



## **Employability and Job Performance as Links in the Relationship Between Mentoring Receipt and Career Success. A Study in SMEs**

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Employability and Job Performance as Links in the Relationship between  
Mentoring Receipt and Career Success: A Study in SMEs

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Employability and Job Performance as Links in the Relationship between  
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Abstract

This study developed and tested a model that posited employability and job performance as intervening variables in the relationship between receipt of 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). 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.

In order 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 the 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 in order to advance their careers (Baruch & Bozionelos, 2010; Hoffman, Casnosha & 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 comprehensive model (2006). 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, i.e. 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 lastly, 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 correspond to 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 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, or non-developmental criticism). Those who are shielded from such negative situations are more likely to develop positive attitudes towards the employer (O'Driscoll, Cooper-Thomas, Bentley, Catley, Gardner & Trenberth, 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, counselling, 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 modelling, 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 modelling presumes identification with the mentor, and personal identification with the organizational agent brings greater identification with the organization itself (Zhu, Wang, Zhen, Liu & Miao, 2012). Therefore, modelling 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.*** 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, 2010). 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 the 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). Further, 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.*** 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 Hypothesis 1, 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.*** 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 and 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, 1988; 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, 2010; 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 (2004). 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, since 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 IT industry, which is characterized by strong orientation towards 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 re-establish 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.*** Employability will be positively related to job performance.

Combined with Hypothesis 1, the above hypothesis posits that employability acts as mediator in the relationship between mentoring receipt and job performance.

***Hypothesis 5.*** 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.*** 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.

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 Insert Figure 1 about here  
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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 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 compose the largest portion of organizational entities and account for most employment. To illustrate, in the European Union and in the USA, SMEs account for over 99% of all registered companies and for two-thirds to one half of total employment, respectively (Eurostat, 2011; United States 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, 1977; 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). 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., Karahanna, Evaristo & Srite, 2005; Hofstede, 2001; 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 (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, 1000 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 (Kram, 1985; Ragins & McFarlin, 1990) as: “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  $\alpha$  was .83.

***Subjective career success.*** This was measured with three items from Gattiker and Larwood (1986) (e.g., "I am pleased with the promotions I have received so far," "I am drawing a high income compared to my peers"). Cronbach  $\alpha$  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 non-normality 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 squared 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 measure (2006). It contains a pool of 47 items on a 6-point response format that assess 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 modelled 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, i.e., low and non-significant, 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 ( $\Delta\chi^2 = 3263.66, p < .001$ ).

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 (for example, both corporate sense and balance have the employer as point of reference) and other models of employability (for example, Van Dam 2004, views technical competence and career interests and preferences as forming a single employability factor, which leads towards 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.

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Insert Table 1 about here

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***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 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 largely complete picture. Subjective success is geared towards 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, 2010).

#### **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  $\alpha$  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 (Ng et al., 2005; Melamed, 1995), 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 to .985; RMSEA range: .046 to .061). Factor loadings were similar across countries for both models (ranging from .449 to .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 inter-correlations 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.

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Insert Table 2 about here  
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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 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 Hypothesis 1, as mentoring receipt was significantly positively related to employability ( $\beta = .26, p < .01$ ). Hypotheses 2a and 2b 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 Hypothesis 4, since 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 Hypothesis 6a. Job performance was related to subjective career success, but in the opposite direction of our expectations ( $\beta = -.24, p < .05$ ), leading to rejection of Hypothesis 6b as well.

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 Insert Figure 2 about here  
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To test for mediation, which pertained to Hypotheses 2c, 3, 5, and 6c, 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 non-significant ( $\beta = -.09, ns$ ), while the corresponding direct effect was found to be significant as per Hypothesis 2b ( $\beta = .32, p < .01$ ). 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 → objective career success → subjective career success; employability → job performance → 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, Hypothesis 2c suggesting mediation was not supported. Hypothesis 6c was also not supported because the relationship of job performance with objective career success was not significant (as per the testing of Hypothesis 6a 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), while 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 (since the path from job performance on objective career success was non-significant) through the two simultaneous mediating paths proposed in our model [i.e., (a) mentoring receipt → employability → subjective career success, and (b) mentoring receipt → employability → job performance → 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, Hypothesis 3 (both parts) and Hypothesis 5 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 – 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.

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 Insert Table 3 about here  
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### **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 non-mentored 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 Hypotheses 1, 2a, 2b, and 4 ( $\beta = .14$ ,  $p < .05$ ;  $\beta = .13$ ,  $p < .05$ ;  $\beta = .26$ ,  $p < .01$ ;  $\beta = .77$ ,  $p < .001$ ; respectively).

Furthermore, in line with our original results, Hypotheses 6a and 6b did not hold ( $\beta = .07$ ,  $ns$ ;  $\beta$

= -.19,  $p < .05$ ; respectively), while mediation tests provided support for Hypotheses 3 and 5 but failed to support Hypothesis 2c. 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 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 modelling, 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, 2010). 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 non-materialization 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.

Multi-source 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, since 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 (for example, cognitive ability and job performance, e.g., Salgado, Anderson, Moscoso, Bertua, De Fruyt & Rolland, 2003; or job satisfaction and affective commitment, Meyer, Stanley, Herscovitch & Topolnytsky, 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 (for example, 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 in order 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., intra-organizational network ties), but "none of those relationships meet the standard for being considered a mentoring relationship" (Haggard et al., 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 non-mentored individuals. Notwithstanding the robustness analysis we conducted, future research should attempt replications using designs that allow for direct comparison between mentored and non-mentored 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. Though 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 inter-organizational 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 (see 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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Table 1

*Confirmatory factor analysis results of the measurement models of employability (N = 352)*

	Model $\chi^2$ <sup>a</sup>	df	$\Delta\chi^2$ <sup>b</sup>	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

<sup>a</sup> Model  $\chi^2$  is the Satorra-Bentler scaled  $\chi^2$  of each model.

<sup>b</sup>  $\Delta\chi^2$  is the change of Satorra-Bentler scaled  $\chi^2$  compared to our original (baseline) measurement model.

\*\*  $p < .01$

Table 2

*Descriptive statistics and inter-correlations (N = 207)*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age	32.51	7.47													
2. Gender <sup>a</sup>	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 <sup>a</sup>	NA	NA	.08	.02	.35**	-.03	.13	.01							
8. Country 2 <sup>a</sup>	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**

<sup>a</sup> Dummy variable\*  $p < .05$ . \*\*  $p < .01$ .



Table 3

*Alternative structural models (N = 207)*

	Model $\chi^2$ <sup>a</sup>	df	$\Delta\chi^2$ <sup>b</sup>	CFI	IFI	RMSEA
Hypothesized structural model	365.30	306	-	.950	.952	.041
Model 1 (mentoring receipt → job performance; job performance → employability, objective career success, subjective career success; employability → objective career success, subjective career success)	618.34	306	253.04**	.827	.831	.073
Model 2 (employability → job performance, mentoring receipt; job performance → mentoring receipt; mentoring receipt → objective career success, subjective career success)	650.18	307	284.88**	.810	.815	.077
Model 3 (employability → job performance; job performance → mentoring receipt; mentoring receipt → objective career success, subjective career success)	693.88	308	328.58**	.786	.792	.081
Model 4 (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 5 (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 6 (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

<sup>a</sup> Model  $\chi^2$  is the Satorra-Bentler scaled  $\chi^2$  of each model. <sup>b</sup>  $\Delta\chi^2$  is the change of Satorra-Bentler scaled  $\chi^2$  compared to our hypothesized structural model. \*\*  $p < .01$

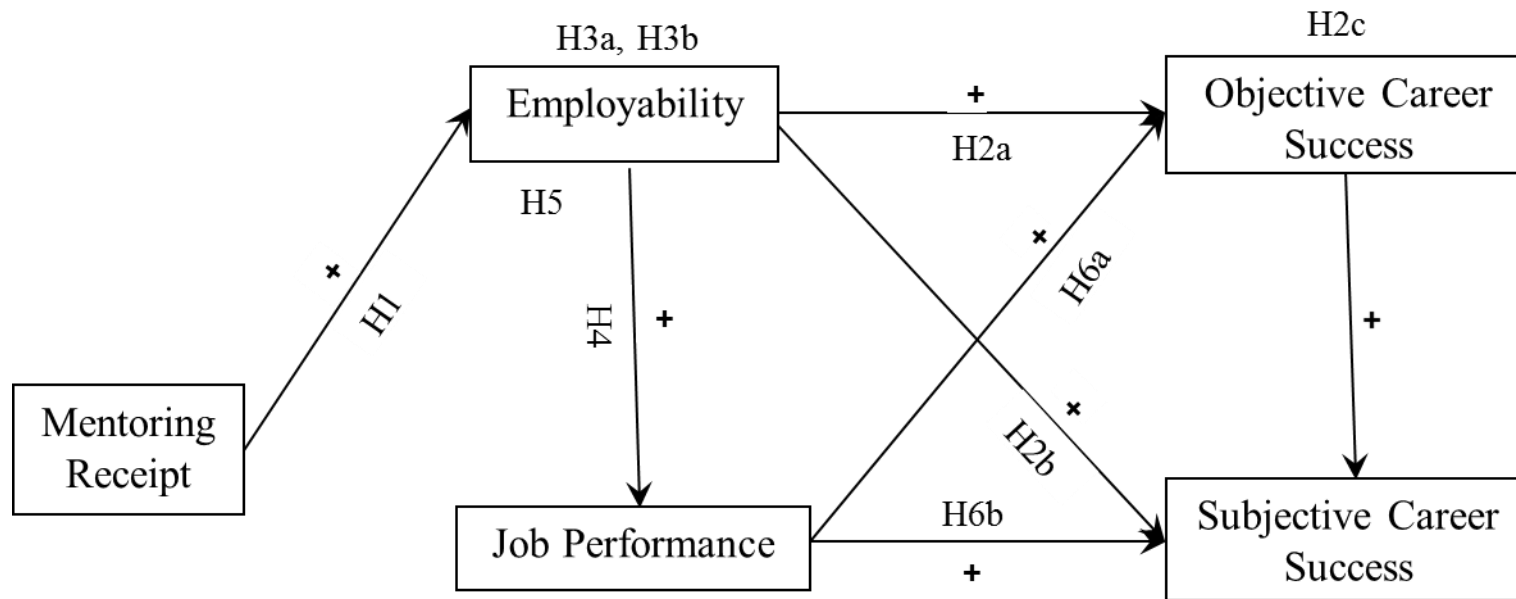


Figure 1. The conceptual model of the relationships among mentoring receipt, employability, job performance, and career success

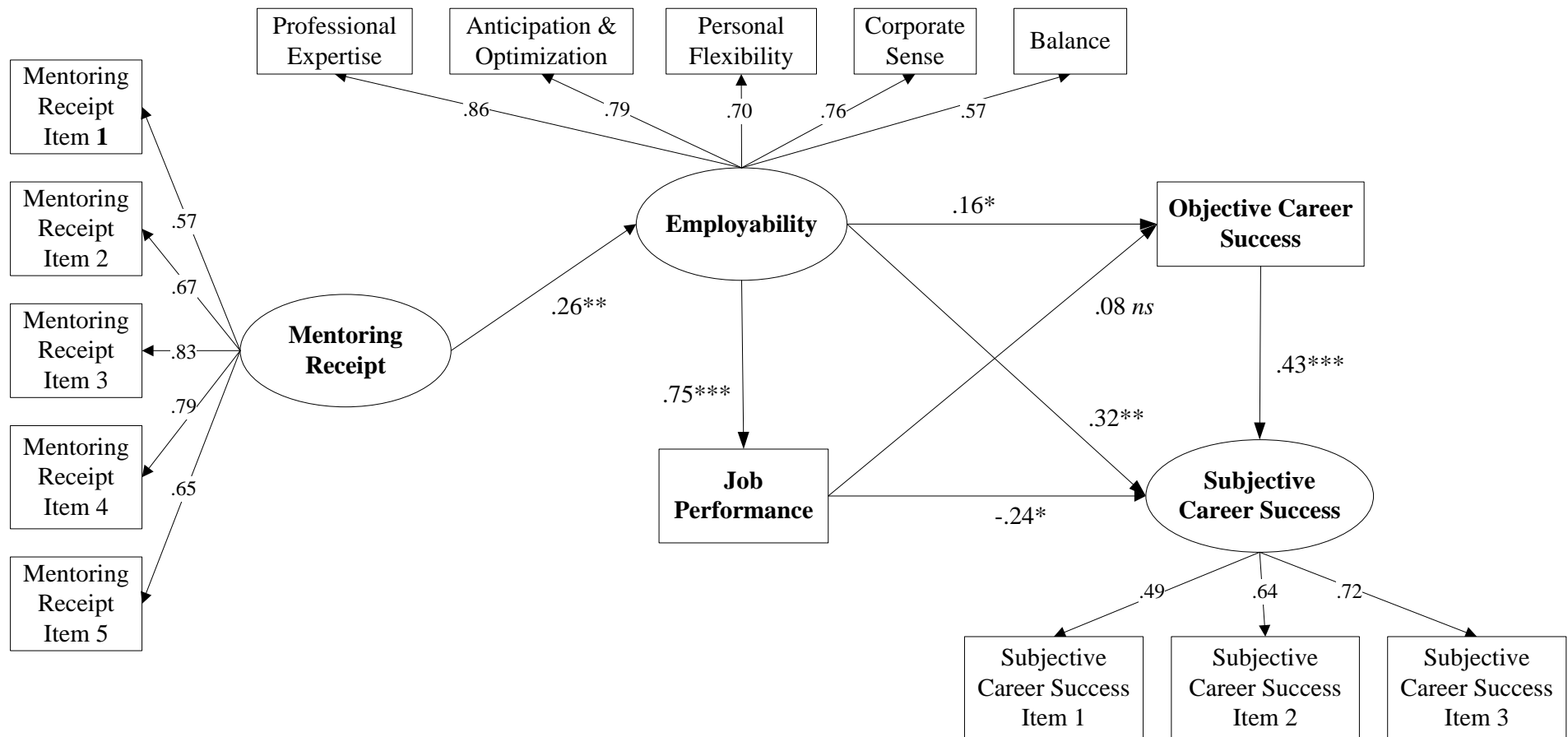


Figure 2. The final structural model

*Notes.*

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. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$