

**The Mediating Effect of Career Capital on the Relationship between
Psychological Capital and Career Success**

by

Po-Hsiang Huang

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Advisor: Yi-Chun Lin, Ph.D.

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ABSTRACT

Individuals pursue career success and competitive advantages through exploring and developing unique talents, strengths, and psychological capacities to achieve productive, sustainable outcomes. The purpose of this study was to investigate the mediating effect of career capital on the relationship between psychological capital and career success. Data were collected from 416 recruiters in career fairs on university campus in northern Taiwan through the paper-based questionnaires. The analysis methods included Confirmatory Factor Analysis (CFA) by operating AMOS 18.0, Pearson correlation, and hierarchical regression by using SPSS v18.0 statistical software. The results showed that psychological capital was positively related career success and career capital. Also, career capital was positively related career success. Most importantly, career capital partly mediated the relationship between psychological capital and career success after controlling for gender, age, position, and job tenure. The results of this study contributed to both theoretical and practical fields. Implications and suggestions for future research were discussed in the research.

Keywords: psychological capital, career capital, career success

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CHAPTER I INTRODUCTION

This chapter discusses about the background of the study, statement of the problem, the purpose of the study, research questions, definitions of key terms, and finally significance of the study.

Background of the Study

Nowadays, individuals have the opportunities to comprehend, handle and leverage this competitive global context for career progression and growth through accumulating personal career competencies (Arthur, Inkson, & Pringle, 1999; DeFillippi & Arthur, 1994; Jones & Lichtenstein, 2000; Parker & Arthur, 2000). Lichtenstein and Mendenhall (2002) suggested that individuals must develop career competencies in order to facilitate their career development in a boundaryless career environment (DeFillippi & Arthur, 1994; Jones & DeFillippi, 1996; Jones & Lichtenstein, 2000). Therefore, by acquiring career competencies, individuals can have a prosperous career. In other words, individuals pursue career success outcome (e.g., career satisfaction and perceive employability) and competitive advantages through exploring and developing unique talents, strengths, and psychological capacities.

Psychological capital (PsyCap) may enable individuals to cope with the complexity of careers in the dynamic working environment (Avey, Luthans, Smith, & Palmer, 2010). PsyCap has been demonstrated conceptually (Luthans, Youssef, & Avolio, 2007) and empirically to represent an individual's positive psychological state of development (Luthans, Avolio, Avey, & Norman, 2007). PsyCap consists of the four positive psychological resources, including efficacy, hope, optimism, and

resiliency. Research showed that individual with the positive psychological capacities report higher self-efficacy, have optimistic expectation, and set higher goals for themselves. As Lyubomirsky, King, and Diener (2005) asserted that these four positive psychological resources could help individual thrive and succeed at work.

Career success has an impact both on individuals and on organizations because individuals' career success (self-determined success) leads to organizational success (Judge, Higgins, Thoresen, & Barrick, 1999). Career success is the accomplishment of desirable work-related outcomes of a person's career experiences.

Statement of the Problem

A wealth of literatures had demonstrated many antecedents of career success in recent year (Judge et al., 1999). Research showed that human capital (e.g., education, work experience, and training) and demographic factors (e.g., age, gender, and marital status) have influences on career success (Judge & Bretz, 1994; Judge, Cable, Boudreau, & Bretz, 1995). McGregor, Tweed and Pech (2004) suggested that given in the work context and employment relationship, there had been an increased demand on the new knowledge worker to display the necessary skills, the unique characteristic and the distinct competencies to compete in a globalized world. However, it was widely accepted that a weakness of career theory is the lack of an adequate conceptualization of career success from the individual's perspective (Poole, Langan-Fox, & Omodei, 1993). Although several researches have taken broad-based different approaches to identify the predictors of career success (Kirchmeyer, 1998; Seibert & Kraimer, 2001), this research attempted to explore potential factors, psychological capital and career capital, to influence and enhance career success.

Psychological capital serves as the antecedent in predicting career success. An

individuals' positive psychological state is helpful to accumulate individual career capital in the workplace. Individuals have confidence to take on challenging tasks and make a positive attribution toward things. Similarly, when faced with difficulties or failures, individuals have the ability to bounce back and adjust well. Besides, there was little literature examining the mediating effect of career capital on the relationship between PsyCap and career success. Individual mental resources such as hope, resiliency, optimism, and self-efficacy can contribute to the development of personal career competencies, thus leading to career success.

Purpose of the Study

This research focused on exploring the relationship among PsyCap, career capital, and career success through analyzing the data collected from recruiters in career fairs on university campus in northern Taiwan. Specifically, the purpose of this study was to investigate the mediating effect of career capital on the relationship between PsyCap and career success. To be more detailed, this study has two goals. One was to investigate how PsyCap relates to career capital and career capital relates to career success. The other one was to identify the mediating effect of career capital on the relationship between PsyCap and career success.

Research Questions

Based on the above purpose of this study, the research questions were proposed as follows:

1. Does psychological capital have a positive effect on career success?
2. Does psychological capital have a positive effect on career capital?
3. Does career capital have a positive effect on career success?
4. Does career capital mediate the relationship between psychological capital and career satisfaction?
5. Does career capital mediate the relationship between psychological capital and hierarchical status?

Definitions of Key Terms

There are three key terms in this research, career capital, career success, and psychological capital (PsyCap).

Career Capital

From a resource-based perspective, career capital can be regarded as the capital that individual possess a unique portfolio of capitals and facilitate their career development in a boundaryless environment. Through the acquisition or accumulation of three key career competencies, which are Knowing-how, Knowing whom, Knowing why (DeFillippi & Arthur, 1994; Dickmann & Harris, 2005), individual cultivate these career competencies as their own career capital to prosper in his or her career (Inkson & Arthur, 2001).

Career Success

According to Judge et al. (1995), career success was defined as the positive psychological outcomes or achievements one has accumulated as a result of experiences over the span of working life.

Psychological Capital (PsyCap)

Psychological capital (PsyCap) was defined as “an individual’s positive psychological state of development and is characterized by: self-efficacy, optimism, hope, resilience” (Luthans et al., 2007, p.542).

Significance of the Study

This study contributed to both theoretical and practical fields. For the academic area, this research attempts to examine the mediating effect of career capital on the relationship between PsyCap and career success. It is pivotal to understand whether psychological capital and career capital play important roles in the literatures of career development fields.

For the practice, the results of this research may help organizations put the emphasis on investing employees’ career capital and psychological capital. For instance, the companies in various industries provide opportunities or training programs for individuals to develop new skills and build both intimal and external networks. Then, employees perform well in their positions. As a result, the enterprises could create the win-win situation for organizations and employees.

To pursue a sustainable career development of enterprises, human resource development practitioners may consider more proactively the development of career competencies for employees.

CHAPTER II LITERATURE REVIEW

This chapter aims to review and summarize relevant literature of career capital, career success, and psychological capital (PsyCap). First of all, it delivered an insight about the concepts and definitions of each variable including career, career capital, career success, and PsyCap. And then, it examined how PsyCap relates to career capital and PsyCap and career capital relate to career success. Finally, it discussed the mediating effect of career capital on the relationship between PsyCap and career success.

Career

The concept of career has been well discussed (e.g., Super, 1976; Aryee & Leong, 1991; El-Sabaa, 2001) and it now has a variety of definitions. Career was first defined as “the course of events which constitutes a life; the sequence of occupation and other life roles which combine to express one’s commitment to work in his or her total pattern of self-development” (Super, 1976, p. 4). According to Brown (2007), the basis of Super’s (1976) definition of career is “a holistic lifestyle conceptualization of career and reflects their beliefs that all life roles are interrelated” (p. 14). Later on, Aryee and Leong (1991) defined career as a type of work related value that reflects an individual’s preferences regarding various job types, performance standards, and forms of recognition in the context of work. El-Sabaa (2001) stated that professional careers include “an evolving sequence of work activities and positions that individuals experience over time as well as the associated attitudes, knowledge and skills they develop throughout their life” (p. 2).

In sum, all these definitions elaborate that career is an individual choice to

consider and manage in a particular occupational area (Brown, 2007).

Career Capital

Career capital was originally proposed by DeFillippi and Arthur (1994). Adopting the concept of organizational capacity, they developed the career competency model where career capital was defined as career competencies which represented individual abilities not only acquired from the organization but also accumulated through work itself. And based on this model (DeFillippi & Arthur, 1994), Inkson and Arthur (2001) proposed a theoretical framework to understand how individuals develop their careers in terms of considering the career capital utilizing to successive employment context. In this framework, career capital could be divided into three dimensions of knowing (DeFillippi & Arthur, 1994; Inson & Arthur, 2001): knowing-why, knowing-how, and knowing-whom. Figure 2.1 showed that how career capital develop and accumulate.

Knowing-why is an important asset in the workplace and it means an individual's energy, sense of purpose, motivation and identification with work. Knowing-why may be regarded as the desire to take care for family, or the ambition to acquire power and status in the company, or seeking opportunities to develop new skills associated to personal interests.

Through work experiences, individual may accumulate another new asset, called knowing how. Knowing-how competencies may be technical, interpersonal or conceptual including the skills, expertise, tacit and explicit knowledge. Then, knowing-how may bring about new contacts and opportunities.

With opportunities to obtain further assets in knowing-whom, that is in the attachments, relationships, reputation, sources of information and mutual obligations that we congregate to pursue our careers. Knowing-whom not only include relevant

relationships between bosses, peers, and subordinates inside the same company, but also extend to the network connections with the company's customers, suppliers, consultants, and to links with outside professionals. Knowing-whom assets also come from our non-work life, for example family relations, friends, acquaintances, and fellow alumni.

To sum up, knowing-why, knowing-how and knowing-whom are complementary flows of career capital. The original investment from one way of knowing has consequences for the other two. Work may stimulate individual to seek out opportunities, thereby affecting our knowing-why. Then, it may inspire individual to learn new skills or abilities, thus intensifying knowing-how. Finally, it may create new working interactions and relationships, and enhance individual's reputation in the society.

Career capital can be described as the value created through ongoing improvement in career position and recognition in both competitive external and internal labor market (Gunderson, 2001). In particular, career capital could help develop an organization's social and intellectual capital from human resources (Haslberger & Brewster, 2009).

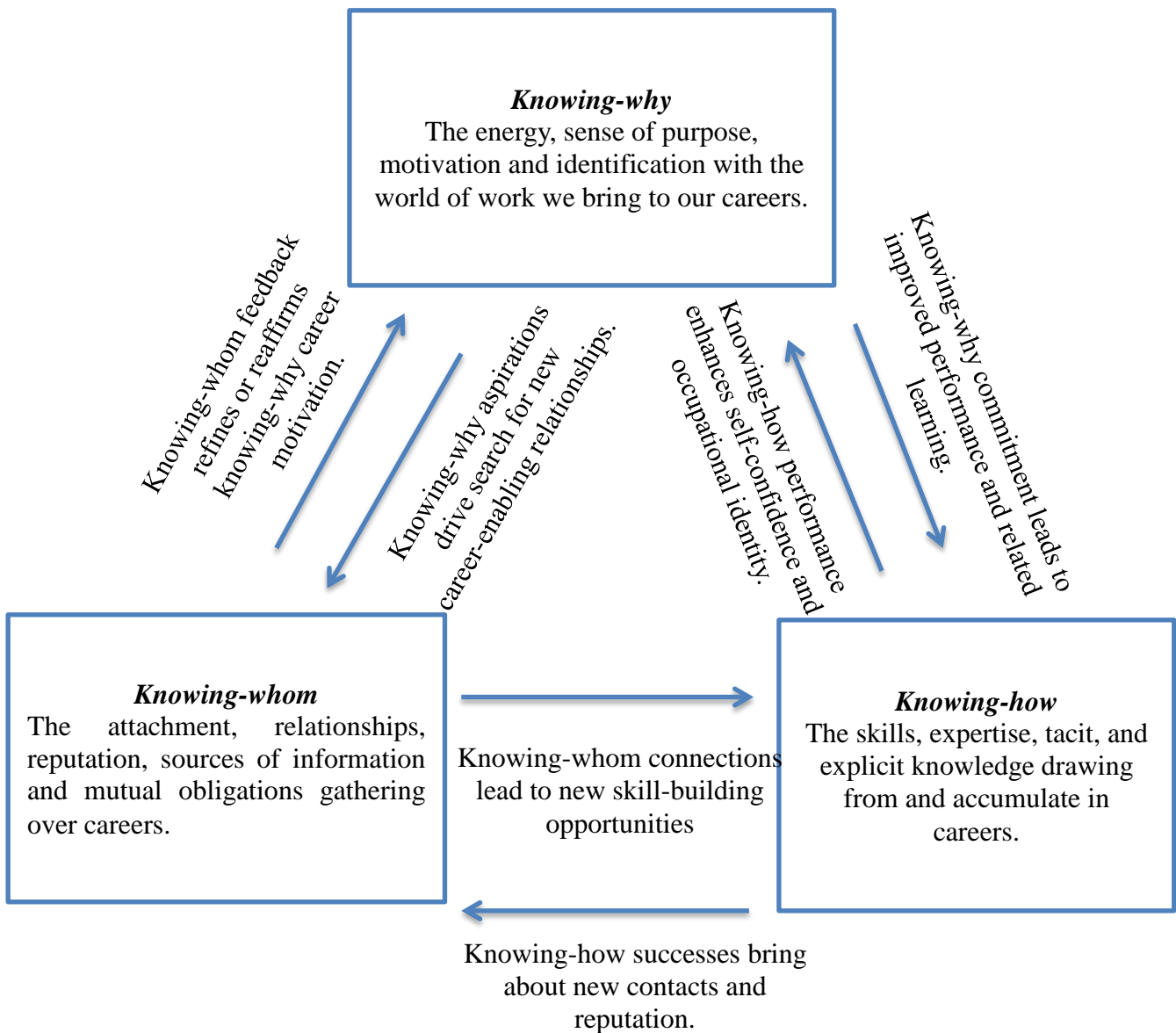


Figure 2.1. Three ways of knowing and the accumulation of career capital. Adapted from “How to be a Successful Career Capitalist,” by Inkson, K., & Arthur, M.B., 2001, *Organizational Dynamics*, 30(1), p. 52. Copyright [2001] by Elsevier Science, Inc.

Career Success

Career success was defined as the “positive psychological or work-related outcomes or achievements one has accumulated as a result of one’s work experiences” (Judge, Cable, Boudreau, & Bretz, 1995, p. 486). Another career success definition is that career outcomes may be viewed from both an external perspective, as judged by an organization, and from an internal perspective, as judged by an employee (Schein, 1978). Most studies operationalize comprehensive career success in two aspects. The first variable measures objective or extrinsic career success (Gutteridge, 1973). It include indicators of career success that can be seen and therefore evaluated objectively by different factors, such as salary attainment and the number of promotions in one’s career (Judge et al., 1995). The second component to measure subjective or intrinsic career success is career satisfaction capturing individuals’ subjective judgment (Judge et al., 1995). Career satisfaction was defined as a stimulated response to career and work events (Gattiker & Larwood, 1988) and assessed to acquire an understanding of subjective career success. Both objective and subjective career success were regarded as important outcomes of individuals’ career experiences (Arthur, Khapova, & Wilderom, 2005).

Career researcher, Hennequin (2007) highlighted the importance of taking both objective and subjective perspectives into account to fully understand career success. In the career literature, previous studies have been explored influential factors to predict career success. Individual difference factors emphasized the role of personal attributes and reflected how individuals interact and perceive their careers. Individual determinants include dispositional traits (Day & Allen, 2004), employees’ demographics (Greenhaus & Parasuraman, 1993), and human capital (Judge et al., 1995). In addition, motivational and social capital variables also demonstrated to

predict career success. Whitely, Dougherty, and Dreher (1991) noted that motivation indicators such as hours worked per week, and work centrality were likely to affect career success. Work centrality means the psychological investment in work or centrality of work for self-identity (Ng, Eby, Sorensen, & Feldman, 2005). Individuals who regard their work as a central part of their lives are more willing to make contributions in their work and in their careers. As for social capital factors, mentoring (Allen, Eby, Poteet, Lentz, & Lima, 2004) and networking (Nabi, 2003) were found to influence career success.

Psychological Capital

Originally, Law, Wong, and Mobley (1998) proposed a conceptual framework for establishing how multidimensional constructs can associate to an essential circumstance. Psychological capital is an important construct in the positive organizational behavior (POB) field. The concept of POB is “the study and application of positive oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today’s workplace” (Luthans, 2002, p. 59).

Psychological capital means ‘who you are’ and ‘what you can become on the part of development’ (Avolio & Luthans, 2006) and is distinguished from human capital (what you know), social capital (who you know), and financial capital (what you have) (Luthans, Luthans, & Luthans, 2004). Psychological capital has been typically defined as “an individual’s positive psychological state of development that is characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems

and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success” (Luthans, Youssef, & Avolio, 2007, p. 3).

As a concept, hope was widely applied in clinical and positive psychology, and usually defined as “positive motivational state that based on an interactively derived sense of successful (a) agency (goal directed energy) and (b) pathways (planning to meet goals)” (Snyder, Irving, & Anderson, 1991, p. 287). The agency is the will to achieve a specific task or goal, whereas the pathway is the means to accomplish a task or goal. Individuals put the will and the way together to attain a given task or goal. A previous study conducted with Chinese workers has shown that performance is positively related to hope (Luthans, Avolio, Walumbwa, & Li, 2005).

Resiliency was the ability to cope with and adapt to the significant adversity or risk (Masten & Reed, 2002). In workplace studies, resiliency was defined as the “positive psychological capacity to rebound, to ‘bounce back’ from adversity, uncertainty, conflict, failure, or even positive change, progress and increased responsibility” (Luthans, 2002, p. 702). Youssef and Luthans (2007) found that employee’s resiliency was relevant to job satisfaction, happiness, and commitment in the work environment.

Positive psychologist, Seligman (1998) defined optimism as creating an internal, relatively stable, and global attribution regarding positive transactions such as goal achievement, and an external, relatively unstable, and specific cause for negative events like a failed attempt at reaching an objective. As applied optimism to the workplace, Seligman (1998) noted that optimism was significantly and positively related to the performance of insurance sales agents.

Self-efficacy represented that “one’s conviction (or confidence) about his or her abilities to mobilize the motivation, cognitive resources, or courses of action

needed to successfully execute a specific task within a given context” (Stajkovic & Luthans, 1998b, p. 66). Stajkovic and Luthans (1998a) conducted a meta-analysis and proved that a strongly positive relationship between self-efficacy and work-related performance.

To sum up, PsyCap emerged from the research of positive organizational behavior (POB) and comprised of four components, hope, resiliency, optimism, and self-efficacy. Then, Luthans (2002) applied these positive psychological capacities or strengths to the workplace. Hope meant that one’s ability to continuously come up with different methods to accomplish the goals; resiliency was described as the individual positive reaction and adaption when they face the difficulties or adversity; optimism referred that people have a positive expectation in the future and attributed the negative events to external, temporary, situational factors; self-efficacy represented that individuals were confident of their ability to perform a specific task well.

Psychological Capital and Career Success

Psychological capital is represented as an emerging higher priority, and core positive construct that corporations can invest in and develop in the workplaces to achieve actual, sustained growth and performance (Luthans et al., 2005; Luthans et al., 2007). Performance is regards as the aggregated value to the organization of the discrete behavioral episodes that an individual performs over a standard interval of time (Motowildo, Borman, & Schmit, 1997).

The four core constructs of psychological capital contribute to improve individual performance effectively and impact on career success (Luthans et al., 2007). Seibert and Kraimer (2001) defined career success as the accumulated positive work

and psychological outcomes resulting from individual work experiences. Furthermore, psychological capital represents the cognitive resources that can help individuals maintain the motivational energy to adapt and identify with work throughout their careers (Luthans et al., 2007).

The first construct of PsyCap is hope. Hope represents the motivational energy to identify the way to achieve career goals (Luthans et al., 2007; Snyder, 2000). Individuals with greater hope, they have more energy to pursue success (Snyder, 2000). Resilience is the second construct of PsyCap. Facing the negative events, individual with higher levels of resilience could deal with setbacks smoothly (Tugade, Fredrickson, & Barrett, 2004). Resilience helps the individual to overcome adversity and uncertainty to achieve success (Gooty, Gavin, Johnson, Frazier, & Snow, 2009; Luthans, Avey, Avolio, Norman, & Combs, 2006).

The third construct of PsyCap is optimism. With higher levels of optimism regarding the future and confidence in abilities to succeed in the current job will motivate individuals to take charge of their own career (Seligman, 1998). Therefore, optimism can easily facilitate adaptation to changing work context and past failures (Luthans et al., 2007). Finally, Self-efficacy represents individual confidences in one's ability to become successful (Gooty et al., 2009; Luthans et al., 2007). With greater self-efficacy, individuals can integrate the motivation, cognitive resources, and actions to achieve success in the career context (Bandura, 1986). In the empirical studies, self-efficacy was found to have a strong positive relationship with work-related performance (Bandura & Locke, 2003). To sum up, those with more psychological capital may have the greater psychological resources for preserving and succeeding when facing the setbacks and challenges.

In addition, there was a positive relationship between PsyCap and job

satisfaction (Luthans et al., 2007) to satisfy the career satisfaction further. The evidence showed that positive constructs such as hope, resilience, efficacy, and optimism that can be measured and related to performance and satisfaction (Luthans et al., 2007). Therefore, PsyCap might relate to career satisfaction.

Based on the above literatures, this study proposed that there was a positive relationship between PsyCap and career success. Specifically, individuals with higher levels PsyCap were supposed to experience higher level of career satisfaction and tend to promote hierarchical status.

Hypothesis 1. Psychological capital has a positive effect on career success.

Psychological Capital and Career Capital

In the positive psychology, PsyCap reflects individuals' psychological resources and the condition of individual positive emotional state (Luthans et al., 2007). PsyCap with features of hope, resilience, optimism, and self-efficacy plays an important role in determining individuals' competitive advantage in the workplace (Luthans, Avey, Clapp-Smith, & Li, 2008). Individuals developed PsyCap and thus apply it to help them recognize their strength and accomplish performance. PsyCap has been viewed as a significant predictor of employees' performance, commitment, and satisfaction (Luthans et al., 2005). However, few studies discussed the relationship between PsyCap and individuals' career capital, including three career competencies, knowing-how, knowing-why, and knowing-whom (DeFillippi & Arthur, 1994). PsyCap is beneficial to the development of career competencies. For example, individual high in PsyCap are more committed their career (knowing-why), engaged in continuous learning (knowing-how), and to develop social networks (knowing-whom). Individuals facilitated their positive psychological capacities such as hope, resilience, optimism, and self-efficacy to develop and accumulate personal

career capital. Therefore, this study proposed that individual with high PsyCap may contribute to the development of personal career capital. Based on the above discussion, the following hypothesis was put forward:

Hypothesis 2. Psychological capital has a positive effect on career capital.

Career Capital and Career Success

Career capital can be regarded as the capital that is valued within the career field individual possesses a unique portfolio (Bourdieu, 1986). Individual consciously acquire portable abilities, actively build social networking to enhance their careers, and identify their own drives and motivations and apply these career capital in their work context (Inkson & Arthur 2001; Vance, 2005).

Career capital takes a variety of forms and accumulated in diverse ways and at different stages of an individual's career. Three career competencies of career capital, namely knowing-how, knowing-why and were proposed by DeFillippi and Arthur (1994). Knowing-how means the knowledge, skills, abilities, and others (KSAO) which are needed for performance. Knowing-why capital reflects individuals' career motivation and personal identification with works. Finally, knowing-whom career competencies include the social networking of intra-firm and inter-firm relations (Jokinen, Brewster, & Suture, 2008).

Career success was defined as the positive psychological or work-related outcome and achievements resulting from one's work experiences (Judge et al., 1995). The acquisition of important outcomes accumulated from individuals' career experiences (Arthur, Claman, & DeFillippi, 1995). Career success also reflects an overall personal evaluation of one's career and the main goal of career management (Judge et al., 1995).

DeFillippi and Arthur (1994) investigated the relationship between individual

career capital and career success. With the knowing-how, knowing-why and knowing-whom career competencies can support individual to pursue personal success. Inkson and Arthur (2001) stated that the three ways of knowing are complementary forms of career capital. The components and balance of career capital is constantly changing based on the context and demands in the work situation. Career capital consists of individual resources and relationships that can positively influence career-related outcomes (Inkson & Arthur, 2001). Similarly, the different forms of career capital all have utility for predicting objective and subjective career success (Singh, Ragins, & Tharenou, 2009). To more specific, the development of career capital enhances individual employability in the workforce and provides opportunities for career growth and success (Ng et al., 2005).

The knowing-how career competency includes the transferable skills and knowledge. When individuals grow in the organization, their networks broaden and they achieve goals through the implementation of their knowledge and skills. Then, their career capital enhances so that they can apply it to the organization (Hill, 1998). In individual work role and behavioral interactions, people develop applicable skills and knowledge for competent performance (Jones & Lichtenstein, 2000). The skill and knowledge acquisition positively related to career success (Drether & Bretz, 1991). Also, it was proved that job skills and work experiences were associated with career success (Eby, Butts, & Lockwood, 2003; Ng et al., 2005).

The knowing-why career competency demonstrated that individual identifies with a sense of reason and purpose in his or her career development. The knowing-why reflected individual career motivation and personal identification to seek different opportunities and adapt to changing work environments (Arthur et al., 1999; DeFillippi & Arthur, 1994). In addition, individuals with proactive personality

tend to generate greater their career satisfaction as they have a strong professional identity (Seibert, Crant, & Kramier, 1999).

The knowing-whom career competency is characterized by relationships, reputation and attachments formed over a career so that it can provide opportunities and resources to help one's career development (Jones & DeFillippi, 1996), career support, and personal development (Parker & Arthur, 2000) . The networking of both inside and outside the organization was associated to the traditional indicators of career success, such as the promotion rates, and the job mobility (Burt, 1997).

Eby, Butts and Lockwood (2003) found that the three ways of knowing, knowing-why, knowing-how, and knowing-whom, were important in predicting perceived career success, and perceived internal and external marketability in boundaryless careers. The construct of perceived career success was described as individual feelings of satisfaction and accomplishment of one's career (Seibert, Crant, & Kramier, 1999). On the other hand, the perceived internal and external marketability were additional indicators of career success. The results of Eby, Butts and Lockwood's (2003) research indicated that all three types of career competencies were likely to add value to individuals' careers. Based on above discussions, this study hypothesized that career capital has a positive effect on career success. The accumulation and implementation of career capital may contribute positively to career success.

Hypothesis 3. Career capital has a positive effect on career success.

The Mediating Effect of Career Capital on the Relationship between PsyCap and Career Success

Kong, Cheung, & Song (2012) examined the mediating effect of career capital on the relationship between PsyCap and career success in the samples of 600 hotel managers in China. They provided initial empirical evidence of mediating effect of career competencies. The research results showed that the three types of career competencies, knowing-how, knowing-why, and knowing-whom mediated the effects of three dimensions of hotel management (career appraisal, career development, and career training) on career satisfaction. In addition, individuals with high level of PsyCap usually expect good things to happen at work (optimism), deeply believe that they created success by themselves (hope and self-efficacy), and have confidence to recover from setbacks or difficulties (resilience). These characteristics of PsyCap are helpful for individuals to acquire career competencies. The acquisitions of career capital enable individuals to pursue career growth and success (Ng et al., 2005). However, since the empirical evidences of career capital as a mediator were limited and thus this study proposed that career capital mediates the relationship between PsyCap and career success.

Hypothesis 4. Career capital mediates the relationship between Psychological capital and career satisfaction.

Hypothesis 4a. Career capital mediates the relationship between Psychological capital and hierarchical status.

CHAPTER III METHODOLOGY

This chapter illustrates the methodology of this research, including the research framework, hypothesis, research procedure, target population, data collection, measurement, and data analysis methods. This research adopted the quantitative research approach to examine the relationships among psychological capital (PsyCap), career capital, and career success.

Research Framework

The independent variable was Psychological capital (PsyCap). PsyCap consisted of four dimensions, hope, resilience, optimism, and self-efficacy. The dependent variable was career success and was measured by objective (hierarchical Status), and subjective (career satisfaction) career success. Career capital served as the mediator on the relationship between PsyCap and career success. Career capital included three dimensions, knowing how, knowing why, and knowing whom. The research framework was shown below, see Figure 3.1.

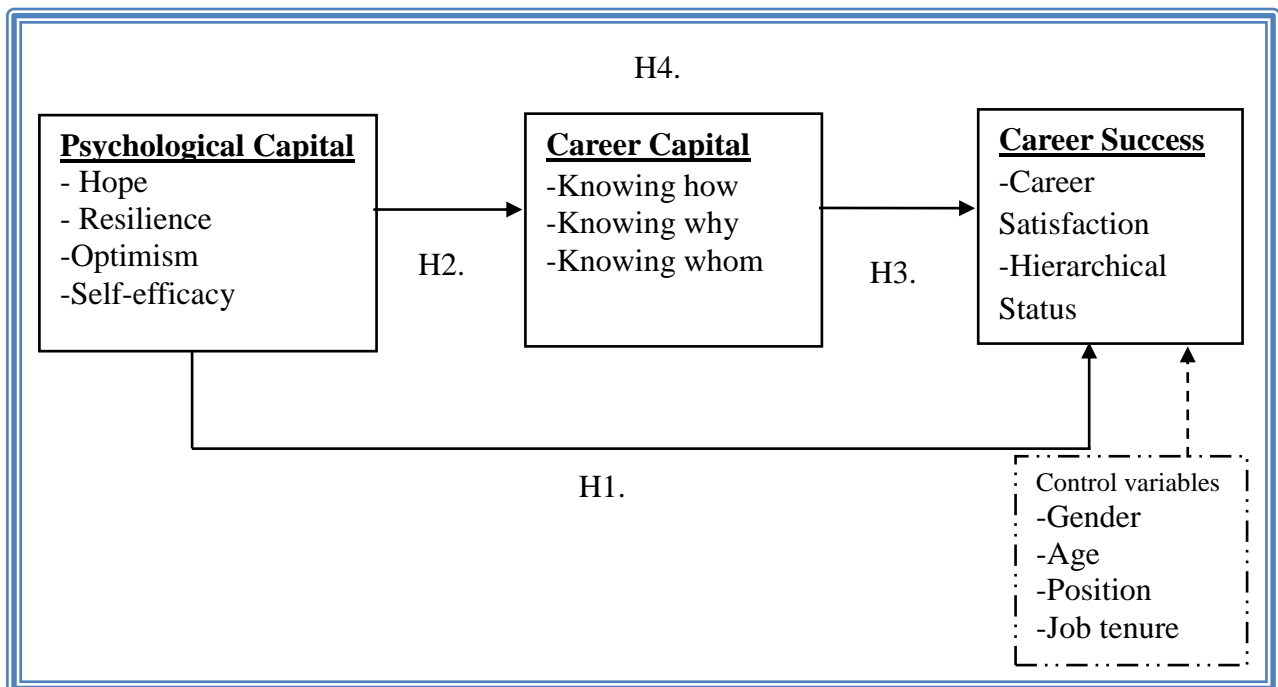


Figure 3.1. Research Framework

Research Hypotheses

Based on previous literature, the research purpose, and research questions, the hypotheses were described as follows:

Table 3.1.

Research Hypotheses

Hypotheses	Explanation
Hypothesis 1.	Psychological capital has a positive effect on career success.
Hypothesis 2.	Psychological capital has a positive effect on career capital.
Hypothesis 3.	Career capital has a positive effect on career success.
Hypothesis 4a.	Career capital mediates the relationship between psychological capital and career satisfaction.
Hypothesis 4b.	Career capital mediates the relationship between psychological capital and hierarchical status.

Research Procedure

This section demonstrated the procedure that was followed for the completion of this study and the procedures were presented in Figure 3.2. Identifying a research topic based on the literature was the first step. Reviewing the relevant literature to identify viable areas of interest related to our topic was the second step. Writing the research questions and hypotheses was the following step. The research questions and hypotheses were developed based on the literature review performed before. After the research questions and hypotheses were proposed, a research framework was developed to understand the relationship between variables. According to the

literatures, a questionnaire was designed to retrieve the information that this study needed to answer the research questions and test the hypotheses. The next step was to collect the data. Once the data were gathered, data analysis, hypotheses testing and interpreting of the meaning was done. Finally, results, discussions and suggestions were discussed to answer the research questions and the purpose of this study.

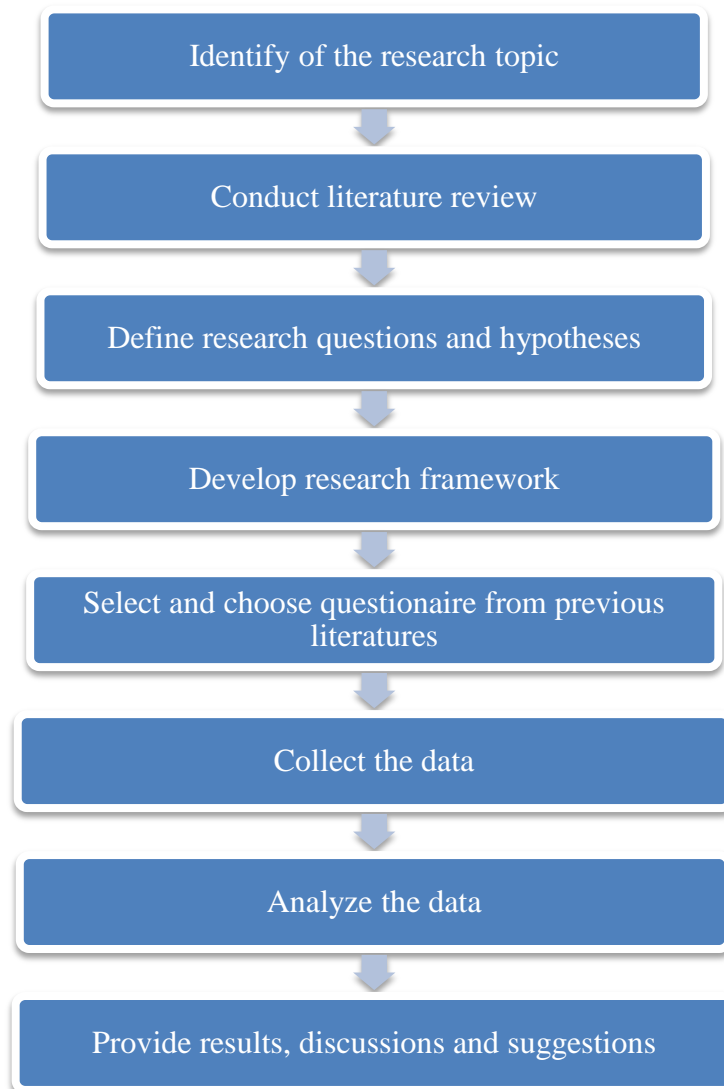


Figure 3.2. Research Procedure

Sample

The target population of this study was the recruiters in career fairs on university campus in Taiwan. The recruiter is an individual who works to fill job openings and finds individuals qualified for positions in businesses or organizations. The sample data were collected using self-reported and paper-based questionnaires. 530 copies of the questionnaires were distributed directly to the recruiters in campus recruitments and career fairs in Taiwan.

There were two reasons for choosing recruiters as target sample in this study. One was that recruiters play an important role in human resource management. Human resource recruiting is a primary function in companies. Their tasks are to find the appropriate people and place them in the right positions. The other reason was the accessibility to the participants so that the researcher can approach them in person.

In the present study, a total of 530 questionnaires were distributed to recruiters in career fairs on university campus in Taiwan. 507 questionnaires were collected. 91 cases with the majority of missing values, incomplete data, and answering in the consistently specific Likert scales were excluded. Finally, 416 questionnaires were valid for the effective response rate of 78.5%.

Data Collection

The major channel to approach recruiters was career fairs on university campus in Taiwan. In the graduation season every year from March to June, a lot of companies actively contact different universities to ask for recruitment opportunities. Similarly, colleges also invite various companies as vendors in the career fairs. The information of career fairs on university campus such as the date and the place were acquired from the 104 official website, newspapers and magazines. For the reason of

accessibility, the researcher directly distributed questionnaires to recruiters with a convenient sampling. The recruiters received a coupon of the convenient store as an incentive for filling the questionnaires. It was a confidential study. The questionnaire did not ask respondents to fill in their personal information.

Questionnaire Design

The mature scales of each variable were adopted in the questionnaires in order to ensure the content validity of questionnaires. There were three parts in the questionnaire. The first part of questionnaire included both career capital (19 items) and career satisfaction (5 items). Based on the participants' work experience, the total 24 items were answered by using the 7-point Likert scale ranging from (1) strongly disagree to (7) strongly agree. The second part was PsyCap which included 24 items in four dimensions. In this part, the 5-point Likert scale from (1) strongly disagrees to (5) strongly agree was adopted to indicate the level of individuals' PsyCap. In addition, there were three reverse items in this section. The last part of questionnaire was demographic information. The participants were asked to fill in their age, tenure in current job, total tenure, gender, three hierarchical status questions (permission to delegate work, project responsibility, and official leadership position), position, education level, annual salary, and industry.

In order to verify the questionnaire content validity, this research conducted the confirmatory factor analysis (CFA) by applying the AMOS 18.0 statistical software. This study adopted indicators had been proposed in previous researches to examine the construct validity of career capital, psychological capital, and career satisfaction.

In addition to validate the questionnaire, the questionnaire may face the problem of common method variance (CMV) (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003)

since we put all variables' scales into a questionnaire which the independent variable and dependent variable were answered by same person at same time.

As a result, the researcher did the pre-preventions and post-preventions to avoid CMV. There are three ways in pre-preventions. First, the research purpose and variables' names did not reveal in the questionnaire content. Second, the questionnaire used both 5-point and 7-point Likert scale to measure different variables in order to reduce the CMV problem. Third, reverse items were contained in the questionnaire to avoid random answers (Podsakoff et al., 2003).

Harman's one-factor analysis was conducted in this study as post-prevention to detect the CMV problem (Podsakoff & Organ, 1986). The general proposition of Harman's one-factor analysis is to see if the majority of the variance can be explained by a single un-rotated factor. The CMV problem exists when the first principle factor accounted for over 50% of total variance.

As the original scales were English version and this study was conducted in Taiwan, the researcher translated the scales into Chinese. The back translation was conducted to confirm both English and Chinese version with the consistent meanings. The researcher found a Ph.D. student who studied in the Graduate Institute of Translation and Interpretation in National Taiwan Normal University. He translated the Chinese version scale back to English. To check whether Chinese and English version are in the same meaning or not, the researcher went through the expert review to make sure the words translated into the consistent meaning. Finally, the Chinese version was formed through the discussion with advisor. The questionnaire can be seen in appendix A.

Measurement

The measurement comprises three measures: career capital, career success, and psychological capital. The details are as follows:

Career Capital

Career Capital was measured with three dimensions scale, knowing-why, knowing-why, and knowing-how. Of three dimensions of career capital, knowing why (9-items), and knowing whom (4-items) were developed by Jokinen, Brewster and Suture (2008) and their corresponded original Cronbach's alpha scores were 0.78, and 0.77, respectively. And the knowing-how (6-items) was developed by Eby et al. (2003) and Baker and Aldrich (1996). The original Cronbach's alpha for knowing-how was 0.87. Respondents were asked to indicate their level of agreement with the scale items. A total of 19 items were incorporated into three of career capital scale. The research sample presented a coefficient alpha of 0.91 (See Table 4.2), indicating good internal consistency.

Knowing-why career capital was measured through nine items scale to acquire the understanding of individual values, work interests and capabilities. Sample item is "Recognizing your own strengths and weaknesses, needs and motives." Each item was answered using a 7-point Likert-type scale ranging from (1) strongly disagree to (7) strongly agree.

Knowing-whom career capital, a four-item scale was used to measure the development of networking skills and social networks based on the work experience. Sample item is "Knowledge of people with influential power within organizations." It reflects the career capital perspective of the social networking developed during the work, focusing on the relationships that have some level of influential power within

organization from the relationships with other people without such power. Each item was answered using a 7-point Likert-type scale ranging from (1) strongly disagree to (7) strongly agree.

Knowing-how was assessed with a six items combining the one item of the transferability of one's job-related skills and knowledge to other employment settings developed by Baker and Aldrich (1996) and the five items career-job-related skills scale developed by Eby et al. (2003). Sample items are "I have a diversified set of job-related skills" and "My job-related knowledge and skills are easily transferable/applied to other employment settings" Each item was answered using a 7-point Likert-type scale ranging from (1) strongly disagree to (7) strongly agree.

Career Success

In this study, career success was measured by objective career success and subjective career success.

Objective career success.

Hierarchical status represented individuals' objective career success by using three items scale developed by Abele and Spurk (2009). The three items were permission to delegate work (0 = no, 1 = yes), project responsibility (0 = no, 1 = yes), and official leadership position (0 = no, 1 = yes). These three items were summed up to represent the participants' hierarchical status. The hierarchical status variable could vary between zero and 3. The Cronbach's alpha reliability of hierarchical status in this study was 0.66 (See Table 4.2).

Subjective career success.

Career satisfaction was used to measure individuals' subjective career success. Career satisfaction was measured with five items developed by Greenhaus, Parasuraman, and Wormley (1990). The participants respond to these five items on the

7-point Likert scales ranging from (1) strongly disagree to (7) strongly agree. The sample items included ‘I am satisfied with the success I have achieved in my career’, ‘I am satisfied with the progress I have made toward meeting my overall career goals’, ‘I am satisfied with the progress I have made towards meeting my goals for advancement’, ‘I am satisfied with the progress I have made toward meeting my goals for income’, and ‘I am satisfied with the progress I have made toward meeting my goals for the development of new skills’. The five items were summed up to form the career satisfaction measure. The original career satisfaction scales reported that internal consistency is with a total Cronbach’s alpha score of 0.88 to be reliable. In this study, the internal reliability coefficient of career satisfaction was 0.79 (See Table 4.2).

Psychological Capital (PsyCap)

Psychological capital (Psycap) was defined as a core psychological factor of positivity that go beyond human and social capital to gain a competitive advantage through investment and development of ‘who you are’ (Luthans et al., 2004). Psychological capital measurement was adopted from Psychological capital (PsyCap) questionnaire (PCQ) self-report version by Luthans et al. (2007) with 24 items in 4 dimensions which were *Hope* (the original Cronbach’s alpha score of 0.8), *Resilience* (the original Cronbach’s alpha score of 0.72), *Optimism* (the original Cronbach’s alpha score of 0.72), and *Efficacy* (the original Cronbach’s alpha score of 0.85). Each dimension included six items.

Example item of hope is “If I should find myself in a jam at work, I could think of many ways to get out of it.”; example item of resilience is “I feel I can handle many things at a time at this job.”; example item of optimism is “If something can go

wrong for me work-wise, it will.”; example item of efficacy is “I feel confident analyzing a long-term problem to find a solution.” Each dimension are in the form of statement and responses are designed on a 5-Point Likert scale ranging from (1) strongly disagree to (5) strongly agree. The high score of scale indicates that an individual have high level of psychological capital (PsyCap). The research sample presented a coefficient alpha of 0.91 (See Table 4.2), indicating good internal consistency.

Control Variables

Based on the previous literatures, it is necessary to rule age, gender and position out to get a sense of the degree attributed clearly to career success.

Age.

Generally, salary increases more or less automatically with age. Besides, older people have a higher status in organizations since they have more experiences than younger employees. Age is likely to influence career success (Kuijpers, Schyns, & Scheerens, 2006). Age and gender are the crucial individualistic differences to affect perceptions of career outcomes (Chen, 2012). Respondents answered their age in an open-ended question.

Gender.

Betz and Hackett (1981) found that men and women differ with respect to their career choices and to what determine their career success, with women feeling more competent in typically female occupations as opposed to typically male occupations. Furthermore, Stroh, Brett and Reilly (1992) indicated that man and women’s career experiences are quite different, which had implications for understanding the relationships between the predictor and career success. In this research, the dummy variable was created to analyze the nominal variable. Hence, female was code as 0

and male was code as 1.

Position.

Referring to the indicators of objective career success, the present position in an organization has implications for salary and status (Forret & Dougherty, 2004). Respondents self-rated their position in the organizations using following categories:

1. Employee, 2. Supervisor, 3. Middle level manager, and 4. Top level manager.

Job tenure.

Prior researches indicated that job tenure was positively related to career outcome (Judge et al, 1995; Stroh et al., 1992). The result showed that individual with longer job tenure may have developed knowledge, skills in their position and acquired valuable experiences. Respondents indicated their number of year of work experience.

Reliability and Validity

Reliability and Validity analysis aim to ensure the internal consistency and stability of the instruments. In the reliability analysis, Cronbach's alpha is the most widely adapted. Cronbach's alpha presents a summary measure of the inter correlations that occur among a set of items. Considering reliability, Cronbach's alpha higher than 0.7 is acceptable (Guilford, 1965; Nunnally, 1978). For the validity analysis, confirmatory factor analysis (CFA) was conducted to make sure the content validity of the measurement.

Pilot Test

Before collecting the data, the researcher conducted pilot test to ensure the wording and the meaning of items in the questionnaires were appropriate that respondents can understand it. Also, reliability of the questionnaire was measured in the pilot test. 56 recruiters in career fairs on university campus in Taiwan completed

the questionnaires in the pilot test, and these 56 pilot test samples were excluded from the final survey. Table 3.2 presented the reliability of three variables and its dimensions in the pilot test. As shown in Table 3.2, Cronbach's alpha coefficient ranged from 0.70 to 0.95 which indicated reasonable to a good consistency of the items' set in measuring the research variables. The Cronbach's alpha for career capital was 0.95 and its dimensions of knowing-how was 0.82, knowing-why was 0.93, knowing-whom was .86. The reliability for psychological capital was 0.95. For the Cronbach's alpha of four dimensions of PsyCap, hope, resilience, optimism, and self-efficacy were 0.9, 0.87, 0.79, and 0.83, respectively. Lastly, the Cronbach's alpha for career satisfaction was 0.95 and hierarchical status was 0.70.

Table 3.2.

Reliability Analysis of Pilot Test (n=56)

Variables and Dimensions	Number of items	Cronbach's alpha
1. Career Capital	19	.95
1-1. Knowing-how	6	.82
1-2. Knowing-why	9	.93
1-3. Knowing-whom	4	.86
2. Psychological Capital	24	.95
2-1. Hope	6	.90
2-2. Resilience	6	.87
2-3. Optimism	6	.79
2-4. Self-efficacy	6	.83
3. Career Satisfaction	5	.95
4. Hierarchical Status	3	.70

Confirmatory Factor Analysis (CFA)

Before testing the hypotheses, confirmatory factor analysis (CFA) was performed to evaluate the distinctiveness of the measures in this study by using AMOS 18.0. Because the chi-square (χ^2) test is sensitive to sample size, the overall model fit was also examined by various fit indices, including root-mean-square error of approximation (RMSEA), Tucker–Lewis non-normed index (TLI), incremental fit index (IFI), and the comparative fit index (CFI). A good model fit was shown when RMSEA was below 0.08 (Browne & Cudeck, 1993) and TLI, IFI and CFI scores are above 0.90 (Byrne, 2001).

The results of CFA presented in Table 3.3. The value of chi square divided by degree of freedom was below 3 (Career Capital = 2.97; PsyCap= 2.37; Career Satisfaction = 1.31). The model fit was good when RMSEA was below or equal to 0.08 (Career Capital = 0.07; PsyCap= 0.06; Career Satisfaction = 0.03), the CFI (Career Capital = 0.91; PsyCap= 0.92; Career Satisfaction = 0.97), NFI (Career Capital = 0.88; PsyCap= 0.87; Career Satisfaction = 0.99), TLI (Career Capital = 0.92; PsyCap= 0.98; Career Satisfaction = 0.99), IFI (Career Capital = 0.89; PsyCap= 0.91; Career Satisfaction = 0.99), and the GFI score (Career Capital = 0.89; PsyCap= 0.89; Career Satisfaction = 0.99) was above 0.90. The NFI, IFI, and GFI value of career capital and the NFI and GFI scores of PsyCap were slightly below 0.90, but it still in the accepted range. However, with regards to objective career success, hierarchical status, the number of three parameters exactly equals to the number of known values which caused zero degree of freedom. It meant that the latent variable, hierarchical status with three items had a perfect just-identified model. Therefore, there was no need to conduct the CFA of hierarchical status.

In conclusion, the three variables, career capital, PsyCap, and career satisfaction,

all reported good fit indexes that ensured the validity of the research.

Table 3.3.

Results of Confirmatory Factor Analyses (n=416)

	Model fit indices								
	χ^2	df	χ^2/df	RMSEA	CFI	NFI	TLI	IFI	GFI
1.Career Capital	433.95	146	2.97	.07	.91	.88	.92	.89	.89
2. PsyCap	575.23	243	2.37	.06	.92	.87	.98	.91	.89
3.Career Satisfaction	5.25	4	1.31	.03	.99	.99	.99	.99	.99

Note: PsyCap=Psychological capital RMSEA=Root Mean Square Error of Approximation;

CFI=Comparative Fit Index; NFI=Normed Fit Index; TLI=Taker-Lewis Index; IFI=Incremental Fit

Index; GFI=Goodness-of-fit index.

Harman's One-Factor Test

In the post-prevention of common method variance (CMV), Harman's one-factor test (Podsakoff et al., 2003) was performed to detect potential bias. Since the data were self-reported and collected by the same questionnaire at the same time. Podsakoff et al. (2003) stated that if a single factor emerged or one general factor account for the majority of all the dependent and independent variables means that the CMV problem exists in the research. In this study, all the 48 items were entered into the factor analysis and then the un-rotated factor solution was examined to determine the number of variances of the variables. The result revealed 10 factors with the eigenvalue greater than 1.0, and accounted for 62.38% of variance. The first principle factor accounted for 30.29% of total variance, which was less than 50%. Hence, the result showed that the items did not load on a single factor and minimize common method bias concern.

Data Analysis

In this study, the data was analyzed by using SPSS v18.0 and AMOS 18.0 statistical software. The analysis method included confirmatory factor analysis (CFA), descriptive statistics, Pearson Correlation, and hierarchical regression analysis.

Before testing the hypotheses, confirmatory factor analysis (CFA) was conducted to test the theoretical measurement structure and examine how well the data set fits the measurement structure used in this research by operating AMOS 18.0. This study used descriptive statistic to provide variables' description and samples' profile information and measure the mean, standard deviations, variance and frequency distributions for demographic characteristics. The Pearson Correlation was performed to provide a preliminary view of relationship between pairs of variables. Both independent variable and dependent variable were continuous variable, thus, hierarchical regression analysis was adopted to test hypotheses and the mediating effect of career capital in this study.

Based on Baron and Kenny's (1986) recommendations, they defined four steps to examine mediation. First, the effect of the independent variable on the dependent variable must be significant. Second, the effect of the independent variable on the mediator must be significant. Third, the effect of the mediator on the dependent variable must be significant. Fourth, the mediator should reduce the effect of the independent variable on the dependent variable when placed in the same regression equation. Full mediation effect occurs when the originally significant independent variables have no significant effect on the dependent variable after the mediator is placed into the regression equation.

CHAPTER IV FINDINGS

This chapter displays the results of the data analysis and its findings. First, the descriptive statistics revealed that the demographic characteristics of the participants. Then, the correlation analysis presented the mean, standard deviation, reliability, and the correlation between the variables. Final, the hierarchical regression analysis was performed to test the hypotheses in this study.

Descriptive Statistics

There were 11 items chosen as the demographic information in this study. The demographic information included age, tenure in current job, total tenure, gender, three hierarchical status questions (permission to delegate work, project responsibility, and official leadership position), position, education level, annual salary, and industry. The frequency and percentage of the demographic characteristics were shown in the Table 4.1.

416 participants in this study were female (67.5%) and their age mainly ranged from 21 to 40 years old (85.4%). Most of the participants had one to five years of tenure in current job (67.5%) and they have been working for five to ten years (61.7%) in total tenure. Regarding to the participants' hierarchical status in the organizations, 55.8% of them have the permission to delegate work, 63.2% of them have the project responsibility, and 40.3% of them have the official leadership position. Moreover, when it comes to the position, over half of the respondents were employees (53.2%) and some of them were supervisors (23.6%) in the company. As for the respondents' education level, most of them had obtained Bachelor degree (66.8%) and master degree (23.8%). For the participants' annual salary, 47.6 % of them have 250,001 to

500,000 NT dollars. On the other hand, participants worked in various industries including service industries (23.3%), wholesale and retail trade industries (15.4%), manufacturing industries (11.5%) and technology industries (10.6%).

Table 4.1.

Demographic Information (n=416)

Item		Frequency	Percentage (%)
Age	21-30	183	44.2%
	31-40	172	41.2%
	41-50	48	11.6%
	51-60	9	2.1%
	Over 60	1	0.2%
	Missing Data	3	0.7%
Tenure in current job	1 year to 5 years	280	67.5%
	6 years to 10 years	82	19.7%
	11 years to 15 years	27	6.5%
	16 years to 20 years	12	2.9%
	Over 20 years	7	1.5%
	Missing Data	8	1.9%
Total tenure	1 year to 5 years	132	31.9%
	6 years to 10 years	124	29.8%
	11 years to 15 years	62	14.9%
	16 years to 20 years	60	14.4%
	Over 20 years	34	8%
	Missing Data	4	1%
Gender	0. Female	281	67.5%
	1. Male	132	31.7%
	Missing Data	3	0.8%

(continued)

Table 4.1. (continued)

Item		Frequency	Percentage (%)
Permission to delegate work	0. No	183	44%
	1. Yes	232	55.8%
	Missing Data	1	0.2%
Project responsibility	0. No	151	36.3%
	1. Yes	263	63.2%
	Missing Data	2	0.5%
Official leadership position	0. No	244	58.7%
	1. Yes	169	40.3%
	Missing Data	3	0.7%
Position	1. Employee	221	53.1%
	2. Supervisor	98	23.6%
	3. Middle level manager	67	16.1%
	4. Top level manager	29	7.0%
	Missing Data	1	0.2%
	1. High/Vocational school	27	6.5%
Education level	2. Bachelor	279	66.8%
	3. Master	99	23.8%
	4. Ph.D.	3	0.7%
	Missing Data	9	2.2%
	Annual salary	Less than NT\$ 250,000	27
NT\$ 250,001 ~ 500,000		198	47.6%
NT\$ 500,001 ~ 750,000		92	22.1%
NT\$ 750,001 ~ NT\$ 1,000,000		46	11.1%
NT\$ 1,000,001 ~ NT\$ 1,250,000		24	5.8%
NT\$ 1,250,001 ~ NT\$ 1,500,000		8	1.9%
Missing Data			
Missing Data			

(continued)

Table 4.1. (continued)

Item		Frequency	Percentage (%)
Annual salary	Above NT\$ 1,500,000	8	1.9%
	Missing Data	13	3.1%
Industry	Wholesale/ Retail Trade	64	15.4%
	Education	26	6.3%
	Mass Communication	5	1.2%
	Travel/Leisure	18	4.3%
	Service	97	23.3%
	Technology	44	10.6%
	Manufacturing	48	11.5%
	Transportation/Logistics	11	2.6%
	Social work	2	0.5%
	Financial/Insurance	35	8.4%
	Legal/Accounting/Consulting/R&D	6	1.4%
	Construction/Real Estate	13	3.1%
	Medical/Health	41	9.9%
	Agriculture	0	0%
	Mining/Quarrying	0	0%
	Missing Data	6	1.5%

Correlation Analysis

The correlation analysis was conducted to examine the correlations among control variables, career capital and sub-dimensions, PsyCap, career satisfaction, and hierarchical status. The mean, standard deviation, reliability, and Pearson's inter-correlation between variables were shown in Table 4.2. All the reliability coefficients were acceptable.

The mean of career capital and sub-dimensions were ranged from 4.92 to 5.49; the standard deviations were ranged from 0.57 to 0.79. The mean of PsyCap was ranged 3.92; the standard deviation was 0.38. The mean of career satisfaction was 5.23; the standard deviation was 0.67. The mean of hierarchical status was 1.60; the standard deviation was 1.13.

Considering the relationship among control variables and the other four variables, the results proved that gender, position, and total tenure showed significant correlations both with career satisfaction ($r=0.14$, $p<0.01$; $r=0.29$, $p<0.001$; $r=0.16$, $p<0.001$, respectively), and hierarchical status ($r=0.15$, $p<0.01$; $r=0.74$, $p<0.001$; $r=0.45$, $p<0.001$, respectively). It implies that men and women have different perception of their career success. Also, employees' positions in the organization and work tenure in the present career are related to their career success. Besides, age was found to be significantly correlated with hierarchical status ($r=0.44$, $p<0.001$). In contrast, age was not significantly correlated to career satisfaction ($r=0.09$, $p>0.1$). The results revealed that age did not affect career satisfaction in this study.

While for the correlation among career capital, PsyCap, career satisfaction, and hierarchical status, the results showed that career capital was significantly and positively correlated to PsyCap ($r=0.61$, $p<0.001$), career satisfaction ($r=0.77$, $p<0.001$), and hierarchical status ($r=0.32$, $p<0.001$). Besides, according to the results,

PsyCap was significantly and positively correlated to career satisfaction ($r = 0.54, p < 0.001$), and hierarchical status ($r=0.39, p < 0.001$).

Further analyzing the correlation among three sub-dimensions of career capital, career satisfaction, and hierarchical status, knowing-how ($r=0.68, p < 0.001$), knowing-why ($r=0.72, p < 0.001$), and knowing-whom ($r=0.59, p < 0.001$) were significantly and positively correlated to career satisfaction. In addition, knowing-how ($r=0.25, p < 0.001$), knowing-why ($r=0.27, p < 0.001$), and knowing-whom ($r=0.28, p < 0.001$) were significantly and positively correlated to hierarchical status.

As for the relationship between three sub-dimensions of career capital and PsyCap, the data indicated that the three sub-dimensions of career capital: knowing-how, knowing-why, and knowing-whom were all significantly and positively correlated to PsyCap at significant levels ($r = 0.49, p < 0.001$; $r = 0.62, p < 0.001$; $r = 0.47, p < 0.001$, respectively). Meanwhile, the three sub-dimensions of career capital had moderate intercorrelations (ranged from 0.47 to 0.69, $p < 0.001$) with each other.

Table 4.2.

Means, Standard Deviations, Correlations, and Reliability (n = 416)

	Mean	S.D.	1	2	3	4	5	5-1	5-2	5-3	6	7	8
1.Gender	0.32	0.47											
2.Age	33.09	7.32	.14**										
3.Position	1.77	0.96	.22***	.53***									
4.Total tenure	10.34	7.28	.06	.88***	.54***								
5.Career Capital	5.27	0.57	.14**	.18***	.30***	.19***	(.91)						
5-1.Khow	5.40	0.62	.11*	.14**	.26***	.16**	.85***	(.79)					
5-2.Kwhy	5.49	0.59	.06	.16**	.29***	.19***	.86***	.69***	(.87)				
5-3.Kwhom	4.92	0.79	.17**	.14**	.23***	.13**	.86***	.54***	.59***	(.80)			
6.PsyCap	3.92	0.38	.08	.31***	.35***	.33***	.61***	.49***	.62***	.47***	(.91)		
7.Career Satisfaction	5.23	0.67	.14**	.09	.29***	.16**	.77**	.68***	.72***	.59***	.54***	(.79)	
8.Hierachical Status	1.60	1.13	.15**	.44***	.74***	.45***	.32***	.25***	.27***	.28***	.39***	.23***	(.66)

Note. 1. Khow=Knowing-how; Kwhy=Knowing-why; Kwhom=Knowing-whom; PsyCap=Psychological capital

2. Internal consistency reliability (alpha) are in parentheses.

3. * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed)

4. Coding for gender: 0 for female; 1 for male

5. Coding for position: 1 for employee; 2 for supervisor; 3 for middle level manager; 4 for top level manager

6. Age and total tenure were measured in years.

7. Career capital and career success adopted 7-point Likert scale.

8. PsyCap adopted 5-point Likert scale.

9. Hierarchical status varies between 0 and 3.

Hierarchical Regression Analysis

Base on Baron and Kenny (1986), this study employed hierarchical regression analysis to test the hypotheses and examine the mediating effect of career capital on the relationships between PsyCap and career satisfaction, PsyCap and hierarchical status. First, entering the control variables including gender, age, position, and job tenure into model, then the direct effect of PsyCap on dependent variable, career satisfaction and hierarchical status, last the mediating effect of PsyCap and career capital on career satisfaction and hierarchical status.

Table 4.3 and Table 4.4 summarized the hierarchical regression analysis results of testing Hypotheses 1 to 4b. Hypothesis 1 postulated PsyCap has a positive effect on career satisfaction. Table 4.3 presented the results of Hypothesis 1. In Model 4, among the control variables, gender, position, and total tenure had significantly positive relationships with career satisfaction ($\beta=0.01$, $p<0.05$; $\beta=0.17$, $p<0.001$; $\beta=0.19$, $p<0.05$) and contrarily age had a significantly negative relationship with career satisfaction ($\beta=-0.36$, $p<0.001$). In Model 4, the regression model was significant (adjusted $R^2=0.34$, $F=40.20$, $p<0.001$) and PsyCap had a positive and statistically significant effect on career satisfaction ($\beta=0.53$, $p<0.001$). Moreover, Model 4 in Table 4.4 showed that PsyCap also had a positive and statistically significant effect on hierarchical status ($\beta=0.14$, $p<0.001$). Hence, Hypothesis 1 was supported.

Hypothesis 2 illustrated PsyCap has a positive effect on career capital. In Model 1 of Table 4.3, only position had significantly positive relationships with career capital ($\beta=0.27$, $p<0.001$). In Model 2, the regression model was significant (adjusted $R^2=0.40$, $F=52.50$, $p<0.001$) and PsyCap had a positive and statistically significant effect on career capital ($\beta=0.61$, $p<0.001$). The PsyCap increased 32 percentage ($\Delta R^2=0.32$, $p<0.001$) of the explained variance in career capital. Therefore,

individuals who perceive higher level of PsyCap have higher career capital. The hypothesis 2 was supported.

Hypothesis 3 stated that career capital has a positive effect on career success. Table 4.3 listed the results of Hypothesis 2. In Model 3, the regression model was significant (adjusted $R^2=0.60$, $F=118.18$, $p<0.001$) and career capital had a positive and statistically significant effect on career satisfaction ($\beta=0.74$, $p<0.001$). The career capital increased 49 percentage ($\Delta R^2=0.49$, $p<0.001$) of the explained variance in career satisfaction. Therefore, individuals with higher career capital more satisfy their careers. Besides, Model 3 in Table 4.4 indicated that career capital also had a positive and statistically significant effect on hierarchical status ($\beta=0.10$, $p<0.001$). Thus, Hypothesis 3 was sustained.

Hypothesis 4a assumed that career capital mediates the relationship between PsyCap and career satisfaction. To test this hypothesis, based on Baron and Kenny (1986), four steps of examining mediation must be respectively achieved. First, the independent variable must be related to dependent variable. Second, the independent variable must be related to mediator. Third, the mediator must be related to the dependent variable. Last, the mediator should influence the relationship between independent variable and dependent variable. Full mediation occurs when independent variable has no effect on dependent variable and partial mediation occurs when independent variable has less effect on dependent variable after mediator was added into the relationship between independent variable and dependent variable.

Table 4.3 showed the result of the mediating effect of career capital on the relationship between PsyCap and career satisfaction. As shown in Model 2 of Table 4.3, it showed that PsyCap was positively and significantly related to career capital ($\beta=0.61, p<0.001$); meanwhile, in Model 3, it confirmed that the career capital was also significantly and positively related to career satisfaction ($\beta=0.74, p<0.001$). In addition, in Model 4, PsyCap was also significantly and positively related to career satisfaction ($\beta=0.53, p<0.001$). Further analyzing Model 4 and Model 5, it confirmed that the beta coefficient of PsyCap was reduced from 0.53 ($p<0.001$) to 0.12 ($p<0.001$) and remained significant. In addition, according to Sobel (1982), the Sobel test was conducted to verify the mediation. The Sobel test result ($z=12.44, p<0.001$) was significant and showed that career capital was a significant mediator of the influence of PsyCap on career satisfaction. Based on these results, it indicated that career capital partly mediates the relationship between PsyCap and career satisfaction. Thus, Hypothesis 4a was partially supported.

Hypothesis 4b assumed that career capital positively mediates the relationship between PsyCap and hierarchical status. Table 4.4 presented the results of Hypothesis 5. In Model 2 of Table 4.4, it showed that PsyCap was positively and significantly related to career capital ($\beta=0.61, p<0.001$); meanwhile, in Model 3, it confirmed that the career capital was also significantly and positively related to hierarchical status ($\beta=0.01, p<0.001$). In addition, in Model 4, PsyCap was also significantly and positively related to career satisfaction ($\beta=0.14, p<0.001$). Further analyzing Model 4 and Model 5, it confirmed that the beta coefficient of PsyCap was reduced from 0.14 ($p<0.001$) to 0.11 ($p<0.05$) and remained significant. Besides, the Sobel test result ($z=2.81, p<0.01$) was significant and showed that career capital was a significant mediator of the influence of PsyCap on hierarchical status. Based on the above results, it demonstrated that career capital partially mediates the relationship between PsyCap and hierarchical status. Therefore, Hypothesis 5 was partially supported.

Table 4.3.

Result of Regression Analysis for Mediating Effect of Career Capital on the Relationship between PsyCap and Career Satisfaction (n = 416)

Variable	Career capital		Career satisfaction (Subjective career success)		
	Model 1	Model 2	Model 3	Model 4	Model 5
	β	β	β	β	β
<i>Step 1: Controls</i>					
Gender	0.09	0.07	0.06	0.10*	0.06
Age	-0.05	-0.11	-0.26***	-0.36***	-0.28***
Position	0.27***	0.13*	0.09*	0.17***	0.09*
Total tenure	0.07	0.00	0.20*	0.19*	0.18*
<i>Steps 2: Direct effect</i>					
Psychological capital		0.61***			
<i>Steps 3: Mediating effect</i>					
Psychological capital				0.53***	0.12**
Career capital			0.74***		0.67***
R^2	0.09	0.41	0.61	0.35	0.61
Adjusted R^2	0.08	0.40	0.60	0.34	0.61
ΔR^2		0.32	0.49	0.23	0.27
F	9.91***	52.50***	118.18***	40.20***	99.21***
ΔF		202.03***	478.87***	135.25***	257.27***

Notes: * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4.4.

Result of Regression Analysis for Mediating Effect of Career Capital on the Relationship between PsyCap and Hierarchical Status (n = 416)

Variable	Career capital		Hierarchical status (Objective career success)		
	Model 1	Model 2	Model 3	Model 4	Model 5
	β	β	β	β	β
<i>Step 1: Controls</i>					
Gender	0.09	0.07	-0.02	0.00	-0.01
Age	-0.05	-0.11	0.03	0.01	0.02
Position	0.27***	0.13*	0.67***	0.66***	0.66***
Total tenure	0.07	0.00	0.05	0.04	0.04
<i>Steps 2: Direct effect</i>					
Psychological capital		0.61***			
<i>Steps 3: Mediating effect</i>					
Psychological capital				0.14***	0.11*
Career capital			0.10***		0.04
R^2	0.09	0.41	0.56	0.56	0.56
Adjusted R^2	0.08	0.40	0.55	0.55	0.55
ΔR^2		0.32	0.01	0.02	0.00
F	9.91***	52.50***	97.44***	95.59***	79.74***
ΔF		202.03***	8.18***	13.46***	0.78*

Notes: * $p < .05$. ** $p < .01$. *** $p < .001$.

CHAPTER V DISCUSSIONS, IMPLICATIONS AND SUGGESTIONS

This chapter consists of three parts, discussions, implications and suggestions. The first session presents discussions for integrating the hypotheses testing results based on the conceptual framework and purposes of this study. The second includes the implications for theoretical and practical fields. Final, research limitations and the suggestions for future research were discussed.

Discussions

The purpose of this study was to expand the literature on career success by examining the mediating role of career capital on the relationship between PsyCap and career success. Table 5.1 revealed the integration of hypotheses testing results. According to the results of hierarchical regression analysis, Hypothesis 1, 2, and 3 were supported. Nevertheless, Hypothesis 4a and 4b was partially supported. Based on the results of analysis, the discussions were drawn as follows:

Table 5.1.

The Integration Results of Hypotheses Testing

Hypotheses	Explanation	Test Result
Hypothesis 1.	Psychological capital has a positive effect on career success.	Supported
Hypothesis 2.	Psychological capital has a positive effect on career capital.	Supported
Hypothesis 3.	Career capital has a positive effect on career success.	Supported
Hypothesis 4a.	Career capital mediates the relationship between psychological capital and career satisfaction.	Partially supported
Hypothesis 4b.	Career capital mediates the relationship between psychological capital and hierarchical status.	Partially supported

Psychological Capital and Career Success

Hypothesis 1 stated that PsyCap has a positive effect on career success. The results of this study showed that PsyCap was significantly and positively correlated to career success. This suggests that individuals having a stronger sense of PsyCap generate the greater career satisfaction and promote higher hierarchical status. The finding implied that individuals with higher PsyCap may be more competent to cope with the difficulties and challenges that they encounter in the workplace. This finding also agree with previous research showing that individual with four positive psychological resources, namely, efficacy, hope, optimism, and resiliency, might help individual's thrive and success in their career journey (Lyubomirsky et al., 2005). In addition, the result further supported the statement proposed by Snyder (2000), which asserted that individuals with greater hope, they have the will more enthusiastically to pursue success. The finding is consistent with previous longitudinal research

conducted by Abele & Spurk (2009), indicating individuals' self-efficacy influence on career outcomes such as career satisfaction, salary, and status. Moreover, individual with higher levels of resilience have greater abilities to overcome adversity smoothly and set back from difficulties. Optimistic people are more satisfied their careers because they consider themselves as the important drivers of career achievement. In sum, individuals with high PsyCap tend to achieve career goals and pursue career success.

Psychological Capital and Career Capital

Hypothesis 2 stated that PsyCap has a positive effect on career capital. Through the literature review, few researches had been down to investigate the relationship between PsyCap and career capital. Nevertheless, the result of this study showed that individuals' PsyCap and career capital were positively correlated. That is to say, individuals with high PsyCap help them to acquire more career capital in the workplace.

To explain the result in detail, individual with higher level of PsyCap have more confidence to take on challenging tasks and learn from the given assignments. They always make a positive attribution toward things and expect good things to happen at work. However, when people face the difficulties and setback, they have ability to bounce back and adjust well. As found in previous research, Luthans et al. (2007) stressed that individuals in high PsyCap are more satisfied with their job and engaged in their work when compared with those lower in PsyCap. As employees are enthusiastic about their work, they recognize their work motives (knowing-why) and develop transferable skills and knowledge (knowing-how) in the workplace. Besides, individuals with higher level of PsyCap are willing to build the relationship with

people and interaction with others (knowing-whom). Moreover, people accomplish projects and solve the problems through building and using interpersonal connection. In other words, individuals rely on the both formal and informal contacts to facilitate the work-related activities and their careers. Therefore, individuals' PsyCap may benefit them to develop their career capital.

Career Capital and Career Success

Hypothesis 3 stated that PsyCap has a positive effect on career success. The results showed that career capital was significantly and positively correlated to career success after controlling gender, age, position, and job tenure. The findings also confirmed the positively significant effects of career capital on career success in line with the results of previous studies (Eby et al., 2003; McArdle, Waters, Briscoe, & Hall, 2007; Ng et al., 2005; Sing et al., 2009). This means that individuals' career capital is an important factor affecting career success. Conversely, career success is facilitated by the acquisition of career capital. Career capital is accumulated during the work experience and applied to perform a job successfully. Career capital can help people adapt to workplace and transfer to the new work environment. If individual invest more career capital in the workplace, they have higher career success.

Specifically, three career competencies of career capital, knowing-how, knowing-why, and knowing-whom all lead to career success, respectively (DeFillippi & Arthur, 1994). First, individuals with more knowing-how career competencies can facilitate their career successfully. This demonstrates that individuals successfully accomplish work tasks and career goals through implementation of their work-related skills and knowledge. To acquire diversified job-related skills, people actively seek out training and development opportunities in their careers. In the meanwhile, individuals constantly update their job-related skills and absorb new knowledge to

fulfill the requirements of current job. Moreover, these work-related skills and knowledge are easily transferred and applied to other employment settings. Second, when individuals have a strong profession identity and the clear career motivation (knowing-why), they are engaged in work with passion and get the sense of achievement from the job. As a result, people are more satisfied themselves and enhance their perception of career success. Third, the career-related relationship and the connections with others within and outside the organization (knowing-whom) can benefit personal career development (Higgins & Kram, 2001; Parker & Arthur, 2000). Also, individuals engaging in networking behaviors are more satisfy themselves in their careers. Knowing-whom career competencies support one's career development and provide the access to new information, connections, learning opportunities, and extensions to different fields.

In sum, individuals who are specialized in developing knowing-how, knowing-why, and knowing-whom career competencies can generate higher career success. Therefore, the application of career competencies is related to career success (Kuijpers, Schyns, & Scheerens, 2006).

The Mediating Effect of Career Capital on the Relationship between PsyCap and Career Success

Based on the previous finding, though PsyCap has been proved to be one factor affecting individuals' career success, this study suggests that career capital is another to determine career success.

Hypothesis 4a posited career capital mediates the relationship between PsyCap and career satisfaction. The results of this study confirmed the partial mediating role of career capital between PsyCap and career satisfaction. Specifically, individuals'

PsyCap can directly influence their career satisfaction. Meanwhile, it can also influence career satisfaction by enhancing career capital. Individuals' positive psychological status can contribute to the development of career capital and thus to achieve higher career satisfaction. The finding implied that individuals with higher PsyCap and career capital are more satisfied their careers.

To reason the finding in detail, Arthur, Claman, and DeFillippi (1995) highlighted the importance of career competency to facilitate personal career development. Individuals with more career capital have greater abilities to accomplish tasks efficiently and perform well in the workplace. The finding of this study was corresponded to previous empirical study conducted by Kong, Cheung, & Song (2012), demonstrating the partial mediating effect of career competency on the relationship between perceived hotel management and career satisfaction. To conclude, an individual's positive psychological state plays an important role in accumulating individual career capital in the workplace and thus making a good use of career capital leads to career success.

Hypothesis 4b illustrated that career capital mediates the relationship between PsyCap and hierarchical status. The results of this study confirmed the partial mediating role of career capital between PsyCap and hierarchical status. As shown from the results, the research findings revealed that career capital served as a mediator between PsyCap and hierarchical status. The finding implied that individuals who are more confidence and optimistic are willing to engage in career-related activities. Through participating various career activities, individuals actively develop their career competencies and potentially being promoted in the organization.

Implications

This study contributed to both theoretical and practical fields. Specifically, this study not only provided the significant contribution to theoretical area but also had the practical implications.

Theoretical Implications

For the academic area, PsyCap is the recently emerging construct and relatively new variable in positive psychology literature. Few studies take PsyCap into consideration in career development fields. In this research, PsyCap was applied to personal career development and today's workplace. Through the results of data analysis, this research not only found that PsyCap plays an important role in determining individual career success but also proved that career capital had positive effect on career success.

In addition, this study provided empirical evidences demonstrating that career capital served as a mediator on the relationship between PsyCap and career success in the literatures of career development fields. Precisely, the finding of this research shows that career capital mediates both the relationship between PsyCap and career satisfaction, PsyCap and hierarchical status. Individuals' PsyCap benefit them to build their career capital, knowing-how, knowing-why, and knowing-whom in the workplace. Career capital enables individuals to achieve their career goals, perceive higher level of career satisfaction, and promote the hierarchical status. To sum up, individuals' PsyCap and career capital were found to be instrumental in attaining to their career success.

Practical Implications

It is crucial to understand the factors influencing employees' career success for organization to develop the competitive workforces. With respect to practice, the results of this research may help companies or organization put the emphasis on investing employees' career capital and cultivating employees' own PsyCap. Accumulating individuals' career capital and PsyCap is beneficial to help employee to achieve career success. For instance, the companies in various industries can provide opportunities or training programs for individuals to develop new skills and build both intimal and external networks. Then, employees perform well in their positions and make contributions to the companies. As a result, the enterprises could create the win-win situation for organizations and employees. To pursue a sustainable career development of enterprises, human resource development practitioners may proactively consider and support employees to develop their career competencies. On the other hand, PsyCap plays an important role in practices for implementing positivity in the workplace and human resource development.

More important, since PsyCap reflects individuals' characteristics and positively psychological quality PsyCap could be an indicator of recruiting strategies to help organizations finding the right people in the right place. In the recruiting process, the applicants are asked to fill out the PsyCap instrument or test to acquire the preliminary understanding of applicants. After the PsyCap's examination, the human resource managers make a good decision to recruit new employees.

Research Limitations

Although the present study has yielded findings that have both theoretical and practical implications, it did have three limitations in this study.

First of all, the researcher used a survey questionnaire and the single resource informant to collect all the data. It may cause common method bias problem (CMV). Moreover, self-reported measure may be a concern since participants answered the independent and dependent variable in a questionnaire simultaneously at the same period of time as well. In this study, we did both the pre-preventions and post-preventions to avoid CMV. The pre-preventions included several ways: (1) The research purpose and variables' names did not reveal in the questionnaire. (2) The questionnaire used both 5-point scale to measure career capital and career success and 7-point Likert scale to measure PsyCap. (3) The reverse items were used in PsyCap questions. On the other hand, Harman's one-factor test was the post-prevention to detect CMV problems. Although we did the efforts to avoid it, it still remained other problems may cause the CMV problems. For example, the process of distributing and collecting the questionnaires may lead to CMV problems. Besides, the potential CMV problems may cause the possible inflated relationships between variables, thus, the relatively high correlation between career capital and career success can be partially explained.

Second, because this study adopted convenient sampling in the data collection, the recruiters were not randomly chosen. The generalization of the results to other population is difficult to achieve with the limited time and resource available.

Final, since the individuals' career capital and psychological capital vary by time, it is difficult to conduct a longitudinal research and take different period of time into consideration with limited resource available.

Suggestions for Further Research

There had some suggestions for future career development research. First, this study adopted quantitative research method. The data was collected from paper-based questionnaires and single source at the same time. It would cause the Common Method Variance (CMV) problems. The research suggests that future studies might adopt multiple sources to measure the independent and dependent variable to avoid the single source bias (Avolio, Yammarino, & Bass, 1991). The multiple sources can include peers, supervisors, and organizations.

Second, due to the accessibility reason, the researcher distributed the questionnaires only focusing the recruiters in career fairs on university campus in the north of Taiwan. Future research might enlarge different regions and more channels to increase the diversity of participants.

Third, this study investigated the mediating effect of PsyCap on the relationship between career capital and career success. As described before, the individuals' career capital and psychological capital are different by time. This suggests that following researches can try to adopt a longitudinal research and take different period of time into consideration.

Fourth, recruiters were the target sample in this study. Nevertheless, the issues of individuals' career capital and personal career development are important in different occupations, industries, and countries. Thus, future research can choose different participants and replicate this research design for other groups to seek the differences results and interesting findings. Last but not the least, when discussing career success issues, exploring other factors influencing career success as mediators and moderators are recommended such as career planning and career management (Orpen, 1994). It is valuable in order to gain more insights and knowledge of career success.

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