pp. 67–113.
- Baruch, Y., Budhwar, P.S., and Khatri, N. (2007), 'Brain Drain: Inclination to Stay Abroad After Studies,' *Journal of World Business*, 42, 99–112.
- Baruch, Y., Dickmann, M., Altman, Y., and Bournois, F. (2013), 'Exploring International Work: Types and Dimensions of Global Careers,' *The International Journal of Human Resource Management*, 24, 2369–2393.
- Beechler, S., and Woodward, I.C. (2009), 'The Global "War for Talent",' *Journal of International Management*, 15, 273–285.
- Bentler, P.M. (2004), *EQS 6 Structural Equations Program Manual*, Encino, CA: Multivariate Software.
- Bentler, P.M., and Chou, C.P. (1988), 'Practical Issues in Structural Modeling,' in *Common Problems/Proper Solutions: Avoiding Error in Quantitative Research*, ed. J.S. Long, Newbury Park, CA: Sage, pp. 161–192.
- Bhaskar-Shrinivas, P., Harrison, D.A., Shaffer, M.A., and Luk, D.M. (2005), 'Input-Based and Time-Based Models of International Adjustment: Meta-Analytic Evidence and Theoretical Extensions,' *Academy of Management Journal*, 48, 257–281.
- Black, J.S., Mendenhall, M., and Oddou, G. (1991), 'Towards a Comprehensive Model of International Adjustment: An Integration of Multiple Theoretical Perspectives,' *Academy of Management Review*, 16, 291–317.
- Bode, C., Wagner, S.M., Petersen, K.J., and Ellram, L.M. (2011), 'Understanding Responses to Supply Chain Disruptions: Insights From Information Processing and Resource Dependence Perspectives,' *Academy of Management Journal*, 54, 833–856.
- Bollen, K.A. (1989), *Structural Equations With Latent Variables*, New York: Wiley.
- Bozionelos, N. (2003), 'Causal Path Analysis: What it Does and What it Does Not Tell Us,' *Career Development International*, 8, 5–11.
- Brookfield Global Relocation Services (2011), *Global Relocation Trends: 2011 Survey Report*, Chicago, IL: Brookfield Global Relocation Services.
- Brookfield Global Relocation Services (2012), *Global Relocation Trends: 2012 Survey Report*, Chicago, IL: Brookfield Global Relocation Services.
- Caligiuri, P. (2000), 'The Big-Five Personality Characteristics as Predictors of Expatriate's Desire to Terminate the Assignment and Supervisor-Rated Performance,' *Personnel Psychology*, 53, 67–78.

- Caligiuri, P., Phillips, J., Lazarova, M., Tarique, I., and Burgi, P. (2001), 'The Theory of Met Expectations Applied to Expatriate Adjustment: The Role of Cross-Cultural Training,' *The International Journal of Human Resource Management*, 12, 357–372.
- Cerdin, J.-L., and Le Pargneux, M. (2009), 'Career and International Assignment Fit: Toward an Integrative Model of Success,' *Human Resource Management*, 48, 5–25.
- Cetinkava-Yildiz, E., Akir, S.G., and Kondakci, Y. (2011), 'Psychological Distress Among International Students in Turkey,' *International Journal of Intercultural Relations*, 35, 534–539.
- Chandon, P., Morwitz, V.G., and Reinartz, W.J. (2005), 'Do Intentions Really Predict Behavior? Self-Generated Validity Effects in Survey Research,' *Journal of Marketing*, 69, 1–14.
- Chang, S.-J., Van Witteloostuijn, A., and Eden, L. (2010), 'From the Editors: Common Method Variance in International Business Research,' *Journal of International Business Studies*, 41, 178–184.
- Chellaraj, G., Maskus, K.E., and Mattoo, K. (2008), 'The Contribution of International Graduate Students to US Innovation,' *Review of International Economics*, 16, 444–462.
- Choi, B.Y., Park, H., Yang, E., Lee, S.K., Lee, Y., and Lee, S.M. (2012), 'Understanding Career Decision Self-Efficacy: A Meta-Analytic Approach,' *Journal of Career Development*, 39, 443–460.
- Chung, S.H., Schwager, P.H., and Turner, D.E. (2002), 'An Empirical Study of Students' Self-Efficacy: Differences Among Four Academic Disciplines at a Large University,' *Journal of Computer Information Systems*, 42, 1–6.
- Clark, T.R., Freedman, S.B., Croft, A.J., Dalton, H.E., Luscombe, G.M., Brown, A.M., Tiller, D.J., and Frommer, M.S. (2013), 'Medical Graduates Becoming Rural Doctors: Rural Background Versus Extended Rural Placement,' *Medical Journal of Australia*, 11, 779–782.
- Cohen, J., Cohen, P., West, S.G., and Aiken, L.S. (2003), *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences* (3rd ed.), Mahwah, NJ: Lawrence Erlbaum.
- Collings, D.G., Scullion, H., and Dowling, P.J. (2009), 'Global Staffing: A Review and Thematic Research Agenda,' *The International Journal of Human Resource Management*, 20, 1253–1272.
- Cooke, R., and Sheeran, P. (2004), 'Moderation of Cognition-Intention and Cognition-Behaviour Relations: A Meta-Analysis of Properties of Variables From the Theory of Planned Behaviour,' *British Journal of Social Psychology*, 43, 159–186.
- Doherty, N., Dickmann, M., and Mills, T. (2011), 'Exploring the Motives of Company-Backed and Self-Initiated Expatriates,' *The International Journal of Human Resource Management*, 22, 595–611.
- Dustmann, C., and Weiss, Y. (2007), 'Return Migration: Theory and Empirical Evidence From the UK,' *British Journal of Industrial Relations*, 45, 236–256.
- Echambadi, R., and Hess, J.D. (2007), 'Mean-Centering Does Not Alleviate Collinearity Problems in Moderated Multiple Regression Models,' *Marketing Science*, 26, 438–445.
- Edmonds, M.L. (2010), 'The Lived Experience of Nursing Students Who Study Abroad: A Qualitative Inquiry,' *Journal of Studies in International Education*, 14, 545–568.
- Evan, P., Pucik, V., and Barsoux, J.L. (2002), *The Global Challenge: Frameworks for International Human Resource Management*, New York: McGraw-Hill.
- Faraj, S., and Yan, A. (2009), 'Boundary Work in Knowledge Teams,' *Journal of Applied Psychology*, 94, 604–617.
- Fazio, R.H., Zanna, M.P., and Cooper, J. (1978), 'Direct Experience and Attitude-Behavior Consistency: An Information Processing Analysis,' *Personality & Social Psychology Bulletin*, 4, 48–51.
- Feldman, J.M., and Lynch, J.G. Jr. (1988), 'Self-Generated Validity and Other Effects on Measurement on Belief, Attitude Intention, and Behavior,' *Journal of Applied Psychology*, 73, 421–435.
- Forster, N., and Johnsen, M. (1996), 'Expatriate Management Policies in UK Companies New to the International Scene,' *The International Journal of Human Resource Management*, 7, 179–205.
- Froese, F.J. (2012), 'Motivation and Adjustment of Self-Initiated Expatriates: The Case of Expatriate Academics in South Korea,' *The International Journal of Human Resource Management*, 23, 1095–1112.

- Geddie, K. (2013), 'The Transnational Ties That Bind: Relationship Considerations for Graduating International Science and Engineering Research Students,' *Population, Space, and Place*, 19, 196–208.
- Gerhardt, M.W., and Brown, K.G. (2006), 'Individual Differences in Self-Efficacy Development: The Effects of Goal Orientation and Affectivity,' *Learning and Individual Differences*, 16, 43–59.
- Gianni, M., and Tharenou, P. (2000), 'A Cross-Cultural Study of the Willingness of Graduating Students to Accept Expatriate Assignments,' in *Readings in International Business*, eds. R. Edwards, C. Nyland, and M. Coulthard, Maryborough: Prentice Hall, pp. 337–360.
- Glasman, L.R., and Albarracin, D. (2006), 'Forming Attitudes That Predict Future Behavior: A Meta-Analysis of the Attitude-Behavior Relation,' *Psychological Bulletin*, 132, 778–822.
- Grunert, M.L., and Bodner, G.M. (2011), 'Finding Fulfilment: Women's Self-Efficacy Beliefs and Career Choices in Chemistry,' *Chemistry Education Research and Practice*, 12, 420–426.
- Gungor, N.D., and Tansel, A. (2008), 'Brain Drain From Turkey: The Case of Professionals Abroad,' *International Journal of Manpower*, 29, 323–347.
- Guo, S.B., and Chase, M. (2011), 'Internationalisation of Higher Education: Integrating International Students into Canadian Academic Environment,' *Teaching in Higher Education*, 16, 305–318.
- Hair, J.F., Anderson, R.E., Tatham, R.L., and Black, W.C. (1998), *Multivariate Data Analysis* (5th ed.), Englewood Cliffs, NJ: Prentice Hall.
- Harrison, D.A., Shaffer, M.A., and Bhaskar-Shrinivas, P. (2004), 'Going Places,' *Research in Personnel and Human Resources Management*, 23, 199–247.
- Haslberger, A., Brewster, C., and Hippler, T. (2013), 'The Dimensions of Expatriate Adjustment,' *Human Resource Management*, 52, 333–351.
- Henning, M.A., Krageloh, C., Moir, F., Doherty, I., and Hawken, S.J. (2012), 'Quality of Life of International and Domestic Students Studying Medicine in New Zealand,' *Perspectives on Medical Education*, 1, 129–142.
- Institute of International Education (2013), *Open Doors Data. International Students: Academic Level*, <http://www.iie.org/Research-and-Publications/Open-Doors/Data/International-Students/Academic-Level/2011-13>
- Kim, H.Y. (2011), 'International Graduate Students' Difficulties: Graduate Classes as a Community of Practices,' *Teaching in Higher Education*, 16, 281–292.
- Kline, R.B. (2005), *Principles and Practice of Structural Equation Modeling*, New York: Guilford Press.
- Konopaske, R., Robie, C., and Ivancevich, J.M. (2005), 'A Preliminary Model of Spouse Influence on Managerial Global Assignment Willingness,' *The International Journal of Human Resource Management*, 16, 405–426.
- Kraus, S.J. (1995), 'Attitudes and the Prediction of Behavior: A Meta-Analysis of the Empirical Literature,' *Personality and Social Psychology Bulletin*, 21, 58–75.
- Lee, E. (1966), 'A Theory of Migration,' *Demography*, 3, 44–57.
- Lee, C.-S., and Chao, C.-W. (2013), 'Intention to "Leave" or "Stay" – The Role of Internship Organization in the Improvement of Hospitality Students' Industry Employment Intentions,' *Asia Pacific Journal of Tourism Research*, 18, 749–765.
- Lent, R.W., Brown, S.D., and Hackett, G. (1994), 'Toward a Unifying Social Cognitive Theory of Career and Academic Interest, Choice and Performance,' *Journal of Vocational Behavior*, 45, 79–122.
- Lent, R.W., Brown, S.D., and Hackett, G. (1996), 'Career Development From a Social Cognitive Perspective,' in *Career Choice and Development* (3rd ed.), eds. D. Brown and L. Brooks, San Francisco, CA: Jossey-Bass, pp. 373–421.
- Lent, R.W., Brown, S.D., and Hackett, G. (2000), 'Contextual Supports and Barriers to Career Choice: A Social Cognitive Analysis,' *Journal of Counseling Psychology*, 47, 36–49.
- Lent, R.W., Brown, S.D., Sheu, H.B., Schmidt, J., Brenner, B.R., and Gloster, C.S. (2005), 'Social Cognitive Predictors of Academic Interests and Goals in Engineering: Utility for Women and Students at Historically Black Universities,' *Journal of Counseling Psychology*, 52, 84–92.
- Mosneaga, A., and Winther, L. (2013), 'Emerging Talents? International Students Before and After Their Career Start in Denmark,' *Population, Space, and Place*, 19, 181–195.
- OECD-UNDESA (2013), *World Migration in Figures*, Paris: OECD-UNDESA.
- Oosterbeek, H., and Webbink, D. (2011), 'Does Studying Abroad Induce a Brain Drain?' *Economica*, 78, 347–366.

- Peltokorpi, V., and Froese, F.J. (2009), 'Organizational Expatriates and Self-Initiated Expatriates: Who Adjusts Better to Work and Life in Japan?' *The International Journal of Human Resource Management*, 20, 1096–1112.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y., and Podsakoff, N.P. (2003), 'Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies,' *Journal of Applied Psychology*, 88, 879–903.
- Ravenstein, R.G. (1889), 'The Laws of Migration,' *Journal of the Statistical Society of London*, 52, 241–305.
- Rottinghaus, P.J., Larson, L.M., and Borgen, F.H. (2003), 'The Relation of Self-Efficacy and Interests: A Meta-Analysis of 60 Samples,' *Journal of Vocational Behavior*, 62, 221–236.
- Rowthorn, R. (2008), 'The Fiscal Impact of Immigration on the Advanced Economies,' *Oxford Review of Economic Policy*, 24, 561–581.
- Sabharwal, M. (2011), 'High-Skilled Immigrants: How Satisfied are Foreign-Born Scientists and Engineers Employed at American Universities?' *Review of Public Personnel Administration*, 31, 143–170.
- Scholz, U., Sniehotta, F.F., Schuz, B., and Oeberst, A. (2007), 'Dynamics of Self-Regulation: Plan Execution Self-Efficacy and Mastery of Action Plans,' *Journal of Applied Social Psychology*, 37, 2706–2725.
- Selmer, J., and Luring, J. (2011), 'Acquired Demographics and Reasons to Relocate Among Self-Initiated Expatriates,' *The International Journal of Human Resource Management*, 22, 2055–2070.
- Shaffer, M.A., Kraimer, M.L., Chen, Y.-P., and Bolino, M.C. (2012), 'Choices, Challenges, and Career Consequences of Global Work Experiences: A Review and Future Agenda,' *Journal of Management*, 38, 1282–1327.
- Sherry, M., Thomas, P., and Chui, W.H. (2010), 'International Students: A Vulnerable Student Population,' *Higher Education*, 60, 33–46.
- Sheu, H.-B., Lent, R.W., Brown, S.D., Miller, M.J., Hennessy, K.D., and Duffy, R.D. (2010), 'Testing the Choice Model of Social Cognitive Career Theory Across Holland Themes: A Meta-Analytic Path Analysis,' *Journal of Vocational Behavior*, 76, 252–264.
- Soon, J.-J. (2012), 'Home is Where the Heart is? Factors Determining International Students' Destination Country Upon Completion of Studies Abroad,' *Journal of Ethnic and Migration Studies*, 38, 147–162.
- Spector, P.E. (1994), 'Using Self-Report Questionnaires in OB Research: A Comment on the Use of a Controversial Method,' *Journal of Organizational Behavior*, 15, 385–392.
- Spector, P.E. (2006), 'Method Variance in Organizational Research: Truth or Urban Legend?' *Organizational Research Methods*, 9, 221–232.
- Sutton, S. (1998), 'Predicting and Explaining Intentions and Behaviour: How Well are We Doing?' *Journal of Applied Social Psychology*, 28, 1317–1338.
- Suutari, V., and Brewster, C. (2000), 'Making Their Own Way: International Experience Through Self-Initiated Foreign Assignments,' *Journal of World Business*, 35, 417–436.
- Suutari, V., Tornikoski, C., and Makela, L. (2012), 'Career Decision Making of Global Careerists,' *The International Journal of Human Resource Management*, 23, 3455–3478.
- Tharenou, P. (2003), 'The Initial Development of Receptivity to Working Abroad: Self-Initiated International Work Opportunities in Young Graduate Employees,' *Journal of Occupational and Organizational Psychology*, 76, 489–515.
- Tharenou, P. (2008), 'Disruptive Decisions to Leave Home: Gender and Family Differences in Expatriation Choices,' *Organizational Behavior and Human Decision Processes*, 105, 183–200.
- UK Council for International Student Affairs (2014), *International Student Statistics: UK Higher Education*, [http://www.ukcisa.org.uk/Info-for-universities-colleges-schools/Policy-research-statistics/Research-statistics/International-students-in-UK-HE/#International-\(non-UK\)-students-in-UK-HE-in-2012-13](http://www.ukcisa.org.uk/Info-for-universities-colleges-schools/Policy-research-statistics/Research-statistics/International-students-in-UK-HE/#International-(non-UK)-students-in-UK-HE-in-2012-13)
- Vance, C.M. (2005), 'The Personal Quest for Building Global Competence: A Taxonomy of Self-Initiating Career Path Strategies for Gaining Business Abroad,' *Journal of World Business*, 40, 374–385.
- Vroom, V. (1964), *Work and Motivation*, New York: Wiley.
- Wang, B.C.Y., and Bu, N. (2004), 'Attitudes Toward International Careers Among Male and Female Canadian Business Students After 9–11,' *Career Development International*, 9, 647–672.

- Waung, M., Macneil, M., and Vance, R.J. (1995), 'Reactions to Feedback in Goal Choice and Goal Change Processes,' *Journal of Applied Social Psychology*, 25, 1360–1390.
- Weber, M., Ruch, W., Littman-Ovadia, H., Lavy, S., and Gai, O. (2013), 'Relationships Among Higher-Order Strengths Factors, Subjective Well-Being, and General Self-Efficacy: The Case of Israeli Adolescents,' *Personality and Individual Differences*, 55, 322–327.
- Weiss, D., Freund, A.M., and Wiese, B.S. (2012), 'Mastering Developmental Transitions in Young and Middle Adulthood: The Interplay of Openness to Experience and Traditional Gender Ideology on Women's Self-Efficacy and Subjective Well-Being,' *Development Psychology*, 48, 1774–1784.
- Willard, G., and Gramzow, R.H. (2009), 'Beyond Oversights, Lies, and Pies in the Sky: Exaggeration as Goal-Protection,' *Personality and Social Psychology Bulletin*, 35, 477–492.
- Workpermit.com (2012), *Highly Skilled Migrant Programme (HSMP)*, http://www.workpermit.com/uk/highly_skilled_migrant_program.htm



Mentoring receipt and personality: Evidence for non-linear relationships[☆]

Nikos Bozionelos^{a,*}, Giorgos Bozionelos^{b,1}, Panagiotis Polychroniou^{c,2}, Kostantinos Kostopoulos^{d,3}

^a Audencia - PRES LUNAM, School of Management, 8 route de la Jonelière, B.P. 31222, 44312 Nantes, France

^b Psychiatric Hospital of Petra Olympou, Katerini, 60100, Greece

^c Department of Business Administration, University of Patras, 26110, Patras, Greece

^d Department of People Management, EADA Business School, 204 Calle Aragon, 08011, Barcelona, Spain

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ABSTRACT

The research investigates the relationship of the Big-Five of personality with mentoring receipt with the use of two independent studies. The findings of the studies show substantial consistency. Equations of quadratic form describe half of the tested relationships better than linear equations. The association of openness to experience and agreeableness with mentoring receipt is of inverted U-shape. The benefits of being open and agreeable for mentoring receipt cease to exist at high values of these traits. On the other hand, emotional stability and conscientiousness demonstrate exclusively positive linear relationships with mentoring receipt. The form of the relationship of extraversion differs between the two studies, but the overall trend is positive. The substantial quadratic component in the association of personality with receipt of mentoring means that research hitherto may be grossly underestimating the effects of personality on developmental relationships because earlier studies assume strictly linear associations. Parts of the results also imply that the associations of certain personality traits with mentoring receipt may depend upon the occupational context.

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1. Introduction

Mentoring in the work place is a developmental relationship between two individuals, the mentor and the protégé. Within that relationship the mentor provides a variety of career-related (e.g., challenging assignments, exposure and visibility, and coaching) and socioemotional (e.g., friendship, counseling and role modeling) functions for the protégé (Kram, 1985). Substantial empirical research on mentoring in the past quarter of a century demonstrates its connection with outcomes that are of benefit to individuals, including career success of protégés (e.g., Allen, Eby, Poteet, Lentz, & Lima, 2004) or mentors (Allen, Lentz, & Day, 2006; Bozionelos, 2004a); firms, including work attitudes of protégés and mentors (e.g., Bozionelos, Kostopoulos, & Polychroniou, 2011; Dawley, Andrews, &

Bucklew, 2010; Lentz & Allen, 2009; Richard, Ismail, Bhuian, & Taylor, 2009); or both individuals and organizations, as mentoring receipt relates to better learning results for protégés (Lankau & Scandura, 2002).

Apart from outcomes, however, antecedents of mentoring are also important. For example, identification of individual characteristics that increase the likelihood of mentoring receipt can contribute towards advice and development programs to assist those with deficits in those features. Personality is an individual characteristic that deserves attention in this sense. Mentoring reflects interpersonal processes. Personality influences such processes (Wiggins & Trapnell, 1996) and, hence, personality traits must play a role in mentoring receipt (Tokar, Fischer, & Subich, 1998; Turban & Lee, 2007). In particular, personality manifests itself through motives and behaviors (e.g., Winter, John, Stewart, Kohnen, & Duncan, 1998). These should affect receipt of mentoring both because of actions of protégés (e.g., actively approaching a mentor in order to enhance their own image or seeking the views of an existing mentor in order to satisfy their inquisitiveness) and because of actions of mentors towards protégés (e.g., an industrious employee may attract a mentor or a mentor may prefer to provide more advice to a receptive than to a non-receptive protégé).

The idea that personality plays substantial part in interpersonal processes and outcomes, such as mentoring receipt, adheres to the dispositional perspective to organizational behavior (e.g., see Staw, Bell, & Clausen, 1986; Staw & Cohen-Charash, 2005). The dispositional view

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* Corresponding author. Tel.: +33 240373434.

E-mail addresses: nbozionelos@audencia.com (N. Bozionelos), gbozionelos@gmail.com (G. Bozionelos), panpol@upatras.gr (P. Polychroniou), kkostopoulos@eada.edu (K. Kostopoulos).

¹ Tel.: +30 2351350730.

² Tel.: +30 2610997656.

³ Tel.: +34 934520844.

asserts that enduring dispositional traits, such as personality, determine individual outcomes across situations and settings, and through time. With respect to the present theme, this means that individuals with similar personality profiles must show consistency across settings and over time in the extent to which they receive mentoring. Hence, information on one's personality can enable the informed prediction of whether this individual will develop mentoring relationships.

However, despite the importance of the issue, empirical research on the link between mentoring receipt and personality is limited, as authors stress (Dougherty, Cheung, & Florea, 2007; Turban & Lee, 2007). Most importantly, extant research, albeit certainly contributory, has two drawbacks. First, that research is inconsistent in utilization of personality framework. Existing studies utilize a variety of frameworks, including the instrumentality-expressiveness (Fagenson, 1989; Kirchmeyer, 2002; Scandura & Ragins, 1993) and the needs model (Fagenson, 1992; Fagenson-Eland & Baugh, 2001), isolated traits (Allen et al., 2009; Wang, Tomlinson, & Noe, 2010) or collections of isolated traits (Aryee, Lo, & Kang, 1999; Turban & Dougherty, 1994). This hinders the extraction of parsimonious conclusions because of different degrees of compatibility between personality frameworks and overlap between their traits. For example, extant studies employ the traits of instrumentality, locus of control, Type A personality, need for power, and self-monitoring. These traits overlap in various degrees (e.g., Lippa & Connely, 1990; Morrison, 1997). However, neither do these traits refer to the same construct, nor do they share the same characteristics, nor do they overlap to the same degree. Therefore, utilization of a single personality framework that contains mutually orthogonal traits and provides a comprehensive description of human personality will improve clarity and enhance understanding.

Second, research so far investigates only relationships of linear nature between personality and mentoring receipt. However, the presence of curvilinear relationships is within reason. Ignoring the presence of curvilinearity can lead to erroneous conclusions over the nature and magnitude of associations (e.g., Iversen, Malchow-Moller, & Sorensen, 2010; Trevor, Gerhart, & Boudreau, 1997), and that includes associations between personality and its outcomes (Vasilopoulos, Cucina, & Hunter, 2007). These limitations suggest that additional investigations on the subject may be beneficial.

2. The present research

The research here investigates the relationship between personality and mentoring receipt from both a linear and a quadratic (in particular, inverted U-shaped) perspective with the utilization of the Big-Five personality framework. The Big-Five, which contains the five mutually orthogonal traits of emotional stability, extraversion, openness to experience (hereinafter "openness"), agreeableness and conscientiousness, has accumulated extensive empirical support on its validity (e.g., Digman, 1990; Goldberg, 1993; McCrae & Costa, 1996; Wiggins & Trapnell, 1997).

Furthermore, the Big-Five possesses the critical properties of parsimony and comprehensiveness, because the model describes human personality in terms of a manageable number of traits that encompass virtually every aspect of the personality sphere (see, for example, Ashton, Lee, & Goldberg, 2004; O'Connor, 2002). In addition, the structure of the Big-Five is robust across cultures (McCrae & Costa, 1997; Schmitt et al., 2007). This signifies that conclusions on the relationship between personality and mentoring within a particular culture can serve as reference point in the consideration of that relationship within other national cultural contexts. This is of importance in light of the state of globalization today (e.g., Al Ariss, 2010).

Because of the above critical properties, the Big-Five holds the status of the most acceptable trait personality theory (Barrick, Mount, & Judge, 2001; John, Naumann, & Soto, 2008). An illustration of its widespread acceptance as parsimonious descriptor of human personality is that serious criticisms of its validity and comprehensiveness virtually ceased

after the mid 1990s (see review by John et al., 2008). This recognition accompanies the model in organizational research too, where authors use the Big-Five as the personality framework of reference (see, for example, Ones, Dilchert, Viswesvaran, & Judge, 2007).

To illustrate, meta-analytic research employs the Big-Five to conclude on the link of personality with a host of processes and outcomes in the work environment, ranging from key constructs such as job performance (Barrick et al., 2001; Chiaburu, Oh, Berry, Li, & Gardner, 2001), work motivation (Judge & Ilies, 2002), work attitudes (Judge, Heller, & Mount, 2002), and leadership (Judge, Bono, Ilies, & Gerhardt, 2002) to less prominent constructs, such as entrepreneurial intentions (Zhao, Seibert, & Lumpkin, 2010). Therefore, utilization of the Big-Five taxonomy when investigating the relationship of mentoring receipt with protégés' personality will maximize the contribution of the research (see also Turban & Lee, 2007).

2.1. Conceptualization and measurement of mentoring receipt

For validity purposes researchers must clearly define the type of mentoring relationship the research focuses on (Allen, Eby, O'Brien, & Lentz, 2008; Haggard, Dougherty, Turban, & Wilbanks, 2011). This step is necessary because forms of mentoring relationships (e.g., formal, informal, vertical and horizontal) vary in terms of dynamics (Allen et al., 2008); which means that simultaneous consideration of various types of mentoring increases the likelihood of confounding. In the present research the focus is exclusively on informal traditional mentoring, which refers to a naturally evolving developmental relationship between two members of the same organization who are of unequal status. The reasons are the following: first, informal traditional mentoring represents the prototype mentoring relationship (e.g., Eby, 1997; Higgins & Kram, 2001); second, as they evolve naturally such relationships are more likely to reveal the role of personality. This is because effects of personality are most discernible in situations of low external constraints (Whithey, Gellatly, & Annett, 2005). Formal mentoring arrangements, for example, conform to certain rules and regulations, hence, they certainly impose more interactional constraints than informal mentoring relationships; and third, informal mentoring accrues more benefits than formal mentoring (Underhill, 2006). Therefore, informal traditional mentoring must have priority in novel investigations.

The present research conceptualizes and measures mentoring received as the totality of the mentoring experience of the individual. This conceptualization encompasses both whether the individual has ever had relationships with mentors and the amount of mentoring the individual has received in those mentoring relationships.

3. Hypotheses

The development of hypotheses makes use of only those extant studies that employ Big-Five traits (i.e., the studies by Aryee et al., 1999 and by Turban & Dougherty, 1994). The reason is the imperfect fit of non-Big-Five traits into the Big-Five model, which seriously compromises the validity of pertinent conjectures (Hurtz & Donovan, 2000; Salgado, 1997). Hence, in the research at hand development of hypotheses primarily draws upon logical reasoning, and secondarily upon findings of the very limited existing empirical research on personality and mentoring that employs traits of the Big-Five.

Although linear relationships have priority in terms of testing in social sciences, relationships of curvilinear nature also demand consideration, especially when adequate logical underpinning exists (e.g., Jackofsky, 1984; Williams & Livingstone, 1994). The form of non-linear relationship that appears likely in the association between mentoring receipt and personality is the quadratic. Quadratic relationships exist in two forms, U-shaped and inverted U-shaped. U-shaped relationships signify associations that are negative and positive for low and high values of predictor variables, respectively.

Relationships of inverted U-shape display the reverse pattern. The authors have reason to expect that quadratic, and in particular inverted U-shaped, equations describe best the link of mentoring receipt with most of the Big-Five traits.

Emotional stability involves composure, confidence, and low tendencies towards development of anxiety. Low emotional stability (or neuroticism) encompasses suspiciousness, irritability and hostility. Therefore, individuals who score low on emotional stability should hesitate to involve themselves in relationships with mentors because of their general suspiciousness and lack of poise. In line with this reasoning, Turban and Dougherty (1994) find a positive relationship between emotional stability and attempts to initiate relationships with mentors. In addition, mentors should hesitate to approach individuals who score low on emotional stability because mentors allegedly prefer as protégés those who display confidence (Kram, 1985; Melanson, 2009). Furthermore, low emotional stability relates to distancing behavior (Brookings, Zembar, & Hochstetler, 2003). This type of behavior from the part of the protégé should reduce the amount of mentoring the protégé receives.

Hypothesis 1. Emotional stability has a positive linear relationship with mentoring received.

Characteristics of extraversion include sociability, gregariousness, optimism, tendencies towards action, assertiveness and ambition. Extraverts proactively seek social encounters in the work place (e.g., Gruman & Saks, 2011), thus, they must have greater propensity to approach mentors. Indeed, Aryee et al. (1999) report a positive association between extraversion and attempts to initiate relationships with mentors. In addition, Kram (1985) suggests that mentors prefer assertive and outgoing protégés. Hence, they should approach extraverts as protégés because extraverts tend to display these behavioral patterns (John et al., 2008). Furthermore, within mentoring relationships extravert protégés, because of their sociability, would interact more with their mentors and, hence, they would receive more mentoring.

However, although extraversion must generally offer advantage in mentoring receipt, presence of the trait above a certain level may not be of benefit or may even hurt the relationship. For example, high extraversion may bring inability to inhibit socially inappropriate behaviors or to suppress the expression of excessive ambition; which may repulse a potential mentor or render an existing mentor reluctant to fully devote oneself in the relationship. Indeed, extraverts demonstrate lower levels of self-control, that is lower capability to regulate the expression of emotions and impulses that are socially inappropriate (Zabelina, Robinson, & Anicha, 2007); and mentors view negatively protégé behaviors that indicate excessive ambition (Eby & McManus, 2004). Furthermore, mentors may consider that those who display strong extraversion do not need their help. For instance, extraverts are apt at developing networks (Wolff & Kim, 2012). This may make the mentor consider that helping the protégé with functions such as sponsorship, exposure, acceptance and friendship (that network ties also provide) is redundant. This reasoning directs towards the possibility of inverted U-shaped relationship.

Hypothesis 2. An equation of inverted U-shaped curve describes the relationship between extraversion and mentoring received more accurately than a positive linear equation.

Openness encompasses multiplicity of interests, inquisitiveness, information seeking, imagination and creativity. Individuals with higher scores on openness must have greater interest in relationships with mentors because such relationships can expose them to novel perspectives, and can provide them information on their job and the organization. In line with this view, empirical research finds that openness relates to seeking performance feedback from others (Wanberg & Kammeyer-Mueller, 2000). Furthermore, mentors report

more attraction towards protégés who show interest in learning and in exposure to different viewpoints because mentoring such individuals is more likely to satisfy the mentors' need to pass their wisdom (Allen, Poteet, & Burroughs, 1997). Finally, within the relationship those with greater inquisitiveness and orientation towards learning should receive more mentoring.

However, strong openness may act as inhibitor for mentoring receipt. Vivid imagination and a wide range of interests, for example, may render the protégé unable to focus on his or her tasks. Evidence shows that high openness is a disadvantage in tasks that require intense concentration (Rose, Fogg, Helmreich, & McFadden, 1994). This may discourage a potential mentor, or dishearten an existing mentor and make him/her hesitant to commit to the relationship. In line with this conjecture, empirical research shows that mentors evaluate their relationships with protégés negatively when protégés lack focus in their work (Eby & McManus, 2004). Furthermore, within mentoring relationships, protégés with excessive inquisitiveness and multiple interests may experience difficulty to maintain their attention to their mentors, and this should limit the amount of mentoring they receive. In concurrence with this argument, Dougherty et al. (2007) suggest that individuals with high scores on openness have difficulties to dedicate themselves to single intensive developmental relationships, like a relationship with a mentor, and have the tendency to form multiple relationship ties instead. The above points suggest that association of inverted-U-shape is likely.

Hypothesis 3. An equation of inverted U-shaped curve describes the relationship between openness and mentoring received more accurately than a positive linear equation.

Agreeableness encompasses altruism, tender-mindedness, sensitivity to the needs of others, trust and modesty. Due to their trusting and altruistic nature agreeable individuals must be more prone to approach mentors, but also mentors themselves must develop attraction to such individuals. In line with this argument, people are more likely to select as friends those who score high on agreeableness (Selfhout et al., 2010). In addition, within the mentoring relationship, those who score high on agreeableness, due to their sensitive, altruistic and modest disposition, would reciprocate the positive gestures of their mentors.

Indeed, agreeable individuals have the tendency to demonstrate commitment (Spagnoli & Caetano, 2012), and are more likely to act in a trustworthy way and reciprocate positive acts of others (Ben-Ner & Halldorsson, 2010). This must strengthen the involvement of both parties, and increase the amount of mentoring receipt. Finally, protégé trust towards the mentor leads to more mentoring (Chun, Litzky, Sosik, Bechtold, & Godshalk, 2010); hence, due to their trusting disposition those who score high on agreeableness should receive more mentoring once in the relationship.

However, the benefits of agreeableness for mentoring receipt may decrease when levels of the trait become excessive. For example, individuals with high levels of altruism and very strong tendencies for self-sacrifice may assign low priority to their own personal development and careers (Judge, Higgins, Thoresen, & Barrick, 1999); hence, they may overlook opportunities to establish relationships with mentors, or may pay inadequate attention to functions that pertain to career development within the mentoring relationship. In addition, mentors may at points lose their enthusiasm with protégés who display strong agreeableness. This is because, as seen, mentors show more interest in protégés who demonstrate strong career prospects, and agreeable individuals are less likely to achieve hierarchical advancement (Bozionelos, 2004b).

Hypothesis 4. An equation of inverted U-shaped curve describes the relationship between agreeableness and mentoring received more accurately than a positive linear equation.

Conscientiousness encompasses industriousness, reliability, achievement-striving, self-discipline, perseverance and sense of duty. Because of these features conscientiousness is the strongest personality correlate of job performance (Barrick et al., 2001; Ng & Feldman, 2010). Mentors express preference for protégés who display aspects of conscientiousness (e.g., dependability), and for protégés who display actual contextual (e.g., enthusiasm at work) or task performance (Allen, Poteet, & Russell, 2000; Allen et al., 1997). These preferences mean that mentors must approach those who score higher on conscientiousness and, hence, such individuals must have greater likelihood of receiving mentoring.

Indeed, in a longitudinal study, Singh, Ragins, and Tharenou (2009) find that those who are in the fast-track for promotion, and who others presumably view as better performers, are more likely to obtain a mentor. Furthermore, conscientious individuals have a strong orientation towards achievement and self-improvement (e.g., Schuler & Prochaska, 2000). This orientation should dispose them to seek and pay more attention at their mentors' advice and role behaviors, which means that within mentoring relationships conscientious individuals must receive more mentoring.

However, the beneficial effect of conscientiousness for mentoring receipt may discontinue or reverse for strong levels of the trait. Individuals with extreme conscientiousness may focus excessively on task accomplishment and this may lead them to disregard social interaction. Indeed, conscientiousness relates to perfectionism (Egberink, Meijer, & Veldkamp, 2010), which in turn relates to deficits in social interaction (Flett, Hewitt, & DeRosa, 1996). This may reduce probabilities of obtaining a mentor and may also reduce the amount of mentoring receipt within a relationship.

Furthermore, highly industrious and dutiful individuals may over-concern themselves with their duties and tasks, and neglect their social image. In line with this conjecture, those who score high on conscientiousness are more likely to be workaholic (Aziz & Tronzo, 2011). Workaholics, in turn, are more likely to behave in interpersonally destructive ways, such as acting rudely or publicly embarrassing others (Galperin & Burke, 2006), or experience burnout (Guglielmi, Simbula, Schaufeli, & Depolo, 2012), which must deduct from their social image. This may act as deterrent for potential mentors. This may also cause resentment of an existing mentor and spoil the relationship, hence, reduce quantity and quality of mentoring receipt. The above reasoning also directs towards a relationship of inverted-U-shape.

Hypothesis 5. An equation of inverted U-shaped curve describes the relationship between conscientiousness and mentoring received more accurately than a positive linear equation.

4. Overview of studies

Two independent studies investigate the hypotheses. The studies differ only with respect to the nature of the sample and the measurement

of the Big-Five. In both studies, criteria for participant inclusion are identical: (1) Participants are not self-employed; (2) participants are in full-time employment; (3) employing organizations do not have formal mentoring schemes in place; and (4) participants have at least two years of tenure, an adequate interval for the development of a mentoring relationship (e.g., Chao, 1997) and for personality traits to exert detectable effects on social outcomes (Helmreich, Sawin, & Garsrud, 1986).

All measures are identical between the studies apart from the Big-Five measure. The first study assesses the Big-Five with self-reports and the second study with peer reports. This is in line with calls for utilization of multi-source data in mentoring research (Allen et al., 2008). And will also provide information on consistency of relationships with assessment of the Big-Five from different raters.

5. Study 1

5.1. Method

5.1.1. Setting and participants

Participants were 212 individuals (134 women and 78 men) attending advanced courses in management related subjects in a Business School in the north of the United Kingdom. Of 343 respondents, those 212 fulfilled the inclusion criteria. Distribution and completion of the personality measure took place on a different occasion from the rest of the measures.

Descriptive statistics are presented in Table 1. Participants were employed in a variety of occupations and organizational roles (ranging from specialist technical jobs to purely managerial roles), organizational types and industry types. Of the participants, 77.4% were employed in the service industry, a proportion that is very close to the proportion of employees working in the service industry in the UK (Department of Trade and Industry, 2007). The majority of participants were married or co-habiting (57.5%); held at least undergraduate degrees (61.3%); and occupied non-supervisory (32.9%), junior management (20.3%) or middle management (30.7%) positions.

5.2. Measures

5.2.1. Mentoring received

The measurement of mentoring received adheres to accumulated knowledge that mentoring relationships vary widely with respect to the scope and intensity of mentoring functions they provide. In essence, they form a continuum with no mentoring occupying the one end and the full breadth of mentoring functions occupying the other end. Early seminal work (e.g., Kram, 1985; Zey, 1984) implies this variance, which more recent empirical research corroborates. In particular, Ragins, Cotton, and Miller (2000) and Ensher, Thomas, and Murphy (2001) conclude that the breadth and intensity of functions mentoring relationships provide vary widely, and stress that

Table 1
Study 1: descriptive statistics and inter-correlations ($N = 212$).

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	33	7.44	–											
2. Socioeconomic origin	2.4	.99	–.30	–										
3. Educational attainment	4.4	1.14	–.11	.15	–									
4. Starting grade	2.2	1.42	.21	–.07	.18	–								
5. Tenure	6.4	6.32	.50	–.26	–.33	–.24	–							
6. Organizational grade	3.2	1.56	.28	–.12	.10	.63	.14	–						
7. Mentoring received	3.7	.82	–.18	–.16	–.10	–.12	.17	.13	–					
8. Emotional stability	3.5	.62	–.02	.01	–.04	.03	–.08	.13	.04	–				
9. Extraversion	3.7	.45	–.25	.20	.07	–.08	–.19	0	.14	–.31	–			
10. Openness	3.5	.48	.13	.04	.25	.06	–.09	.14	–.10	.07	.02	–		
11. Agreeableness	4.2	.43	–.24	.27	.18	–.32	–.01	.35	.20	–.23	.32	–.02	–	
12. Conscientiousness	3.8	.52	–.09	–.24	–.13	.04	–.04	.13	.18	–.24	.29	–.16	.20	–

Note. Correlations $\geq |.11|$, $|.12|$, $|.16|$, and $|.21|$ are significant at $p < .1$, $p < .05$, $p < .01$, and $p < .001$, respectively.

mentoring relationships are unequal with respect to the amount of mentoring protégés receive (Ragins et al., 2000, p. 1177).

The operationalization of mentoring received in the study at hand incorporates the above knowledge and involves two steps. In the first step, participants are asked to indicate (in a binary “yes” or “no” item) whether they have had at least one mentor during their employment with their current employer, after considering the following definition: “A mentor is generally defined as a higher-ranking and more experienced individual in the work environment who is committed to providing personal or career support to another individual, the protégé. A person's mentor does not have to be one's immediate superior and the relationship needs not to be formally arranged by the organization. Some people have had no mentors while other people have had many different mentors in their careers.”

In the second step, those who respond positively in the first step complete a scale that contains nine items from Dreher and Ash (1990) on a 5-point response format (1: not at all and 5: to a great extent). The scale asks respondents to consider their employment with their current employer and indicate the extent to which “a higher-ranking individual (this need not be limited to one person) who had advanced experience and knowledge” has provided a variety of functions for them. Items cover all nine mentoring functions the literature identifies (e.g., Kram, 1985; Tepper, Shaffer, & Tepper, 1996), including the five career-instrumental functions (e.g., the item “given or recommended you for challenging assignments that presented opportunities to learn new skills?” corresponds to the challenging assignments function), and the four socioemotional functions (e.g., “served as a role model” corresponds to the role modeling function). Cronbach α for this study was .88. A test with a sample of 91 executive MBA students (whose responses were not included in the research reported here) revealed no relationship ($r = .07$, ns) between scores on the scale and scores on the Crowne–Marlowe social desirability scale (Crowne & Marlowe, 1964). This indicates that social desirability does not affect responses to the instrument.

All participants, those who reported that they had had at least one mentor and those who reported that they had had no mentors, were included in the analysis. Scores for the former were set equal to their scores on the scale; and the latter were assigned the minimum possible score on the scale (i.e., nine). That process ensures that measurement of mentoring received is in line with accumulated knowledge, because this method is able to tap variations between individuals in the amount of mentoring they have received, from one or more mentors. This process also accounts for cases of individuals who have had no experience in mentoring receipt, who are assigned the lowest score on the scale. Both studies in the research at hand utilize this method of measuring mentoring received. Some authors have employed analogous, though simpler, operationalizations (Aryee et al., 1999; Bozionelos, 2004a; Bozionelos et al., 2011).

5.2.2. Big-Five traits

These were assessed with the NEO Five-Factor Inventory (Costa & McCrae, 1992) that includes 60 personal statements, 12 for each Big-Five trait, in a 5-point response format (1: strongly disagree and 5: strongly agree). Costa and McCrae (1992) report Cronbach alphas in a range of .68 for agreeableness to .86 for conscientiousness. Alphas for the present sample are .87, .62, .72, .60 and .82 for emotional stability, extraversion, openness, agreeableness and conscientiousness, respectively.

5.2.3. Controls

Single items assessed gender (male: 1 and female: 2); age (in years); educational attainment: CSE or below (coded 1) to Graduate degree (coded 6); marital status (single: 1, co-habiting: 2, and married: 3); tenure (in years); starting and current organizational grade: “subordinate” (coded 1) to “CEO” (coded 7); and staff (coded 1) or line (coded 2) position. An item that asked the socio-economic level of respondents'

family when they were at the age of 15 (upper class: 5 to working class: 1), assessed socio-economic origin. Both studies utilize these controls.

In this study only, single items also assessed organizational size, “below 20” (coded 1) to “more than 1000” (coded 6); sector type (public: 1 and private: 2); and industry type (service: 1 and manufacturing: 2).

5.3. Results

Table 1 presents Pearson correlation coefficients. Hierarchical regression tests the hypotheses. The first step includes the controls. In line with recommendations for detecting quadratic relationships (Cohen, Cohen, West, & Aiken, 2003), the second step contains the first-order terms of scores on the Big-Five traits. The third, and final, step contains the second-order (i.e., squared) terms of scores on the Big-Five traits. In all steps variables enter the equation by forcible entry. The regression makes use of centered scores on Big-Five traits because this assists in the interpretation of results in quadratic equations (Cohen et al., 2003, p. 204). Significance testing uses values from one-tailed distribution due to existence of specific hypotheses. Both studies use the same data-analytic methodology.

Table 2 presents the final regression model. The first-order term ($\beta = .19$, $t = -2.29$, $p < .05$) of emotional stability makes a significant contribution to mentoring received over and above the controls, while the second-order term does not ($\beta = .05$, $t = .53$, ns). The sign of the first-order term indicates a linear positive association that supports Hypothesis 1.

Table 2
Results of hierarchical regressions testing the hypotheses.

	Study 1 (N = 212)		Study 2 (N = 131)	
	β	t value	β	t value
<i>Step 1: forcible entry</i>				
Gender	-.04	-.39	.20	3.53**
Marital status	-.24	-2.76**	.22	3.74***
Age	-.16	-1.98*	-.49	-7.74***
Socioeconomic origin	-.24	-3.39***	.47	9.52***
Educational attainment	-.07	-.96	-.55	-11.16***
Starting grade	-.22	-2.27*	.31	4.26*
Tenure	.10	1.09	.06	.67
Current grade	.43	4.16***	-.51	-5.97***
Staff vs. line	.05	.51	.35	6.07***
Public vs. private	.02	.23		
Services vs. manufacturing	-.02	-.33		
Org. size	-.07	-1.18		
$\Delta R^2/\Delta F$	.221/5.99***		.504/15.7***	
<i>Step 2: forcible entry</i>				
Emotional stability	.19	2.29*	.19	2.26*
Extraversion	.12	1.6†	.11	1.62†
Openness	-.13	-1.85*	.51	10.43***
Agreeableness	.16	1.84*	.17	2.18*
Conscientiousness	.21	2.83**	.06	.81
$\Delta R^2/R^2$	.040/.261		.276/.780	
$\Delta F/F$	3.13**/5.38***		31.28***/33.9***	
<i>Step 3: forcible entry</i>				
Emotional stability ²	.05	.53	.06	.75
Extraversion ²	.17	2.61**	.04	.55
Openness ²	-.26	-3.61***	-.19	-4.19***
Agreeableness ²	-.22	-3.14**	-.25	-2.96**
Conscientiousness ²	-.02	-.26	-.06	-1.03
$\Delta R^2/R^2$	.072/.333		.043/.823	
$\Delta R^2/R^2$	.072/.333		.043/.823	
$\Delta F/F$	5.22***/5.79***		6.71***/32.89***	

Notes. Beta coefficients in the final models are presented. Adjusted R^2 values are presented.

† $p < .1$.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

The second-order terms of extraversion ($\beta = .17$, $t = 2.61$, $p < .01$), openness ($\beta = -.26$, $t = -3.61$, $p < .001$) and agreeableness ($\beta = -.22$, $t = -3.14$, $p < .01$) make significant contributions to mentoring received over and above the contributions of controls and first-order terms. This suggests the presence of quadratic relationships. The signs of the coefficients of second-order terms provide information on the direction of curvature (Cohen et al., 2003).

The negative signs of second-order terms for openness and agreeableness indicate relationships of inverted U-form, which are in line with [Hypotheses 3 and 4](#), respectively. On the other hand, the positive sign of the second-order term for extraversion suggests a relationship of U-form, which has the reverse curvature from the hypothesized. This indicates no support for [Hypothesis 2](#).

The signs of the regression coefficients of first-order terms inform on the direction of relationships at the mean scores of the predictor variables (Cohen et al., 2003). The value of the predictor (i.e., personality trait) that verifies the first derivative of the corresponding univariate quadratic equation for zero (meaning that the tangent line at that point is parallel to the x-axis) represents the point of bending. The negative coefficient ($\beta = -.13$) of the first-order openness term suggests that the direction of the relationship is negative at the mean value of openness scores. In particular, the relationship turns negative at $-.55$ SDs from the mean of the trait. The positive coefficient ($\beta = .16$) of the first-order agreeableness term suggests that the direction of the relationship is still positive at the mean score of agreeableness: the slope turns negative at 1.20 SDs above the mean of the trait. Finally, the positive first-order coefficient ($\beta = .12$) of extraversion suggests that the direction of the relationship has already become positive at the mean score of the trait. In fact, the slope turns upwards at $-.75$ SDs from the mean score of extraversion.

Finally, the significance of the first-order term ($\beta = .21$, $t = 2.83$, $p < .01$) of conscientiousness in conjunction with the non-significance of the second-order term ($\beta = -.02$, $t = -.26$, ns) means that a linear equation describes the relationship best. This indicates no support for [Hypothesis 5](#).

5.4. Discussion

The positive linear association of emotional stability with mentoring received suggests that, in line with expectations, increases in emotional stability associate with increases in amount of mentoring receipt for the whole spectrum of values of the trait. The pattern is exactly the same for conscientiousness. This means that increases in features such as industriousness, diligence, assiduity, perseverance and dutifulness constantly accompany increases in probability to receive mentoring. The difference from emotional stability is that the finding for conscientiousness is not in line with the expectation for a concave curve. Apparently, therefore, negative states that strong conscientiousness may associate with, such as workaholicism, do not harm mentoring receipt, at least in the context this particular sample reflects.

The results for openness and agreeableness are in line with expectations. The specifics of the inverted U-shaped curve for openness suggest that mentoring receipt increases along with openness until a point near the mean score of the trait and at that point the upwards trend reverses. Regarding agreeableness, the particulars of the curve suggest that the switch in the direction of the relationship from positive to negative occurs well after the mean agreeableness score (in fact, the change in the slope occurs near the top scores on the trait in the sample). This indicates that unless possessing extreme levels of the trait, agreeable individuals have an advantage in terms of mentoring receipt over their less agreeable counterparts. This highlights the difference with the pattern for openness, whose benefits for mentoring receipt cease at earlier point.

The result for extraversion suggests that as scores on the trait increase from low to moderate mentoring receipt decreases. This is at odds with the expectation. On the other hand, the direction of the relationship

reverses well before (nearly one standard deviation below) the mean score of the trait. This means that the negative trend limits itself to a restricted range of scores at the lower part of the extraversion continuum. Therefore, the specifics of the curve imply a positive overall trend in the relationship (Cohen et al., 2003, p. 204). This is visually illustrated in [Fig. 1](#). [Dougherty et al.'s \(2007\)](#) suggestion helps to develop an account, albeit post-hoc, for this observed pattern. Dougherty et al. suggest that those who score low on extraversion (i.e., introverts) still need social interaction, but they need more focused interaction; and for this reason they seek exclusive developmental relationships, such as relationships with mentors. This is in line with the finding that decreases in extraversion at the low range of scores of the trait associate with increases in amount of mentoring received. However, as extraversion moves away from its low scores, that is from introversion, the features of the trait take over and, hence, shifts from mediocre scores upwards increase the likelihood to receive mentoring. In addition, extraverts must also benefit from that potential mentors are more likely to notice them. Therefore, the slope becomes steeper as one moves towards the positive pole of the trait. In essence, therefore, they are only those with average extraversion who are disadvantaged in terms of probabilities to receive mentoring.

6. Study 2

6.1. Method

The main purpose of the second study is to test the hypotheses in a sample of different nature. The sample of the first study was highly heterogeneous both occupationally and structurally. The setting of the second study is chosen to represent a particular function within a single organization; hence, providing a sample with much greater occupational and structural homogeneity. A sample of this nature should inform on the extent to which the findings of the first study are applicable within particular settings. An additional purpose of the second study was to conduct the investigation by obtaining measures of the Big-Five and mentoring received from different sources.

6.2. Setting and participants

Participants were 131 individuals (48 women and 83 men) from the Information Systems function of a large British company that operates in the financial services sector. These were those of 145 individually approached respondents who fulfilled the criteria for inclusion. [Table 3](#)

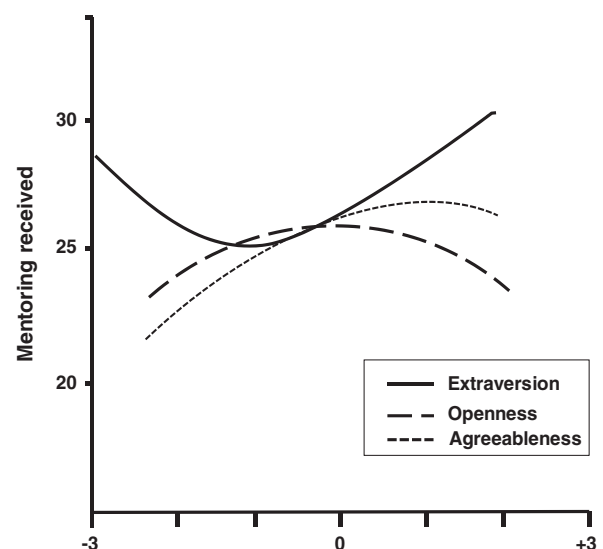


Fig. 1. The curves that depict the quadratic relationships in Study 1.

Table 3Study 2: Descriptive statistics and inter-correlations ($N=131$).

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	37	7.53	–											
2. Socioeconomic origin	2.3	.83	–.30	–										
3. Educational attainment	4.6	.82	–.03	.31	–									
4. Starting grade	1.4	.89	.28	.02	–.08	–								
5. Tenure	7	6.85	.41	–.12	–.23	–.28	–							
6. Organizational grade	2.3	1.27	.34	.14	–.05	.49	.34	–						
7. Mentoring received	3.6	.58	–.33	.35	–.36	.13	–.15	.04	–					
8. Emotional stability	7.3	1.06	.26	–.01	.13	–.05	.37	.23	–.01	–				
9. Extraversion	4.4	1.26	–.09	–.03	.07	–.08	.11	.15	–.04	–.03	–			
10. Openness	5.4	.83	.22	–.02	–.09	–.26	.57	.31	–.01	–.41	.22	–		
11. Agreeableness	5.5	.91	.36	–.22	–.21	.12	.46	.23	.08	–.52	.15	.44	–	
12. Conscientiousness	5.6	.79	.14	.03	–.10	–.24	.44	.13	.03	–.53	.01	.56	.45	–

Note. Correlations $\geq |.11|$, $|.12|$, $|.16|$, and $|.21|$ are significant at $p < .1$, $p < .05$, $p < .01$, and $p < .001$, respectively.

presents descriptive statistics. Most participants had university education (69.5%), and were professionals performing specialist technical jobs (51.9%), while the rest held supervisory (32.8%) and management positions within technical disciplines.

6.3. Measures

Measurement of mentoring received and of the controls (that did not include organizational size, sector type, and industry type) was identical to the first study. Cronbach α for the mentoring received scale in Study 2 was .80.

6.3.1. Big-Five traits

These were assessed by peers using Saucier's (1994) mini-markers. Eight unipolar adjectives on a nine-point scale (1: extremely inaccurate and 9: extremely accurate) assess each Big-Five trait. Examples for emotional stability include "moody" (reverse scoring) and "relaxed"; for extraversion: "talkative" and "shy" (reverse scoring); for openness: "creative" and "unintellectual" (reverse scoring); for agreeableness: "sympathetic" and "harsh" (reverse scoring); and for conscientiousness: "systematic" and "sloppy" (reverse scoring). Each participant handed the personality questionnaire along with a return envelope to a peer of the same gender to complete (see Goldberg, 1992; Saucier, 1994). Instructions to peers asked that they return completed questionnaires sealed to participants, who returned these, along with their own completed questionnaires, personally to the researcher. Cronbach alphas were .84, .84, .64, .84 and .82 for emotional stability, extraversion, openness, agreeableness and conscientiousness, respectively.

6.4. Results

Table 3 presents the inter-correlations. Table 2 presents the results of hypotheses testing.

The first-order term of emotional stability ($\beta = .19$, $t = 2.26$, $p < .05$) makes a significant contribution to mentoring received over and above the controls, while the second-order term does not ($\beta = .06$, $t = .75$, ns). The positive coefficient of the first-order term indicates support for Hypothesis 1. The second-order terms of openness ($\beta = -.19$, $t = -4.19$, $p < .001$) and agreeableness ($\beta = -.25$, $t = 2.96$, $p < .01$) make significant contributions to mentoring received over and above the controls and the first-order terms. The negative signs of the coefficients indicate curvatures of inverted-U-shape, hence, support for Hypotheses 3 and 4. The signs of the first-order coefficients suggest that the directions of the relationships are still positive at mean scores of the traits. In particular, the points where the slopes turn negative are .96 SDs and .19 SDs above the mean scores of openness and agreeableness, respectively. Fig. 2 presents the curves.

Neither the second-order term of extraversion ($\beta = .04$, $t = .55$, ns) nor the second-order term of conscientiousness ($\beta = -.06$,

$t = -1.03$, ns) make significant contributions to the equation. This suggests no support for Hypotheses 2 and 5. The first-order term of conscientiousness is not significant ($\beta = .06$, $t = .81$, ns), suggesting no presence of linear relationship either, but the first-order term of extraversion is marginally significant ($\beta = .11$, $t = 1.62$, $p < .06$) with the relationship in the positive direction.

6.5. Discussion

The result for emotional stability is in line with expectations and in line with the result of the first study (in fact, effect coefficients for this trait are identical in the two studies). Increases in emotional stability appear to provide an advantage for mentoring receipt along the whole spectrum of the trait. The findings for openness and agreeableness concur with the expectation for inverted U-form relationships, and the particulars of the curves indicate that for the greater part of their continua increases in scores on these traits associate with increases in amount of reported mentoring receipt. With regard to openness, increases in its amount bring no more benefit and may become a disadvantage for receiving mentoring only when the trait becomes very strong (i.e., beyond one standard deviation above the mean). A discrepancy with the pattern of the first study is that in the second study openness continues to pay dividends for mentoring receipt well beyond its mean score, while in Study 1 the trait ceases to do so before its mean. Nevertheless, the forms of the relationships for

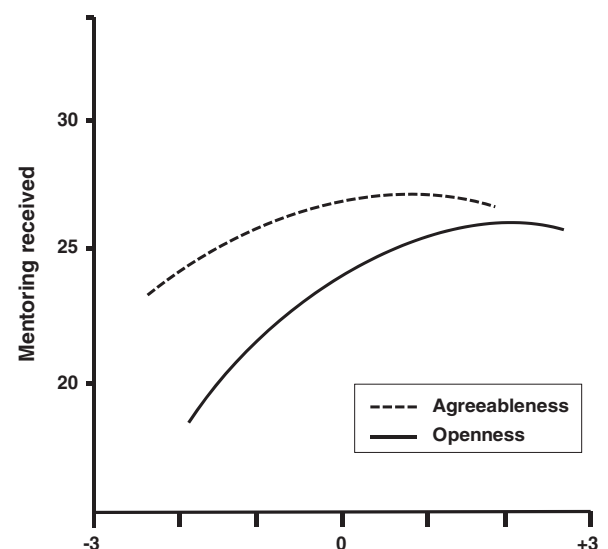


Fig. 2. The curves that depict the quadratic relationships in Study 2.

emotional stability, openness and agreeableness do show consistency between the two studies.

The result for extraversion indicates association of positive linear trend. Though this does not lend support to the corresponding hypothesis, it concurs with the idea that the features of extraversion must bring mostly benefits with respect to mentoring receipt (i.e., first part of the reasoning behind [Hypothesis 2](#)). The positive linear relationship of extraversion in the second study is also compatible with the overall positive trend of its association in the first study.

Increases in conscientiousness are not associated with increases in likelihood to report mentoring receipt; hence, the features of conscientiousness do not appear to convey an advantage within the context of Study 2. This is discrepant with the corresponding finding of the first study (that, however, does not support the respective hypothesis for quadratic relationship either). The general discussion tackles these findings.

Overall, the results of the two studies show substantial, if not remarkable, consistency (in essence, the results concur with respect to the relationships of four out of the five traits). Discrepancies of substance are limited. The Big-Five markers of Study 2 demonstrate convergent validity with the NEO of Study 1 ([Goldberg, 1992](#); [John et al., 2008](#)), and self- and peer-report assessments of personality generally show good agreement ([Ready, Clark, Watson, & Westerhouse, 2000](#)). Hence, the setting rather than the measurement is the most likely cause of these discrepancies. Furthermore, if the causes of the discrepancies lie in the measurement of the Big-Five then these must have been more widespread. The general discussion touches the issue of context.

Finally, though not directly relevant to hypotheses, the Big-Five traits account for greater proportions of variance in mentoring received in the second study (31.9%), which uses peer assessments of personality, than in the first study (11.2%) that uses self-reports. This pattern makes implications regarding alleged validity improvements with multi-source measurement methodologies over self-report methodologies.

7. Overall discussion

The research at hand focuses on the relationship of the Big-Five of personality with mentoring receipt. The results indicate that the Big-Five accounts for substantial variance in mentoring receipt over and above demographic, human capital and structural factors, with all Big-Five traits demonstrating links. In addition, the move from linear to quadratic equations brings considerable increase in the capacity of personality to explain variance. This means that the role of personality in mentoring is stronger and more complicated than what simple linear associations advise.

The forms of the associations show substantial agreement between the two studies. This implies considerable generalizability across occupational and organizational contexts. Hence, the findings support the dispositional approach to organizational behavior because: (1) the Big-Five explains sizable variance in mentoring receipt over and above a host of personal, occupational and organizational demographics, and (2) the patterns of association show substantial congruence between the two studies, which represent different settings.

Emotional stability demonstrates a remarkably consistent link with mentoring receipt across the two studies. The nature of the relationship indicates that in the whole of its spectrum higher levels of that trait constantly correspond to greater amounts of mentoring receipt. This means that qualities such as calmness, patience, confidence and a positive outlook of situations offer a continuous advantage in terms of receiving mentoring. Emotional stability is the only Big-Five trait within the construct of core self-evaluations, whose advocates view as a dispositional kernel that heavily influences the way individuals perceive themselves and their environment ([Bono & Judge, 2003](#)). The present findings, therefore, concur with the placement of emotional stability into a central spot in human disposition.

Conscientiousness also has a linear relationship with mentoring receipt. However, this relationship appears only in one of the studies, albeit the one that utilizes the most structurally and occupationally heterogeneous sample and, hence, arguably bears most resemblance to the general working population. This means that in the general case increases in the strength of the trait convey an advantage in the mentoring receipt arena. On the other hand, the lack of relationship in the technically-oriented occupational context of the second study implies exceptions to the general case.

Presumably tasks, procedures and quality specifications are more standardized within technically-oriented environments. Such standardization may suppress the effects of conscientiousness on job performance, thus rendering variance in conscientiousness among employees more difficult to discern. Indeed, some research suggests that conscientiousness does not relate to performance when tasks are technical and heavily prescribed ([Mohammed, Mathieu, & Bartlett, 2002](#)). This means that conscientious employees may be less distinguishable in such environments. That would reduce the likelihood for mentors to notice them and approach them as protégés. The fact that conscientiousness has the lowest variance among the Big-Five traits in the second study (where, to remind, peers assess the Big-Five) corroborates this tentative account.

Openness and agreeableness demonstrate inverted U-shaped associations with mentoring receipt in both studies. For the greater part of their ranges increases in the strength of these traits augment the likelihood of receiving mentoring, but strong presence of the traits does not offer a mentoring advantage anymore and may in fact bring a handicap. This means that creativity, interest in learning and inquisitiveness on the one hand, and cooperativeness, trust, altruism and sensitivity on the other hand are for the most part helpful in obtaining a mentor and receiving mentoring functions.

Extraversion also displays a relationship of overall positive trend with mentoring receipt. Apart from a limited range of scores near its negative pole (i.e., introversion) in one of the studies, increases in the strength of the trait accompany increases in amount of mentoring receipt. Hence, characteristics such as sociability, energy and action tendencies appear to provide a constant advantage in terms of mentor attraction and receiving mentoring functions.

The slight discrepancy between the two studies with respect to extraversion may reflect the effects of context. The context of the second study is a technologically oriented occupational setting, where typical jobs involve the development and maintenance of various types of information systems. Jobs of that nature primarily demand ability to concentrate and maintain attention to the task, which fits introverts more than extraverts (e.g., see [Beauducel, Brocke, & Leue, 2006](#); [Blumenthal, 2001](#)). This may lead to filtering that renders most individuals in that occupational context low on extraversion. Indeed, in the second study extraversion has by far the lowest mean score of the Big-Five traits. Presuming that the characteristics of extraversion yield an advantage for an employee in terms of a mentor noticing him/her, this signifies that the effects of such characteristics become stronger in a low extraversion environment because in such an environment they are scarce. This explains the positive relationship of extraversion with mentoring receipt even near the low pole of the trait in the second study. On the other hand, in the setting of Study 1, which is presumably more representative of the general work environment, the relationship is negative in the vicinity of low extraversion. As seen, this is may be the outcome of introvert's very strong preference for developing intense exclusive relationships. Of course, this is a tentative account that needs testing.

7.1. Limitations

The Big-Five is remarkably stable during adulthood ([Judge et al., 1999](#)), which justifies the assignment of cause to personality traits and of effect to mentoring receipt when applying the criterion of temporal stability. According to this criterion, more temporally stable

variables are normally causes while less temporally stable factors are normally effects (Davis, 1985). This offers some confidence about causality despite the cross-sectional design.

The research has taken precautions against common method bias: ensuring anonymity, using temporal separation in the completion of questionnaires of personality and mentoring, and offering the option of feedback on personality (e.g., see Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Furthermore, the second study utilizes multi-source measurement. In addition, the mentoring scale is immune to social desirability, a potential source of common method effects (Podsakoff et al., 2003). Therefore, the possibility for presence of common method variance in the findings is rather low.

The issue of common method bias deserves some more consideration because of substantial attention in recent years; which has led to automatic attribution of inferior quality status to research that employs exclusively self-report measures. This is despite that empirical and quantitative review research (Crampton & Wagner, 1994; Malhotra, Kim, & Patil, 2006) concludes that common method bias is an overstated threat to validity. In the second study, which utilizes peer assessments of personality, the Big-Five accounts for much greater amounts of variance than in the first study, which utilizes self-reports. Considering that the measurement of mentoring is common in the two studies two explanations ensue: (1) indeed common method bias is not as serious an issue as assumed to be; (2) adoption of simple measures, such as careful choice or development of instruments, separate measurement of core variables, and offering feedback, are very effective means against common method bias. In either case, the present research contributes towards the counter-argument (e.g., see Spector, 2006) that the attention paid to common method bias is disproportional to the real threat.

Responses to the mentoring measure represent participants' own perceptions, which may not be accurate (Welsh, Bhawe, & Kim, 2012). Nevertheless, empirical research suggests substantial agreement between protégés and mentors in the amount of mentoring that flows within the relationship (Waters, McCabe, Kiellerup, & Kiellerup, 2002). In addition, for certain mentoring functions, such as socioemotional functions, perceptions of protégés are probably more accurate than perceptions of mentors (see Waters et al., 2002). Hence, self-report measures may represent the most valid method for assessing receipt of mentoring.

7.2. Directions

The substantial consistency of the findings of the two studies, in line with the dispositional approach, suggests that the way Big-Five traits relate to mentoring receipt largely generalize across contexts. Nevertheless, inter-study consistency is not perfect, and as seen in detail above, the occupational setting may moderate some relationships. Therefore, future research must investigate for occupational and organizational moderators. In addition, individual characteristics may also affect the pattern of certain relationships. Self-monitoring (Snyder, 1974) is such a characteristic. Self-monitoring reflects the extent to which individuals carefully monitor and modify their behavior according to social cues in order to project favorable public image. High self-monitors may sense in the behavior of their mentors or potential mentors the negative impressions excessive display of acts associated with openness and agreeableness create, and may suppress or manage pertinent behaviors accordingly. This means that for high self-monitors the relationship of these traits with mentoring receipt may not include a bending point (i.e., the relationship is linear and positive) while for low self-monitors the inverted-U-shape curvature is more pronounced.

The universality of the Big-Five does not mean that its traits relate in the same way with work and other outcomes across cultures (McCrae & Costa, 1997; Van Emmerik, Gardner, Wendt, & Fischer, 2010). Therefore, research in other cultural clusters, or even in other countries of the Anglo-Saxon cluster, is advisable. For example, the British society, like those of other individualistic English-speaking and West-European

countries, values and encourages autonomous and independent thinking over conformism and obedience (Schwartz, 2006). On the other hand, Confucian and South Asian societies endorse conformism and compliance over intellectual and emotional autonomy (e.g., Bond & Smith, 1986; Schwartz, 2006). This may mean that openness does not relate in the same way to mentoring receipt in those societies because superiors may not appreciate openness-related behaviors from their subordinates. As another example, high neutrality is a characteristic of British culture. A neutral culture, as opposed to an affective culture, signifies non-appreciation and discouragement of overt expression of felt emotions (Trompenaars, 1993). This invites the possibility that those Big-Five traits that pertain to experience and expression of emotions, like emotional stability and extraversion (e.g., Watson & Clark, 1992), relate more strongly with mentoring receipt in affective cultures.

The present era of globalization has brought an unprecedented movement of individuals across national borders. The extent to which personality traits have consistency in their relationships with mentoring receipt across cultures has essence for those who move across national boundaries (see also Baruch & Bozionelos, 2010). Research in various national settings will contribute towards the development of pertinent advice for individuals and organizational agents alike.

The exclusive focus on traditional informal mentoring represents a conscious, validity enhancing, choice. Nevertheless, the relationship of the Big-Five with mentoring receipt demands investigation within formal and non-traditional (e.g., lateral mentoring, which takes place between peers) mentoring relationships as well. Non-traditional developmental relationships, like peer-mentoring (e.g., McManus & Russell, 2007), acquire special importance these days due to flattening of organizations, stretching of the workforce, and employment uncertainty. These phenomena reduce the amount of time managers can dedicate to subordinates and suppress their motivation to provide mentoring (Allen et al., 1997). The dynamics of lateral and traditional mentoring are dissimilar (e.g., less power differential), hence, the effects of personality may also differ.

Finally, the implications of the present research extend beyond the domain of mentoring. Although many critical workplace outcomes clearly relate to personality, authors pose questions on its substantive contribution, invoking rather weak relationships with key outcomes (e.g., Hurtz & Donovan, 2000). However, extant research on correlates of personality mostly assumes and tests linear associations. The present findings imply that the contribution of personality is substantially stronger and more complicated than currently believed because non-linear relationships appear at play. This adds to calls and emerging literature (e.g., Vasilopoulos et al., 2007) on the curvilinear perspective to the association of personality with work processes and outcomes, which opens a new horizon that future research ought to explore.

References

- Al Ariss, A. (2010). Modes of engagement: Migration, self-initiated expatriation, and career development. *Career Development International*, 15, 338–358.
- Allen, T. D., Eby, L. T., O'Brien, K. E., & Lentz, E. (2008). The state of mentoring research: A qualitative review of current research methods and future research implications. *Journal of Vocational Behavior*, 73, 343–357.
- Allen, T. D., Eby, L. T., Poteet, M. L., Lentz, E., & Lima, L. (2004). Career benefits associated with mentoring for protégés: A meta-analysis. *Journal of Applied Psychology*, 89, 127–136.
- Allen, T. D., Johnson, H. A. M., Xu, X., Biga, A., Rodopman, O. B., & Ottinot, R. C. (2009). Mentoring and protégé narcissistic entitlement. *Journal of Career Development*, 35, 385–405.
- Allen, T. D., Lentz, E., & Day, R. (2006). Career success outcomes associated with mentoring others: A comparison of mentors and nonmentors. *Journal of Career Development*, 32, 272–285.
- Allen, T. D., Poteet, M. L., & Burroughs, S. M. (1997). The mentor's perspective: A qualitative inquiry and future research agenda. *Journal of Vocational Behavior*, 51, 70–89.
- Allen, T. D., Poteet, M. L., & Russell, J. E. A. (2000). Protégé selection by mentors: What makes the difference? *Journal of Organizational Behavior*, 21, 271–282.
- Aryee, S., Lo, S., & Kang, I. -L. (1999). Antecedents of early career stage mentoring among Chinese employees. *Journal of Organizational Behavior*, 20, 563–576.

- Ashton, M. C., Lee, K., & Goldberg, L. R. (2004). A hierarchical analysis of 1,710 English personality-descriptive adjectives. *Journal of Personality and Social Psychology*, 87, 707–721.
- Aziz, S., & Tronzo, C. L. (2011). Exploring the relationship between workaholism facets and personality traits: A replication in American workers. *Psychological Record*, 61, 269–286.
- Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and performance at the beginning of the new millennium: What do we know and where do we go next? *International Journal of Selection and Assessment*, 9, 9–29.
- Baruch, Y., & Bozionelos, N. (2010). Career issues. In S. Zedeck (Ed.), *APA handbook of industrial and organizational psychology. Selecting & developing members of the organization*, 2. (pp. 67–113) Washington DC: American Psychological Association.
- Beauducel, A., Brocke, B., & Leue, A. (2006). Energetical bases of extraversion: Effort, arouse, EEG, and performance. *International Journal of Psychophysiology*, 62, 212–223.
- Ben-Ner, A., & Halldorsson, F. (2010). Trusting and trustworthiness: What are they, how to measure them, and what affects them. *Journal of Economic Psychology*, 31, 64–79.
- Blumenthal, T. D. (2001). Extraversion, attention, and startle response reactivity. *Personality and Individual Differences*, 30, 495–503.
- Bond, R., & Smith, P. B. (1986). Culture and conformity: A meta-analysis of studies using Asch's (1952b, 1956) line judgment task. *Psychological Bulletin*, 119, 111–137.
- Bono, J. E., & Judge, T. A. (2003). Core self-evaluations: A review of the trait and its role in job satisfaction and job performance. *European Journal of Personality*, 17, 55–518.
- Bozionelos, N. (2004a). Mentoring provided: Relation to mentor's career success, personality and mentoring received. *Journal of Vocational Behavior*, 64, 24–46.
- Bozionelos, N. (2004b). The relationship between disposition and career success: A British study. *Journal of Occupational and Organizational Psychology*, 77, 403–420.
- Bozionelos, N., Bozionelos, G., Kostopoulos, K., & Polychroniou, P. (2011). How providing mentoring relates to career success and organizational commitment: A study in the general managerial population. *Career Development International*, 16, 446–468.
- Brookings, J. B., Zembar, M. J., & Hochstetler, G. M. (2003). An interpersonal circumplex/five-factor analysis of the rejection sensitivity questionnaire. *Personality and Individual Differences*, 34, 449–461.
- Chao, G. T. (1997). Mentoring phases and outcomes. *Journal of Vocational Behavior*, 51, 15–28.
- Chiaburu, D. S., Oh, I. S., Berry, C. M., Li, N., & Gardner, R. G. (2001). The five-factor model of personality traits and organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 96, 1140–1166.
- Chun, J. U., Litzky, B. E., Sosik, J. J., Bechtold, D. C., & Godshalk, V. M. (2010). Emotional intelligence and trust in formal mentoring programs. *Group and Organization Management*, 35, 421–455.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Lawrence Erlbaum/Mahwah, NJ.
- Costa, P. T., & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual. Odessa, FL: Psychological Assessment Resources.
- Crampton, S. M., & Wagner, J. A., III (1994). Percept-percept inflation in microorganizational research: An investigation of prevalence and effect. *Journal of Applied Psychology*, 79, 67–76.
- Crowne, D., & Marlowe, D. (1964). *The approval motive: Studies in evaluative dependence*. New York: Wiley.
- Davis, J. A. (1985). *The logic of causal order*. Beverly Hills, CA: Sage.
- Dawley, D. D., Andrews, M. C., & Bucklew, N. S. (2010). Enhancing the ties that bind: Mentoring as a moderator. *Career Development International*, 15, 259–278.
- Department of Trade and Industry (2007). *Business services and globalisation. Economics Paper*, 19. London: Department of Trade and Industry.
- Digman, J. M. (1990). Personality structure: Emergence of the five factor model. *Annual Review of Psychology*, 41, 417–440.
- Dougherty, T. W., Cheung, Y. H., & Florea, L. (2007). The role of personality in employee developmental networks. *Journal of Managerial Psychology*, 23, 653–669.
- Dreher, G. F., & Ash, R. A. (1990). A comparative study of mentoring among men and women in managerial, professional, and technical positions. *Journal of Applied Psychology*, 75, 539–546.
- Eby, L. T. (1997). Alternative forms of mentoring in changing organizational environments: A conceptual extension of the mentoring literature. *Journal of Vocational Behavior*, 51, 125–144.
- Eby, L. T., & McManus, S. E. (2004). The protégé's role in negative mentoring experiences. *Journal of Vocational Behavior*, 65, 255–275.
- Egberink, I. J. L., Meijer, R. R., & Veldkamp, B. P. (2010). Conscientiousness in the workplace: Applying mixture IRT to investigate scalability and predictive validity. *Journal of Research in Personality*, 44, 232–244.
- Ensher, E. A., Thomas, C., & Murphy, S. E. (2001). Comparison of traditional, step-ahead, and peer mentoring on protégés support, satisfaction, and perceptions of career success: A social exchange perspective. *Journal of Business and Psychology*, 15, 419–438.
- Fagenson, E. A. (1989). The mentor advantage: Perceived career/job experiences of protégés versus non-protégés. *Journal of Organizational Behavior*, 10, 309–320.
- Fagenson, E. A. (1992). Mentoring: who needs it? A comparison of protégés' and non-protégés' needs for power, achievement, affiliation and autonomy. *Journal of Vocational Behavior*, 41, 48–60.
- Fagenson-Eland, E. A., & Baugh, S. G. (2001). Personality predictors of protégé mentoring history. *Journal of Applied Social Psychology*, 31, 2502–2517.
- Flett, G. L., Hewitt, P. L., & DeRosa, T. (1996). Dimensions of perfectionism, psychological adjustment, and social skills. *Personality and Individual Differences*, 20, 143–150.
- Galperin, B. L., & Burke, R. J. (2006). Uncovering the relationship between workaholism and workplace destructive and constructive deviance: An exploratory study. *International Journal of Human Resource Management*, 17, 331–347.
- Goldberg, L. R. (1992). The development of markers for the big-five factor structure. *Psychological Assessment*, 4, 26–42.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48, 26–34.
- Gruman, J. A., & Saks, A. M. (2011). Socialization preferences and intentions: Does one size fit all? *Journal of Vocational Behavior*, 79, 419–427.
- Guglielmi, D., Simbula, S., Schaufeli, W. B., & Depolo, M. (2012). Self-efficacy and workaholism as initiators of the job demands-resources model. *Career Development International*, 17, 375–389.
- Haggard, D. L., Dougherty, T. W., Turban, D. B., & Wilbanks, J. E. (2011). Who is a mentor? A review of evolving definitions and implications for research. *Journal of Management*, 37, 280–304.
- Helmreich, R. L., Sawin, L. L., & Garsrud, A. L. (1986). The honeymoon effect in job performance: Temporal increases in the predictive power of achievement motivation. *Journal of Applied Psychology*, 71, 185–188.
- Higgins, M. C., & Kram, K. E. (2001). Reconceptualizing mentoring at work: A developmental network perspective. *Academy of Management Review*, 26, 264–288.
- Hurtz, G. M., & Donovan, J. J. (2000). Personality and job performance: The big five revisited. *Journal of Applied Psychology*, 85, 869–879.
- Iversen, J., Malchow-Moller, N., & Sorensen, A. (2010). Returns to schooling in self-employment. *Economic Letters*, 109, 179–182.
- Jackofsky, E. F. (1984). Turnover and job performance: An integrated process model. *Academy of Management Review*, 9, 74–83.
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big-Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of Personality: Theory and Research* (pp. 114–158). New York: Guilford Press.
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology*, 87, 765–780.
- Judge, T. A., Heller, D., & Mount, M. K. (2002). Five-factor model of personality and job satisfaction: A meta-analysis. *Journal of Applied Psychology*, 87, 530–541.
- Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The big five personality traits, general mental ability, and career success across the life span. *Personnel Psychology*, 52, 621–652.
- Judge, T. A., & Ilies, R. (2002). Relationships of personality to performance motivation: A meta-analytic review. *Journal of Applied Psychology*, 87, 797–807.
- Kirchmeyer, C. (2002). Change and stability in managers' gender roles. *Journal of Applied Psychology*, 87, 929–939.
- Kram, K. E. (1985). *Mentoring at work: Developmental relationships in organizational life*. Glenview, IL: Scott, Foresman.
- Lankau, M. J., & Scandura, T. A. (2002). An investigation of personal learning in mentoring relationships: Content, antecedents, and consequences. *Academy of Management Journal*, 45, 779–790.
- Lentz, E., & Allen, T. D. (2009). The role of mentoring others in the career plateauing phenomenon. *Group and Organization Management*, 34, 358–384.
- Lippa, R., & Connelly, S. (1990). Gender diagnosticity: A new Bayesian approach to gender-related individual differences. *Journal of Personality and Social Psychology*, 59, 1051–1065.
- Malhotra, N. K., Kim, S. S., & Patil, A. (2006). Common method variance in IS research: A comparison of alternative approaches and a reanalysis of past research. *Management Science*, 52, 1865–1883.
- McCrae, R. R., & Costa, P. T., Jr. (1996). Toward a new generation of personality theories: Theoretical contexts for the five-factor model. In J. S. Wiggins (Ed.), *The five factor model of personality: Theoretical perspectives* (pp. 51–87). New York: Guilford.
- McCrae, R. R., & Costa, P. T., Jr. (1997). Personality trait structure as a human universal. *American Psychologist*, 52, 509–516.
- McManus, S. E., & Russell, J. E. A. (2007). Peer mentoring relationships. In B. R. Ragins, & K. E. Kram (Eds.), *The handbook of mentoring at work* (pp. 273–297). Thousand Oaks, CA: Sage.
- Melanson, M. A. (2009). Qualities of the ideal protégé. Oct.–Dec. *U.S. Army Medical Department Journal*, 44–46.
- Mohammed, S., Mathieu, J. E., & Bartlett, A. L. (2002). Technical-administrative task performance, leadership task performance, and contextual performance: Considering the influence of team- and task-related composition variables. *Journal of Organizational Behavior*, 23, 795–814.
- Morrison, K. A. (1997). Personality correlates of the five-factor model for a sample of business owners/managers: Associations with scores on self-monitoring, type A behavior, locus of control and subjective well-being. *Psychological Reports*, 80, 255–272.
- Ng, T. W. H., & Feldman, D. C. (2010). Human capital and objective indicators of career success: The mediating effects of cognitive ability and conscientiousness. *Journal of Occupational and Organizational Psychology*, 83, 207–235.
- O'Connor, B. P. (2002). A quantitative review of the comprehensiveness of the five-factor model in relation to popular personality inventories. *Assessment*, 9, 188–203.
- Ones, D. S., Dilchert, S., Viswesvaran, C., & Judge, T. A. (2007). In support of personality assessment in organizational settings. *Personnel Psychology*, 60, 995–1027.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. -Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903.
- Ragins, B. R., Cotton, J. L., & Miller, J. S. (2000). Marginal mentoring: The effects of type of mentor, quality of relationship, and program design on work and career attitudes. *Academy of Management Journal*, 43, 1177–1194.
- Ready, R. E., Clark, L. A., Watson, D., & Westerhouse, K. (2000). Self- and peer-reported personality: Agreement, trait reliability, and the "self-based heuristic". *Journal of Research in Personality*, 34, 208–224.

- Richard, O. C., Ismail, K. M., Bhuian, S. N., & Taylor, E. C. (2009). Mentoring in supervisor–subordinate dyads: Antecedents, consequences, and test of a mediation model of mentorship. *Journal of Business Research*, 62, 1110–1118.
- Rose, R. M., Fogg, L. F., Helmreich, R. L., & McFadden, T. J. (1994). Psychological predictors of astronaut effectiveness. *Aviation, Space, and Environmental Medicine*, 65, 910–915.
- Salgado, J. F. (1997). The five factor model of personality and job performance in the European Community. *Journal of Applied Psychology*, 82, 30–43.
- Saucier, G. (1994). Mini-markers: A brief version of Goldberg's unipolar big-five markers. *Journal of Personality Assessment*, 63, 506–516.
- Scandura, T. A., & Ragins, B. R. (1993). The effects of sex and gender role orientation on mentorship in male-dominated occupations. *Journal of Vocational Behavior*, 43, 251–265.
- Schmitt, D. P., Allik, J., McCrae, R. R., Benet-Martinez, V., Alcalay, L., Ault, L., et al. (2007). The geographic distribution of big five of personality traits: Patterns and profiles of human self-description across 56 nations. *Journal of Cross-Cultural Psychology*, 38, 173–202.
- Schuler, H., & Prochaska, M. (2000). Development and construct validation of a job-related achievement motivation test. *Diagnostica*, 46, 61–72.
- Schwartz, S. H. (2006). A theory of cultural value orientations: Explication and applications. *Comparative Sociology*, 5, 137–182.
- Selfhout, M., Burk, W., Branje, S., Denissen, J., van Aken, M., & Meeus, W. (2010). Emerging late adolescent friendship networks and big five personality traits: A social network approach. *Journal of Personality*, 78, 509–538.
- Singh, R., Ragins, B. R., & Tharenou, P. (2009). Who gets a mentor? A longitudinal assessment of the rising star hypothesis. *Journal of Vocational Behavior*, 74, 11–17.
- Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology*, 30, 526–537.
- Spagnoli, P., & Caetano, A. (2012). Personality and organisational commitment: The mediating role of job satisfaction during socialisation. *Career Development International*, 17, 255–275.
- Spector, P. E. (2006). Method variance in organizational research: Truth or urban legend? *Organizational Research Methods*, 9, 221–232.
- Staw, B. M., Bell, N. E., & Clausen, J. A. (1986). The disposition approach to job attitudes: A lifetime longitudinal test. *Administrative Science Quarterly*, 31, 56–77.
- Staw, B. M., & Cohen-Charash, Y. (2005). The dispositional approach to job satisfaction: More than a mirage, but not yet an oasis. *Journal of Organizational Behavior*, 26, 59–78.
- Tepper, K., Shaffer, B. C., & Tepper, B. J. (1996). Latent structure of mentoring function scales. *Educational and Psychological Measurement*, 56, 848–857.
- Tokar, D. M., Fischer, A. R., & Subich, L. M. (1998). Personality and vocational behavior: A selective review of the literature, 1993–1997. *Journal of Vocational Behavior*, 53, 115–153.
- Trevor, C. O., Gerhart, B., & Boudreau, J. W. (1997). Voluntary turnover and job performance: Curvilinearity and the moderating influences of salary growth and promotions. *Journal of Applied Psychology*, 82, 44–61.
- Trompenaars, F. (1993). *Riding the waves of culture: Understanding cultural diversity in business*. London: Nicholas Brealey Publishing.
- Turban, D. B., & Dougherty, T. W. (1994). Role of protégé personality in receipt of mentoring and career success. *Academy of Management Journal*, 37, 688–702.
- Turban, D. B., & Lee, F. K. (2007). The role of personality in mentoring relationships: Formation, dynamics and outcomes. In B. R. Ragins, & K. E. Kram (Eds.), *The handbook of mentoring at work* (pp. 21–50). Thousand Oaks, CA: Sage.
- Underhill, C. M. (2006). The effectiveness of mentoring programs in corporate settings: A meta-analytical review of the literature. *Journal of Vocational Behavior*, 68, 292–307.
- Van Emmerik, H., Gardner, W. L., Wendt, H., & Fischer, D. (2010). Associations of culture and personality with McClelland's motives: A cross cultural study of managers in 24 countries. *Group and Organization Management*, 35, 329–367.
- Vasilopoulos, N. L., Cucina, J. M., & Hunter, A. E. (2007). Personality and training proficiency: Issues of bandwidth-fidelity and curvilinearity. *Journal of Occupational and Organizational Psychology*, 80, 109–131.
- Wanberg, C. R., & Kammeyer-Mueller, J. D. (2000). Predictors and outcomes of proactivity in the socialization process. *Journal of Applied Psychology*, 85, 373–385.
- Wang, S., Tomlinson, E. C., & Noe, R. A. (2010). The role of mentor trust and protégé internal locus of control in formal mentoring relationships. *Journal of Applied Psychology*, 95, 358–367.
- Waters, L., McCabe, M., Kiellerup, D., & Kiellerup, S. (2002). The role of formal mentoring on business success and self-esteem in participants of a new business start-up program. *Journal of Business and Psychology*, 17, 107–121.
- Watson, D., & Clark, L. A. (1992). On traits and temperament: General and specific factors of emotional experience and their relation to the Five-Factor model. *Journal of Personality*, 60, 441–476.
- Welsh, E. T., Bhawe, D., & Kim, K. -Y. (2012). Are you my mentor? Informal mentoring mutual identification. *Career Development International*, 17, 137–148.
- Whithey, M. J., Gellatly, I. R., & Annett, M. (2005). The moderating effect of situation strength on the relationship between personality and provision of effort. *Journal of Applied Social Psychology*, 35, 1587–1608.
- Wiggins, J. S., & Trapnell, P. D. (1996). A dyadic-interactional perspective on the five-factor model. In J. S. Wiggins (Ed.), *The five-factor model of personality: Theoretical perspectives* (pp. 180–207). New York: Guilford Press.
- Wiggins, J. S., & Trapnell, P. D. (1997). Personality structure: The return of the Big Five. In R. Hogan, J. A. Johnson, & S. R. Briggs (Eds.), *Handbook of personality and social psychology* (pp. 737–765). San Diego, CA: Academic Press.
- Williams, C. R., & Livingstone, L. P. (1994). Another look at the relationship between performance and voluntary turnover. *Academy of Management Journal*, 37, 269–298.
- Winter, D. G., John, O. P., Stewart, A. J., Kohnen, E. C., & Duncan, L. E. (1998). Traits and motives: Toward an integration of two traditions in personality research. *Psychological Review*, 105, 230–250.
- Wolff, H. -G., & Kim, S. (2012). The relationship between networking behaviors and the big five personality dimensions. *Career Development International*, 17, 43–66.
- Zabelina, D. L., Robinson, M. D., & Anicha, C. L. (2007). The psychological tradeoffs of self-control: A multi-method investigation. *Personality and Individual Differences*, 43, 463–473.
- Zey, M. (1984). *The mentor connection*. Homewood, IL: Dow Jones-Irwin.
- Zhao, H., Seibert, S. E., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. *Journal of Management*, 36, 381–404.

