# THE IMPACT OF SOCIAL CAPITAL IN THE WORKPLACE: A SYSTEMATIC REVIEW AND QUANTITATIVE STUDY

## A Dissertation

by

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#### **ABSTRACT**

The overarching purpose of this dissertation was to examine the impact of social capital manifested in South Korea through a systematic review and a quantitative study. First, by conducting a systematic review of literature on social capital, I provided an overview of the conceptualizations of social capital as documented in the 57 empirical studies. Further, this review sheds light on the methodological issues that exist in current social capital research and mapped out the nomological network of social capital research by incorporating all prior empirical evidence.

Based on the conceptualizations and research trends identified in Article 1,

Article 2 extended the prior social capital and HRD literature by exploring the role of social capital in facilitating an individual and organizational success. Specifically, the purpose was to examine the relationships among social capital, subjective career success, organizational knowledge sharing, career adaptability, psychological ownership, and perceived supervisor support. In this quantitative study, a total of 522 employees working for the large corporations in Korea were collected and analyzed to address the above study purpose. A survey research design with a social network data collection method and structural equation modeling led to five major findings. First, there was a positive relationship between social capital and both subjective career success and organizational knowledge sharing. Second, there was positive relationships between social capital and career adaptability and psychological ownership. Third, there was no indirect effect of social capital via career adaptability and psychological ownership.

and career adaptability. Finally, the indirect effect of social capital on subjective career success via career adaptability was stronger for those employees who perceive higher supervisor support.

The most prominent theoretical contribution is that the findings lend empirical support to the idea that social capital fosters individual and organizational growth. In addition to individuals' attributes, this study highlights the importance of interpersonal relationships and informal networks in obtaining and utilizing a diversity of resources and information for individual and organizational success. Another significant contribution is that leaders play a vital role in further strengthening the positive impact of social capital. Given that leaders have control and authority over important resources and opportunities in the workplace, human resource development professionals should seek ways to strike a balance between formal and informal (e.g., social capital) networks for continuous growth and competitive advantage of individuals and organizations.

#### **DEDICATION**

I dedicate my dissertation work to my family and God Almighty. A special feeling of gratitude to my loving parents, Jin-Hong Oh and Hyung-Mo Son whose words of encouragement, unwavering love, and prayer have brought me here. Thank you for putting trust in me and encouraging me to pursue my dreams and finish my degree. To my parents: You are my role model! Also, to my sister Hye-In Oh, thank you for being such a great sister to me. I am beyond lucky to have such a gifted and loving sister to lean on and share my thoughts with. I am so grateful for our bond. Finally, to my creator, my strong pillar, my source of inspiration, wisdom, knowledge, and everything: your grace, love, and strength sustain me all the time. He has been the source of my strength throughout my entire life and doctoral journey. You have done everything for me, and I will put my trust in you alone.

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#### CHAPTER I

#### INTRODUCTION

As a means to understand the exchange and circulation of commodities, capital theories have evolved in various forms, from economic/financial to cultural and human capital (Lin, 1999; Lin & Chen, 2015). Since the late 1900s, as the society became complex and pluralistic, social capital has emerged as an alternative to traditional human and economic capitals to explain interdependency and social relations (Arena & Uhl-Bien, 2016; Deloitte, 2019; Seet, Jones, Oppelaar, & Corral de Zubielqui, 2018). Like other capitals, social capital is based on the assumption that "the investment can bring expected returns" (Lin, Cook, & Burt, 2001, p.32). Simply put, social capital is the "investment in social relations which allow to access to embedded resources and bring expected returns" (Lin et al., 2001, p.39).

However, social capital is distinguished from other forms of capital. Unlike other capital concepts, social capital explicitly explains social interactions and complex relations, which are not likely transferrable and replaceable, thus providing distinct competitive advantage to both individuals and organizations (Tymon & Stumpf, 2003). Given that, both researchers and practitioners have paid much attention to social capital and actively seeking ways to maximize the potential of social capital in the organizational context (Hollenbeck & Jamieson, 2015).

Social capital has been extensively studied in social sciences over the last four decades (Adler & Kwon, 2002; Hollenbeck & Jamieson, 2015; Lin, 1999). For instance, one of the seminal works by Granovetter (1973) and his social capital theory has been

cited more than 58,000 times. The scholarly interest in social capital was further stimulated and exponentially increased in the 2000s and 2010s with the advancement of technology and statistical packages that allow for more systematic and accurate analyses of networks (Borgatti & Halgin, 2011; Borgatti, Mehra, Brass, & Labianca, 2009).

Social capital is not a new concept. The term 'social capital' was first proposed in the early 1900s by Hanifan (1916, 1920) (Fulkerson & Thompson, 2008). Later on, Moreno (1934) used a social network approach to explain girls' run-away from the school and found that runaway was not attributed to individual traits; rather, it was more concerned with informal relationships in groups. However, the recognition or popularity of social capital was gained not until the 1980s when social capital and network analysis became popular and conceptualized as an academic term (Akdere, 2005; Borgatti et al., 2009). Since the 1990s, the breadth and depth of social capital scholarship have been largely extended, and the focus of social capital research has also shifted over time from individual attributes or perceptions to social interactions, dynamics, and complexities in relationships (Akdere, 2005).

#### The Problem

Despite the recognized significance of social capital, there are several issues that warrant further investigation of this phenomenon. First, a preliminary review of the literature shows that social capital has been examined by scholars in various disciplines, such as sociology, psychology, economics, management, and anthropology, (Baker, 2000; Bourdieu, 1985; Portes, 1998; Putnam, 1995; Putnam, Leonardi, & Nanetti, 1994; Schmid, 2003; Woolcock, 1998). For example, in public health, social capital has been

extensively studied to understand social support and health-related behaviors (e.g., Kim, Kreps, & Shin, 2015; Xue & Cheng, 2017). In economics, social capital has been identified as the means of reducing transaction costs and recovering economic crises (e.g., Javakhadze, Ferris, & French, 2016; Lins, Servaes, & Tamayo, 2017). However, social capital has not attracted much attention from scholars in the field of human resource development (HRD).

For a field such as HRD whose core mission is "developing and unleashing expertise for the purpose of improving an organizational system, work process, team, and individual performance" (Swanson, 2008, p.764), human and social capitals are highly relevant concepts. As Swanson (2008) noted, HRD efforts are performed to support "training and development, organization development, performance improvement, organizational learning, career development, and management and leadership development" (p. 764). In this sense, the core mission of HRD grounded in a holistic approach is to leverage people as capital, discover their potentials, and improve performances at all levels. By paying little attention to the role of social capital, the HRD professionals are missing out on opportunities to make an impact in the real-world organizations.

In addition, the contemporary workplace is shifting from a hierarchical to a teamoriented and cross-functional based work system (Zander et al., 2015). In light of this change, how to manage networks of teams and social capital in organizations is becoming more prominent than ever to cultivate desired performance (Deloitte, 2019). Taking this workplace trend into consideration, HRD scholars and practitioners need to direct more attention to social capital and networks in order to facilitate productive collection and allocation of resources necessary for individual and organizational growth (Feli'cio, Couto, & Caiado, 2014; Uzzi, 1999).

The good news is: HRD scholars have already recognized the need for more understanding of the notion of social capital. For instance, Storberg (2002) stated that "HRD scholars and practitioners are in a unique and favorable position to work toward integrating multidisciplinary research on social capital" (p. 495). Hatala (2006) also highlighted the importance of studying social capital and the network approach in the field of HRD, highlighting that understanding the interpersonal relationships within organizations is the key to increasing organizational effectiveness. In this sense, the application and utility of social capital would allow both HRD scholars and practitioners to not only reap benefits of high performance in the workplace but also contribute to expanding social capital research.

However, HRD researchers have noted that much of current HRD research is still largely driven by the function of individual cognitive processes and behavioral change (Han, Chae, & Passmore, 2019; Holton III, 2002; Marsick & Watkins, 1994). While several researchers have attempted to conceptually link the concept of social capital with HRD and provide implications and future directions (e.g., Akdere, 2005; Hezlett & Gibson, 2007; Stoberg, 2002; Storberg-Walker & Gubbins, 2007), there lacks adequate empirical evidence to substantiate such linkage. Therefore, this dissertation study is designed to fill this void by tapping into an under-explored, yet highly relevant research territory, and by corroborating the linkage between social capital and HRD areas.

Second, unlike existing social capital studies that are primarily situated in Western countries, this study extends the attention to the non-western setting. Our current understanding of social capital and related theories is likely context-specific; therefore, previous findings may not apply to contexts that have different characteristics, such as in eastern countries. For example, several studies (e.g., Bian & Ang, 1997; Chua & Wellman, 2015; Hong, Casado, & Harrington, 2011; Horak, 2017) revealed that social capital theories developed in the West (particularly in North America and Europe) often failed to grasp how social capital was formed, maintained, and made an impact in eastern countries.

Weak tie theory (Granovetter, 1973), explaining infrequent and less close relationships, has been considered as seminal work in social capital and demonstrated the benefits to obtain more job opportunities in the West. However, Bian & Ang's (1997) study revealed different results, that is, strong ties (intimate and frequent interactions) are more reliable and effective than weak ties when it comes to job searching in China and Singapore. Eastern countries' perspectives towards life and work are shaped by different cultural values, such as collectivism and Confucianism, both of which place high emphasis on group harmony, cooperation, interactions, and dependency (Philips & Crist, 2008). Therefore, many researchers have called for more social capital research in the eastern context, which provides unique and nuanced understanding of social capital (e.g., Chua & Wellman, 2015; Horak, 2014, 2015, 2017).

Among different eastern countries, South Korea (hereinafter as Korea) has arisen as one of the promising research sites for social capital. Kocken (2014) argued that

social capital represented as interpersonal relationships and networks are the key to a business in Korea because Korea is a "network society" (Kim, 2000, p.161).

Furthermore, Horak (2018) noted that the Korean context offers a unique perspective of social capital networks based upon strong emotional and intimate bonds. However, a number of studies have reported that the westernized social capital concept is often inadequate to capture the distinct cultural characteristics and networks in the Korean context (Chung, Choi, & Lee, 2014; Horak, 2017; Horak et al., 2018). Therefore, this dissertation study is an attempt towards unpacking the unique meaning of social capital in Korea and providing evidence-based insights into how social capital may contribute to individual and organizational development.

Lastly, what is missing is a deep understanding of the impact of social capital and the beneficiaries of social capital in the workplace. One of the ongoing debates about social capital is whether it is a collective asset, thus able to be possessed by groups or organizations (Adler & Kwon, 2002; Lin, 1999; Kilduff & Brass, 2010). On one hand, pioneers in social capital research such as Coleman (1988) and Putnam (1995) believed that social capital is developed and maintained within groups as a form of a collective asset for the purpose of enhancing groups' norms and trusts. On the other hand, researchers such as Bourdieu (1985) and Lin (1999, 2001) argued that different resources and capital through networks are possessed and sustained by individuals.

More scholars nowadays have found evidence that social capital can be beneficial to both individuals and groups or organizations (e.g., Wei, Zheng, & Zhang, 2011; Yu, Hao, Dong, & Khalifa, 2013); however, we remain unclear about how

individuals and organizations are linked through social capital. Kilduff and Brass (2010) pointed out that the link between macro-level (organizations) and micro-level (individuals) has been overlooked and consequently under-explored. To expand our understanding of the relationship between individuals and organizations through social capital, this dissertation aims to explore the impact of social capital on both individuals and organizations and provide empirical support for these relationships.

Specifically, this study examines subjective career success (individual level) and organizational knowledge sharing (organizational level) as two primary endogenous variables. Additional three variables, career adaptability, psychological ownership, and perceived supervisor support, are incorporated to disclose the interdependent mechanisms of social capital and the relationships with other variables as well as to "provide a more sophisticated understanding for psychological processes" (MacKinnon & Luecken, 2008, p.1). The detailed explanations of each construct and relationships between variables are provided in the Operational Definitions section of this chapter and the second article of this dissertation.

## **Overarching Purpose**

This dissertation study examined the impact of social capital manifested in South Korea. Specifically, this study sheds light on how social capital possessed by Korean employees may benefit both individuals and organizations. Using the journal article format to structure this dissertation, I sought to gain a holistic understanding of social capital. Specifically, I used three encompassing research questions to guide this inquiry:

- 1. How has social capital been studied in the Korean context, distinguished from the West?
- 2. How is social capital associated with individual and organizational performances in the Korean workplace?
- 3. How are these relationships above substantiated through mediation and moderation analyses?

#### **Research Methodology**

To address the three overarching research questions above, I conducted a systematic literature review (for Question 1) and a quantitative study (for Question 2 and Question 3). Findings from each study were presented in an article format – Article 1 for a systematic literature review and Article 2 for the quantitative study. The systematic review provided a synthesized and holistic understanding of how social capital had been studied in the Korean context and documented in the literature. This systematic review allowed me to identify glaring gaps in current social capital literature and propose directions for future research, some of which were addressed in the empirical study portion of this dissertation.

Furthermore, I undertook a quantitative study to examine the impact of social capital in the Korean workplace. The second article filled some of the voids in the social capital literature as identified in the first article. By adopting a quantitative study design with a social network analysis data collection method, I was able to capture complex social relations or dynamics and provide empirical evidence on social capital and other

related constructs, including career success, career adaptability, organizational knowledge sharing, psychological ownership, and perceived supervisor support.

#### **Significance of the Study**

This dissertation made three important contributions. First, this study opened the door to an uncharted territory to HRD, provoked scholarly interest in social capital, and provided new insight into HRD practice and research for increasing organizational effectiveness. As discussed earlier, despite its substantial relevance to HRD, the concept of social capital has received little attention in the field of HRD. With its focus on facilitating interdependent relations and cultivating productive collection and allocation of resources, social capital contributes to the core mission of HRD that leverages human capital and nourishes individual and organizational development.

Second, the findings of this dissertation extended the applicability of the concept of social capital. Since social capital literature is heavily derived from the Western context, this dissertation contributed to testing the applicability of western-based theories and their relevancies to a non-western context, specifically South Korea. As a result, this study provided a fresh or unconventional perspective of social capital and its application in the Korean context.

Third, this study provided a holistic understanding of the impact of social capital in the workplace. Due to an ongoing debate about the definitions and beneficiaries of social capital, social capital has largely been studied in a fragmented manner. Some scholars focused on examining the impacts of social capital on individual success, and others paid attention to the benefits of social capital to organizations or communities. By

taking an integrated approach, this dissertation provided a comprehensive understanding of social capital related to both individual and organizational successes.

#### **Structure of the Dissertation**

Following the article format, this dissertation consists of four chapters. Below is a brief introduction of each chapter:

- Chapter I provides the background information on the dissertation topic social
  capital and the significance of studying this topic. It also presents the overarching
  purpose and research questions, rationale for selecting the topic, and a brief
  introduction to the two projects that are presented in the following two articles.
- Chapter II (Article 1) presents a systematic review of literature regarding social capital in the Korean workplace context. The purpose is to identify, analyze, synthesize, and appraise existing social capital literature in Korea as well as identify major gaps in the current knowledge base.
- Chapter III (Article 2) presents a quantitative study of the associations among social capital, subjective career success, knowledge sharing, career adaptability, psychological ownership, and perceived supervisor support. With a randomized sample of Korean employees, this study examines the effects of social capital as well as the mediation and moderation effects related to social capital.
- Chapter IV provides general conclusions regarding this dissertation project as a
  whole. Based on Chapter II and III in tandem, I summarize the results from each
  article, discuss their meaning in relation to previous literature, and offer
  implications for theory, research and practice in the field of HRD.

## **Operational Definitions**

Throughout the dissertation, a number of terms have been used. For the purpose of clarity, they are defined in this chapter.

## **Social Capital**

Social capital has been defined in various ways depending on the purpose of a study. In this study, I adopt Nahapiet and Ghoshal's (1998) definition because of its encompassing focus on both individuals and organizations. According to Nahapiet and Ghoshal (1998), social capital is "the sum of actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit. Social capital thus comprises both the network and the assets that may be mobilized through that network" (p. 242).

# **Subjective Career Success**

Career success is comprised of objective and subjective aspects (Ng & Feldman, 2014). Objective career success is largely defined by objective measures (e.g., income, the number of promotions); and subjective career success is determined by person's own assessment and evaluation of his/her career concepts (Gattiker & Larwood, 1986). In recent years, subjective career success has received increasing attention due to prevalence of non-linear careers and the recognized importance of subjective perceptions of employees toward careers (Ng & Feldman, 2014). Taking such a trend into account, this study focuses on subjective career success, the subjective perception, evaluations, and affective reactions to individual's careers (Greenhaus et al., 1990; Turban &

Dougherty, 1994), rather than objective career success. Throughout this dissertation, the term career success refers to subjective career success specifically.

Adopting Judge, Cable, Boudreau, and Bretz's (1995) definition, I define subjective career success as "the positive psychological or work-related outcomes one has accumulated as a result of one's work experiences" (p.438). In this study, subjective career success is represented as individual's subjective evaluations and judgements about career progress, income (financial aspect), career attainment, and career satisfaction (Haibo, Xiaoyu, Xiaoming, & Zhijin, 2018; Ng & Feldman, 2014).

## **Organizational Knowledge Sharing**

Knowledge sharing is defined as "the provision of receipt of task information, know-how, and feedback regarding a product or procedure" (Cummings, 2004, p.352). Similarly, in an integrative literature review, Wang and Noe (2010) defined knowledge sharing as "the provision of task information and know-how to help others and to collaborate with others to solve problems, develop new ideas, or implement policies or procedures" (p. 117). Organizational knowledge sharing includes both explicit and implicit knowledge sharing (Zhang, de Pablos, & Xu, 2014). Explicit knowledge sharing is the degree to which individuals engage in an explicit knowledge sharing act (e.g., proposal, report, and knowledge obtained from other publications). On the other hand, implicit knowledge sharing is the degree to which one engage in an implicit knowledge sharing act (e.g., know-how, know-where, or know-how from work with other team members).

#### **Career Adaptability**

In this study, career adaptability is defined as the readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by changes in work and working conditions (Savickas, 1997).

# **Psychological Ownership**

Coined by Pierce, Kostova, and Dirks (2001), psychological ownership is "a state in which individuals feel as though the target of ownership (or a piece of that target) is theirs (i.e., it is 'MINE')" (p. 86). Psychological ownership is deeply associated with a sense of belonging, devotion, or responsibility for the target (Pirkkalainen, Pawlowski, Bick, & Tannhäuser, 2018).

# **Perceived Supervisor Support**

Perceived supervisor support is defined as the extent to which an employee views a supervisor as supportive about his/her contributions and well-being (Kottke & Sharafinski, 1988). It includes employees' general beliefs about how supervisors care about goals, career interests, well-being, and opinions of employees.

#### CHAPTER II

#### SOCIAL CAPITAL IN SOUTH KOREA:

#### A SYSTEMATIC LITERATURE REVIEW

This chapter (Article 1) presents a systematic review of literature on social capital in the South Korean context. This chapter addresses the first overarching question of the dissertation: How has social capital been studied in the Korean context? It provides an overview of the concept of social capital as documented in the Korean literature, with a specific focus on issues including definitions, methodologies, and the impact of social capital in the Korean workplace.

#### Introduction

Since the 1980s, social capital has gained much interest from both scholars and practitioners in social sciences (Bidet, 2009) as a result of the shift of focus from individual attributes to social interactions/relations and contexts. Social capital has been considered a promising and alternative approach to explaining individual and organizational behaviors (Borgatti & Foster, 2003; Ha & Chung, 2018). By definition, social capital is both the quantity and quality of resources and assets embedded in social relations or connections (Lin, 2001; Ng, Eby, Sorensen, & Feldman, 2005), which enables individuals to access, mobilize, and accumulate resources or information of others through social relationships. The concept of social capital was initially proposed and developed based on community studies to understand the survival and function of communities (Lee & Tamraker, 2018; Nahapiet & Ghoshal, 1998). Later on, it has become popular in management and human resources areas due to its recognized

advantages in promoting positive individual and organizational outcomes in the workplace (Borgatti & Foster, 2003; Borgatti & Halgin, 2011; Hollenbeck & Jamieson, 2015).

Traditionally, the vast majority of researchers in HRD and management have taken the attribute-centered approach that focuses primarily on individuals' perceptions, attitudes, and behaviors to identify individual or organizational characteristics associated with effectiveness (Han et al., 2019; Hollenbeck & Jamieson, 2015). This approach, while arguably useful and advantageous to identify the characteristics that would benefit both individuals and organizations (Hollenbeck & Jameison, 2015), it largely neglects the fundamental aspect of the workplace – relationships (Chua & Wellman, 2015; Granovetter, 1985).

Unlike the attribute-centered approach, the social capital approach provides new insight into research and practice by taking into account social relations and interactions within an organization (Han et al., 2019; Hollenbeck & Jamieson, 2015). It captures the multi-level dynamics and social phenomena in the workplace (Hezlett & Gibson, 2007; Kilduff & Brass, 2010). For example, at the macro level, social capital sheds light on inter-organizational relations (Provan, Fish, & Sydow, 2007), organizational reputation (Rhee & Haunschild, 2006), and the economic performance of the organization (Westlund & Adam, 2010). At the micro-level, social capital promises to increase individual performance (Baldwin, Bedell, & Johnson, 1997; Mehra, Kilduff & Brass, 2001; Sparrowe, Liden, Wayne & Kraimer, 2001), creativity (Burt, 2004; Perry-Smith, 2006), leadership (Pastor, Meindl, & Mayo, 2002), and career mobility within an

organization (Seibert, Kraimer, & Liden, 2001). Therefore, understanding the critical role of social capital and creating a platform to facilitate its networks in the workplace are fundamentally important to both employers and employees.

## **Significance**

Despite the recognized importance of social capital and abundant research, my preliminary review of the literature illuminates a few issues in previous social capital research. First, there is an ongoing debate about the definitions of social capital. With increasing attention to social capital, this notion has been conceptualized in various ways. For example, some scholars (e.g., Bourdieu, 1985; Burt, 1992; Lin, 1999) defined social capital as resources embedded in social relationships, which would lead to instrumental or expressive gains to individuals, such as career success and satisfaction. On the other hand, others (e.g., Fukuyama, 1997; Putnam, 1995; Woolcock, 2001) focused on shared knowledge, norms, and trust that would facilitate cooperation and collective actions within groups or communities.

Such diverse perspectives of social capital may be attributed to different conceptualizations in different disciplines (e.g., psychology, economics, management, and medical fields) as well as upsurge interest due to the advancement of network analysis. Despite these varied understandings, there is a general agreement on the benefits and values of social capital: social relations or ties are associated with access to more information, knowledge, opportunities, and resources (Brunie, 2009; Han, Kim, Lee, & Lee, 2013). Therefore, this article is an attempt toward providing some

conceptual clarity by reviewing various definitions and perspectives of social capital documented in literature.

Second, in terms of methodology, social capital has been studied in different ways. Typically, social capital researchers have adopted the attribute-based approaches that rely on the perceptions, attitudes, and behaviors of the participants and social network analysis (SNA) that provides both the breadth and depth of understanding of social capital (Han et al., 2019; Hatala, 2006; Yamkovenko & Hatala, 2015).

Specifically, SNA has been emerged as "a comprehensive paradigmatic way of taking social structure by studying directly how patterns of ties allocate resources in a social system" (Wellman, 1988, p. 20), which has not likely possible in the traditional attribute approaches. By this definition, SNA is a unique approach to capturing social interactions and structural linkages, which is nearly impossible to do through traditional linear analyses (Han et al., 2019). The emergence and use of SNA have allowed for an in-depth understanding of and fresh insight into social capital (Patterson & Goodson, 2018).

Therefore, I focus on how SNA has provided fresh insight into social capital research and advanced its research domain.

Furthermore, social capital constructs have been measured in many ways due to different conceptualizations (Chung et al., 2014; Lee, Jeong, & Chae, 2011). Depending on the purpose of a study, different constructs have been used to guide social capital studies in different regions and countries. Examples include the three dimensions (structural, relational, and cognitive) of social capital by Nahapiet and Ghoshal (1998) and Tsai and Ghoshal (1998), the Organization for Economic Cooperation and

Development (OECD) and the World Bank's World Value Survey (OECD, 2001), and Putnam's (2000) Social Capital Community Benchmark Survey (SCCBS).

In addition to definitional issues, this article also aims to address methodological issues in social capital research. Specifically, I intend to (a) explore how SNA and different methodological approaches have been used to study social capital, (b) assess the methodological quality of social capital research, and (c) synthesize different measurements or constructs of social capital. To achieve this three-folded goal, I focused exclusively on empirical studies on social capital.

Third, this article is an attempt to provide a holistic understanding of the impact of social capital in the workplace. So far, many systematic reviews on this topic have been undertaken (e.g., De Silva, McKenzie, Harpham, & Huttly, 2005; Derose & Varda, 2009; Nyqvist, Forsman, Giuntoli, & Cattan, 2013; Villalonga-Olives & Kawachi, 2017); however, previous reviews focus exclusively on social capital research conducted in medical and health sciences, recognizing social capital as a means of maintaining individual health status and promoting collective well-being actions (e.g., non-smoking) (Villalonga-Olives & Kawachi, 2017). Consequently, little is known about how social capital influences individuals and organizations in other fields. To fill this void in current knowledge, this systematic review provides a holistic picture of the impact of social capital in the workplace and suggest directions for future research and practice.

Finally, regarding the research context, previous social capital studies were primarily situated in the West, which means that existing social capital and network theories reflect mainly western countries' social structures and environments (Chua &

Wellman, 2015; Horak et al., 2018). Consequently, current social capital theories may not explain the nature and characteristics of social relationships in non-western settings (Ledeneva, 2018; Li, 2007; Qi, 2013; Sato, 2010). To address this issue, scholars have called for research that examines how national culture or national-level characteristics may influence the access and mobilization of social capital (Chua & Wellman, 2015).

This dissertation study is a response to such a call by examining social capital in a non-western context—South Korea. This choice was made with one key consideration: the Korean context would offer a rich ground to study informal networks and social relations for two reasons. First, social capital in Korea has drawn much research attention over the past decade (Chung et al., 2014); nevertheless, the volume of research in this area remains relatively small compared to other mainstream research. Therefore, this study contributes to providing future directions and a synthesized understanding of social capital literature in Korea. Second, under the heavy influence of Confucian values, Korea is a highly collectivistic society that places a high value for informal networks and social relations (Chung et al., 2014; Hong et al., 2011; Phillips & Crist, 2008; Valle, Yamada, & Barrio, 2004). Given that, studying social capital in this cultural context is meaningful and likely generate insights different from western-based studies.

## **Purpose and Research Questions**

The overarching purpose of this article is to identify, analyze, and synthesize social capital research in the Korean workplace context. The following three research questions guided this inquiry:

1. How has social capital been conceptualized in South Korea?

- 2. What methodologies have been used to study social capital in the Korean context, and what is the methodological quality?
- 3. What does the literature reveal about the impact of social capital in the Korean workplace?

The remainder of this chapter is structured into four sections. The first section provides a brief history of social capital in general. The second section describes the systematic literature review methodology. The third section presents my findings in response to the three research questions above. The final section outlines a future research agenda and suggestions for improving practice in the social capital area.

# **Research Methodology**

In this article, I used the systematic literature review (SLR) methodology to generate reliable and inclusive knowledge about extant social capital research in the Korean context (Thorpe, Holt, Macpherson, & Pittaway, 2005). Unlike traditional or narrative reviews, SLRs enable researchers to efficiently integrate existing literature, assess the findings, and provide evidenced-based information with minimized research bias (Mullen & Ramirez, 2006; Mulrow, 1994; Weed, 2006). In the subsequent paragraphs, I describe the process I followed to conduct the systematic review.

#### **The Search Process**

To ensure the rigor and reliability of the literature search, I followed the PRISMA guidelines and flow diagram, which depicts the flow of a systematic review (Figure II-1). Using this guide enabled me to systematically search and locate the extant literature. Since I am a native Korean and bilingual (Korean and English), both English

and Korean databases were searched in a hope to generate as much literature as possible. Specifically, I searched five English databases (ABI/INFORM Collection, Academic Search Ultimate, Business Source Ultimate, ERIC, and PsycINFO) and two Korean databases (RISS and KCI – Korean journal database available at Web of Science). These academic research databases were chosen because they provide a broad range of scientific academic journals and publications (Centobelli, Cerchione, & Esposito, 2018). The search was conducted from November 2019 to March 2020.

While searching for the literature, I used the following list of keywords: "social capital", "social network\*" combined with "Korea\*". Because social capital and social network are often used interchangeably, my literature search also included the key words of both social capital and social network. All the keywords were translated into the Korean language for the search of the Korean literature.

In total, 1,923 publications (2006-2019) were identified from the seven academic databases. All articles identified were exported to RefWorks for further screening. After reading the titles and keywords of each article and removing duplicates across databases, I excluded 1,677 articles prior to abstract review. If articles did not clearly explore individual or organizational social capital in the workplace, they were excluded. For example, studies that measured a different population of interest (e.g., non-profit organizations and communities or regions) were excluded because social capital in the non-profit organizations or communities may be different from that in for-profit organizations. Based on the following four pre-determined eligibility criteria, an

additional 129 articles were removed at this stage. This screening process led to a total of 57 publications for final analysis.

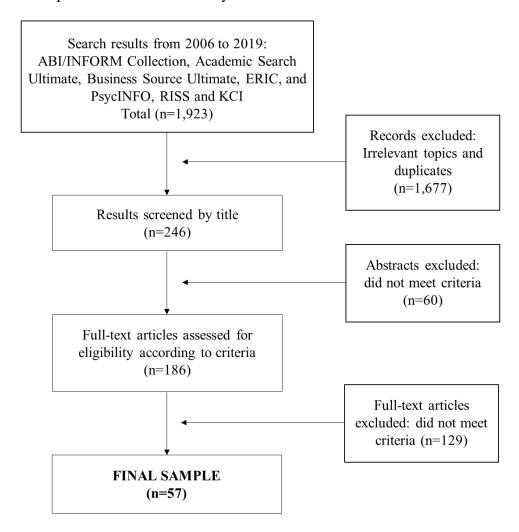


Figure II-1. PRISMA flow diagram of social capital studies

# **Eligibility Criteria**

To determine whether an article should be included for this review, I used four criteria as a guide. First, only peer-reviewed articles published in an academic journal are included. This choice was made based on a common understanding that peer-reviewed publications reflect higher quality than those that did not go through the blind

review process. As a result, editorials, conference proceedings, working papers, theses, dissertations, book chapters and books are excluded. Second, only publications in the languages of English and Korean are included. This decision was driven by my anticipation of the potential difficulty in accessing non-English or -Korean databases and the challenges associated with translation. Third, no time restriction was set for publications to maximize the search results. Fourth, only empirical studies are included. This decision was based on the purpose of this review – to provide an evidence-based understanding of social capital in the Korean context as well as to review the methodological qualities of the studies. Therefore, conceptual papers, literature reviews and theory-building articles were used only for providing background information in this review.

# **Data Abstraction and Synthesis**

To systematically organize and review literature, I used Garrard's Matrix Method (2014), which is a useful guide for a structured review process. All identified articles were fully reviewed, and the information in the follow areas were extracted from each article: author(s), the year published, the purpose and research questions of the study, the participants' characteristics, data collection and analysis methods, the findings of the study, and the contributions of the study (Appendix A). I evaluated each of the 57 publications and then synthesized and recorded such information in the matrix. After that, I applied the thematic analysis technique to identify the trends across the 57 empirical studies, definitions, and methodological information relevant to my research questions.

## **Methodological Quality**

To appraise the methodological characteristics and the rigor of a study, each article was reviewed using a checklist (Appendix B). This checklist was adapted from Kmet, Lee, and Cook (2004), Lee, Schotland, Bacchetti, and Bero (2002), and Parris and Peachey (2013). The score ranges from 1 to 18. The higher the score, the better the methodological quality. The items for evaluating the methodological quality include the focus of a study, research design, sampling strategy, data collection and data analysis methods, and the quality of the report of results/findings.

## **Findings**

In this section, I report the social capital research trends observed from the 57 studies. This review spans 15 years (2006 – 2019); the year 2006 was chosen because it was when the first peer-reviewed social capital research was published with the Korean population. Prior to 2010, there were only four empirical studies on social capital. However, since 2017, there has been an upsurge of interest in social capital research, as evidenced a total of 32 empirical studied published.

In terms of the publication outlet, the reviewed 57 studies have published in 48 academic journals; among them, two thirds (30 studies) have been disseminated through KCI – the best Korean publications and managed by the national Research Foundation of Korea (see Table II-1). A few examples of high-impact journals include *International Journal of Contemporary Hospitality Management*, *Journal of Applied Psychology*, *Journal of Business Research*, *Journal of Knowledge Management*, and *Supply Chain Management*. However, a majority of social capital research was published in second

tier journals. Also, due to the interdisciplinary nature of social capital, research in this area has been conducted in different disciplines, such as management or business (26 studies), administration (4 studies), information system (4 studies), and education (3 studies).

Table II-1

Publication outlets (total 48 journals are included)

Journal Title	Number of articles	Journal Title	Number of articles
Asian Business & Management	3	Journal of Small Business Management	1
Management & Information Systems Review	3	Journal of The Korean Production and Operations Management Society	1
American Review of Public Administration	2	Journal of The Korean Regional Development Association	1
International Journal of Contemporary Hospitality Management	2	Korean Academic Society of Accounting	1
Journal of Korea Academia- Industrial cooperation Society	2	Korean Business Education Review	1
Social Behavior and Personality: An International Journal	2	Korean Corporation Management Review	1
The Journal of Business Education	2	Korean Journal of Business Administration	1
Asia Pacific Business Review	1	Korean Journal of Management	1
Asia Pacific Journal of Business	1	Korean Journal of Sociology	1
Corporate Communications	1	Korean Management Consulting Review	1
Crisisonomy	1	Modern Society and Public Administration	1
International Journal of Human Resource Management	1	Management International review	1
Information Systems Review	1	Public Performance & Management Review	1
Journal of Applied Psychology	1	Public Personnel Administration	1
Journal of Business Research	1	Supply Chain Management	1
Journal of Computer Information Systems	1	The International Journal of Human Resource Management	1
Journal of Construction Engineering & Management	1	The International Journal of Industrial Distribution & Business	1
Journal of Information Technology Services	1	The Journal of Information Systems	1

Journal of Knowledge	1	The Journal of International Trade	1
Management		& Commerce	
Journal of Korean Economic	1	The Journal of Vocational	1
Development		Education Research	
Journal of Management &	1	The Korean Journal of Local	1
Economics		Government Studies	
Journal of Management and	1	The Korean Journal of Public	1
Organization		Administration	
Journal of Marketing Thought	1	The Korean Journal of Woman	1
Journal of Marketing Thought		Psychology	
Journal of Nursing Management	1	Yonsei Business Review	1

Next, social capital research has been conducted in various industries (see Table II-2). Among them, public administration (e.g., local government, military, and postal service) was the most frequently studied sector (11 studies), followed by wholesale and retail trade (8 studies), manufacturing (5 studies), and information technology (3 studies). In the 18 studies, multi-industries (e.g., manufacturing, R&D, and service) have been considered as the research venues rather than a single organization. In addition, a diversity of industries has been included as the research site, including health care, entertainment and recreation, accommodation and food services, construction, and finance and insurance. In terms of the firm size, it is worth noting that small-medium enterprises (SME) have received great attention from social capital scholars as the primary research venues (14 studies) when compared to large corporations (7 studies).

Table II-2

Industry categories studied in the 57 studies

Industry categories	N
Representation of industry categories	
Public administration	11
Wholesale and retail trade	8
Manufacturing	5

Information technology	3
Health care	2
Accommodation and food services	1
Construction	1
Entrainment and recreation	1
Finance and insurance	1
Not reported	6
Multi-industries were included	18
Firm size	
Small-medium enterprises	14
Large corporations	7

### Research Question 1: How Has Social Capital Been Conceptualized?

The first research question aimed to examine various definitions of social capital. Ha and Choi's (2019) study was excluded when synthesizing and operationalizing the concept of social capital because they did not explicitly provide a definition. In the remaining 56 articles, a multitude of definitions of social capital were provided. Since the concept of social capital has evolved and varied among researchers, a diversity of conceptualizations has been observed in the 56 studies. First, in analyzing the definitions of social capital in the 56 studies reviewed, the most prominent authors were Nahapiet and Ghoshal (1998), Coleman (1987, 1988, 1990) and Adler and Kwon (2002) (see Table II-3). Their definitions have been frequently used in the 56 studies, with Nahapiet and Ghoshal's (1998) being cited most in the 10 publications, followed by Coleman (7 studies) and Adler and Kwon (6 studies) respectively. Other seminal works by Bourdieu (1985), Burt (1992, 1997), and Putnam (1995, 2000) were also frequently adopted by researchers when defining social capital. It is worth noting that although these popular definitions from seminal works (e.g., Nahapiet & Ghoshal, Coleman, and Bourdieu)

were introduced and develop more than two decades ago, they are still the most frequently adopted ones.

Table II-3

Most adopted definitions of social capital from reviewed publications

A .1	D (' '.'
Authors	Definitions
Bourdieu (1985,	The aggregate of the actual or potential resources which are
p. 248)	linked to possession of a durable network of more or less
	institutionalized relationships of mutual acquaintance or
	recognition
Coleman (1990,	Social capital is defined by its function. It is not a single entity,
p. 302)	but a variety of different entities having two characteristics in
1 /	common. They all consist of some aspect of social structure,
	and they facilitate certain actions of individuals who are within
	the structure. Also, social capital is an asset embedded in the
	relationship between the members of a network or a
	community
Burt (1992, p. 9)	Friends, colleagues, and more general contacts through whom
<b>Bart</b> (1772, p. 7)	you receive opportunities to use your financial and human
	capital
Durtu aug. (1005	•
Putnam (1995,	Features of social organization such as networks, norms, and
p. 67)	social trust that facilitate coordination and cooperation for
N. 1	mutual benefit
Nahapiet &	The sum of the actual and potential resources embedded within,
Ghoshal (1998,	available through, and derived from the network of
p. 242)	relationships possessed by an individual or social unit. Social
	capital thus comprises both the network and the assets that may
	be mobilized through that network
Putnam (2000,	Connections among individuals – social networks and norms of
p.19)	reciprocity and trustworthiness that arise from them
Adler & Kwon	Social capital is the goodwill available to individual or groups. Its
(2002, p. 23)	source lies in the structure and content of the actor's social
_	relations. Its effects flow from the information, influence, and
	solidarity it makes available to the actor

Second, in addition to identifying various definitions, I also examined what specific dimensions of social capital were included in each definition. Among a variety of ideas used to describe the concept of social capital, the most common term across the

56 studies is the sum of actual and potential resources (22 times), followed by trust (12), assets (8) and norm and a set of people/nodes (7 for each). Since many scholars consider social capital as resources and assets, they focus further on how to maximize the sharing (7), accessing (6), and utilizing (5) of these resources through social capital.

One noticeable observation is that unlike research on other capital concepts (e.g., human capital and financial capital), much scholarly attention to social capital is given to who possesses it and how it is developed. For example, *social relationships* (i.e., interactions, social relations, connections, and networks) (in the 45 definitions) are depicted as the fundamental basis where social capital is embedded, available, and developed. Also, social capital is frequently characterized as collective, mutual, and interdependent rather than personal and individual (in the 18 definitions). It indicates that social capital can be jointly owned or shared. It is also emphasized that not only individuals but also groups, organizations, and even a community can utilize social capital and benefit from it.

As revealed through the analysis, social capital embodies a multitude of concepts, which makes it difficult to draw a firm conclusion about what constitutes social capital. Despite the variations among the definitions, there appears to be some agreement about social capital based on four key assumptions. First, social capital encompasses actual (or currently available) or potential resources. Second, social capital is available and embedded in the social relationships or interactions, thus not easily replicable and requiring an effort to build and develop. Third, the expected benefit of social capital can be both tangible (e.g., behavior, promotion, and monetary gain) and

intangible (e.g., trust, knowledge, effectiveness, and information). Finally, social capital can be possessed by any social unit, including individuals, groups, and organizations. In essence, social capital is the sum of actual and potential resources embedded within and developed through the social relationships and interactions possessed by different social units (individuals, groups, and organizations) to achieve the desired goals and expected outcomes.

# Research Question 2: What Methodologies Have Been Used to Study Social Capital in the Korean Context, And What Is the Methodological Quality?

To answer the second research question, I examined the research methodologies, the methods for data collection and analysis, and measurements used in the 57 articles. As shown in Figure II-2, almost all the 57 empirical studies adopted quantitative approaches (n=54, 94.7%), except three qualitative studies (Horak, 2014, 2017; Jeong, Jin, Chung, & Yang, 2017); no mixed-method research methods were used. The three qualitative studies are explorative, focusing on some understudied domains in social capital and social network research, such as connecting informal social network concept to Korea's indigenous networks. For example, Horak (2014, 2017) conducted explorative qualitative studies using interviews to uncover the unique meaning of informal networks in Korea, such as *yongo*, and the influence of *yongo* on recruiting practices. *Yongo* refers to "personal relationships in Korea that are attached to affiliation in an informally organization group" (Horak, 2014, p. 87). Also, all the three qualitative studies collected data from interviews and analyze them based on a theoretical proposition or theory that are derived from the literature (Pearse, 2019).

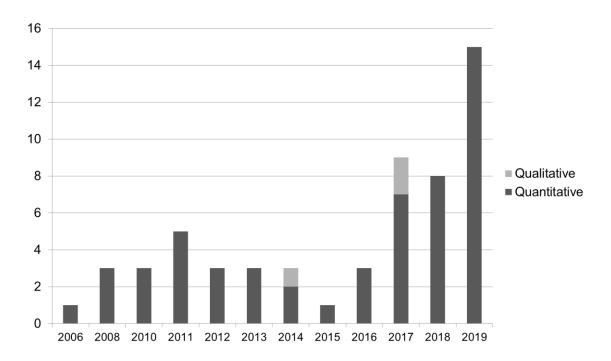


Figure II-2. Research methodologies used to study social capital

On the other hand, the 54 quantitative studies on social capital were conducted using the correlational design as the dominant methodology, except four SNA studies (Jang & Moon, 2019; Kim, Hau, Song, & Ghim, 2014; Lee, 2013; Park, Han, Rojas, Son, & Jung, 2011). The data used in these analyses were collected from the conventional Likert-type scale in which people respond to "a series of statements by indicating the degree of agreement" ranging from 1 to 5 (Gay, Mills, & Airasian, 2009, pp.150-151). Asking questions about individuals' perceptions or attitudes are the examples of these statements. Of the 54 quantitative studies, 50 employed traditional regression methods or structural equation modeling (SEM) for data analysis. More specifically, regression methods (e.g., multiple, hierarchical linear, and logistic regression) (27 studies) were the most adopted analytical method, followed by SEM (including partial least square) (21 studies) and hierarchical linear modeling (2 studies).

Of the 54 quantitative studies, Nahapiet and Ghoshal's (1998) three dimensions (structural, relational, and cognitive) of social capital have been most widely used for operationalizing and measuring social capital (see Table II-4). Each social capital dimension has been used in 29 studies (structural), 31 studies (relational), and 20 studies (cognitive), respectively. For the structural dimension, social interactions or tie strength were included as the sub-constructs. The relational dimension was largely studied by trust, norms, and identification. Lastly, the cognitive dimension was measured by shared vision or goals among employees in the organization.

Despite the popularity of Nahapiet and Ghoshal's (1998) conceptualization, there was no unified or popular instrument for measuring social capital. Nahapiet and Ghoshal's three dimensions of social capital have been measured in various ways by developing or adopting different items for assessing each dimension within a study. The structural dimension has been measured by frequency of contacts or participations, closeness or intimacy, network density, and centrality (i.e., degree, betweenness, and closeness). For the relational dimension, trust for leader, organization, or coworkers, identification, and norms have been used. Lastly, the structural dimension includes shared vision or shared language.

The second poplar instrument that has been used for some studies is grounded in bonding and bridging social capital. Adler and Kwon (2002) argued that the essential characteristics of social capital lie in how individuals view social capital. From this viewpoint, social capital is characterized by bridging (i.e., a resource embedded in the external linkages) and bonding (i.e., collective or inherent resources in the relationships)

capitals. By measuring cooperation or collective effort, the bridging and bonding concepts have been measured. Interestingly, this classification has been used in several studies along with Nahapiet and Ghoshal's three dimensions. For example, Lee, Lee and Lee (2017) differentiated bridging capital from bonding capital, while each component consists of Nahapiet and Ghoshal's structural, relational, and cognitive capital.

Three studies (Chung & Park, 2010; Jung & Chang, 2008; Park & Cha, 2019) measured social capital using the concept of formal and informal network. Specifically, the size of informal network and frequency of participation in informal network developed by Johnson (2001) were assessed. In addition, one study (Shin & Lee, 2016) used the Social capital outcomes for Nurses (SCOM) scale as the social capital measurement.

Table II-4

Measurements of social capital

Authors	Dimensions	The focus of measurement	
Nahapiet & Ghoshal (1998)	Structural	Social interaction, tie strengths, closeness, network configuration	29
	Relational	Trust, identification, norms, obligations	31
	Cognitive	Shared vision, shared language	20
Adler & Kwon (2002)	Bridging	External, brokerage	4
	Bonding	Internal, closure	3
Das & Teng (1997); Johnson (2001);	Formal	Frequency of contacts over the past 1-2 years	1
Littunen (2000); Watson (2007); Yang (2008)	Informal	The size, frequency of participation in informal network	2
Sheingold & Sheingold (2013)	Internal and external	Social capital outcomes for Nurses (SCOM): Internal trust and solidarity, external trust and solidarity,	1

In the 54 quantitative studies, SNA methodology and methods have often been used as supplementary sources of data. A total of 13 studies employed the network survey method to elicit network data. For data collection, name generators were employed to identify relevant relationships or a set of people (e.g., Kim et al., 2014; Lee, 2013; Oh & Kilduff, 2008). When generating or listing people and the relationships with them, some studies put limit on the number of ties nominated to lower burden on survey respondents (Perry, Pescosolido, & Borgatti, 2018). For example, three network studies limited the number of ties (alters), such as nominating up to five people (Koo, 2006) or seven people (Chang & Chang, 2010; Kim et al., 2014). However, two studies (Lee, 2013; Lee & Kim, 2011) did not impose any restrictions on the number of ties by allowing for nominating as many people as possible.

Six studies provided respondents with rosters (i.e., the complete list of people) (Choi & Jeong, 2019; Kim & Kim, 2012; Lee, 2013; Lee & Kim, 2011; Oh & Kilduff, 2008; Park & Oh, 2019), while others relied on recall of the participants. Three studies (Kim et al., 2014; Kim, Ko, & Jung, 2019; Park & Oh, 2019) limited the period of time for which people have interacted (e.g., over the past six months), and two studies (Jang & Moon, 2019; Kim & Kim, 2012) set a limit on the boundary of network (e.g., within the workplace) for a manageable and cost-effective network (Perry et al., 2018).

The most frequently asked questions to generate a list of people were associated with information, knowledge, and advice seeking for a successful work or performance

(e.g., Kim & Kim, 2013; Kim et al., 2019; Kim et al., 2014; Koo, 2006). Much research was conducted to capture the knowledge flow or advice seeking behavior using social relationships and interactions, which are core to social capital. In addition, frequency of contact (e.g., daily, weekly, or monthly) (Lee, 2013; Lee & Kim, 2011; Chung & Park, 2010; Koo, 2006), emotional closeness (Chang & Chang, 2010, 265), status of alters (e.g., high or low than the ego's one) (Chang & Chang, 2010, 265), duration of relationship (Koo, 2006), and range (e.g., same department or not) (Lee, 2013; Chang & Chang, 2010) were further used to obtain information about individuals' networks.

**Methodological quality**. I used a nine-item checklist with 8 assessment points in total. The distribution of 57 reviewed studies regarding its methodological quality score is presented in Table II-5. Actual scores ranged from 12 to 17 with a mean of 16.23 (SD=1.21). Overall, the 57 empirical studies exhibited good quality with clearly stated objective and the appropriate study design. Among them, six studies scored below 15 points, accounting for 10.5% of all quantitative studies included for this review. The relatively low scores were attributable to the lack of validity or reliability and the failure to provide detailed information on measurements (e.g., the original source of instruments).

Twelve quantitative and qualitative studies (21.1%) did not report either validity or reliability of the instruments used. Of these 12 studies, one qualitative study did not provide evidence on trustworthiness (credibility, transferability, dependability, and confirmability) of the data. Seven quantitative studies (12.3%) had an insufficient number of participants (a ratio of at least 5:1 or 10:1 per indicator) (Kyriazos, 2018),

resulting in small sample sizes for data analysis. For instance, Lee et al.'s (2017) questionnaire included 33 items; however, only 165 responses were analyzed to draw a conclusion.

Regarding the study participants, five quantitative studies (8.8%) did not provide information on participants' demographic details or background. Also, the 50 quantitative studies reported both descriptive (mean, standard deviation, and correlation) and inferential statistics for hypotheses testing, while seven studies (12.3%) provided only inferential statistics. Lastly, the 56 studies (98.2%) were cross-sectional, and all variables were mostly measured at once. Kim and Ahn's (2018) study was the only longitudinal study that examined women managers' social capital using a panel data. Also, only one study (Kim, 2018) used temporal separation by measuring constructs at two different time points.

Table II-5

Methodological quality score

Criterion	Scoring options	Distribution characteristic reviewed stu	cs among 57
		Frequency (n)	Percent (%)
Clear and focused objective	Yes	2	100
	Partial	0	0
	No	0	0
Evident and appropriate	Yes	2	100
research design	Partial	0	0
_	No	0	0
Sufficient participants'	Yes	50	87.7
characteristics	Partial	7	12.3
	No	0	0
Clearly described data	Yes	52	91.2
collection procedure		2	3.5

	Partial	3	5.3
	No		
Clearly defined, well	Yes	54	94.7
validated, and reliable	Partial	3	5.3
measure construct(s)	No	0	0
Clearly described and	Yes	51	89.5
appropriate analytic methods	Partial	6	10.5
	No	0	0
Results with sufficient	Yes	50	87.7
details	Partial	7	12.3
	No	0	0
Study design	Longitudinal	1	1.8
	Cross-sectional	56	98.2
(maximum total sc	ore = 18 points)		16.23 (SD=1.21)

*Notes*. Adapted from Goodson, Buhi, & Dunsmore, 2006; Jeon, Chen, & Goodson, 2012. The frequency and percentages were calculated based on 57 reviewed studies.

# Research Question 3: What Does the Literature Reveal About the Impact of Social Capital in the Korean Context?

By synthesizing the findings from the 57 studies, the interrelatedness of the key concepts, antecedents, outcomes, and mediators or moderators of social capital were identified. An illustration of these relationships and the related studies can be found in Table II-6, II-7, and II-8 and depicted in Figure II-3. First, the antecedents of social capital generally include individual, organizational, and relational variables. Ten different antecedents from the 54 studies were identified. At the individual level, three factors were found to contribute to the development of social capital: (a) individual capabilities to take control, (b) belief in the self under uncertainty, and (c) ability to balance work and home (Choi & Kim, 2019; Chung & Park, 2010; Oh & Kilduff, 2008). It is worth noting that thus far, individual-level antecedents in the social capital literature are mostly associated with individual capabilities or skills rather than the personality or demographics of individuals.

At the organizational level, a participatory and democratic work environment in which every voice is heard and respected was recognized as the antecedents of social capital (Kim & Hwang, 2012; Li & Song, 2019; Yong & Hwang, 2013). For example, Kim and Hwang (2012) compared the effects of different organizational cultures (i.e., hierarchical, developmental, and consensual) on social capital. They found that consensual organizational culture that emphasizes the importance of cohesiveness and participatory decision was the strongest precondition for social capital.

The most striking aspect of antecedents of social capital is that relational variables were emerged as the source of social capital. A few studies have reported that two-way communication and information technology use are highly associated with social capital (Kim, 2018; Kim & Shim, 2017; Yong & Hwang, 2013). Kim (2018) further provided support that the quality of employee-organization relationships is a promising predictor for social capital. Taking this evidence together, to strengthen social capital requires not only individuals' capabilities and participatory work environments but also the relationships between employees or employees and organization.

In terms of the outcomes of social capital, a wide range of outcomes were identified at both organizational and individual levels. At the organizational level, the relationship between social capital and organizational effectiveness is the most commonly studied relationship (31 studies). Given that social capital is a form of capital that expects to earn a return on their investment (Lin et al., 2001), it is not surprising that social capital is found to be positively associated with a wide range of performance or organizational effectiveness variables.

Organizational effectiveness includes attitudinal/behavior (i.e., commitment, satisfaction, turnover, and engagement), financial (i.e., revenue, growth in sales, and profitability), operational (i.e., efficiency, productivity, firm growth, and job performance), and structural (i.e., innovation and flexibility) aspects (Sharma & Singh, 2019). Specifically, operational effectiveness that directly relates to productivity and growth in the organization was the most popular effectiveness (10 studies). For example, Han and Jin (2018) found that CEO's social capital plays a vital role in obtaining and maintaining a company's competitive advantage, as it is not easily replicable.

Additionally, social capital has been linked with the quality of service (Shin & Lee, 2016; Si & So, 2019), collaboration among employees (Yong & Hwang, 2013), competitive intelligence (i.e., formal processes or informal activities to make and implement strategic decisions) (Kim & Kim, 2014), and organizational socialization (Chang & Chang, 2010).

At the individual level, the positive relationships between social capital and both tangible (i.e., behavioral) and intangible (i.e., attitudinal) outcomes have been established. Tangible outcomes include innovative behavior (Ko, 2019; Shin & Lee, 2017), silence behavior (Park & Oh, 2019), voice behavior (Chung, Kim, & Ko, 2019), income (Park & Cha, 2019), employability (Jung & Chang, 2008), and promotion (Koo, 2006). For example, Chung et al.'s (2019) findings showed that being central in the social networks within the organization allows for the promotion of voice behavior that is difficult in nature and often requires courage to challenge the status quo. Park and Cha (2019) found that social capital defined as a degree of participation in informal networks

is deeply associated with employees' higher incomes. On the other hand, intangible outcomes include entrepreneurship (Gil & Jeong, 2019; Ryu & Heo, 2019), subjective well-being (Ko, 2019), and life satisfaction (Koo, 2006). Koo (2006) found that diverse social networks that provide both emotional and work-related support are positively related to a high level of life satisfaction. Gil and Jeong (2019) identified social capital as a great source to promoting and nurturing senior employee's entrepreneurship.

Table II-6

Antecedents and outcomes of social capital reported by the 54 quantitative studies

Variable	Authors
Antecedents	
Organizational culture (2)	Kim & Hwang (2012); Yong & Hwang (2013)
Communication (1)	Kim (2018)
Green supply chain	Lee (2015)
management (1)	
Information technology use (1)	Kim & Shim (2017)
Self-efficacy (1)	Chung & Park (2010)
Self-monitoring (1)	Oh & Kilduff (2008)
Work ethic (1)	Yong & Hwang (2013)
Work-life balance (1)	Choi & Kim (2019)
Workplace democracy	Li & Song (2019)
Working hours/time flexibility	Kim & Ahn (2018)
(1)	
Individual outcomes	
Behaviors (3)	Innovative: Ko (2019); Shin & Lee (2017)
	Silence: Park & Oh (2019)
	Voice: Chung, Kim, & Ko (2019)
Career success (3)	Employability: Jung & Chang (2008)
	Income: Park & Cha (2019)
	Promotion: Koo (2006)
Entrepreneurship (2)	Gil & Jeong (2019); Ryu & Heo (2019)
Continuous relationship (1)	Kang (2017)
Life satisfaction (1)	Koo (2006)
Subjective well-being (1)	Ko (2019)

#### **Organizational outcomes**

Organizational effectiveness (31)

Attitudinal/behavioral (8): Choi & Kim (2019); Kim & Hwang (2012); Ko, Kim, & Lee (2019); Lee & Kim (2011); Lee & Tamraker (2018); Park & Lee (2017); Shin & Lee (2016); Yong & Hwang (2013)

Financial (8): Chung & Park (2010); Ha & Choi (2019); Kim & Shim (2018); Lee (2013); Lee, Choi, & Kim (2012); Lee, Sohn, & Ju (2011); Park, Han, Rojas, Son, & Jung (2017); Rhee (2008)

Operational (10): Eom & Won (2019); Han & Jin (2018); Kang & Kim (2018); Kim & Kim (2012); Kim, Lee, Paek, & Lee (2013); Kim & Ryu (2011); Lee (2015); Lee, Jang, & Choi (2016); Lee, Lee, & Lee (2017); Rhee & Ji (2011)

Structural (5): Ahn & Kim (2019); Kang & Moon (2010); Kim (2018); Kim & Shim (2017); Won & Leem (2017)

Quality of service (2) Competitive intelligence activities (1) Shin & Lee (2016); Si & So (2019)

Kim & Kim (2014)

Reverse knowledge transfer (1) Oh (2019)

Offshoring service activities (1) Musteen, Ahsan, & Park (2017)

Organizational collaboration (1) Yong & Hwang (2013) Organizational socialization (1) Chang & Chang (2010)

Additionally, the 35 quantitative studies reported mediators or moderators of social capital with the aim to unpack the boundary conditions and broaden the nomological network of social capital research (see Table II-7). Researchers found four individual-level mediators, including absorptive capacity (Kang & Moon, 2010; Won & Leem, 2017), knowledge or information sharing (Ahn & Kim, 2019; Kim, Lee, Paek, & Lee, 2013; Kim & Shim, 2018; Lee & Tamraker, 2018; Shin & Lee, 2017),

organizational citizenship behavior (Han & Hovav, 2016), and quality of work life (Ko, 2019). Among them, knowledge sharing has been frequently linked with innovation or performance (e.g., Ahn & Kim, 2019; Kim, Lee, Paek, & Lee, 2013; Kim & Shim, 2018) as the means to bridge social capital and outcome variables. At the organizational level, mediators include business environment (Lee, Sohn, & Ju, 2011), organizational adaptability and sensitivity to environmental change (Ryu & Heo, 2019), organizational investment (Ha & Choi, 2019), and organizational trust (Ko, Kim, & Lee, 2019).

Furthermore, research has focused primarily on the moderating roles of demographic variables (e.g., gender, education, and country) in the relationship between social capital and outcomes. For example, Koo (2006) investigated the differential impact of social capital on promotion and life satisfaction among managers and found that the effect of social capital is more salient among women managers than their male counterparts. In a comparative study, Musteen et al. (2017) showed that the relationship between social capital and offshoring activities is contingent upon the size of the firm. Additionally, a diversity of moderators has been found, such as leadership (Li & Song, 2019; Park & Oh, 2019), network cognitive memory (Kim & Kim, 2012), organizational support (Ko et al., 2019), ownership structure (Lee, Jang, & Choi, 2016), and status conflict (Chung et al., 2019).

Seven quantitative studies used social capital as a mediator. Kim and Hwang (2012) found that social capital mediates the relationship between consensual organizational culture and organizational effectiveness (job satisfaction and turnover

intention). Choi and Kim (2019) demonstrated that the effect of work-life balance via social capital is positively associated with organizational and job engagement.

Table II-7

Mediators or moderators included in the 35 studies

	Variables		Authors
IV	Mediator	DV	
Social capital	Business satisfaction	Managerial performance	Han & Jin (2018)
Social capital	Business environment and satisfaction	Performance	Lee, Sohn, Ju (2011)
Social capital	Knowledge management → innovation → relationship satisfaction	Investment on relationships	Kang (2017)
Social capital	Organizational trust	Organizational effectiveness	Ko, Kim, & Lee (2019)
Social capital	Dynamic capability	Entrepreneurial orientation	Ryu & Heo (2019)
Social capital	Knowledge sharing	Performance	Ahn & Kim (2019); Kim, Lee, Paek, & Lee (2013); Lee & Tamraker (2018)
Social capital	Knowledge sharing	Innovative behavior	Shin & Lee (2017)
Social capital	Knowledge sharing → innovation	Performance	Kim & Shim (2018)
Social capital	Knowledge absorptive capacity	Organizational performance	Won & Leem (2017)
Social capital	Absorptive capacity	Innovative performance	Kang & Moon (2010)
Social capital	Innovative behavior	Product innovative performance	Kim (2018)
Social capital	Quality of work life	Subjective well- being	Ko (2019)
Social capital	Self-efficacy	Contextual performance	Kang & Kim (2018)

Social capital	Team climate	Team performance	Lee, Lee, & Lee (2017)
Social capital	Organizational citizenship behavior	Knowledge sharing intention	Han & Hovav (2016)
Social capital	Investment	Investment performance	Ha & Choi (2019)
Entrepreneurship	Social capital	Entrepreneurial intention	Gil & Jeong (2019)
Organizational culture	Social capital	Organizational effectiveness	Kim & Hwang (2012)
Work ethic, organizational culture	Social capital	Organizational collaboration & commitment	Yong & Hwang (2013)
Work-life balance	Social capital	Organizational and job engagement	Choi & Kim (2019)
Green supply chain management	Social capital	Environmental/ operational performance	Lee (2015)
Information technology use	Social capital	Innovative performance	Kim & Shim (2017)
Self-efficacy	Social capital	Organizational performance	Chung & Park (2010)
Two-way and symmetrical communication	Employee- organization relationships	Social capital	Kim (2018)
IV	Moderator	$\mathbf{DV}$	
Social capital	HR's change agent role	HR effectiveness	Kim & Ryu (2011)
Social capital			
	Educational level	Employability	Jung & Chang (2008)
Social capital	Educational level Firm size	Employability  Offshoring service activities	Jung & Chang (2008)  Musteen, Ahsan, & Park (2017)
Social capital		Offshoring service	Musteen, Ahsan, & Park
-	Firm size Organizational	Offshoring service activities Organizational	Musteen, Ahsan, & Park (2017)
Social capital	Firm size  Organizational support  Environmental	Offshoring service activities Organizational effectiveness Entrepreneurial	Musteen, Ahsan, & Park (2017)  Ko, Kim, & Lee (2019)
Social capital Social capital	Firm size  Organizational support  Environmental dynamism  Organizational	Offshoring service activities Organizational effectiveness Entrepreneurial orientation Product innovative	Musteen, Ahsan, & Park (2017)  Ko, Kim, & Lee (2019)  Ryu & Heo (2019)

Social capital	Gender	Income	Park & Cha (2019)
Social capital	Leader-member exchange	Silence behavior	Park & Oh (2019)
Social capital	Network cognitive memory	Job performance	Kim & Kim (2012)
Social capital	Status conflict	Voice behavior	Chung, Kim, & Ko (2019)
Social capital	Ownership structure	Firm growth	Lee, Jang, & Choi (2016)
Workplace democracy	Servant leadership	Social capital	Li & Song (2019)

Lastly, the findings from the three qualitative studies (Horak, 2014, 2017; Jeong et al., 2017) were examined to determine whether any new constructs or relationships have emerged or introduced from the in-depth understanding. A summary of the findings of each article is presented in Table II-8, including the research purpose, study participants, and conclusions. Two of these studies by Horak (2014, 2017) paid special attention to the informal networks in Korea, as known as *Yongo*. Given the Confucian values and culture in Korea, the author uncovered the importance of *Yongo*, exclusive network ties or informal social relationships, in recruiting or promotion practices over the formal and institutionalized networks. Similarly, Jeong, Jin, Chung and Yang (2017) also pointed out that Confucianism plays a vital role in developing social relationships and creating the network dynamics in Korea.

Table II-8

Findings about social capital reported by the qualitative studies

Authors	Purpose	Participants	Study findings
Horak (2014)	To introduce three (Yongo, Yonjul, and Inmaek) forms of	21 experts representing international	Three forms of the informal networks are distinguished from each

	informal relation- based networks in Korea	corporations and public organizations	other; however, kinship-, university/school-, and regional origin-based ties are important across the three
Horak (2017)	To investigate the influence of the informal networks (i.e., Yongo) on the recruiting practices of Korean firms	45 representatives from private firms (both large corporations and SMEs)	In large corporations, the upper management level relies on the informal networks, whereas the middle and upper management used them in SMEs
Jeong, Jin, Chung, & Yang (2017)	To explore the patterns of network development and cultivation in SMEs during the internationalization process	13 Korean SMEs from the consumer- goods sector	The findings revealed the importance of host-country's characteristics that drive the evolution of SME's networks

## Discussion and Agenda for Future Research

In this section, I discuss the findings from my systematic literature review of the 57 empirical studies beginning with the trends across these studies, followed by a discussion in response to the three research questions. An agenda for future research is outlined based on the findings.

### **Research Trend**

The first trend observed in the 57 publications reviewed is that in recent years, there has been an increasing amount of literature on social capital. Specifically, there has been an exponential growth in social capital (32 studies) over the last three years (2017-2020); compared to a total of 25 studies published during a decade (2006-2016).

Researchers, such as Conway (2014), attributed this rising interest in social capital to the

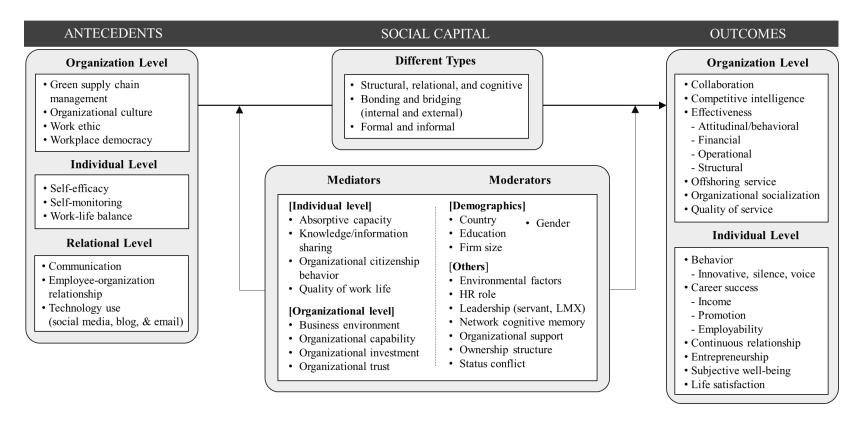


Figure II-3. The nomological network of social capital research

introduction of SNA to the context of business and management during the past decade. As Hollenbeck and Jamieson (2015) noted, SNA allows researchers to explain and visualize the social relationships. Han et al. (2019) echoed this by describing SNA as a great tool to explicate social relationships and relational patterns among social entities that constitute the basis for social capital. In analyzing the 57 studies, I observed that SNA has been frequently adopted to supplement traditional data collection and analysis methods and examine the network patterns or structures. Therefore, it appears that social capital research in Korea follows this increasing trend, with the advent and popularity of SNA in the field of social science.

Another noticeable trend is the dominance of SMEs as the research context. Of the 21 studies that reported the firm size, 66% of them were conducted with the sample of SMEs. This trend is consistent with the findings of a systematic review by Gamage et al. (2020) that highlighted the relationships between social capital and SMEs. One viable explanation for the popularity of SMEs in social capital research might be the unique characteristics of SMEs, such as less bureaucracy, more social ties or family-like relationships, and the low level of formalization (Bogáth, 2017; Zaridis & Mousiolis, 2014). Given these characteristics, many scholars have regarded SMEs as one of the major research sites to provide insight into how SMEs sustain a competitive advantage using social capital and networks (Gamage et al., 2020).

### **Discussion of Research Question One**

The first research question sought to examine the definition of social capital and what constituted social capital. Many researchers have noted the lack of consensus on

what constitutes social capital as its definition has been developed in various ways by scholars in different disciplines or scholars (Fulkerson & Thompson, 2008; Nahapiet & Ghoshal, 1998). In this review, I attempted to clarify the concept of social capital by reviewing various definitions and perspectives of social capital within the workplace boundary. The most notable definitions from the 57 studies reviewed were presented by Nahapiet and Ghohsla (1998), Coleman (1998), and Adler and Kwon (2002). All these three definitions recognize social capital as resources embedded in the networks or social relationships that would bring benefits (i.e., access, actions, or information). Therefore, it is safe to conclude that social capital is commonly defined as resources available in the social relationships to bring both tangible and intangible benefits to an individual or organization.

This finding is consistent with the review by Fulkerson and Thompson (2008) who examined the most frequently used social capital concepts in sociology. They reported that networks, resources, and relationships are the most prominent concepts documented from the social capital literature. Unlike Fulkerson and Thompson's (2008) findings, my review highlighted two additional key elements of social capital – expected benefit or returns. A possible explanation for these findings may be the fact that in the business context, organizations tend to prioritize performance and return on investment.

Additionally, one interesting observation is that Putnam has long been considered as one of the most prominent scholars in social capital research, along with Bourdieu and Coleman (Fulkerson & Thompson, 2008); however, his work was not frequently cited in the 57 publications reviewed. This may be because Putnam's work is largely rooted in

community or societal development by facilitating shared and coordinated actions (Putnam, 1993). Given a heavy focus on societal efficiency (Fulkerson & Thompson, 2008), Putnam's conceptualization might not be popular in social capital research in the context of workplace.

### **Discussion of Research Question Two**

Through this systematic review of the 57 empirical studies, I found that social capital research is dominated by quantitative research design, with traditional Likert scale instruments for data collection and conventional analytical methods (e.g., regression and structural equation modeling). Qualitative approaches were used in only three studies and no mixed research methods were employed. Such a narrow selection of research methodologies and methods may be partially explained by the fact that the phenomenon of social capital attracted research attention in Korea only in recent years, and the development of research on social capital is still at the infancy stage (e.g., duplicating the seminal work and focusing on the conceptualization of social capital).

Furthermore, it is worth noting that there has been no widely used measurement for social capital, even though Nahapiet and Ghoshal's (1998) three dimensions of social capital have been frequently cited in quantitative studies. In fact, Tsai and Ghoshal (1998) developed an instrument aimed to measure the three dimensions of social capital proposed by Nahapiet and Ghoshal (1998); however, Tsai and Ghoshal's instrument has been largely underutilized. Among the 54 quantitative studies I reviewed, only two studies (Han & Hovav, 2016; Kim & Shim, 2018) reported the use of Tsai and Ghoshal's (1998) instrument. A possible explanation for this might be that Tsai and Ghoshal's

(1998) instrument is based on SNA techniques (e.g., name generator questions and sociomatrix) rather than using the traditional Likert scale.

Furthermore, Tsai and Ghoshal's (1998) measurement was based on sociometric (or whole network) analysis, which examines the structure and pattern of networks and relationships by limiting a boundary of the network. This means, if a researcher is interested in the structure of a network in a specific organization or group, all members of the organization or group need to participate in data collection. However, collecting data from all employees within the organization is often unfeasible and increase the burden on respondents (Perry et al., 2018). As a result, the unfamiliarity with SNA as an analytical method, combined with the challenge in data collection within the specified boundary of a network may lead to the underutilization of the measurement developed by Tsai and Ghoshal (1998).

While the overall quality of the 57 studies I reviewed appears acceptable, some areas raised concerns. Examples include the insufficient sample size and traditional parametric statistics (e.g., univariate or bivariate statistics and regression analyses). Since the concept of social capital is grounded in social relationships, interactions, and networks, research on this topic calls for alternative analysis techniques (e.g., SNA) and high-level of analyses (e.g., multivariate). Perry et al. (2018) cautioned us that typical regression analyses might not be appropriate for network data because the concept of social capital or social network assumes interdependent or connected observation rather than independent. A similar reminder was given by Jacobs, Goodson, Barry, Kenneth, and McLeroy (2016) who concluded, based on a systematic review of social networks,

that univariate/bivariate statistics and regression analyses (ordinary least squares) are the rudimentary level of data analysis compared to the multivariate statistics and SNA. With these issues raised by researchers, it is safe to conclude that traditional linear models and bivariate statistics that were used in more than half of the studies (28 studies) reviewed are not the best choice for social capital research.

#### **Discussion of Research Question Three**

Through this review, I provide a holistic picture of the nomological network of social capital documented in the existing literature. As shown in Figure II-3, a variety of antecedents and outcomes were identified from the 57 studies. However, it appears that social capital scholarship has paid more attention to the outcomes than to the antecedents, particularly the outcomes at the organizational level (e.g., effectiveness and performance). This may partly be explained by one of the key underlying concepts of social capital – any social unit can possess social capital, which is embedded in the relationships (Coleman, 1990; Nahapiet & Ghoshal, 1998). Given the multi-level benefits of social capital, it appears that both individual and organizational outcomes have been substantially studied.

Despite the recognized value of social capital supported by ample empirical evidence, the outcomes of social capital are largely limited to effectiveness and performance. Unlike other capital concepts (e.g., financial and human), social capital explicitly emphasizes the importance of the interconnectedness and interactions between individuals (Lin, 1999). Therefore, studying diffusion of behaviors or ideas and decomposition of social networks or subgroups within the workplace (Borgatti &

Halgin, 2011; Hollenbeck & Jamieson, 2015) can broaden the nomological network of social capital research.

Another interesting finding is that a few studies have introduced the concept of *yongo*, which is a Korean indigenous concept that refers to the informal network.

Linking social capital to the indigenous concepts has become a new trend. Drawing upon social capital theory, Chinese *Guanxi* networks and their impact on the business have been popularly studied and discussed (Horak, 2014; Huang & Wang, 2011; Mao, Peng, & Wong, 2012; Qi, 2013). Along with this line of inquiry, two studies (Horak, 2014, 2017) in this review attempted to introduce and examine *yongo* empirically. Social capital can be manifested in different ways depending on cultural values (e.g., individualism and collectivism) (Realo & Allik, 2009). Therefore, indigenous research would provide a more contextualized and nuanced understanding of social capital beyond existing theories and practices.

#### **Implications for Research and Practice**

Findings from this review have several implications for both HRD practitioners and researchers. In this section, I discuss how the findings of this review can contribute to theoretical advancements, scholarly endeavors, and practical implications.

### **Implication for Research**

Findings from this review have several implications for social capital literature and research. First, a diversity of definitions of social capital are presented in the 57 empirical studies reviewed; however, few studies included indigenous conceptualization. Korea might offer a unique and new perspective to understand and define social capital

because Korean management practices are deeply rooted in informal relationship-based ties (Horak, 2014, 2015). Among the 57 empirical studies, Horak (2014, 2015) explored the definitions and characteristics of informal networks (social capital) and their impact on business practices. Specifically, he highlighted that Korean networks and social capital were developed often based on the same backgrounds (i.e., same school, same region, and family or blood ties). These informal networks promote a sense of belongness and trust; however, they can also lead to high exclusiveness to non-network members or social ties (Horak, 2015). Incorporating these unique characteristics into social capital literature, scholars can broaden its boundary and better understand the development and continuation of social capital. Therefore, I urge that both Korean and other scholars in eastern countries integrate a variety of approaches into social capital research and provide an indigenous definition of social capital rather than blindly adopting western conceptualizations.

Second, this review shows that all but one study relied on the cross-sectional research design. Based on this finding, there is a need for different methodologies and methods to help generate different data. Curvilinear relationships or longitudinal research design can be used to further examine social capital. For instance, researchers tend to assume that the more social capital and social relationships, the better; however, that may not always be the case. In fact, an abundance of social capital may constrain employees' behaviors and lead to information overload. Oldroyd and Morris (2012) ascribed the failure or turnover of star employees, who are central in the network and have high visibility in the workplace, to information overload. In other words, an

excessive amount of social capital tends to result in a substantial amount of information flow, which can lead to poor decisions and decline in ability to share the right information and resources (Oldroyd & Morris, 2012). For this reason, there is a need to explore how social capital produces positive or negative outcomes from a curvilinear perspective.

Furthermore, once established, social capital tends to be stable and constant because of its low transferability and fungibility (not easily replaceable) (Tymon & Stumpf, 2003); nevertheless, access to social capital or possible resources that can obtain from social capital may change over time (Eriksson & Ng, 2015). Therefore, using longitudinal designs would allow researchers to capture the development of social capital over time and the changes in access to information and resources as the individual's status changes (e.g., educational level, age, and career experiences).

Another area that is worth further investigation is social capital in the virtual environment. While ample empirical evidence demonstrates the benefits of social capital in the workplace, how social capital looks like in the virtual workplace setting is largely unknown. Through literature search, I found no social capital study conducted in the virtual workplace environment. However, cultivating a sense of belonging and facilitating participation in the virtual environment is becoming increasingly important (Zhao, Lu, Wang, Chau, & Zhang, 2012), with the recent upsurge in the need of virtual collaboration (Waizenegger, McKenna, Cai, & Bendz, 2020).

The advent of Covid-19 in 2020 has accelerated this trend of the virtual environment and collaboration by forcing many people to work from home and engage

in virtual learning (Zheng, Khan, & Hussain, 2020). Physical spaces have long been used to serve as a primary platform for social interactions and exchange of information (Mason, Castieman, & Parker, 2008; McCallum & O'Connell, 2008; Mebane, Porcelli, Iannone, Attanasio, & Francescato, 2008); however, the pandemic left many organizations with no choice but move operations into the virtual environment.

Therefore, more research is needed to enhance our understanding of how social capital is facilitated and utilized virtually. With such knowledge, HRD professionals will be better prepared to help create and cultivate social capital in both physical and virtual spaces.

### **Implications for Practice**

This review synthesizes empirical findings on social capital in the workplace with a specific focus on Korean employees. First, insights generated from this review will enable HRD professionals to gain a comprehensive understanding of social capital in the Korean workplace. HRD professionals can identify appropriate strategies for building and maintaining social capital for employees, better assist in addressing networking or communication challenges through social capital and make recommendations for top executive members. The synthesized findings highlight the consistent positive relationships between social capital and both individual and organizational outcomes. Also, Figure II-3 depicts how, why, and when social capital is effective and beneficial to individuals and organizations. This provides strong evidence on the importance of building and capitalizing collective social capital in the workplace.

Informed by this finding, HRD practitioners are better positioned to accommodate all employees' or teams' network-related needs and promote their social

and business relationships. For example, HRD practitioners can take a lead in creating physical and virtual platforms where trustful relationships can be nurtured, and information can be promptly shared. This practice will save employees a considerable amount of time to locate necessary information, thus increasing their efficiency and productivity (Nakamura & Yorks, 2011).

Additionally, findings from this review indicate that environmental factors, HRD roles, leadership, and organizational support are critical moderators that facilitate or impede the effect of social capital. In other words, constant and consistent support from the organization is the key to strengthening and maintaining social capital. Without commitment from senior leadership, the organization and its member may not be able to reap the benefits of social capital. Because social capital is difficult to build within a short period of time, it requires concerted effort. HRD professionals must be proactive in identifying essential resources needed to build and maintain social capital and in seeking top management support so that they can effectively tackle social capital or networking challenges that employee may encounter.

Second, employees can better prepare themselves for building and maintaining social capital to accomplish their career goals and aspirations in the organization. One of the positive outcomes of social capital at the individual level is career success, such as promotion and employability. Understanding various factors that influence the development of social capital will enable employees to make informed career decisions and motivate them to take initiatives to seek needed help or resources. For example, with a heightened awareness of the importance of self-monitoring and self-efficacy to develop

social capital, employees are more likely to invest time in relationship building which is a foundation of the development of social capital. As a result, employees may feel safer to share and test out different ideas, thus offering opportunities to reflect on themselves (Nakamura & Yorks, 2011). With this self-awareness, employees may be better positioned in the workplace. During this process, HRD professionals can serve as a mentor, coach, or facilitator to foster interactive activities and social relationships (Hezlett & Gibson, 2007).

#### CHAPTER III

THE IMPACT OF SOCIAL CAPITAL ON CAREER SUCCESS AND KNOWLEDGE
SHARING: THE RELATIONSHIPS WITH CAREER ADAPTABILITY,
PSYCHOLOGICAL OWNERSHIP, AND PERCEIVED SUPERSIVOR SUPPORT

This chapter (Article 2) presents an empirical study using a social network analysis data collection method. It addresses the second and third overarching questions of the dissertation— How is social capital associated with individual and organizational performances in the Korean workplace? And how are these relationships above substantiated through mediation and moderation analyses? To answer these questions, I focus on examining the effect of social capital on various individual and organizational outcomes in the Korean workplace, including career adaptability, subjective career success, psychological ownership, organizational knowledge sharing, and perceived supervisor support. This second article sheds light on the critical role of social capital in enhancing both individual and organizational outcomes (subjective career success and organizational knowledge sharing), as well as the mediation effects of career adaptability and psychological ownership and the moderation effects of perceived supervisor support.

#### Introduction

As the workplace is becoming more complex and interdependent, social capital rooted in continuity and stability of relationships has emerged as a powerful resource to drive organizations to achieve desired business outcomes (Hollenbeck & Jamieson, 2015; Nahapiet & Ghoshal, 1998). According to Bourdieu (1985), social capital includes the resources accumulated through social relationships. By this definition, social capital

allows for access to information and resources through social ties or relations and creates values from exchanges of instrumental and meaningful actions (Coleman, 1990).

Ample research suggests that social capital benefits individuals in multiple ways, for example, enhancing career success, evoking creativity, facilitating promotion, and improving high performance (e.g., Bozionelos, 2003; Burt, 1992). It has also been demonstrated that social capital helps increase organizational outcomes, such as improving productivity, inter-organizational relations, organizational reputation, and cooperation (e.g., Beckman, Haunschild, & Phillips, 2004; Provan et al., 2007; Rhee & Haunschild, 2006; Westphal, Boivie, & Ming Chng, 2006). Simply put, social capital has a positive impact in the workplace on both micro (individual) and macro (organization) levels. With such positive influences as the backdrop, this study focuses specifically on subjective career success as an exogenous variable at the individual (micro) level and organizational knowledge sharing as an exogenous variable at the organizational (macro) level.

Career success is considered a key indicator of individuals' accomplishments and psychological well-being (Ng et al., 2005). In today's workplace where career transition and instability are more prevalent than ever before, scholars and practitioners have paid increasing attention to achieving and maintaining career success (Feldman & Ng, 2007). It has been reported that social capital helps accumulate necessary resources to advance individuals' career and accomplish goals or expectations through relationships with others (Seibert et al., 2001). Career benefits such as greater remunerations (Meverson,

1994), promotions (Burt, 1997), and high-performance evaluation (Mehra, Kilduff & Brass, 2001), were identified as the primary outcomes of social capital.

As linear career progression, upward mobility, and organizational hierarchy are becoming less common in the contemporary workplace, subjective career success, represented as subjective evaluations or meaningfulness, has received increasing attention from researchers and practitioners (Ng & Feldman, 2014; Smale et al., 2018). Given the benefits of social capital that allows for collecting meaningful career-related resources and information, this study takes subjective career success into account when examining the positive influence of social capital on individual careers.

Furthermore, organizational knowledge sharing is chosen as another primary dependent variable in this study. As the focus of global business and economy shifted from a manufacturing-based to knowledge-based system, knowledge has been considered as the most competitive advantage and the source of sustainable organizational growth (Sharif, Zakaria, Ching, & Fung, 2005; Witherspoon, Bergner, Cockrell, & Stone, 2012). For this reason, organizational capabilities to accumulate, utilize, share, and manage knowledge have become increasingly important (De Carolis, 2003; Grant, 1996). Within the knowledge management process, knowledge sharing is considered as the cornerstone (Szulanski, 1996; Gupta & Govindarajan, 2000) because the flow of knowledge ensures knowledge application and innovation, in turn creating a sustainable advantage (Jackson, Chuang, Harden, Jiang, & Joseph, 2006).

Research suggests that knowledge sharing occurs and sustains largely through social ties and interactions (Egan, 2003; Witherspoon et al., 2013). One of the most

widely used frameworks in knowledge sharing was proposed by Nahapiet and Ghoshal (1998) theory, which was developed based on the assertion that organizational intellectual capital (knowledge) is deeply embedded in employees' social capital in that "who you know affects what you know" (p. 252). Given such potential linkages between social capital and career success and knowledge sharing, this study explores how social capital affects both individual and organizational outcomes in the workplace.

# **Need for the Study**

This empirical study addresses several gaps that exist in social capital research. First, up to date, social capital researchers have made little effort to holistically examine the effects of social capital on both individual and organizational outcomes. Given the ongoing debate about the levels of impact (i.e., individual, group, or community level) and the meaning of social capital, social capital has been studied in a fragmented manner either at the micro or macro level (Kildulff & Brass, 2010).

Social capital provides not only information and resources but also mutual support that helps an entity (e.g., individual, group, or organization) to achieve goals and growth (Lin, 1999; Nahapiet & Ghoshal, 1998). Individual career success and knowledge sharing are among the most critical factors and sources for organizational competitive advantage (Kharabsheh, 2007; Ng et al., 2005). However, the role of social capital or interpersonal relationships in promoting these individual and organizational outcomes have not received much attention and thus remains relatively unknown (Seibert et al., 2001). Career success has long been largely studied through personality traits, motivation, and human capital (Boudreau, Boswell, & Judge, 2001; Judge, Cable,

Boudreau, & Bretz, 1995); in addition, extant literature on knowledge sharing has overemphasized the tangible incentives for the facilitation of knowledge sharing (e.g., financial bonuses, rewards) (Lin & Joe, 2012; Ko, Kirsch, & King, 2005; Siemsen et al. 2007). Therefore, this study sheds light on the critical role of social capital, as relational variable, in positively influencing on both the macro (i.e., organizational knowledge sharing) and micro (i.e., individual career success) level variables, with the aim of holistically demonstrating the impact of social capital.

Second, few studies have focused on the mediation mechanisms of social capital. In other words, how resources and information embedded in social capital are mobilized to improve individual and organizational outcomes is largely unknown. It is commonly agreed that social capital facilitates" the instrumental utility of relations" and brings "beneficial consequences" through whom people know (Carpenter, Li, & Jiang, 2012, p.1332). To this end, many researchers have examined various individual and organizational outcomes (e.g., organizational performance, organizational citizenship behavior, career success, and growth) as a result of social capital (Hollenbeck & Jamieson, 2015). However, it is worth noting that not every network or relation with others automatically turns into social capital that generates benefits above; rather, individuals need to invest time and effort to capitalize social relations or make decisions about how they utilize resources and information accrued by social ties (Bidet, 2009; Horak & Taube, 2016).

To understand how social capital contributes to subjective career success and organizational knowledge sharing, this study further examines two possible mediators –

career adaptability and psychological ownership. Career adaptability is the set of competencies necessary to adapt to the new or challenging work conditions and demands (Savickas, 1997). As careers are trending toward being more diverse, boundaryless, and global, career adaptability has become essential to a successful career (O'Connell, McNeely, & Hall, 2008). For example, numerous studies have identified the association between career adaptability and various career-related outcomes, such as a satisfactory transition (Hirschi, 2010), career satisfaction (Tolentino, Garcia, Restubog, Bordia, & Tang, 2013), and job-search strategies (Koen, Van Vianen, Zikic, & Nauta, 2010). In a recent empirical study, Guan et al. (2015) found that career adaptability is a key driver of achieving long-term career success.

Savickas (2005, 2013) proposed the career construction theory that emphasizes the importance of continuous adaptation and adaptability to the environment throughout an individual's life. According to the career construction theory (Savickas, 2005, 2013), individuals accrue career adaptability through stable and context-general personal characteristics (e.g., cognitive ability, social ties), which leads to adaptation results that are indicative of work/career success and well-being. As such, employees' stable social capital is likely to promote career adaptability, subsequently enhancing individual career success. However, there is a paucity in empirical literature of career adaptability regarding social capital and career success (Zacher, 2014). Informed by the career construction theory, this study thus provides empirical evidence for the linkages among social capital, subjective career success, and career adaptability, focusing specifically on the mediation effect of career adaptability.

Psychological ownership is also included in this study to link social capital and organizational knowledge sharing. Pierce, Kostova, and Dirks (2001) defined psychological ownership as "a state in which individuals feel as though the target of ownership (or a piece of that target) is theirs (i.e., it is 'MINE')" (p. 86). An essential insight from Nahapiet and Ghoshal's (1998) social capital and intellectual theory is that knowledge sharing requires the preconditions. Social relationships or interactions do not automatically translate into information or knowledge; rather, individuals' motivations or beliefs precede the willingness or behavior of knowledge sharing. As one of the motivational factors, psychological ownership has been understood as the prerequisite for extra-role, altruistic, and discretionary behaviors of employees (e.g., Han et al., 2010; Jiang, Wang, & Li, 2019; Van Dyne & Pierce, 2004). Research suggests that a high level of psychological ownership instills employees to invest extra time, effort, and resources by developing reciprocal responsibility and commitment toward the target(s) (Masterson et al., 2000; Pierce et al., 2001).

Social capital offers not only information and resources but also emotional support (Bozionelos, 2003; Lin, 1999; Tymon & Stumpf, 2003), which helps develop a sense of psychological ownership toward the organization (Pierce et al., 2001). As an altruistic attitude and spirit, psychological ownership generates positive organizational behaviors and attitudes toward the targets, such as knowledge and information, and then shares them (Pierce et al., 2001; Li et al., 2015). Although knowledge sharing requires a strong sense of engagement from a knowledge holder (Nahapiet & Ghoshal, 1998), high psychological ownership would enable employees to voluntarily mobilize their resources

and information obtained through social capital. Despite the high theoretical and conceptual relatedness between these constructs, only a few empirical studies have focused on the role of psychological ownership in promoting knowledge sharing and mobilizing social capital (Wang & Noe, 2010). Given that knowledge sharing is derived from individual's internal motivation or belief (Nahapiet & Ghoshal, 1998; Wang & Noe, 2010), this study attempts to shed light on the mediating role of psychological ownership by linking social capital and knowledge sharing.

Lastly, this study is an attempt to account for both formal and informal relationships in the workplace by focusing on supervisor support. Informal relations (e.g., relationships with colleagues, friendships) in the workplace have become increasingly important as organizations are moving towards flatter and flexible structures from hierarchical structures (Huning, Bryant, & Holt, 2015). Yet the most accessible and critical gatekeeper available to employees is leaders (Sparrowe & Liden, 2005; Stark & Jefferies, 2017). The leader-member exchange (LMX) theory suggests that the fate of employees depends largely on the relationship between a leader and his/her subordinates (Awee et al., 2014). Drawing on the LMX theory, Ng and Feldman (2014) further argued that supervisors play a vital role in allocating resources and providing support necessary for employees' career advancement or job performance.

Traditionally, LMX theory focuses on how leaders differentiate their attention to members, "favoring some but not others" (Sparrowe & Liden, 2005, p. 506) and how differentiated attention results in different individual outcomes (Lee, Chae, & Shin, 2016). However, more researchers nowadays are interested in examining the effect of

LMX or supervisor support on both individual and group-level outcomes, such as group performance (Le Blanc & González-Romá, 2012; Liden, Erdogan, Wayne, & Sparrowe, 2006; Stewart & Johnson, 2009), extra-role behaviors (Shanock & Eisenberger, 2006; Wang, 2014), and social integration at work (Ng & Feldman, 2014). For instance, individuals who have a higher level of LMX or perceived supervisor support tend to show greater organizational commitment (e.g., Casper, Harris, Taylor-Bianco, & Wayne, 2011; Newman, Thanacoody, & Hui, 2012) and be less prone to leave the organization (e.g., Dysvik & Kuvaas, 2013; Maertz Jr, Griffeth, Campbell, & Allen, 2007; Newman et al., 2012).

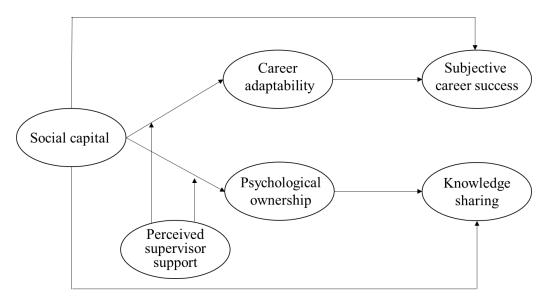
Informed by the LMX theory, this study posits that the relationships between social capital and two outcome variables (subjective career success and organizational knowledge sharing) are dependent largely on perceived supervisor support; that is, higher perceived supervisor support promotes the mobilization of social capital in enhancing career adaptability and psychological ownership, thus strengthening the effect of social capital on two outcomes. Examining the effect of perceived supervisor support provides insight into how employees' formal relationships with their leaders facilitate or impede resource allocation and knowledge exchange in the workplace (Sparrowe & Liden, 2005).

#### **Purpose and Research Hypotheses**

The overarching purpose of this article is to examine the relationships among social capital, subjective career success, organizational knowledge sharing, career adaptability, psychological ownership, and perceived supervisor support. Specifically,

this article examines: (a) the relationship between social capital and two endogenous variables (subjective career success and organizational knowledge sharing); (b) the mediation effects of career adaptability and psychological ownership on the relationship between social capital and subjective career success and organizational knowledge sharing, respectively; and (c) the moderating effects of perceived supervisor support on the relationships between social capital and two outcome variables (subjective career success and organizational knowledge sharing).

Based on the purpose of this study, a hypothesized model (Figure III-1) was developed. Twelve research hypotheses were formulated and tested.



*Figure III-1*. The hypothesized model

*Hypothesis 1.* Social capital is positively related to subjective career success.

*Hypothesis* 2. Social capital is positively related to organizational knowledge sharing.

Hypothesis 3. Social capital is positively related to career adaptability.

Hypothesis 4. Career adaptability is positively related to career success.

*Hypothesis 5.* Career adaptability mediates the positive association between social capital and subjective career success.

*Hypothesis* 6. Social capital is positively related to psychological ownership.

*Hypothesis 7.* Psychological ownership is positively related to organizational knowledge sharing.

*Hypothesis* 8. Psychological ownership mediates the positive association between social capital and organizational knowledge sharing.

Hypothesis 9. The positive association between social capital and career adaptability is moderated by perceived supervisor support, such that the association will be stronger for employees with high rather than low perceived supervisor support.

Hypothesis 10. The indirect effect of social capital on subjective career success via career adaptability is moderated by perceived supervisor support, such that the mediated association will be stronger for employees with higher rather than low perceived supervisor support.

Hypothesis 11. The positive association between social capital and psychological ownership is moderated by perceived supervisor support, such that the association will be stronger for employees with high rather than low perceived supervisor support.

Hypothesis 12. The indirect effect of social capital on organizational knowledge sharing via psychological ownership is moderated by perceived supervisor support, such that the mediated association will be stronger for employees with higher rather than low perceived supervisor support.

### **Guiding Theories**

This study was guided by two social capital theories (i.e., weak ties theory and social capital and intellectual capital theory), career construction theory, and LMX theory. Two social capital theories help define what social capital is and how this construct was assessed in this study. These theories also informed how social capital construct was associated with two dependent variables in this study – subjective career success and organizational knowledge sharing. The other two theories (career construction theory and LMX) provided a rationale for selecting specific variables for the mediation and moderation effects. In short, these theories together were used to holistically identify the relationships among social capital, subjective career success, organizational knowledge sharing, career adaptability, psychological ownership, and perceived supervisor support. The rationale for using these theories and their roles in hypotheses development is discussed below.

# **Weak Ties Theory**

Weak ties theory, developed by Granovetter (1973, 1983), is recognized as the most widely cited and prominent career-related theory in social capital and network research. According to Granovetter (1973), people tend to establish social capital through the strength of the tie, which is described as frequent interaction or high intimacy. This theory contributes to our understanding of social capital by explicating how the pattern of a network influences individual careers (Seibert et al., 2001). Thus, this theory has been extensively applied to understand the role of social networks and relations. For example, weak ties theory explains how individuals seek job opportunities

and advance their careers by examining what is embedded in networks and how transactions occur within relationships (Kilduff & Brass, 2010).

Interestingly, Granovetter (1973) stated that when an individual is searching for a job, having weak ties (infrequent interaction or low intimacy) is likely to be more useful than strong ties because weak ties expose individuals to job information and resources that are non-redundant. It seems somewhat counterintuitive that loosely connected relationships are more beneficial; however, Granovetter (1973) argued that the information collected from the strong ties may often be ineffective. This is because the stronger the relationship, the more possible that their social relations will be overlapped. In other words, information and resources that people share are likely redundant rather than being fresh and innovative. In addition, people's ideas or thoughts tend to become homophilous as they continue to maintain relationships (Borgatti & Halgin, 2011).

In this sense, Granovetter (1973) argued that weak ties serve as a bridge linking unconnected people. Weak ties act as a bridge that connects two independent people and serve as a source of novel information (Granovetter, 1973). Weak ties allow individuals to reach out to wide-ranging social groups otherwise not available to them, thus increasing the possibility of non-redundant information and ideas. Simply put, Granovetter's theory suggested that bridging, reflected as weak ties, is the fundamental key to accessing non-redundant information and resources necessary for individual success.

Although the weak ties theory is arguably one of the most well-established and widely used theories for social capital research, there have been mixed results of the

benefits of weak ties on career outcomes (Labianca & Brass, 2006). In an empirical study, Bian and Ang (1997) found that weak ties did not help job seekers to locate high-level help in China and Singapore. These two researchers attributed this finding to Confucian and collectivistic cultural roots that prioritize strongly connected or trustful social relations. Seibert et al.'s (2001) study also supported the idea that strong ties tend to ensure information and career sponsorship, while weak ties are negatively associated with access to information and assistance.

Given such inconsistency, the current study tested the applicability of weak ties theory in the Korean workplace context where the strong-ties-based relationships (e.g., strong affection and empathy) are more prominent (Bstieler & Hemmert, 2010; Yang, 2006). Granovetter's (1973) weak ties theory was used to understand how social capital is mobilized from individuals to individuals through strong social ties and how these strong ties are positively associated with individual career success.

# **Social Capital and Intellectual Capital Theory**

Developed by Nahapiet and Ghoshal (1998), the social capital and intellectual capital theory has been regarded as the seminal work in linking social capital with knowledge management (Mahmood, 2015; Wang & Noe, 2010). Nahapiet and Ghoshal (1998) clarified the linkage between social capital and knowledge management as they believe "who you know affects what you know" (p. 252). According to these researchers, social capital plays a vital role in creating new intellectual capital (knowledge). At a developmental stage of social capital research, Nahapiet and

Ghoshal's work evoked extensive scholarly interest in both social capital and knowledge management (Akhavan & Mahdi Hosseini, 2015; Mahmood, 2015).

This theory provides a distinctive and an additional understanding of social capital at the macro level. Unlike theories that focus exclusively on individual success and micro-level outcomes, Nahapiet and Ghoshal (1998) suggested that not only individuals but also any social units (e.g., group and organization) can be considered as the entity of social capital. More specifically, Nahapiet and Ghoshal paid special attention to the role of social capital in creating intellectual capital, which is not easily imitated by competitors. The core aspect of these authors' assumption is that intellectual capital is deeply embedded in social capital and social relations, thus warranting further consideration as a key to generating knowledge and organizational competitive advantage.

Nahapiet and Ghoshal (1998) characterized social capital into three dimensions in an organizational setting (see Figure III-2): structural, relational, and cognitive. First, the structural dimension of social capital concerns "the overall patterns of connection between actors" (Nahapiet & Ghoshal, 1998, p.244) or the structural characteristics of the network as a whole (Castro & Roldán, 2013). This dimension focuses primarily on how people are connected to one another (Burt, 1992), and it includes the strength of ties, social interaction, density, connectivity, and hierarchy of relations. Second, the relational dimension of social capital is concerned about "the characteristics and attributes of relationships" (Castro & Roldán, 2013, p. 1037). This dimension focuses on the influence of relationships on returns or actions of the network, which mainly derive

from a history of interactions, trust, respect, and friendship (Granovetter, 1992). Lastly, the cognitive dimension of social capital refers to "shared representations, interpretations, and systems of meaning among parties" (Nahapiet & Ghoshal, 1998, p.244). This dimension suggests that the more people share visions and goals, the stronger relationships they would develop.

The premise of the above dimensions is that they all contribute to co-constructing the social structure and intellectual capital, which can be jointly owned by social relations rather than by a sole individual (Burt, 1992). Nahapiet and Ghoshal (1998) defined intellectual capital as "the knowledge and knowing capability of a social collectivity, such as an organization, intellectual community, or professional practice" (p. 245). They argued that social capital, consisted of the three dimensions above, is available to or through social relations and then transferred to certain actions or outcomes in the workplace, such as diffusion of information, cooperation, innovation, and value creation (Coleman, 1990).

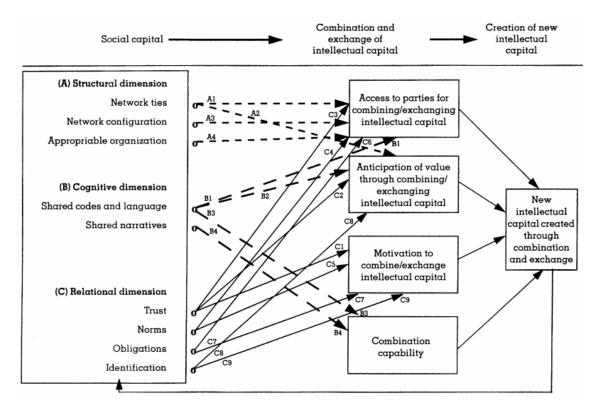
An essential insight from Nahapiet and Ghoshal's (1998) social capital and intellectual capital theory is that social capital lays the foundation for the creation of intellectual capital. Nahapiet and Ghoshal (1998) emphasized that social capital promotes the exchange (i.e., the transfer of explicit and implicit knowledge) and combination (i.e., the process of combining materials and information) of knowledge. For example, the strong network ties are conducive to the development of affective relationships, which offer opportunities to engage in more social interactions and exchange knowledge. Thus, this social capital and intellectual capital theory makes a

strong argument that social capital itself is an important social context and provides a platform for exchange and combination of knowledge (Cropanzano & Mitchell, 2005). Informed by Nahapiet and Ghoshal's (1998) social capital theory, the current study focused on examining the relationship between social capital and knowledge sharing given that employees' knowledge sharing is the key to creating intellectual capital in an organization.

Another valuable insight from Nahapiet and Ghoshal's (1998) theory is that it emphasizes the importance of the conditions for knowledge exchange and sharing. As shown in Figure III-2, Nahapiet and Ghoshal (1998) argued that social capital consists of three dimensions (i.e., structural, relational, and cognitive), and these three dimensions of social capital form the basis for the combination and exchange of intellectual capital, which leads to the creation of new knowledge. In this process, social relationships and interactions do not automatically create significant value. Rather, mobilization (i.e., use of the resources embedded in social capital) and accessibility to resources precede the exchange or combination of knowledge (Lin, 1999; Pena-López & Sánchez-Santos, 2017). Specifically, Nahapiet and Ghoshal (1998) highlighted the importance of employees' belief and motivation for sharing knowledge. Based on value expectancy theories, they argued that knowledge exchange and sharing occur when employees see the value of exchange and are motivated to transfer their knowledge.

Based on this argument, the current study also examined the precondition of knowledge sharing that facilitates the relationship between social capital and knowledge sharing. As one of the motivational factors, the concept of psychological ownership was

adopted to explain the underlying mechanism of social capital and knowledge sharing in the workplace. In sum, Nahapiet and Ghoshal's (1998) social capital theory was useful to this study because it outlines not only the relationship between social capital and knowledge sharing but also the condition of knowledge sharing that facilitates mobilization of resources embedded in social capital.



*Figure III-2*. Social capital model and the creation of intellectual capital (Nahapiet & Ghoshal, 1998, p. 251)<sup>1</sup>

<sup>\*</sup>Reprinted with permission from "Social capital, intellectual capital, and the organizational advantage" by Nahapiet and Ghoshal, 1998. Academy of Management Review, 23, pp. 242-266, Copyright [1998] by Academy of Management.

### **Career Construction Theory**

Career construction theory (Savickas, 2005) has been extensively used in career development research due to its distinctive view of career development as a proactive process and meaning making (Packard, Leach, Ruiz, Nelson, & DiCocco, 2012). As careers become unstable and mobile, this theory provides a much-needed insight into how individuals adapt to an ever-changing environment and proactively navigate their careers (Haynie & Shepherd, 2010; Rudolph, Zacher, & Hirschi, 2019).

The central premise of career construction theory (Savickas, 2005) is that individuals continuously adapt to a social environment for their entire life and this ongoing adaptation process includes four dimensions: adaptivity (adaptive readiness), adaptability (career adaptability resources), adapting (adapting responses), and adaptation (adaptation results). Adaptivity refers to psychological and personal characteristics, resources, and traits that represent readiness to meet career tasks and respond to changes. The underlying assumption of adaptivity is that it is relatively stable and embedded in individuals (Šverko & Babarović, 2019). Adaptability involves the psychological strengths and abilities to cope with vocational development and transitions (Savickas, 2005). Adaptability involves four competencies (4Cs): concern about one's vocational future, control over that future, curiosity and exploration of the fit between work and self, and *confidence* or anticipation of success in overcoming obstacles (Savickas, 2005; Savickas et al., 2009). Adapting responses include behaviors and beliefs regarding how people address changing conditions and advance their careers (Savickas, 2013; Savickas & Porfeli, 2012). Hirschi, Herrmann and Keller (2015)

corroborated that adapting responses involve career planning, exploration, and self-efficacy. Lastly, adaptation results indicate the outcomes of all adaptive behaviors and a fit between the individual's needs and environmental opportunities (Hirschi et al., 2015). The outcomes include career success, commitment, career identity, and job satisfaction (Rudolph et al., 2019).

According to Savickas (2005), the above four dimensions are a sequential and logical process that individuals experience. Guided by this theory, a number of studies investigated the effect of career adaptability on a diversity of career-related outcomes, such as job and career satisfaction (Zacher, 2015), task and career performance (Zacher, 2015), career success (Ocampo et al., 2018), and career optimism (McLennan, McIlveen, & Perera, 2017). Also, several studies explored how career adaptability served as the mediator to connect individual-level variables (e.g., personality) with career outcomes (e.g., career exploration, career engagement) (Li et al., 2015; Nilforooshan & Salimi, 2016).

While earlier studies have examined the critical role of career adaptability linking personality with various career outcomes, researchers have paid little attention to the relational factors, such as social capital. To advance this line of inquiry, the current study focused on investigating how an individual's social capital is linked to subjective career success through career adaptability. According to the career construction theory (Savickas, 2005), social capital can be interpreted as *adaptivity* because social capital tends to be stable and irreplaceable upon the creation (Tymon & Stumpf, 2003). It also posits that adaptation results, such as career success, are resulted from career

adaptability. Therefore, informed by the sequential adaptation process of career construction theory, this study establishes the mediation effect of career adaptability between social capital and subjective career success.

# **Leader-Member Exchange Theory**

The LMX theory was developed in the field of leadership as a promising way to examine the quality of relationships between leaders and subordinates (Martin, Guillaume, Thomas, Lee, & Epitropaki, 2016; Nie & Lämsä, 2013). This theory was initially proposed by Dansereau, Graen, and their colleagues in the 1970s as a means to understand the vertical relationships between leaders and followers (Dansereau, Graen, & Haga, 1975; Graen & Cashman, 1975). The primary focus of earlier LMX theory was two-folded: (a) the role-making process – how organizational members define and accomplish their work roles, both expected and unexpected (Granen, 1976); and (b) how this process is shaped through a series of interpersonal exchanges (Liden, Sparrowe, & Wayne, 1997).

Although LMX was originally grounded in role theory (Graen, 1976; Graen & Scandura, 1987), it has largely evolved within social exchange theory by focusing on the positive effects of high LMX (Erdogan & Liden, 2002; Kamdar & Van Dyne, 2007; Liao, Liu, & Loi, 2010; Rockstuhl, Dulebohn, Ang, & Shore, 2012; Wayne & Green, 1993). Based on a comprehensive literature review, Liden et al. (1997) argued that higher LMX is associated with the exchange of various resources or materials between leader and members, which goes beyond expected or contractual tasks. In other words, a high level of support from an immediate supervisor or leader enables members to engage

in additional or extra-role behaviors and attitudes (Van Breukelen, Schyns, & Le Blanc, 2006; Khalifa, 2019). Along with this line of inquiry, many researchers have studied the effect of supervisor support and LMX on the behavioral or attitudinal outcomes of followers, such as knowledge sharing, innovative behavior, loyalty, commitment, support, and trust (Anand, Hu, Liden, & Vidyarthi, 2011; Cropanzano & Mitchell, 2005; Uhl-Bien & Maslyn, 2003).

Recently, the LMX theory has become increasingly popular due to its distinctive focus on dyadic relationships and its abilities to explain how leaders develop differentiated relationships with followers in work groups vice versa (Martin, Guillaume, Thomas, Lee, & Epitropaki, 2016; Yammarino, Dionne, Chun, & Dansereau, 2005). An essential insight from the LMX theory is that each individual develops differentiated relationships with a leader and its differentiated relationship often determines individual extra-role behaviors and attitudes in the workplace. Liden and Graen (1980) suggested that individuals who have higher LMX are more likely to invest more time and effort for the benefit of their organization or work unit when compared to those who have lower LMX.

Guided by the LMX theory, the current study examined the effect of high LMX, which is represented as perceived supervisor support, as the boundary condition of promoting or impeding individual subjective career success and knowledge sharing. A high level of LMX is characterized by mutual trust, reciprocal obligation, respect (Bauer & Green, 1996), which lead to a high level of career satisfaction (Yang & Chau, 2016). Supervisors have direct control over career-related resources, allocation, and decisions

(Lee, Yun, & Kim, 2019). Therefore, those subordinates who perceive high-quality LMX or supervisor support are likely to be granted more resources, opportunities, and autonomy than those who not (Breland, Treadway, Duke, & Adams, 2007).

On the other hand, knowledge sharing is a manifestation of the stewardship or form of the extra-role behavior in that knowledge is embedded in individuals in nature and rarely externalized without exchange and interaction (Nonaka & Takeuchi, 1995; Rechberg & Syed, 2013). Resources and information acquired from social capital are internalized in individuals (Nahapiet & Ghoshal, 1998). These innate resources are needed to be mobilized and transferred to a form of knowledge sharing through interaction and exchange. During this process, a degree of supervisor support would moderate the relationship between social capital and knowledge sharing as an extra-role behavior.

In this sense, the LMX theory is a useful theoretical framework that explains how the differentiated relationship with a leader facilitates the internalization, mobilization, and externalization of social capital in order to enhance subjective career success and organizational knowledge sharing. Figure III-3 below highlights all the theories that guided this study. Two social capital theories guide how social capital would be defined, assessed, and related to two outcome variables, and the other two theories (career construction theory and LMX) provide a theoretical background for the mediation and moderation analyses.

# **Hypotheses Development**

In this section, the variables for this study and the relationships among these variables are discussed. The variables are social capital, subjective career success, organizational knowledge sharing, career adaptability, psychological ownership, and perceived supervisor support. Followed by definitions, antecedents or consequences, and important studies for each construct, research hypotheses are proposed.

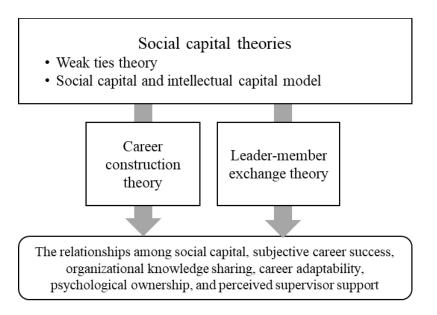


Figure III-3. Core theories that support the conceptual model for the study

#### The Key Role of Social capital in Individual and Organizational Success

**Social capital.** As a means to create values and cultivate resources for enhancing individual and organizational growth, social capital has been emerged as one of the core concepts in social sciences (Borgatti & Foster, 2003; Borgatti et al., 2009; Hollenbeck & Jamieson, 2015; Lin, 1999). While different disciplines (e.g., economic, sociology, and management) have developed different understandings, it is commonly understood that the concept of social capital conceives "the value of connections" (Borgatti & Foster,

2003, p. 993) that engender or bring resources, information, influence, and solidarity (Akdere, 2005; Bozioneleos, 2003). From a management point of view, social capital serves as a platform to seek valuable resources, recognition, and opportunities for both individual and organizational success (Brass, 1984; Brass & Burkhardt, 1993; Kilduff & Krackhardt, 1994). To this end, researchers identified associations between social capital and positive individual and organizational outcomes, such as career mobility, promotion, career success, creativity, team performance, and innovation (e.g., Alguezaui & Filieri, 2010; Chen, Chang, & Hung, 2008; Clopton, 2011; Lin & Huang, 2005; Seibert et al., 2001; Schenkel & Garrison, 2009).

Following this perspective, Nahapiet and Ghoshal (1998) defined social capital as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit. Social capital thus comprises both the network and the assets that may be mobilized through that network" (p. 24). Nahapiet and Ghoshal's (1998) work has extended the micro perspective of social capital (e.g., Bourdieu, 2001; Coleman, 1988; Lin, 1999; Portes, 1998) that focuses exclusively on individuals as the beneficiary of social capital. They emphasized the idea that any social unit, (e.g., group, organization, and collective community) can benefit from social capital, and resources embedded in social capital.

Because of its extensive operationalization, many researchers have adopted Nahapiet and Ghoshal's (1998) conceptualization of social capital to examine individual and organizational effectiveness and performance. The popularity of their definition was also confirmed by the findings from my systematic review of the 57 empirical studies.

Therefore, Nahapiet and Ghoshal's (1998) definition of social capital was adopted from this study as well. Furthermore, Nahapiet and Ghoshal (1998) identified three elements as key to defining social capital: the strength of ties (structural), trust (relational), and shared understanding/vision (cognitive). Informed by Granovetter's (1973) and Nahapiet and Ghoshal's (1998) work, this study included individual subjective career success and organizational knowledge sharing as outcomes variables of social capital because they are the key for both individual and organizational growth and success.

Subjective career success. In the career management and development literature, career success has been one of the long-standing research topics (Boudreau, Boswell, & Judge, 1999; Hirschi, Nagy, Baumeler, Johnston, & Spurk, 2018; Pan & Zhou, 2015). Traditionally, many researchers view career success as the concerns of individuals that require each employee to take full responsibility (Ng, Eby, Sorensen, & Feldman, 2005). However, career success has emerged as one of primary organizational interests when leaders came to realize that employees' career success contributes to strengthening organizational effectiveness and ultimately organizational success (Baroudi, Khapova, Fleisher, & Jansen, 2018; Ng, Eby, Sorensen, & Feldman, 2005; Judge, Higgins, Thoresen, & Barrick, 1999). Therefore, organizations and researchers have become increasingly interested in identifying factors that promote individual career success and thereby drive organizational success (Hirschi et al., 2018).

The concept of career success has evolved over the several decades by incorporating psychological aspects (Ng & Feldman, 2014; Rasdi, Ismail, Uli, & Noah, 2009). The focus of career success has shifted from a hierarchical progression (e.g.,

salary, promotion) to positive psychological or work-related experiences (e.g., career satisfaction, quality of work life) (Rasdi et al., 2009). Such shift of focus is attributable to the changing nature of the contemporary workplace in which non-linear and boundaryless career progression are replacing a linear career path (Ng & Feldman, 2014). Also, not every employee is given an opportunity to attain objective career success (e.g., promotion) as the organizations become less hierarchical and more flattened (Smale et al., 2018). Thus, subjective career success that highlights the perceived achievements or feelings about one's careers based on their own criteria has received much recent attention in the literature (Ng & Feldman, 2014; Pan & Zhou, 2015; Seibert et al., 2001).

The current study examines the relationship between social capital and subjective career success. Judge, Cable, Boudreau, and Bretz (1995) defined subjective career success as "the positive psychological or work-related outcomes one has accumulated as a result of one's work experiences" (p.438). Their definition contributed to the operationalization of subjective career success at a developmental research stage. Later on, Ng and Feldman (2014) defined subjective career success as "individuals' perceptual evaluations of, and affective reactions to, their careers" (p. 170). Similarly, Spurk, Hirschi, and Dries (2019) defined it as "the focal career actor's evaluation and experience of achieving personally meaningful career outcomes" (p. 36). In this study, subjective career success is understood as individual's subjective evaluations and judgements about career progress, career attainment, and career satisfaction (Haibo, Xiaoyu, Xiaoming, & Zhijin, 2018; Ng & Feldman, 2014).

Social capital and subjective career success. A large volume of literature on career success has been investigated to identify key factors facilitate subjective career success (Boudreau et al., 1999; Judge et al., 1995; Mohd Rasdi, Ismail, & Garavan, 2011; Zacher, 2014). In their seminal study, Judge et al. (1995) suggested that demographic, human capital, motivational, and organizational variables contribute to facilitating career success. Drawing on an extensive range of key sources for career success, Hirschi (2012) also proposed four critical career resources that enhance career success: (a) identity resources (e.g., self-concept, goal clarity), (b) human capital resources (e.g., education, skills), (c) psychological resources (e.g., self-efficacy, resilience), and (d) social resources (e.g., social support, social network).

Through a meta-analysis, Ng and Feldman (2014) theoretically characterized the key factors for subjective career success into five broad categories: (a) trait-related (e.g., personality, self-evaluations, and proactivity); (b) motivational (e.g., commitment, satisfaction, and engagement); (c) skill-related (e.g., education and participation in training and development activities); (d) social network (e.g., LMX, supervisor support, and social integration); and (e)organizational and job factors (e.g., organizational support, job control, and job challenge). By focusing on these various factors that promote or undermine subjective career success, Ng and Feldman (2014) highlighted the importance of subjective career success in the workplace where the emergence of different or non-linear career paths is prevalent. More recently, building upon Hirschi's (2012) model, Hirschi et al. (2018) proposed an integrative framework (i.e., human capital, social capital, and motivational factors) of career resources to enhance career

success. Collectively, these studies have provided important and comprehensive insights into what factors drive individual subjective career success.

According to Boudreau et al. (1999), the concept of career success is rooted in the accumulated interactions among individuals, behaviors, and organizational or societal norms. However, in the 1990s and early 2000s, the role of interpersonal relationships or environments has been largely neglected by scholars (e.g., Boudreau et al., 1999; Judge et al., 1995). In recent years, however, more scholarly attention has been given to interpersonal-related factors and environmental factors as a means to promote subjective career success (e.g., Mohd Rasdi et al., 2011; Ng & Feldman, 2014; Spurk, Kauffeld, Barthauer, & Heinemann, 2015). Specifically, mentoring or leader-member exchange have been examined as a part of social capital or social resources (e.g., Bozionelos, Bozionelos, Kostopoulos, & Polychroniou, 2011; Park, Kang, Lee, & Kim, 2017); however, the roles of interpersonal-related factors, such as social capital, are relatively little known (Seibert et al., 2001).

Given that social capital provides competitive job resources and opportunities, several researchers have considered it as one of the key sources for subjective career success (Adler & Kwon, 2002; Granovetter, 1976; Seibert et al., 2001). Informed by social capital theories (e.g., weak ties theory, social resource theory), several empirical studies suggest that social capital allows individuals to access information and resources necessary for career development, and in turn help them to achieve career success (e.g., Ng et al., 2005; Seibert et al., 2001). Based on Granovetter's (1973) weak ties theory, researchers specifically suggest that individuals with little social capital are more likely

at a disadvantage in accessing job opportunities and receiving career sponsorship (Ng & Feldman, 2014; Wayne, Liden, Kraimer, & Graf, 1999). However, what we know about the link between social capital and subjective career success is based largely upon the theoretical conceptualizations rather than empirical evidence. Therefore, the current study aims to lend empirical support to this link by exploring the impact of social capital on subjective career success.

Moreover, according to Granovetter (1973) and Nahapiet and Ghoshal (1998), strong social ties (i.e., frequent interaction, intimacy), trustful relationships, and shared understanding exert a powerful influence on individual success and growth. Social capital establishes a strong foundation for developing one's career competencies in that one's career success has increasingly relied on "the nature and quality of relationships" (Tymon & Stumpf, 2003, p.12). In a study conducted by Bozionelos (2003), the results showed that strong network resources (i.e., interpersonal ties) are associated with both objective and subjective career success over and above human capital, demographics, and mentoring. Additionally, a seminal study by Seibert et al. (2001) provided evidence that the strength of ties and social capital resources play a vital role in predicting and maintaining both subjective and objective career success (i.e., salary, promotion, and career satisfaction). Therefore, I posit that social capital constituted by three dimensions – structural (i.e., the strength of ties), relational (i.e., trust), and cognitive (i.e., shared understanding or vision) – exerts a positive influence on subjective career success.

Furthermore, this study encompasses both intra- and extra-interpersonal relationships as the boundary of social capital. Earlier studies support the pivotal role of

social capital as a source of key information and resources for subjective career success; however, these studies remain narrow in focus dealing only with intraorganizational ties within an employees' own organization (e.g., Seibert et al., 2001). As the boundaryless career has emerged, career progression or career success is not likely defined within one organization; rather, both intra- and extra-interpersonal relationships contribute to providing necessary information and resources for career success (Arthur, Khapova, & Wilderom, 2005). Therefore, this study attempts to demonstrate the role of social capital that includes both internal and external interpersonal relationships as a source of subjective career success. I expect a positive relationship between social capital and subjective career success, as social capital offers individuals career opportunities, resources, and information otherwise not available. Accordingly, I hypothesize:

*Hypothesis 1.* Social capital is positively related to subjective career success.

Organizational knowledge sharing. In the contemporary workplace, knowledge has been recognized as one of the most invaluable resources and critical assets to determine a sustainable competitive advantage and organizational growth (Drucker, 1992; Janasz & Forret, 2008; Kharabsheh, 2007; Whelan, Collings, & Donnellan, 2010; Witherspoon, Bergner, Cockrell, & Stone, 2012). As an intangible asset, knowledge allows individuals and organizations to maintain a competitive advantage that is not easily replicated (Janasz & Forret, 2008; Whelan et al., 2010). As such, accessing, creating, transferring, utilizing and distributing knowledge that would add value to organizations have become a primary interest of leaders (Tymon & Stumpf, 2003; Witherspoon et al., 2012). Among a diversity of knowledge-related concepts, knowledge

sharing—the transfer of knowledge from one to another—has been understood as the key to successful knowledge management in the workplace (Desouza, 2003; Kharabsheh, 2007; Ouakouak & Ouedraogo, 2019).

Knowledge sharing is defined as "the provision of receipt of task information, know-how, and feedback regarding a product or procedure" (Cummings, 2004, p.352). Similarly, in an integrative literature review, Wang and Noe (2010) defined knowledge sharing as "the provision of task information and know-how to help others and to collaborate with others to solve problems, develop new ideas, or implement policies or procedures" (p. 117). Usoro, Sharratt, Tsui, and Shekhar (2007) described knowledge sharing as "a process of communication between two or more participants involving the provision and acquisition of knowledge" (p.201). Knowledge sharing was also defined as "the act of making knowledge available to others within the organization" (Ipe, 2003, p. 341).

In addition, researchers have suggested that knowledge sharing includes both explicit and implicit knowledge (Ellis, 1993; Masters, 1992). Explicit knowledge sharing is the degree to which individuals engage in an explicit knowledge sharing act (e.g., proposal, report, and knowledge obtained from other publications) (Zhang et al., 2014). On the other hand, implicit knowledge sharing is the degree to which one engage in an implicit knowledge sharing act (e.g., know-how, know-where, or know-how from work with other team members) (Zhang et al., 2014). Taken together, knowledge sharing involves reciprocal or mutual exchanges of not only tangible reports or official documents but also intangible information, know-how, feedback, and techniques.

The current study adopted Wang and Noe's (2010) definition of knowledge sharing from a comprehensive review: "the provision of task information and know-how to help others and to collaborate with others to solve problems, develop new ideas, or implement policies or procedures (p. 117). In addition, this study examined both explicit (e.g., know-how, information) and implicit (e.g., reports, official documents) knowledge sharing.

Social capital and organizational knowledge sharing. Knowledge sharing is a prerequisite for organizational growth and success, such as innovation/innovative capability, creativity, and competitive advantage (e.g., Dong, Bartol, Zhang, & Li, 2017; Kamaşak, & Bulutlar, 2010; Kang & Lee, 2017), because knowledge sharing among employees is fundamental to the development of new products, innovations, and processes (Li, Yuan, Ning, & Li-Ying, 2015; Nonaka & Takeuchi, 1996; Nonaka et al., 2006). Through knowledge sharing, organizations can obtain, integrate, utilize and capitalize these knowledge-based resources to build the competitive advantage (Cabrera & Cabrera, 2005; Damodaran & Olphert, 2000; Davenport & Prusak, 1998; Wang & Noe, 2010).

Despite its crucial role for organizational growth and prosperity, knowledge sharing remains a challenging task in organizations (Saetang, 2011; Staples & Webster, 2008). According to Amayah (2013), the difficulty of knowledge sharing lies in two aspects. First, knowledge is tacit in nature; thus, not highly transferrable among employees. Second, knowledge sharing is a voluntary act, thus "employees cannot be compelled to do it" (Lin, Lee, & Wang, 2008, p. 456). Several models (e.g., Kharabsheh,

2007; Lin & Joe, 2012; Witherspoon et al., 2012) have been proposed and tested in a diversity of organizational settings to understand the factors that facilitate organizational knowledge sharing (Amayah, 2013). Some scholars emphasized the importance of individual attitudes, personality, or absorptive capacity (e.g., Kwok & Gao, 2005; Matzler et al., 2008; Yang, 2008), while others focused on group- or organizational-level variables (e.g., organizational culture, incentives; Al-Alawi, Al-Marzooqi & Mohammed, 2007; Caruso, 2017; Islam, Hasan, Ahmed, & Ahmed, 2011). However, several researchers have raised concerns about an overemphasis on the tangible incentives to promote knowledge sharing (Lin & Joe, 2012), and such approach to knowledge sharing tends to reflect relatively individualistic and context-independent views (Nahapiet & Ghoshal, 1998). To address these concerns, researchers have identified informal networks or social ties as the facilitator of the movement of knowledge among employees (Akhavan & Mahdi Hosseini, 2015; Hollenbeck & Jamieson, 2015; Whelan, 2011).

According to Nahapiet and Ghoshal (1998), knowledge is embedded in social relations as the sources of information and interaction; and social capital is conducive to the development of affective relationships that encourage employees to exchange knowledge. In the same vein, social capital and networks serve as a platform for distributing and exchanging information, providing mutual support, and establishing shared expectations (Kings et al., 2008; Lin, 2007). Along with this line of thought, recent evidence suggests that social capital can facilitate knowledge sharing and improve the quality of information obtained (Wang & Noe, 2010). For example, Lefebvre,

Sorenson, Henchion, and Gellynck (2016) found that social capital accumulated among employees are positively related to knowledge sharing. Chang et al.'s (2012) results also confirmed a positive impact of social capital on knowledge sharing of nurses.

Informed by Nahapiet and Ghoshal's (1998) social capital and intellectual capital theory, I thus posit that social capital contributes to a positive influence on organizational knowledge sharing. In Asian countries, such as China, South Korea, and Indonesia, the strong-tie-based relationships are more prevalent due to cultural heritages and tendency (Ahlstrom, Bruton, & Liu, 2000; Hamilton & Biggart, 1988; Khanna & Palepu, 2000; Peng & Zhou, 2005). Specifically, Koreans tend to build strong interpersonal relationships that are grounded in affection or empathy and built upon frequent personal interaction (Bstieler & Hemmert, 2010; Yang, 2006). Therefore, the current study adopts a strong-tie-based approach than weak ties when defining the structural dimension of social capital. Together, I propose that organizational knowledge sharing is positively facilitated by social capital.

*Hypothesis* 2. Social capital is positively related to organizational knowledge sharing.

# The Mediating Role of Career adaptability

Career adaptability has been defined as the set of competencies necessary to adapt to new or challenging work conditions and demands (Savickas, 1997). As one of the core concepts of career construction theory (Savickas, 2005), career adaptability is concerned about the psychological strengths and ability to cope with vocational development and transitions (Savickas, 2005). Savickas (2005) theorized career

adaptability under four types: *concern* about one's vocational future (i.e., future-oriented consideration or awareness of career), *control* over that future (i.e., self-discipline, effort, and persistence for a successful career), *curiosity* exploration of the fit between work and self (i.e., reflection on personal interests and skills and environments), and *confidence* or anticipation of success in overcoming obstacles (i.e., the beliefs that one can actualize career choices) (Savickas et al., 2009).

Career adaptability has been understood as personal resources and abilities to deal with new or challenging work demands (Haenggli & Hirschi, 2020). In the literature, a high level of career adaptability has been associated with a successful career transition (Koen, Klehe, & Van Vianen, 2012) and career success or employability (Hirschi, 2010; Koen, Klehe, Van Vianen, Zikic, & Nauta, 2010; Zikic & Klehe, 2006; Zacher, 2014). Also, career adaptability has been regarded as one of the ways of mitigating the negative work-related effects, such as career anxiety and work stress (Maggiori, Johnston, Krings, Massoudi, & Rossier, 2013). As careers become unstable and mobile, career adaptability provides insight into how individuals adapt to an everchanging environment and predict individual growth and success (Haenggli & Hirschi, 2020; Zacher, 2014).

According to career construction theory (Savickas, 2005), career adaptability does not arise from fixed qualities, but rather is developed from the continuous changes of personality, environments, and reciprocal interactions over time (Savickas & Porfeli, 2012). Several researchers have characterized career adaptability as transactional competencies situated at the intersection of person-environment as means of facilitating

career adjustment and development (Savickas, 1997; Savickas & Porfeli, 2012; Zacher, 2014). Savickas (2005) also posited that adaptivity, as a prerequisite for career adaptability, includes not only psychological but also personal characteristics and resources, which are stable and irreplaceable. In this study, I view social capital as types of *adaptivity* in that it is long-standing and not easily replaceable once it is established (Tymon & Stumpf, 2003).

Moreover, social capital is "reciprocal transactions" (Wall, Ferrazzi, & Schryer, 1998, p. 305) that involve the exchange of information, new ideas, influence and social support (Baker, 2000; Janasz & Forret, 2008). Thus, social capital increases the likelihood that individuals will be given timely information and resources as well as personal assistance when needed (Janasz & Forrest, 2008). Social capital theories, such as Granovetter's weak ties theory (1973) and Lin's social resources theory (1999), further support that individuals with high level of social capital can hold high expectations of task completion, vocational development, and career success through resources and information acquired from social relations (Seibert et al., 2001).

Although social capital has not been frequently linked with career adaptability, a handful of studies have found that social support from family, peers, and friends play a critical role in promoting career adaptability (e.g., Hirschi, 2009; Kenny & Bledsoe, 2005; Wang & Fu, 2015). Unlike social support, the concept of social capital highlights the importance of resources and information necessary for "the achievement of certain ends" (Colemena, 1988, p. S98), such as career opportunities and development.

Therefore, I expect that individuals with high level of social capital can develop career

adaptability as they are more likely to be given additional resources for achieving new or challenging work demands.

*Hypothesis 3.* Social capital is positively related to career adaptability.

The career construction theory (Savickas, 2005) further suggests that high level of career adaptability will generate positive career-related skills, strategies, and beliefs, which in turn increase career or work outcomes (Zacher, 2014). Savickas and Porfeli (2012) argued that career adaptability acts as a catalyst for fostering self-regulation strategies that enable one's adaptive resources to achieve career goals and outcomes. In particular, adaptable individuals tend to proactively take responsibility for current, anticipated, and unanticipated tasks (Savickas, 2005). Their ability to address their current or unpredictable tasks and problems makes adaptable individuals more competitive and valuable to their organization when compared to others lacking this ability (Haibo et al., 2018). Moreover, exploring alternative possibilities, devoting to their career development and preparing for unpredictable situations are considered as psychological strengths of adaptable employees (Savickas & Porfeli, 2012). Therefore, career adaptability is a key competency that encompasses attitudes, beliefs, or behaviors essential to individual career success (O'Connell, McNeely, & Hall, 2008; Savickas, 2013).

In summary, career construction theory suggests a mediating role of career adaptability between social capital and career success. Social capital offers access to information and resources necessary for developing an individual's career adaptability. Adaptable individuals tend to devote more effort to addressing their current and

anticipated work tasks and take responsibility for their development and work environment. As a result, subjective career success—accumulated positive psychological, work- or career-related outcomes (Judge et al., 1995; Seibert & Kramer, 1999)—is achieved. In this sense, social capital may positively enhance individual's subjective career success by developing one's career adaptability. Hence, I propose:

Hypothesis 4. Career adaptability is positively related to career success.

*Hypothesis 5.* Career adaptability mediates the positive association between social capital and subjective career success.

# The Mediating Role of Psychological Ownership

It is commonly understood that ownership is associated with the tendency of "maintaining and nurturing the possession" people own (Avey, Avolio, Crossley, & Luthans, 2009, p. 173). With a focus on the connections to possessions, psychological ownership is considered as one of the critical factors to understand individual or organizational behaviors in management and sociology (Avey et al., 2009; Darkins, Tian, Newman, & Martin, 2017; Dirks, Cummings, & Pierce, 1996; Pierce, Kostova, & Dirk, 2001).

Pierce, Kostova, and Dirks (2001), who coined the term psychological ownership, defined it as "a state in which individuals feel as though the target of ownership (or a piece of that target) is theirs (i.e., it is 'MINE')" (p. 86). Similarly, O'Reilly (2002) defined psychological ownership as a "a feeling on the part of the employees that they have a responsibility to make decisions that are in the long-term interest of the company" (p.19). Simply put, psychological ownership is deeply

associated with a sense of belonging, devotion, or responsibility for the target (Pirkkalainen, Pawlowski, Bick, & Tannhäuser, 2018). The target of ownership includes not only tangible (e.g., organization, the job, or personal possessions) but also intangible (e.g., ideas, knowledge, or a specific project) targets (Avey, Wernsing, & Palanski, 2012; Baer & Brown, 2012).

When psychological ownership is developed, individuals become attached to the targets and thereby are more likely to invest their time, effort, and resources to maintain them (Pierce et al., 2001; Pratt & Dutton, 2000). Also, psychological ownership establishes control over the possession or strategies for effective utilization of these possessions to achieve desirable outcomes (Saetang, 2011; Rodin, 1990). With this focus, scholars who developed and refined the concept of psychological ownership have stressed that psychological ownership is the source for generating attitudinal, emotional, psychological and behavioral consequences (Avey et al., 2009; Pierce et al., 2001). Due to its encompassing nature, many researchers have demonstrated how psychological ownership plays a vital role in promoting attitudinal or behavioral outcomes in an organization, such as organizational citizenship behavior (Jiang, Wang, & Li, 2019; Van Dyne & Pierce, 2004), job satisfaction (Knapp, Smith, & Sprinkle, 2014), knowledge sharing/holding behavior (Han et al., 2010; Peng & Pierce, 2015), and organizational commitment (Mayhew, Ashkanasy, Bramble, & Gardner, 2007).

Nahapiet and Ghoshal's (1998) social capital and intellectual theory provides valuable insight into how social capital is associated with individuals' motivation or willingness to share knowledge. This theory emphasizes the importance of the

motivation of individuals and the anticipated value of knowledge sharing (Nahapiet & Ghoshal, 1998). In particular, social relations expose individuals to various information, knowledge or resources; as a result, individuals are expected to "learn something of value" (p. ix) (Slocum, 1994). These various resources and information gained through social capital become a powerful tool to create a competitive advantage (Ladan et al., 2017; Rechberg & Syed, 2013) and thus nurture a sense of ownership and responsibility for individuals.

Further, Pierce et al. (2001) suggested that organizational members feel a sense of ownership when they (a) have control over the target(s), (b) have intimate interactions or longer associations with the target(s), and (c) invest the self in the target(s). Social capital offers access to and use of embedded resources (gain control) and represents "an investment in social relationships with expected returns" (Lin et al., 2001, p. 39). When internalizing these resources and information, individuals have control over them, bring expectations that these resources would bring the value, and thus cherish them.

Moreover, individuals receive not only resources or information but also emotional support or recognition through social capital (Bozionelos, 2003; Lin, 1999; Tymon & Stumpf, 2003). These supportive networks can tap into deep-rooted psychological and emotional needs, attitudes and well-being (Bruque, Moyano, & Piccolo, 2016; Ryff & Keyes, 1995).

Thus, the control over knowledge, information, or resources acquired from social capital, together with emotional support or trust gained from social capital, can serve as strengths and opportunities to bring advantages to individuals and organizations. Also,

this control helps individuals develop a sense of ownership toward the organizations or the sources of resources or information. Hence, I predict that social capital provides a platform for the sharing or exchange of valuable resources, information, and knowledge, which allows individuals to appreciate the value of these resources. In return, individuals develop a sense of psychological ownership and motivation for devoting themselves to the source of resources and organizations to which they belong.

*Hypothesis* 6. Social capital is positively related to psychological ownership.

Nahapiet and Ghoshal's (1998) social capital theory further suggested that knowledge sharing is one of the most difficult activities because it requires a strong sense of engagement from a knowledge holder, and he/she needs to see it as worthwhile. Given that knowledge provides power and an advantage to its owner, individuals may refrain from sharing knowledge or not always be motivated to do so (Michailova & Husted, 2003; Staples & Webster, 2008). This is perhaps why prior research has paid much attention to identifying how knowledge sharing occurs, in particular when individuals have a prosocial or altruistic attitude (Alavi & Leidner, 1999) or an expectation in return on investment (Davenport & Prusak, 1998; Michailova & Hutchings, 2006).

As part of positive psychological construct, psychological ownership generates positive organizational behaviors and attitudes toward the targets of which they feel ownership, such as an altruistic spirit or extra-role behaviors, (Pierce et al., 2001; Li et al., 2015). The targets of ownership can be tangible or intangible, such as the organization, a task, a specific project, or a novel idea (Avey et al., 2012; Baer & Brown,

2012; Brown, Crossley, & Robinson, 2014; Brown & Robinson, 2011; Darkins et al., 2017). By definition, individuals with psychological ownership have ambition, commitment, and obligation towards the target(s) (O'Reilly, 2002; Pierce et al., 2001). In other words, individuals who perceive an organization as one of their targets are likely to be actively involved in reciprocal responsibility and commitment, because they recognize the organization as part of ownership (Masterson et al., 2000; Pierce et al., 2001).

Individuals with a higher level of psychological ownership have mutual accountability and develop a strong affinity and belongingness, which is an essential condition for knowledge sharing (Hameed et al., 2019; Li et al., 2015). Psychological ownership promotes individual decision-making involvement or knowledge sharing behavior as it advocates altruistic spirit and extra-role behavior for the benefit of an organization (Hameed et al., 2019; Li et al., 2015; Masterson & Stamper, 2003). For instance, Han et al. (2010) reinforced the idea that a high level of psychological ownership is conducive to employees' knowledge sharing behavior. Pittino, Martinez, Chirico, and Galvan (2018) suggested that psychological ownership involves recognition of identification in an organization, thus promoting employees' willingness to disseminate organization values and beliefs as well as disclose important information or knowledge.

Collectively, individuals who gained various resources, knowledge, information, recognition, and emotional support from social capital display a strong sense of psychological ownership towards an organization. Such psychological ownership as a

prerequisite for altruistic or extra-role behavior can evoke knowledge sharing. Hence, I posit that a high level of psychological ownership is likely to promote organizational knowledge sharing.

*Hypothesis 7.* Psychological ownership is positively related to organizational knowledge sharing.

*Hypothesis* 8. Psychological ownership mediates the positive association between social capital and organizational knowledge sharing.

# **The Moderating Role of Perceived Supervisor Support**

Perceived supervisor support is defined as the extent to which an employee views a supervisor as supportive about his/her contributions and well-being (Kottke & Sharafinski, 1988). Informed by organizational support theory, researchers have identified close relationships between perceived organization support and perceived supervisor support (Eisenberger et al., 2002; Rhoades & Eisenberger, 2002). However, in more recent studies, researchers considered perceived supervisor support as a distinct concept with a focus on the differentiated relationship between leaders and subordinates in accordance with LMX theory (DeConinck & Johnson, 2009; Liden et al., 2006; Maetz, Griffeth, Campbell, & Allen, 2007).

Leaders have authority and power over their followers as they assign tasks, allocate resources, provide the opportunity to strengthen or learn new skills, and evaluate their performances (Eisenberger et al., 1986; Levinson, 1965; Yildiz & Uildiz, 2015).

Also, supervisor's influence is found to be more influential than perceived organizational support (Eisenberger et al., 2002; Maertz et al., 2007; Vandenberghe,

Sucharski, & Rhoades, 2002). Therefore, more recent attention has been paid to how the degree of perceived support from supervisors facilitates or impedes employees' attitudes and behaviors (DeConinck & Johnson, 2009; Jung & Yoo, 2018).

Given the vital role of leaders as agents or gatekeepers of the organization (Dysvik & Kuvaas, 2013; Levinson, 1965; Sparrowe & Liden, 2005), researchers have placed great emphasis on understanding the relationships between leaders and subordinates as a critical source for enhancing positive attitudes and behaviors and buffering negative emotions or stress (Carlson & Perrewe, 1999; Kim, Lee, Park, & Yun, 2015). For instance, prior research has reported the positive influence of perceived supervisor support on job satisfaction (Barbain & Boles, 1996; Gok, Karatuna, Karaca, 2015), commitment (Kalidass & Bahron, 2015), extra-role behavior (Wang, 2014) as well as the critical role in buffering negative effect, such as reducing stress or mental health (Park & Jang, 2017), role conflict (Barbin & Boles, 1996; Casper et al., 2011; Mayo, Sanchez, Pastor, & Rodriguez, 2012), and turnover intention (DeConinck & Johnson, 2009; Dysvik & Kuvaas, 2013; Newman et al., 2012).

The central premise behind LMX is that leaders develop differentiated relationships with their respect subordinates given the limited nature of time and resources (Graen, 1976; Graen, Anderson, & Shivers, 1996). Leaders are the holders or gatekeepers of key resources and information in an organization (Lee et al., 2019). With the aim of facilitating individual and organizational success, leaders engage in the development of positive relationships with followers, make important decisions, and allocate resources (Breland et al., 2007; Peng, Gao, & Zhao, 2019). Leaders also play a

key role in developing subordinates' career goals and providing constructive feedback on tasks and work (Kidd & Smewing, 2001; Wickramasinghe & Jayaweera, 2010). However, only few subordinates selected may experience a high level of exchange or supervisor support because of limited time and resources (Graen, 1976).

For those subordinates who have high LMX or perceived supervisor support, they may be given privileges or preferential access to resources, which lead to a high level of career satisfaction, confidence, and the successful completion of tasks (Lee et al., 2019). Such feelings of support and affection can positively impact individual capabilities or willingness to take on or cope with challenges, which is the core aspect of career adaptability. In this sense, Ito and Brotheridge (2005) argued that the perception of social support from supervisor was found to be a critical indicator for enhancing career adaptability. On the contrary, employees with a low level of supervisor support may rely more on one's ability to adapt to the new or challenging tasks, which leads to feeling more burden and insignificance in the workplace.

Given the leaders' critical role and control over career-related resources, therefore, I posit that perceived supervisor support would strengthen the effect of social capital in such a way that supervisor further promotes access, mobilization, and utilization of social capital that allows to garner resources and information necessary for career advancement and adaptation. Employees with high perceived supervisor support are more likely to develop more adaptive strategies to achieve their career goals and aspirations. Hence, I propose that:

Hypothesis 9. The positive association between social capital and career adaptability is moderated by perceived supervisor support, such that the association will be stronger for employees with high rather than low perceived supervisor support.

I consider perceived supervisor support as the moderator in the relationship between social capital and career adaptability. A stronger perceived supervisor support may provide employees with more privileges and control over career-related resources and decision, thus being more adaptable and flexible in their careers. As a consequence, high career adaptability will be developed when compared to those who perceived less support from supervisors. Given the prior studies that support the strong association between career adaptability and subjective career success (e.g., Haibo et al., 2018; Xie, Xia, Xin, & Zhou, 2016; Zacher, 2014), it is also logical to argue that perceived supervisor support would further moderate the relationship between social capital and subjective career success via career adaptability. According to Edwards and Lambert (2007), this plausibility and relationship is specified as the first-stage moderation model (Edwards & Lambert, 2007).

More specifically, employees with high perceived supervisor support are more likely to show greater subjective career success and career satisfaction. Researchers suggested that subjective career success is dependent on one's social environment and affected by social relationships rather than occurring in a vacuum (Dany, 2014; Ng et al., 2005). Support from social networks facilitate career performance; and supervisor support strengthens its relationship by helping individuals acquire necessary resources and information to meet their career demands (Lee et al., 2019). A high level of

perceived supervisor support also aids employees in demonstrating greater motivation and capacity to adapt to changes, thereby improving their career satisfaction and attaining subjective career success (Ocampo et al., 2018). Bozionelos (2003) found that employees with strong social networks tend to feel more successful in their careers compared to those who not. In a meta-analytic review, Ng et al. (2005) also suggested that positive relationships with supervisors play a crucial role in enhancing subjective career success.

Conversely, employees with low perceived supervisor support may weaken the effect of social capital on subjective career success via career adaptability. These employees may feel less respected, welcomed, and significant in the organization and not develop strong attachment to their social networks. In this sense, I suppose that the mediation effect of social capital will become weakened when perceived supervisor support is lower. In line with this reasoning, I predict that:

Hypothesis 10. The indirect effect of social capital on subjective career success via career adaptability is moderated by perceived supervisor support, such that the mediated association will be stronger for employees with higher rather than low perceived supervisor support.

The LMX theory also holds that the degree of engagement in extra-role behaviors and attitudes as well as reciprocal activities varies with the employee's relationship with the supervisor. Individuals with high LMX and perceived support from their supervisors are more likely to be motivated to display extra-role behaviors beyond contracts or obligations (Van Breukelen et al., 2006; Lavelle, Rupp, & Brockner, 2007;

Khalifa, 2019). Further, a high level of perceived supervisor support inspires individuals to engage in work-related efforts and investment, which is a prerequisite for psychological ownership. Those employees who perceive high supervisor support (e.g., trust, obligations) tend to demonstrate mutual accountability toward the target, such the organization (Shanock & Eisenberger, 2006). Conversely, employees who perceive less supervisor support tends to feel less psychologically attached or feel obligated to the organization (Pierce, Jussila, & Cummings, 2009). Therefore, perceived supervisor support is of vital importance in developing a sense of ownership and belongingness for employees.

By involving in social interactions, employees learn, create, and gain knowledge and resources necessary for a competitive advantage (Carmeli, 2007). Social capital as a source of the individual development leads employees to feel obligated and attached to the organization to which they belong (Neergaard, Shaw, & Carter, 2005). In particular, employees with high perceived supervisor support may show stronger desires for investing time and efforts as a supervisor plays a vital role in promoting these discretionary and voluntary decisions (Maertz et al., 2007).

Following this logic, this study was conducted based on the assumption that the strength of social capital is contingent upon perceived supervisor support. Informed by LMX theory, the influence of social capital on psychological ownership will be moderated by the extent to which an employee perceives supervisor as supportive.

Therefore, I predict that there will be a strong relationship between social capital and

psychological ownership when perceived supervisor support is strong. It leads to the following hypothesis:

Hypothesis 11. The positive association between social capital and psychological ownership is moderated by perceived supervisor support, such that the association will be stronger for employees with high rather than low perceived supervisor support.

The above discussion so far depicts a hypothesized model where psychological ownership mediates the relationship between social capital and organizational knowledge sharing. In this model, perceived supervisor support moderates the relationship between social capital and psychological ownership. Considering the moderating effect of perceived support on psychological ownership, it is also plausible that perceived supervisor support moderates the relationship between social capital and organizational knowledge sharing. That is, the first-stage moderation model (i.e., a moderated mediation) is established (Edwards & Lambart, 2007).

In particular, employees with high perceived supervisor support may show a strong extra-role or discretionary behaviors (Jung & Yoo, 2018). Such perceptions evoke employees to voluntarily exert prosocial behaviors, such as knowledge sharing (Kurtessis et al., 2017). For example, Kim et al. (2015) investigated the moderating effect of perceived supervisor support on knowledge sharing. They found that employees' perceptions buffer the detrimental effect of work-family conflict on knowledge sharing. On the other hand, employees with low perceived supervisor support experience a weaker relationship between social capital and organizational knowledge sharing. Lower levels of perceived supervisor support may make employees feel less

secure and less willing to show discretionary behaviors, such as knowledge sharing (Buch, Dysvik, Kuvaas, & Nerstad, 2015). That is, the mediation effect will be stronger when perceived supervisor support is high, which leads to the following hypothesis:

Hypothesis 12. The indirect effect of social capital on organizational knowledge sharing via psychological ownership is moderated by perceived supervisor support, such that the mediated association will be stronger for employees with higher rather than low perceived supervisor support.

### **Methodology and Methods**

This section provides an overview of the research design, a description of the population and study sample, data collection procedures, the instruments for data collection, and data analysis methods. To achieve the research goals of the study, I adopted a quantitative approach proposed by Bell, Bryman and Harley (2018). Their guideline includes a total of 11 steps to follow (see Appendix C). The underlying premise of quantitative research is that "there is an external reality" (p. 168) and researchers can develop knowledge through objectively measuring and researching a phenomenon (Bell et al., 2018). A quantitative design is appropriate for this study in that I deductively developed a conceptual model based on the previous literature and test this hypothesized model by measuring and examining a phenomenon in reality (Bell et al., 2018).

### **Population and Sample**

The population for this study is full-time employees working in large for-profit corporations (over 300 employees or \$5 billion revenue) in South Korea. According to

Statistics Korea (2018), there are approximately over 3.4 million people working in large corporations in Korea. Given the infeasibility of studying this entire population, I used inferential statistics to collect sample data derived from the large populations (Coolidge, 2006). The sample for this study was determined using a nonprobability sampling technique. This decision was driven by my research design in that random sampling is less likely feasible and more expensive (Battagila, 2008). Nonprobability sampling is appropriate when randomization is impossible because of a large population size (Etikan, Musa, & Alkassim, 2016).

Moreover, an online research panel was used as a source of sampling. An online research panel is a group of people or access panel defined as "a sample database of potential respondents who declare that they will cooperate for future data collection if selected" (International Organization for Standardization, 2012, p. 1). Sharp, Moore and Anderson (2011) noted that online panels have several benefits over a traditional field survey method, including (a) a shorter field time to collect data than traditional methods (e.g., e-mail, mail or telephone), (b) lower data collection cost due to those who are prerecruited and willing to participate in a research study, and (c) the easier identification of participants, regardless of longitudinal or cross-sectional designs. Sharp et al. (2011) further stated that the responses from online panel are not significantly, demographically, attitudinally, or behaviorally different from the results collected through traditional surveys. In this sense, online panels offer reliable and affordable data that adequately represents the population.

Regarding the sample size, it must be large enough to obtain a statistical power. Therefore, determining an adequate sample size is important to undertake structural equation modeling (SEM) analysis (Kline, 2016; Schumacker & Lomax, 2016). Scholars have recommended different sample sizes for SEM, ranging from 100 or 150 respondents (Tinsley & Tinsley, 1987; Anderson & Gerbing, 1988; Ding, Velicer, & Harlow, 1995; Tabachnick & Fidell, 2001) to 200 (Hoogland & Boomsma 1998; Boomsma & Hoogland, 2001; Kline, 2016). Traditionally, the ratio of the number of survey items or latent factors is considered as a rule of thumb for the sample size needed for SEM, such as Bentler and Chou's (1987) 5:1 or 10:1 ratio. In recent years, researchers have suggested considering not only the number of items but also the effect size, power, missing data and multivariate normality when determining the sample size (Wolf, Harrington, Clark, & Miller, 2013). Taken altogether, I set a goal to collect a minimum of 500 responses, given the number of survey items (54 items) and statistical power.

### **Data Collection Procedures**

The data collection process started upon receiving the approval from the Institutional Review Board (IRB) of Texas A&M University (see Appendix D). To recruit participants, I contacted an agency (EM Brain) who provides researchers and organizations with reliable online survey panels. This company has the largest research panel (over 1.41 million, as of 2021) in Korea. This choice was based on two reasons. First, given the limited professional and personal networks I have in Korea, seeking help from EM Brain would allow me to maximize access to the potential participants for data

collection. Second, given EM Brain's extensive source of research panels, it would ensure more randomized and diverse sampling. Thus, the company helped me distribute a cross-sectional and electronic questionnaire survey designed by me.

Throughout the data collection process, I abided by the ethical guidelines of Texas A&M IRB. I also followed the standards for ethics and integrity developed by the Academy of Human Resource Development (AHRD), which provides guidance and a set of values for HRD professionals to comply with when conducting research. EM Brain also followed an ethical guideline by IRB in order to keep the confidentiality of participants' responses and their personal information.

After receiving the IRB approval from the university regarding all study materials, the online panel registered in EM Brain was informed of the study through online invitations if they were interested in participating. A total of 15,902 invitations were sent to the online panel registered in EM Brain, while 609 invitations failed to reach out to people. Among 3,113 people who initiated to the survey, 2,311 people were excluded through the screening question that asked whether the participant works for the large corporation in South Korea. Therefore, a total of 622 participants completed the survey, resulting in a response rate of 3.9%. EM Brain removed data of 94 cases who did not fully complete the survey. Hence, the final valid sample consisted of 528 employees, yielding the valid response rate of 3.3%. Of the 528 responses, six responses were excluded from the final analysis, because they were identified as multivariate outliers based on Mahalanobis distance (the cut-off value = .001). This led to a total of 522 responses for the final analysis.

## **Participants Characteristics**

As shown in Table III-1, 50.4% (n= 263) of the survey respondents were female. As for age, 28.5% (n= 149) of the respondents were in their 30s, followed by 27.4% (n= 143) in the 20s, 26.4% (n= 138) in the 40s, and 17.6% (n= 92) over 50 years old. With respect to the educational level, 68.0% (n= 355) of the participants held bachelor's degrees, 13.4% (n= 70) held associate's degrees (i.e., community college or 2-year college), 7.3% (n= 38) were high school graduates, and 11.3% (n= 59) held graduate-level degrees (Master= 9.4%, Doctoral= 1.9%). Regarding the total length of service, 25.5% of the respondents had worked for 1-5 years, 20.1% had worked 20 years or more, 19.2% had worked 11 to 15 years, 19.0% had worked 6 to 10 years, and 14.8% had worked 16-20 years; only 1.5% of the respondents had worked less than 1 year.

Table III-1

Demographic characteristics of the participants

Variable	Characteristics	Frequency	Valid	Cumulative
			(%)	(%)
Gender	Male	259	49.6	49.6
	Female	263	50.4	100.00
Age	20-29 years old	143	27.4	27.4
	30-39 years old	149	28.5	55.9
	40-49 years old	138	26.4	82.4
	More than 50 years old	92	17.6	100.00
Educational	High school or GED	38	7.3	7.3
level	Associate's degree	70	13.4	20.7
	Bachelor's degree	355	68.0	88.7
	Master's degree	49	9.4	98.1
	Doctoral degree	10	1.9	100.00
The length of	Less than 1 year	27	5.2	5.2
service in the	1-5 years	178	34.1	39.3
	6-10 years	110	21.1	60.3

-		2.0		
current	11-15 years	82	15.7	76.1
organization	15-20 years	52	10.0	86.0
	Over 20 years	73	14.0	100.00
The total length	Less than 1 year	8	1.5	1.5
of service	1-5 years	133	25.5	27.0
	6-10 years	99	19.0	46.0
	11-15 years	100	19.2	65.1
	15-20 years	77	14.8	79.9
	Over 20 years	105	20.1	100.00

### Measurements

To examine the hypothesized structural relationships, I measured six constructs of the variables: social capital, subjective career success, organizational knowledge sharing, career adaptability, psychological ownership, and perceived supervisor support. The six instruments for measuring six constructs were selected given the quality (validity and reliability) and feasibility (length and difficulty) of each instrument. In total, 54 items were included in the questionnaire in addition to seven items to collect demographic information. The details on each measure are presented in Table III-2 and all items are listed in Appendix E.

Table III-2

The number of items, sources, and reliabilities for each measure

Construct	# of	Sources	Reliability
	items		(Cronbach's
			alpha)
Social capital	9	Cross, Borgatti, &	N/A
		Parker (2001); Cross, Borgatti, &	
		Parker (2002); Gubbins &	
		Garavan (2016); Perry,	

Subjective career success	5	Pescosolido, & Borgatti (2018); Tsai & Ghoshal (1998) Jang (2003); Greenhaus, Parasuraman, & Wormley (1990); Nam (2014)	Eng= . 88 ~ .92 Kor= .910
Organizational knowledge sharing	13	Lee (2019); Wang & Wang (2012); Woo (2020)	Eng= .97 Kor= .81 ~ .83
Career adaptability	12	Maggiori, Rossier, & Savickas (2017); Savickas & Porfeli (2012); Tak (2012)	Eng= .80 ~ .84 Kor= .90 ~ .93
Psychological ownership	6	Van Dyne & Pierce (2004); Chai et al. (2020)	Eng= .87 ~ .93 Kor= .88
Perceived supervisor support	9	Choi (2016); Greenhaus et al. (1990); Kwon (2017)	Eng= .90 Kor= .93

<sup>\*</sup>Note. Eng = English version, Kor= Korean translated version

Social capital. Employees' social capital was assessed using a social network analysis (SNA) approach. SNA enables a researcher to examine the patterns or relations of social interactions visually and psychometrically (Allen, James, & Gamlen, 2007). There are two essential approaches to assessing social capital: sociocentric (a whole network) analysis and egocentric (ego-network) analysis. The primary goal of sociocentric analysis is to explore the structure and pattern of an entire network, and egocentric analysis focuses on the relations around individuals and their environment (Perry et al., 2018).

While the results from a sociocentric approach tend to be applicable to the respective sample and predetermined boundaries or organizations, an egocentric design allows for making inferences to other populations and understanding a social context that shapes individual attitudes and behaviors (Perry et al., 2018). Also, an egocentric network survey is useful for studying multiple companies or institutions (Marsden,

1990). Given the purpose of this study and the benefits of the egocentric analysis, I adopted an egocentric social network approach in this study.

Specifically, social capital was assessed using name generator and name interpreter. Name generator is a useful tool to identifying the connected individuals (alters), while name interpreter is designed to obtain characteristics and properties about the connected people (e.g., age, gender, or closeness of relationships) (Perry et al., 2018). Using name generator, each participant (ego) was asked to "list no more than 10 people who have acted to help his/her career and/or work, provided career- or work-related information, resources, support, opportunities, and advice" (Gubbins & Garavan, 2016).

Additionally, participants were asked to specify the characteristics of a specific person they identified (name interpreter). In this study, various characteristics of alters, including gender, intimacy, frequency of interaction, and the degree of trust, were included. Intimacy (or closeness) is defined as the degree to which a person has a close relationship with each alter (1= distant, 2= less than close, 3= average, 4= close, and 5= very close). Frequent interaction is measured by the level of perceived or actual interaction with the alter (e.g., phone calls, emailing, and face-to-face meetings, etc.). A 5-point Likert scale was utilized for assessing frequent interaction (1= never contacted to 5= very frequently contacted). These items were previously used and validated in the Korean organizational context by Jin (2013) and Gu (2010).

In sum, the structural and relational dimensions of social capital were measured using both name generator (i.e., intimacy, frequent interaction) and name interpreters

(i.e., trust). The last dimension of social capital, a cognitive dimension, was further assessed using 3-item scale from Tsai and Ghoshal (1998). Tsai and Ghoshal (1998) reported that the internal consistency of the cognitive dimension was .71. A sample item is "Our unit shares the same ambitions and vision with other units at work."

Subjective career success. To measure individual subjective career success, I adopted Greenhaus et al.'s (1990) scale, one of the most frequently used for subjective career success. This instrument assesses four career-related goals and individuals' career satisfaction: overall career, income, advancement, and new skills (Shockley, Ureksoy, Rodopman, Poteat, & Dullaghan, 2016). It consists of five items on a 5-point Likert scale, ranging from 1 (do not agree at all) to 5 (fully agree). Wolff and Moser (2009) reported that this scale had a high level of reliability ( $\alpha$  = .84) and factor loadings ( $\chi$ <sup>2</sup> (5) = 9.17, p = .08; RMSEA = 0.059; CFI = 1.00). In an empirical study, Spurk, Keller, and Hirschi (2016) also reported a good estimate for reliability ( $\alpha$  = .92). Sample items include: "I am satisfied with the success I have achieved in my career" and "I am satisfied with the progress I have made toward meeting my overall career goals."

Organizational knowledge sharing. Organizational knowledge sharing was measured using Wang and Wang's (2012) 13-item scale. Participants were asked to evaluate their perceptions of a degree of the knowledge sharing behavior (both tacit and explicit) in the organization with a 5-point Likert scale. Wang and Wang (2012) reported that the reliability of this scale was good (Cronbach's alpha was above .95). Other empirical studies conducted in the Korean organizational context (Lee, 2019; Woo, 2020) also confirmed the high level of reliability of the translated version (ranging from

.810 to .834). Sample items include: "People in my organization frequently share knowledge of know-where or know-whom with others." and "People in my organization are frequently offered a variety of training and development programs."

Career adaptability. To measure career adaptability, the Korean version of the Career Adapt-Abilities Scale (CAAS), which includes 12 items, was used. This measure consists of four subscales: concern (e.g., "Thinking about what my future will be like"), control (e.g., "Making decisions by myself"), curiosity (e.g., "Exploring my surroundings"), and confidence (e.g., "Performing tasks efficiently"). Each subscale includes three items with a 5-point Likert scale (1= not strong, 5= strongest). Savickas and Porfeli (2012) validated this scale across 13 countries, including South Korea. Tak (2012) also reported that the CAAS shows good internal consistency value (Cronbach alpha=.93), which is higher than the total international sample in Savickas and Porfeli's research in 2012. The original CAAS includes 24 items; however, a brief 12-item version of the CAAS was later developed to "preserve the excellent psychometric properties of the instrument" (p. 314) and reduce administration time (Maggiori et al., 2017). Given the strong correlations between two measures and high reliability ( $\alpha$ = .90), I chose to use the short form (12 items) of the CAAS to reduce participants' burden and administration time. Sample items include: "Becoming aware of the educational and career choices that I must make", "Taking responsibility for my actions", "Looking for opportunities to grow as a person", and "Working up to my ability".

**Psychological ownership.** A 6-item scale adapted from Van Dyne and Pierce (2004) was employed to measure psychological ownership. This scale is designed as a

one-dimensional latent factor. Examples of the items include: "I sense that this organization is OUR company" and "I feel a very high degree of personal ownership for this organization". The Cronbach's alpha for this measure was .87 to .93 in Van Dyne and Pierce's (2004) study with three different samples. The translated version of the scale into Korean was adopted from Chai et al.'s (2020) study. Chai et al. (2020) reported the high reliability of the scale ( $\alpha$ = .88). In the original scale by Van Dyne and Pierce (2004), the last item was devised as the reverse item (It is hard for me to think about this organization as MINE). Following the Chai et al.'s (2020) translated version, the reverse item was reworded to communicate more nuanced and precise information. Each item was measured on a 5-point Likert scale, ranging from 1 (totally disagree) to 5 (totally agree).

Perceived supervisor support. Perceived supervisor support was measured using the 9-item instrument by Greenhaus et al. (1990). Each item was measured on a 5-point Likert scale, ranging from 1 (totally disagree) to 5 (totally agree). Sample items include "My supervisor takes the time to learn about my career goals and aspirations" and "My supervisor gives me helpful advice about improving my performance when I need it." Prior studies reported that the Cronbach alpha for the Korean instrument was .926 (Choi, 2016; Kwon, 2017).

Control variable. Due to the potential effects of human capital (e.g., age, education, and experience) on two outcome variables (Batra, 2009; Frederiksen & Kato, 2018; Guo, Xiao, & Yang, 2012; Wi), I controlled for education, the total length of service, gender, and age. In general, human capital includes not only one's knowledge,

skills, and abilities but also personal and professional experiences (Becker, 1964; Coleman, 1988). Traditionally, human capital has been regarded as one of the key resources for attaining individual and organizational success (Guo, Xiao, & Yang, 2012). To take into account the effect of social capital and minimize the potential confounding effects, I controlled the abovementioned human capital variables when testing the hypotheses.

#### **Instrument Translation**

While the instruments used in this study are originally developed in English, the translated Korean versions have been frequently used in the Korean context. Before the distribution of the survey, I ensured the content validity and cultural appropriateness of the instruments. To do so, three researchers (faculty members) were invited to review each item, thus establishing the face validity. Two of them are bilingual (English and Korean) and have not only experiences in both cultures but also expertise on the dissertation topic and included variables. The third reviewer (an American faculty) was invited because of her expertise on inferential statistics. Two Korean scholars reviewed and compared each item in the original English and Korean versions to ensure the accuracy of the instruments. Prior to this review, the American faculty member established the face validity of the original English instruments. When the errors or different meanings of an item were found, revisions were made according to reviewers' feedback.

### **Data Screening and Analytical Strategy**

To ensure the rigor of data analysis, it is essential to check and screen the data set before starting any analysis, such as the assessment of missing data, outliers, normality, and multicollinearity (Badara & Saidin, 2014; Pallant, 2001). Using IBM Statistical Packages of Social Science (SPSS) Statistics 27, I carried out data screening in four steps to ensure the consistency and accuracy in the analysis (Tabachnick & Fidell, 2007). First, descriptive statistics was conducted to discover any missing data. The results showed that there was no missing data among 528 responses. EM Brain's online panel system requires participants to answer every question before moving to the next page; thus, missing data is not allowed. Second, assessment of outliers was carried out to check the extreme cases that might have a negative impact on the accurate data analysis (Hair, Black, Babin, & Anderson, 2010). Multivariate outliers were checked using SPSS by detecting cases with Mahalanobis distance's probability less than .001. Six cases with value less than .001 were eliminated for further analysis, which accounted for 1.13% of the total sample size. This led to a total of 522 responses for the final analysis.

Third, normality is another essential aspect in multivariate analysis (Hair et al., 2010). Not only skewness and kurtosis but also histogram for each study variable were used to demonstrate the normality of the distribution. In this study, no significant skewness and kurtosis greater than  $\pm$  3.0 (z score) were observed as presented in Appendix E. Also, all histograms did not show dramatic departs from a bell shape 'normal curve'. Furthermore, normal Q-Q plots were used to inspect homogeneity of residual variances and residual normality. The results confirmed residual normality, with data points close to the diagonal line.

Lastly, multicollinearity occurs when independent variables are highly correlated with one another (Keith, 2006). Given its negative impact on the standard errors of the variable, multicollinearity should be controlled and resolved before the analysis (Badara & Saidin, 2014). To verify the issue of multicollinearity, Variance Inflation Factors (VIF) and tolerance values were calculated using SPSS. Any VIF values that exceed 10 and tolerance values that are below 0.1 indicate severe multicollinearity (Hair et al., 2010). The results showed that multicollinearity did not occur among the independent variables (social capital, career adaptability, and psychological ownership) because VIF ranged from 1.376 to 1.543, which is less than 10. Therefore, the independent variables included in the study did not have multicollinearity issue (Tabachnick & Fidell, 2007).

For this study, all data collected from surveys were analyzed using SEM with Mplus 8.3 (Muthén & Muthén, 2018) and SPSS software packages. The use of statistical packages above helped me determine the reliability and validity of data, examine any significant relationships between the latent variables, and test the hypothesized model. SEM is a particularly effective analytical method when investigating latent variables because it ensures a precise and accurate analysis by minimizing measurement errors and decomposing observed variables into true scores and errors (Nachtigall, Kroehne, Funke, & Steyer, 2003). Also, SEM allows for examining complex structural relationships among numerous variables at once (Schumacker & Lomax, 2016).

Initially, descriptive statistics and zero-order correlations were carried out using SPSS. Prior to testing the hypothesized relationships, confirmatory factor analysis (CFA) for the proposed model was conducted to ensure construct distinctiveness. Secondly, I

sem with maximum likelihood estimation and 1,000 bootstrap samples. As per Hair et al.'s (1998) suggestion, several fit indices were used to assess the model fit, including  $\chi^2$  test, the root mean square error of approximation (RMSEA), the comparative fit index (CFI), the Tucker-Lewis index (TLI), and the standardized root mean square residual (SRMR). Since the latent moderated structural equation (LMS) model does not provide traditional model fit indices (e.g., CFI, TLI, and RMSEA) (Cheung & Lau, 2017), the mediation model was used to check the overall model fit.

Thirdly, I evaluated a model with latent interaction between social capital and perceived supervisor support on two mediators. In this process, I requested to generate bias-corrected confidence intervals (CIs) using Mplus to reduce potential errors of non-normality (Cheung & Lau, 2017). Finally, the conditional indirect effects of social capital were estimated at three different levels (±1 SD, mean) of the moderator. A moderated mediation model was also evaluated using bias-corrected CIs. Conditional indirect effects are considered as meaningful when the lower and upper level bias-corrected CIs do not include zero (Preacher & Hayes, 2004). All codes for the analyses in Mplus were adapted from Stride, Gardner, Catley, and Thomas (2015).

### **Common Method Variance**

Using a single data source (i.e., self-reported questionnaire) with the same participants may distort and make it hard to interpret causal or inferential effects, which cause common method variance (CMV) (Fuller, Simmering, Atinc, & Babin, 2016).

Bagozzi and Yi (1991) defined CMV as "a variance that is attributable to the

measurement method rather than to the construct of interest" (p. 426). Simply put, CMV is a spurious variance rather than reflecting the true explanatory power or variability in the variables interested. To reduce its potential detrimental effect on the analyses, I implemented two procedural and statistical remedies. First, all participants were asked to provide honest input rather than socially desirable responses. Also, the promise of confidentiality was highlighted during the data collection process.

Second, Podsakoff, MacKensiz, Lee, and Podsakoff (2003) and Podsakoff, MacKenzie, and Podsakoff (2012) suggested using a common latent factor to check whether there is a shared variance across all factors (unmeasured latent method construct; ULMC). To this end, all constructs were loaded on both the common latent factor and their respective theoretical constructs. When compared between the constrained and unconstrained model, there was a significant difference ( $\chi(20)$  = 401.284 p < .001), which signifies that there is a possibility for the shared variance across the items. Hence, I had all factor loadings to the common latent factor that is fixed to be equal in order to see whether the common method bias is spread equally across the items and how much variance is shared amongst all the items. The results indicated that the shared variance is approximately 14.4% of the total variance, which means that there is not significantly severe common method bias in this dataset (the threshold of 50%).

### **Reliability Analysis**

Reliabilities were estimated for the six instruments to determine whether the selected instruments show the consistent and reliable results (Hair, Black, Babin, &

Anderson, 2010). Using IBM SPSS 27.0, Cronbach's was computed for each instrument (see Table III-3). According to a general cutoff value of .70 (Kline, 2011), all instruments used for this study showed the high internal consistency, ranging from .81 to .94. Among social capital items, two of them (name generator question and gender of the alter) were not included in the reliability analysis.

Table III-3

Estimates of reliability

Construct		# of item	Cronbach α
Independent variable	Social capital	7	.813
Mediators	Career adaptability	12	.880
	Psychological ownership	6	.905
Moderator	Perceived supervisor support	9	.941
Dependent variable	Subjective career success	5	.884
	Organizational knowledge sharing	13	.934

#### **Results**

In this section, I report the results of the analyses including the descriptive statistics, correlation analysis, confirmatory factor analysis, structural model analysis, bootstrap analysis, and latent moderated structural equations.

## **Descriptive Statistics**

The composite means, standard deviations, and intercorrelations of all the variables are shown in Table III-4. Each item's mean, standard deviation, and the values of skewness and kurtosis are presented in Appendix F. All variables included in the analysis showed univariate normality with skewness and kurtosis values less than 3.0.

When it comes to bivariate correlations ( $\gamma$ ) among study variables, the correlations among variables provided initial support for the hypotheses with the expected direction. As expected, social capital was positively correlated with both subjective career success ( $\gamma$ = .415) and organizational knowledge sharing ( $\gamma$ = .557). Social capital was also found to be positively correlated with two mediators, career adaptability ( $\gamma$ = .478) and psychological ownership ( $\gamma$ = .523) respectively. All correlations among study variables demonstrated statistically significant (p< .05) and moderate to strong correlations.

### **Measurement Model**

Prior to testing hypotheses, I tested a measurement model with all study variables to ensure the distinctiveness of the measured constructs. I performed CFA using Mplus with maximum likelihood estimator. As shown in Table III-4, the six-factor measurement model provided a fair fit to the data,  $\chi^2(1250)=3007.858$ , CFI= .896, TLI= .889, RMSEA= .052, and SRMR= .053. I also compared the hypothesized six-factor model with alternative models, such as five-factor, four-factor, three-factor, two-factor, and one-factor model. Results indicated that all alternative models fitted the data significantly poorer than the theoretical model.

Although the six-factor model demonstrated a fair fit, the estimates of CFI and TLI were not acceptable (< .900). Based on Kline's (2011) suggestion, I looked at the intercorrelations and modification indices to identify possible specification error (Kenny, 2011). Specifically, the high correlations between the 12<sup>th</sup> and 13<sup>th</sup> of organization knowledge sharing items as well as between the structural and the relational dimension of social capital were observed. The 12<sup>th</sup> and 13<sup>th</sup> items of organizational knowledge

sharing are designed to understand the degree to which the participants receive adequate support or resources from an organization, such as training opportunities (12<sup>th</sup>) and intranet or IT system (13<sup>th</sup>). Given such a focus, it seems that these two variables are highly associated. In terms of the social capital construct, Tsai and Ghoshal (1998) measured three social capital dimensions and reported high correlations between

Table III-4

Means, standard deviations, and intercorrelations among variables

Variable	Mean	SD	1	2	3	4	5	6	7	8	9
1. Gender	0.50	.50									
2. Age	38.10	9.65	225**								
3. Edu	2.85	.76	092*	.053							
4. Lngth	146.80	106.13	212**	.908**	034						
5. SOC	3.83	.50	052	.101*	.086*	.129**					
6. CA	3.86	.48	001	.094*	.093*	.115**	.478**				
7. PO	3.40	.75	114**	.243**	.009	.248**	.523**	.430**			
8. SCS	3.29	.79	182**	.100**	.123**	.139**	.415**	.388**	.516**		
9. OKS	3.54	.64	078	.037	.052	.068	.557**	.445**	.612**	.514**	
10. PSS	3.31	.78	141**	.080	.065	.082	.551**	.391**	.667**	.539**	.697**

Note. Edu= educational level; Lngth= the total length of service (month); SOC= social capital; CA= career adaptability; PO= psychological ownership; SCS= subjective career success; OKS= organizational knowledge sharing; PSS= perceived supervisor support; \*p<.05, \*\*p<.01.

structural and relational dimensions' items (ranging from  $\gamma$ = .69 ~ .75). Therefore, I allowed two items from organizational knowledge sharing and two latent variables to be related in the alternative model. As presented in Table III-5, the alternative model was statistically different from the base six-factor model with a better model fit ( $\chi^2(2)$ = 255.221, p < .001). Lastly, all indicators were significantly loaded on their corresponding latent variable (ranging from .584 to .863, p < .001). All standardized factor loadings for each item are listed in Appendix G.

Table III-5

CFA analyses comparing alternative measurement models

Models	$\chi^2(df)$	$\Delta \chi^2(\mathrm{df})$	CFI	TLI	RMSEA	SRMR
6-factor	2752.637(1248)***	255.221(2) ***	.911	.905	.048	.052
alternative model						
6-factor model	3007.858(1250)***	344.897(4)***	.896	.889	.052	.053
5-factor model	3352.755(1254)***	107.356(3)***	.875	.848	.057	.114
4-factor model	3460.111(1257)***	40.356(2)***	.869	.862	.058	.074
3-factor model	3500.467(1259)***	32.105(2)***	.867	.860	.058	.083
2-factor model	3532.572(1261)***	86.667(1)***	.865	.858	.059	.076
1-factor model	3619.239(1262)***		.860	.853	.060	.072

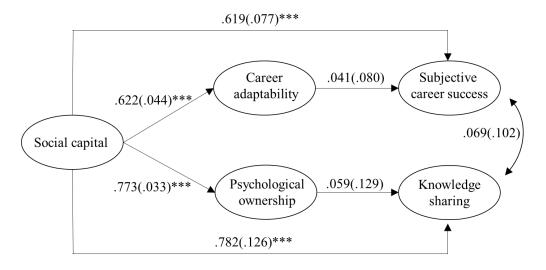
Note. All three models were compared with the four-factor model to determine  $\Delta \chi^2$  values. \*\*\*p< .001; 5-factor model: combined psychological ownership and perceived supervisor support into one latent factor; 4-factor model: combined career adaptability, psychological ownership, and perceived supervisor support into one latent factor; 3-factor model: combined organizational knowledge sharing and subjective career success into one factor in addition to 4-factor model; 2-factor model: combined career adaptability, psychological ownership, perceived supervisor support, and social capital into one factor.

# **Hypothesized Structural Model**

After establishing the measurement model, I tested the hypotheses using maximum likelihood estimator. Paths were specified according to the hypotheses (see

Figure III-4), and gender, age, educational level, and the length of service were included as covariates. Results indicated that the mediation model presented a good fit to the data,  $\chi^2(998)=2099.887$  (p<.001), CFI=.912, TLI=.906, RMSEA=.046, and SRMR=.052. With respect to individual paths, the direct paths from social capital to subjective career success (b=2.059, SE=.446, p<.001) and organizational knowledge sharing (b=2.179, SE=.687, p<.01) were both statistically significant; thus,  $Hypothesis\ 1$  and  $Hypothesis\ 2$  were supported. Also, the results indicated that social capital was positively associated with both career adaptability (b=1.121, SE=.214, p<.001) and psychological ownership (b=2.602, SE=.539, p<.001), respectively. Therefore,  $Hypotheses\ 3$  and 6 were also supported.

Inconsistent with *Hypothesis 4* and *Hypothesis 7*, however, the paths from career adaptability to subjective career success (b= .075, SE= .148, p= .613) as well as from psychological ownership to organizational knowledge sharing (b= .049, SE= .107, p= .645) were not statistically significant. In *Hypothesis 5* and *Hypothesis 8*, I posited that career adaptability mediates the relationship between social capital and subjective career success, and psychological ownership mediates the relationship between social capital and organizational knowledge sharing. Given the insignificant relationships between two mediators and two dependent variables respectively, no empirical evidence was found to support the indirect effects of social capital.



Note. Standardized coefficient (SE), \*\*\*p < .001

Figure III-4. Results from the mediation analysis

As shown in Table III-6, the bootstrapping analysis (1,000 bootstrap samples) revealed the insignificant indirect effects between social capital and two dependent variables, with career adaptability and psychological ownership as the mediators. Specifically, the indirect effects of social capital on subjective career success (indirect effect= .025, 95% bias-corrected CI [-.077, .117]) via career adaptability and organizational knowledge sharing (indirect effect= .046, 95% bias-corrected CI [-.180, .210]) via psychological ownership were not statistically significant.

Table III-6

Estimated model effects and bias-corrected confidence intervals

	b	SE	t value	p	95% [LL, UL]
Subjective career success					
Total effect	2.144	.411	5.217	<.001	[ 1.554, 3.139]
Direct effect	2.059	.446	4.618	<.001	[ 1.375, 3.146]
Indirect effect	.084	.172	.488	.625	[271, .420]
Organizational knowledge sharing					

Total effect	2.307	.505	4.567	<.001	[ 1.479, 3.591]
Direct effect	2.179	.687	3.170	<.01	[ 1.311, 3.866]
Indirect effect	.128	.301	.425	.671	[592, .573]

Note. SE= estimated standard error; p= p value under the assumption of normal distribution; 95% LL = lower limit of bias-corrected bootstrap confidence interval; 95% UL = upper limit of bias-corrected bootstrap confidence interval; \*\*p< .01, \*p< .05

Next, in *Hypothesis 9* and *11*, I proposed that the positive associations between social capital and two mediators (career adaptability and psychological ownership) are moderated by perceived supervisor support. That is, social capital will be more positively related to career adaptability and psychological ownership when the level of perceived supervisor support is high, rather than lower. In support of *Hypothesis 9*, the results showed that perceived supervisor support had a significant moderating effect between social capital and career adaptability (b= .144, bias-corrected CI [ .021, .266], SE= .062, p< .05). The results further indicated that the positive association between social capital and career adaptability was stronger when perceived supervisor support was high.

To illustrate the interactions, I plotted the relationship, showing the high and low degrees of perceived supervisor support at two different values ( $\pm 1$  SD) (see Figure III-5). Social capital had a more positive association with career adaptability when perceived supervisor support was higher ( $\pm 1$ SD) (estimate=  $\pm .965$ , SE=  $\pm .202$ ,  $\pm .001$ ) than lower ( $\pm 1$ SD) (estimate=  $\pm .678$ , SE=  $\pm .181$ ,  $\pm .001$ ). However, the interaction terms between social capital and perceived supervisor support on psychological ownership were not statistically significant ( $\pm 1$ ) significant ( $\pm 1$ ). SE=  $\pm 1$ 086, bias-corrected CI [ $\pm 1$ 086,  $\pm 1$ 087,  $\pm 1$ 181.

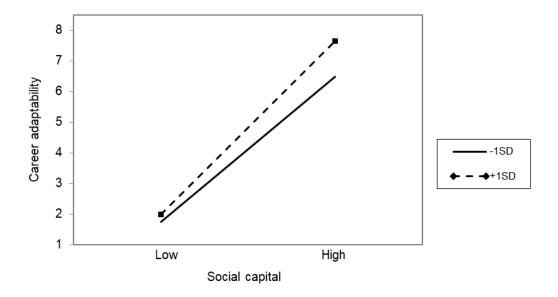


Figure III-5. The moderation effect of perceived supervisor support on the relationship between social capital and career adaptability

Lastly, I tested the moderated mediation model using the latent interaction terms between social capital and perceived supervisor support. Using 95% bias-corrected CIs from 1,000 bootstrap iterations, the results showed that regression coefficient of the latent interaction term on subjective career success was statistically significant (b= .263, bias-corrected CI [ .111, .416], SE= .078, p< .01), which supports Hypothesis 10. That is, the indirect effect of social capital on subjective career success via career adaptability is moderated by perceived supervisor support, such that the mediated association is stronger for employees with higher perceived supervisor support. Conversely, the indirect effect of social capital on organizational knowledge sharing via psychological ownership was not statistically significant (b= -.098, bias-corrected CI [ -.273, .078], SE= .090, p= .276); thus, Hypothesis 12 was not supported by the data.

Next, I used estimates from the latent moderated mediation model to probe and calculate the conditional indirect effects at various levels of perceived supervisor support. As summarized in Table III-7, the indirect effects of social capital were not conditional on three different levels of perceived supervisor support.

Table III-7

Conditional indirect effects at three levels of perceived supervisor support based on bias-corrected bootstrapping technique

	Indirect effect	SE	t value	p	95% [LL, UL]
Predicting subjective					
career success					
-1 SD	.147	.163	.905	.365	[171, .466]
Mean	.172	.191	.902	.367	[202, .546]
+1 SD	.197	.219	.899	.369	[232, .626]
Predicting organizational					
knowledge sharing					
-1 SD	276	.252	-1.092	.275	[770, .219]
Mean	266	.244	-1.088	.276	[745, .213]
+1 SD	256	.237	-1.083	.279	[721, .208]

Note. SE= estimated standard error; p= p value under the assumption of normal distribution; 95% LL = lower limit of bias-corrected bootstrap confidence interval; 95% UL = upper limit of bias-corrected bootstrap confidence interval.

To summarize, the results of the hypotheses testing are shown in Table III-8.

Table III-8

Results of the hypothesized model (unstandardized coefficients)

Нурс	othesis	Estimate	p	Remarks
H1	$SC \rightarrow SCS$	2.059	<.001	Supported
H2	$SC \rightarrow OKS$	2.179	<.01	Supported
H3	$SC \rightarrow CA$	1.121	<.001	Supported
H4	$CA \rightarrow SCS$	.075	.613	Not supported
H5	$SC \rightarrow CA \rightarrow SCS$	.084	.625	Not supported
Н6	$SC \rightarrow PO$	2.602	<.001	Supported
H7	PO → OKS	.049	.645	Not supported

H8	$SC \rightarrow PO \rightarrow OKS$	.128	.671	Not supported
H9	$SC \times PSS \rightarrow CA$	.144	<.05	Supported
H10	$SC \rightarrow PSS \times CA \rightarrow SCS$	.263	<.01	Supported
H11	$SC \times PSS \rightarrow PO$	086	.320	Not supported
H12	$SC \rightarrow PSS \times PO \rightarrow OKS$	098	.276	Not supported

Note. SC= social capital; SCS= subjective career success; OKS= organizational knowledge sharing; CA= career adaptability; PO= psychological ownership; PSS= perceived supervisor support.

## **Discussion and Implications**

In this study, I sought to examine the impact of social capital on individual- and organizational-level outcomes (subjective career success and organizational knowledge sharing, respectively). Guided by career construction theory (Savickas, 2005) and Nahapiet and Ghoshal's (1998) social capital and intellectual capital model, I further examined the mediating effects of career adaptability and psychological ownership on the aforementioned relationships. The study revealed two major results: (a) social capital had a positive effect on both subjective career success and organizational knowledge sharing; and (b) social capital was positively associated with career adaptability and psychological ownership.

Drawing further on the LMX theory, I built a moderated mediation model to investigate the extent to which perceived supervisor support moderates the relationship between social capital and outcome variables via career adaptability and psychological ownership. Perceived supervisor support moderated the relationship between social capital and career adaptability. Namely, the influence of social capital on career adaptability was stronger for employees with a higher level of perceived supervisor support. However, perceived supervisor support was not a significant moderator in the

relationship between social capital and organizational knowledge sharing via psychological ownership. Also, the results of this study did not show any significant mediating effects of career adaptability and psychological ownership on the relationships between social capital and two outcome variables. In the following sections, I discuss the above findings with a specific focus on their implications for theory, practice and research.

### **Theoretical Implications**

This study contributes to the existing literature in several ways. First, the findings uncovered a significant role of social capital in predicting subjective career success and organizational knowledge sharing; thus, extending the scholarly understanding of the benefits of social capital at both individual and organizational levels. Identifying the predictors of subjective career success has been one of the most popular topics in career research, given the importance of career success in enhancing organizational performance and growth (Haibo et al., 2018; Hirschi et al., 2018; Ng & Feldman, 2014). To date, however, the existing studies have focused primarily on personal or individual-level factors, such as dispositions, human capital, and psychological sources (Boudreau et al., 1999; Jung et al., 1999; Rasdi et al., 2009). Additionally, while some researchers identified social capital as a potential predictor of subjective career success (Hirschi et al., 2012; Hirschi et al., 2018; Seibert et al., 2001), very little empirical evidence is available to support and substantiate this link.

In this study, I explored an antecedent of subjective career success from the perspective of social capital. In particular, social capital enabled individuals to establish

a strong foundation for acquiring and accumulating resources and information necessary for career development. The results of this study lend empirical support to the argument that social capital consisted of the strong-ties-based relationships, trust, and shared understanding increases one's judgement or evaluation on career success, including career goal, income, and advancement (Ganiron Jr, 2013; Seibert et al., 2001). More broadly, the findings supported the view that individual career success is determined and enhanced by not only personal factors but also relational or environmental factors (Hirschi et al., 2018; Ng & Feldman, 2014). Some scholars have emphasized the importance of a 'balanced' or 'interdependent' approach to understanding career development rather than relying exclusively on individual's capability and human capital factors (Baruch, 2006; Baruch & Vardi, 2016; Tams & Arthur, 2010). Along with this line of inquiry, the findings of this study provide empirical support for the critical role of a relational factor (social capital) as a means to promoting career success and development.

Similarly, the findings point to the positive effect of social capital on fostering organizational knowledge sharing. Previous studies have explored the predictors of knowledge sharing, such as tangible incentives, individual attitude, and organizational culture (Ismail & Yusof, 2010; Kuo & Young, 2008; Witherspoon et al., 2012); however, little attention has been paid to the relational or interpersonal factors (Seibert et al., 2001). By adopting a social capital perspective, I examined how social capital, an interpersonal or relational factor, might promote organizational knowledge sharing. The

results confirmed that social capital served as a vehicle of resource and knowledge flows.

Specifically, not only intra-network within an organization (e.g., peers, team members) but also external social relationships (e.g., family, friends) play a vital role in promoting one's social capital, which in turn increased the level of organizational knowledge sharing. Although several scholars have examined the association between social capital and knowledge sharing, most of studies have focused exclusively on one or two specific dimensions of social capital (e.g., Collins & Hitt, 2006; Dhanaraj et al., 2004; Holste & Fields, 2010; McFadyen & Cannella, 2004; Yang & Farn, 2009). By incorporating the three dimensions of social capital (i.e., structural, relational, and cognitive) and internal/external relationships, this study corroborates the link between social capital and organizational knowledge sharing.

Taken together, the findings from this study support the view that HRD interventions and practices based on social capital can improve effectiveness at multiple levels (e.g., individual and organization as a whole) within an organization. HRD takes a holistic approach to leveraging and developing individual, group, organization, and country by unleashing its expertise and potential (Swanson, 2008). Given its focus, several scholars have called for research on empirical evidence for social capital as a means to drive HRD's core mission and for the exploration of the specific benefits of social capital on both individuals and organizations (Akdere, 2005; Nakamura & Yorks, 2011). The current study responded to this call by studying the relationship between social capital and subjective career success and organizational knowledge sharing. The

results illuminated that social capital is an invaluable vehicle for building and maintaining both individual and organizational competitive advantage by enabling the flow of knowledge, information, and resources.

Second, the results of this study provide support for the strong-tie-based relationships in the social capital literature. The benefits and distinctiveness of strong ties and weak ties in job searching or career development have long been studied since Granovetter's (1973) seminal work, *The strength of weak ties*. Strong ties involve relatively easy access and mobilization of resources based on a high level of commitment and emotional attachment (Tortoriello, Reagans, & McEvily, 2012). On the other hand, weak ties ensure structural benefits (e.g., efficiency, quality) as they tend to provide non-redundant and new information (Granovetter, 1973).

The findings showed that strong social capital or ties (i.e., frequent interaction and close relationships) were positively associated with individual and organizational outcomes. A possible explanation for the positive effect of strong ties is that strongly connected ties encourage individuals to continuously engage in career development activities (e.g., investing more time, effort, and resources) based on mutual trust and obligation (Tian & Lin, 2016). Another possible explanation is attributable to the cultural factors. That is, people in Asian countries (e.g., Korea) tend to construct or define the self through the interdependent relationships (i.e., the interdependent or relational self-view) when compared to western countries (e.g., U.S.) (Ishii, 2017). Therefore, it appears that participants' desire for highly interdependent and strong relationships were reflected in the study results.

Third, this study enriched our knowledge of how social capital is associated with career adaptability and psychological ownership. Previous research suggested that career adaptability is not a fixed quality; rather, it can be developed through the individual's interactions with the environment and reciprocal relationships (Savickas & Porfeli, 2012). However, the precondition of career adaptability is relatively unknown compared to a variety of outcomes of career adaptability (Zacher, 2013). Informed by the career construction theory (Savickas, 2005), career researchers have paid great attention to stable personality traits and capabilities as antecedents of career adaptability (e.g., Chong & Leong, 2017; Ebenehi, Rashid, & Baker, 2016; Gregor et al., 2021). Nonetheless, very few have investigated the antecedents of career adaptability from a dynamic approach (Storme, Celik, & Myszkowski, 2020). In this sense, this study expanded current knowledge base by exploring the relationship between social capital and career adaptability from a social capital perspective. The findings reinforced the critical role of social capital in meeting the unfamiliar and complex demands through interdependent social relations. A possible explanation for this finding might be that social capital allows individuals to be exposed to various career or job experiences that influence one's decision (Mäkelä, Sumelius, Höglund, & Ahlvik, 2012) and thereby help to easily adapt to the new or challenging tasks.

Furthermore, findings from this study revealed that social capital had a positive effect on psychological ownership. This finding provided empirical support for Pierce et al.'s (2001) argument that that investing the self to the target(s) and having intimate interactions with the target(s) are the important preconditions of psychological

ownership. As "an investment in social relationships" (Lin et al., 2001, p. 39), social capital was found to be a critical predictor for psychological ownership. In addition, this study is consistent with that of KuchManer, Wiggins, and Grimm (2019) and Zhang, Nie, Yan, and Wang (2014) who investigated the effect of network embeddedness (structural and relational) on psychological ownership in the context of consumer behavior and branding community. By extending its significance to the HRD field and workplace context, this study enhanced our understanding of how employees develop and feel a sense of ownership within an organization through interpersonal relationships.

Contrary to expectations, this study did not find a significant mediating effect of social capital via career adaptability and psychological ownership. However, this result is consistent with Haenggli and Hirschi's (2020) study that tested the mediation effect of career adaptability in the relationship between self-esteem/optimism and subjective career success. While Haenggli and Hirschi (2020) found that career adaptability is negatively associated with objective career success, no relationship with subjective career success was found. Likewise, although a modest to high level of correlations were found in the relationship between two mediators and outcome variables in this study, no statistically significant mediation effects were shown. This result may be explained by the strong positive associations between social capital and two outcome variables. The paths from social capital to both subjective career success ( $\beta$ = .619) and organizational knowledge sharing ( $\beta$ = .782) outweigh the effects of mediators on outcome variables. Thus, it appears that the indirect effect becomes non-significant due to the strong association between social capital and outcome variables.

Fourth, the findings regarding perceived supervisor support's moderating role provide a more comprehensive understanding of the importance of both formal and informal networks within an organization. Based on this study, perceived supervisor support strengthens the impact of social capital on subjective career success via career adaptability. In other words, the stronger perceived supervisor support, the greater influence of social capital on an individual's subjective career success. Considering this finding, leaders must not only provide employees with adequate job support and resources for career advancement but also promote the effective use of social capital (Kuvaas & Dysvik, 2010). This does not mean that leaders' support is the only necessary condition for a successful career; however, it does suggest that building a positive relationship with supervisor can further enhance the positive impact of social capital. Therefore, this result supports the view that a social capital perspective complements the existing leadership literature, rather than degrading the value of traditional leadership approaches that focus exclusively on individual's capabilities and qualities (a human capital perspective) (Balkundi & Kilduff, 2006).

Another important finding is that the positive association between social capital and career adaptability becomes stronger when perceived supervisor support is high. Employees with high perceived supervisor support also tend to show high dependence on social capital to enhance their career adaptability. This finding highlights the importance of leaders to help followers to share information and resources, while they still have control over critical resources and decisions in the workplace (Lee et al., 2019). This finding also highlights the importance that employees should seek not only

direct help and support from their supervisors but also their social networks when coping with new or challenging demands.

The highlighted importance of leadership in this study might also be attributable to the strong emphasis on hierarchical relations and respect for authority in a Korean organizational culture (Moon, Uskul, & Weick, 2017). In the Korean workplace, leaders play prominent roles in allocating and collecting career-related resources. Furthermore, Savickas (2005) suggested that career adaptability stems from not only personal traits or characteristics but also the social context. That is, career adaptability is dependent on the level of individual's willingness and ability to respond to a changing work environment and the level of interactions with the social context, such as leaders and social capital (Ocampo et al., 2018; Rudolph et al., 2017; Savickas & Porfeli, 2012). In accordance with these studies, the results support the idea that various influences derived from personal characteristics and social context should be considered when developing career adaptability.

On the other hand, the moderating effect of perceived supervisor support on the relationship between social capital and organizational knowledge sharing via psychological ownership was not found to be significant, counter to my expectation. So far, there have been mixed results on the moderating role of perceived supervisor support in career and management research. Jung and Tak (2008) found a significant moderating role of perceived supervisor support on the relationship between career plateau and two outcome variables (job satisfaction and organizational commitment). However, no significant interaction effect was found in the relationship between protean

and boundaryless career attitudes and organizational commitment (Çakmak-Otluoğlu, 2012). Çakmak-Otluoğlu (2012) observed that employees with protean career attitudes are more likely to be driven by internal motivation or career competence for their career success rather than being dependent on support from supervisors.

The results from this study showed that perceived supervisor support only moderated the relationship between social capital and subjective career success via career adaptability, while no support for the relationship between social capital and organizational knowledge sharing via psychological ownership. In this sense, my study provided mixed results of the moderating role of perceived supervisor support. This conflicting result may be due to that the positive effect of supervisor support is dependent on individuals' personality or trait, and that strong psychological ownership or collective-oriented attitudes are negatively associated with supervisor support (Chae, Park, & Choi, 2018). For example, Chae et al. (2018) found that the positive effect of dutiful (i.e., dependable and trustworthy) employees on knowledge sharing behavior becomes stronger when perceived supervisor support is low rather than high. Consistent with their findings, the results from my study revealed that a high level of perceived supervisor support did not strengthen the positive impact of social capital on organizational knowledge sharing. It appears that employees' strong psychological ownership and collective-oriented attitudes may be contradictory with high perceived supervisor support; thus, no moderation or moderated mediation effects were found. This finding suggests that both social or environmental factors (e.g., social capital) and

individual-level factors (e.g., personality) need to be considered when incorporating perceived supervisor support as a moderator.

Another important insight from this study is that based on a Korean organizational context, this study examined the boundary condition of social capital by incorporating perceived supervisor support as a moderator that strengthens or weakens the positive effect of social capital. The findings support that social capital is useful and effective in non-Western cultures as a means to promoting individual career success; however, leaders still play key roles in determining a successful career. Therefore, HRD interventions with the aim of building and enhancing social capital need to be undertaken in alignment with unique organizational culture, hierarchy, and supervisor's support.

# **Practical Implications**

This study provides useful implications for HRD professionals and organization leaders for business practice. First, at the individual level, social capital within and outside the workplace is important to subjective career success and career adaptability. In view of this, employees need to develop and seek multiple types of relationships for career and social support (Bozionelos, 2003; Higgins & Kram, 2001). As compared to mentoring and coaching that focuses on a dyad and one-to-one relationship, social capital offers collective benefits and access to a greater span of information (Hezlett & Gibson, 2007). Given that, individuals should view social relationships as a valuable asset and proactively seek ways to utilize social capital for acquiring resources essential to their career success.

Second, at the organizational level, leaders, managers, and HRD professionals should introduce and adopt social capital or social relationship-based interventions. Given the evidence-based value of social capital to both individual career success and organizational knowledge sharing, social capital can contribute to sustainable competitive advantage and innovation (Ganguly et al., 2019; Khalifa, 2019). With this in mind, organizations should design activities and interventions (e.g., networking event, mentoring programs) that will bolster networking opportunities and pave the way for the successful utilization of social capital. While social capital building is a long-term effort, once it is established, it offers more advantages than any other capitals because of its low transferability and fungibility (not easily replaceable) (Tymon & Stumpf, 2003). In other words, establishing networking within and outside the organization and promoting collaborative works through social capital would lay the foundation for long-term organizational growth and success.

Third, the findings of this study suggest that the positive relationship between social capital and outcome variables is strengthened in the presence of perceived supervisor support. Therefore, organizational leaders should take integrated approaches to enhancing both formal and informal networks for individual and organizational success (Hollenbeck & Jamieson, 2015). Establishing and maintaining social capital may not be enough to foster individual and organizational growth; leaders must create a working environment where leaders can offer necessary support, feedback, and training and developmental opportunities are readily available to employees. Doing so will boost individual career success and facilitate the attainment of organizational goals.

### **Study Limitations and Directions for Future Research**

This study has several limitations. First, in this study, a cross-sectional design was adopted to collect data with the single-source data. All survey items were completed by participants without time separation, which may carry the risk of CMV. While the potential source bias was controlled through procedural and statistical remedies, having time separation between surveys may provide a better causal inference on the relationships. Also, given that time is a critical factor for the development and continuity of social capital (Nahapiet & Ghoshal, 1998), adopting a longitudinal design will enable researchers to observe the evolving effect of social capital on individual and organizational success over time.

Another methodological suggestion for future social capital studies is to consider the use of cross-level analyses. In this study, I incorporated both individual and organizational outcomes to depict the benefits of social capital at multiple levels; however, each individual or organizational level's contribution to the development of social capital was not considered as it is beyond the scope of this study. Given the distinctive nature of social capital that allows for the multi-level examinations, a cross-level or multi-level approach will help generate more nuanced understanding of the impact of social capital at different levels (e.g., individual, team, and organization as a whole) (Yu et al., 2013).

Second, the measurements of social capital used in this study were derived from the multiple sources of studies rather than one single source of study. Given that social capital construct has no agreed or commonly used measurement due to lack of conceptual clarity (Chapter II), in this study each sub-construct of social capital was measured using different items from different sources. It may cause some inconsistencies among social capital constructs. Therefore, I encourage researchers to seek ways to reach a consensus on how to measure social capital's three dimensions in a more precise and standardized way.

Third, this study was conducted with multiple large corporations in Korea. Korean organizational context is characterized by high power distance and hierarchy, despite the emerging trend of flattening organizations (Lee & Park, 2020). Also, Korean people tend to develop a strong-tie-based relationship with one another rather than loosely connected relationships (Bstieler & Hemmert, 2010; Yang, 2006). Given these distinct cultural characteristics, findings from this study may not be generalized to different cultural contexts. Therefore, I urge researchers to replicate this study in more contexts with similar and different national and organizational cultures to determine what degree the findings of this study were representative. Also, I encourage researchers to test the hypothesized model in this study in small-medium enterprises (SMEs), because research shows that the development and utilization of social capital in SMEs are quite different from those of large corporations. For example, SMEs tend to struggle with securing necessary resources for the development of social capital as compared to large corporations (Kim & Shim, 2018).

Lastly, the findings suggested that no mediating effects of both career adaptability and psychological ownership were found. Although career adaptability has been identified as a substantial predictor of career success (e.g., Haibo et al., 2018; Guan

et al., 2015; Zacher, 2014), no significant association was found in this relationship. Similarly, no statistically significant association was observed in the relationship between psychological ownership and organizational knowledge sharing. Therefore, exploring confounding factors and omitted variables that possibly mediate the relationships among the abovementioned variables will advance our understanding of how social capital is mobilized to enhance subjective career success and organizational knowledge sharing. As Nahapiet and Ghoshal (1998) contended, anticipated value of social capital, other motivational factors (e.g., intrinsic and extrinsic), and individual capability to combine information and knowledge may mediate the relationship between social capital and two outcome variables.

#### CHAPTER IV

### **CONCLUSION**

This dissertation study aimed to examine the impact of social capital on both individual and organizational success. With the recent trend of flattening organizations and increased task complexity, social capital has been increasingly popular in social sciences, such as management, economics, and psychology. In response to the emerging interest in social capital, the purposes of Chapter II were three-fold to provide an overview of social capital research. First, I reviewed how social capital has been conceptualized within the organizational context and offered a clear definition and characteristics of social capital. I examined the different conceptualizations and dimensions of social capital depicted in the 57 publications, as the different conceptualizations have led to a diversity of social capital's dimensions. Second, I focused on the methodological issues within the social capital literature and assessed its methodological quality. Third, I mapped out the nomological network of social capital research by incorporating all prior empirical evidence on social capital and offering an overview of what has been studied.

The review shows that social capital researchers have witnessed an upsurge of interest in social capital in Korea since the 2010s. However, there are still lingering questions for the lack of indigenous conceptualizations of social capital and the limitations in research design. Therefore, utilizing social network analysis and different research approaches would provide additional insights that will advance current social capital and network literature.

Based on the conceptualization and research trend identified in Chapter II, Chapter III extended the prior social capital and HRD literature by highlighting the role of social capital in facilitating individual and organizational success. Answering two overarching research questions in this study, I examined how social capital is associated with individual and organizational performances through mediation and moderation analyses. In particular, I applied a social capital perspective and SNA to investigate individual- and organizational-level outcomes. SNA allows to identify social relationships inside and outside the workplace. The results of the study suggested that social capital fostered key individual and organizational outcomes, including subjective career success, career adaptability, organizational knowledge sharing, and psychological ownership. Another significant finding from the study was that supervisor support played a vital role in further strengthening the positive impact of social capital.

In HRD and management fields, a human capital perspective, which depends largely on individual's sole attributes, abilities, and capabilities, has been dominant to understand individual and organizational growth (Han et al., 2019; Hollenbeck & Jamieson, 2015). While individual's attributes are arguably the most important factor, social capital advances our understanding of how interdependent relationships and informal networks contribute to a success and growth of the organization. In light of this, this study supported the critical role of relational and social context in HRD field. Specifically, this study found that social capital enabled individuals and organization to access, obtain, and utilize a diversity of resources and information, which subsequently enhanced career success and organizational knowledge sharing. Therefore, I urge HRD

professionals to innovate their current practices by taking into account the valuable contribution of social capital to both the employers and employees.

Furthermore, leaders' support is still recognized as an important source of individual and organizational success. Given that leaders have control and authority over important resources and opportunities in the workplace, understanding how leaders allocate resources and provide support for employees is necessary. Therefore, HRD professionals should seek ways to strike a balance between formal (e.g., leader-follower relationship) and informal (e.g., peers, family, and friends) networks. Supporting and building interdependent relationships as well as positive relationships between leaders and subordinates would pave the way toward continuous growth and competitive advantage of individuals and organizations.

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## APPENDIX A

## THE SCREENSHOT OF A LITERATURE REVIEW MATRIX

Include v Rea	ason v	Ref. No		Year 🕶	Title ~	Journal v	Availat v	Major topic 🔻	Purpose/R ~	Type of SC 🔻	Definition of SC v	Type of study *	Other variables 🔻	Method ~	Participants ~	Measu 🔻	Findings
Excluded Ins	titutional S	18	5 Ahn	2006	The effect of inst	it Korean J	0	Women gradua	대출	Individual, but i	al) 사회자본:	Quantitative	취업준비정도 (8개	교차분석과 일	남녀공학을	사회자본	대학의 서열구조와 성차별적 환경에 기반한
Excluded Cor	mmunity le	2	8 Bidet	2009	SOCIAL CAPITAL AF	N Asian Pe	10	SC and work int	egration	Individual + soc	A "social capital" I	framework, with	two main approache	es: one regardir	North Korean o	defectors	North Korean defectors have an especially
Excluded Cor	mmunity le	10	2 Brown & Na	2018	A Study on the Eff	fe The Jour	0	SC and subjecti	to confirm	community level	A frequently	Quantitative	DV: subjective well	ordinary least	the 6th Wave	The	Firstly, the subjective well-being of older
Excluded Cor	mmunity le	14	6 Jaekwon Ch	2017	Difference of	Korean J	0	SC of one city		community level	네트워크 (개인 중심	Quantitative	N/A	일원분산분석,	832 Daegu city	사회적 너	대구시민들 사이에서는 특히 연령의
Included		16	8 Chang & Ch	2010	The Effects of De	The Jour	0	Early career em	조직사회화.	Individual	배태성 (embedded	Quantitative	DV: 조직사회화 (조직가치수용/역할 ,직무학습)		814 early caree	employe	배태성의 지표로서 개발지원자들과의 평균적
Excluded Edi	itorial(intro	6	4 Vincent Chi	2015	Social Networks i	ir America	0						,7178/				İ
Included		16	7 Chung & Pa	2010	The Effects of Wo	The Jour	0	Women entrep	여성벤처기 업가의	Individual	• 본 연구는 기존 선	Quantitative	IV: Self-efficacy DV: 기업성과	다중회귀분석	101 중소벤처기	네트워크	연구결과는, 첫째, 기업가의 인지적 특성인 자아효능감은 공식적.비공시적 네트워크와
Excluded not	t focused or	2	2 Soondool C	2014	Measuring Social	Social In	0	SC's measurem	critically	Individual	social capital is a	set of resource,	which is created wh	factor analysis	1,216 responde	social pa	suggest that micro-level social participation
Excluded not	t relevant	14	3														
Excluded Inte	er-organiza	10	) Kyoungnam	2018	Impacts of Strong	Journal o	0		to examine	how network type	s affect network pe	conceptual?	performance	???	???	people	
Excluded not	t relevant	7	4 Gyuseog H	2011	Trust Working in	I Compara	0	Different types	of trust								
Included		1	6 Han, Jinyou	2016	DIMENSIONALITY	CThe Jour	n0	KS	understand and	Individual/group	"the goodwill available to	Quantitative	share knowledge ME: OCB (helping	Partial least s	187 people wh	l'	citizenry behavior improves knowledge sharing. Bridging
Excluded con	nmunity lev	6	Sehee Han	2013	The Contextual a	n Journal o	0	subjective well	investigate		Bourdieu, 1986, Co	leman, 1988, Put	tnam, 1993			Four vari	ables were used to measure individual leve
Included		10	9 Han & Jin	2018	The Role of Jewe	el Korean C	40	CEO's SC on per	주얼리 사업 경영자들의		자본을 경영자의 네트워크를	Quantitative	ME: 사업 만족도 MO: 상황적	과 위계적 회귀분석	465 Jewelry CE		관계적 차원, 인지적 차원 모두 주얼리 사업의 만족도에 유의한 영
Excluded nat	tional level	7	6 Michin Hor	2011	Validation of Kor	e Clinical	0	Measure valida	psychometr		Berkman, Glass,	man, Glass, Korean immigrants in USA		A			
Excluded not	t relevant		7 Sven Horak	2018	Join In or Opt Out	Journal	0		s first to		Affective ties and	ffective ties and networks using three Korean concepts					
Excluded not	t relevant	3	3 Sven Horak	2014	Antecedents and	Asia Pac	0		between		of relationships	Qualitative		expert intervie	(10 korean nat	ionals, 11	german nationsl) - representing corporation
Excluded not	t relevant	3	Sven Horak	2015	Approaching Kore	Journal	olo		and					participant ob	servation		

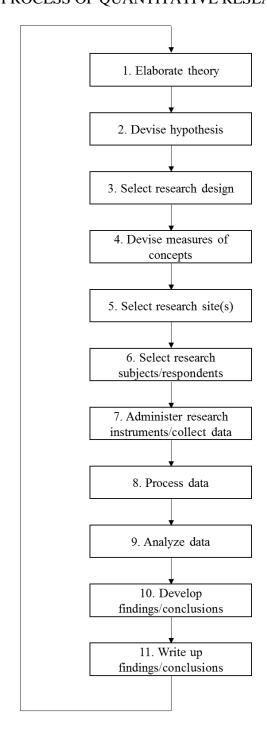
## APPENDIX B

# METHODOLOGICAL QUALITY CRITERIA

Methodological Criterion	Description	Score
1. Did the study address a clearly focused	Yes / Partial / No	2/1/0
question/objective?		
2. Study design is evident and appropriate	Yes / Partial / No	2/1/0
3. Sampling procedure is clearly described and the	Yes / Partial / No	2/1/0
number of participants are adequate		
4. Participants' characteristics are sufficiently	Yes / Partial / No	2/1/0
described		
5. Data collection procedure is clearly described	Yes / Partial / No	2/1/0
6. How to measure construct(s) is clearly defined,	Yes / Partial / No	2/1/0
well validated, and reported		
7. Analytic methods are clearly described and	Yes / Partial / No	2/1/0
appropriate to answer the research question(s)		
8. Results are reported sufficiently with details	Yes / Partial / No	2/1/0
9. Study design	Longitudinal	2 / 1
	Cross-sectional	

APPENDIX C

THE PROCESS OF QUANTITATIVE RESEARCH



### APPENDIX D

### IRB APPROVAL LETTER

#### DIVISION OF RESEARCH



#### **EXEMPTION DETERMINATION**

(Common Rule -Effective January, 2018)

September 16, 2020

Any study that requires in person or face-to-face study visits may not begin or resume until your site has an approved plan that adheres to the re-opening guidelines posted on the Division of Research's VPR website: https://vpr.tamu.edu/covid-19. This plan is to be sent to your Department Chair and Dean, then forwarded to the Clinical Research, Education and Service Advisory Committee for approval.

Type of Review:	Initial Review Submission Form
Title:	THE IMPACT OF SOCIAL CAPITAL IN THE WORKPLACE:
	A SYSTEMATIC REVIEW AND QUANTITATIVE STUDY
Investigator:	Jia Wang
IRB ID:	IRB2020-1059
Reference Number:	115837
Funding:	Internal Funds
Documents Reviewed:	Informed Sheet_Eng 1.1
	Informed Sheet_Kor 1.1
	Questionnarie_ENG 1.0
	Translation Certification 1.0
	Questionnarie_KOR 1.0
	Recruitment Material_Kor 1.0
	Recruitment material_Eng 1.0
	Letter of Cultural Evaluation 1.0
No. of the second	Dissertation Proposal_Jihye Oh 1.0
Review Category	Category 2: Research that only includes interactions
	involving educational tests (cognitive, diagnostic,
	aptitude, achievement), survey procedures, interview
	procedures, or observation of public behavior
	(including visual or auditory recording) if at least one
	of the following criteria is met: i. The information
	obtained is recorded by the investigator in such a
	manner that the identity of the human subjects
	cannot readily be ascertained, directly or through
	identifiers linked to the subjects; ii. Any disclosure of
	the human subjects' responses outside the research
	would not reasonably place the subjects at risk of
	criminal or civil liability or be damaging to the
	subjects' financial standing, employability,
	educational advancement, or reputation; or iii. The
	information obtained is recorded by the investigator
	in such a manner that the identity of the human

750 Agronomy Road, Suite 2701 1186 TAMU College Station, TX 77843-1186

Tel. 979.458.1467 Fax. 979.862.3176 http://rcb.tamu.edu

I	subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB
	conducts a limited IRB review to make the
	determination required by .111(a)(7).

#### Dear Jia Wang:

The HRPP determined on September 16, 2020 that this research meets the criteria for Exemption in accordance with 45 CFR 46.104.

This determination applies only to the activities described in this IRB submission and does not apply should any changes be made. Please use the reviewed, stamped study documents (available in IRIS) for applicable study procedures (e.g. recruitment, consent, data collection, etc...). If changes are needed to stamped study documents or study procedures, you must immediately contact the IRB. You may be required to submit a new request to the IRB.

Your exemption is good for three (3) years from the Approval Start Date (09/16/2020). Thirty days prior to that time, you will be sent an Administrative Check-In Notice to provide an update on the status of your study.

If you have any questions, please contact the IRB Administrative Office at 1-979-458-4067, toll free at 1-855-795-8636.

Sincerely, IRB Administration

## APPENDIX E

# SURVEY QUESTIONNARIE (ENGLISH)

Constructs	Items
Social capital	[Name generator]
	List "no more than 10 people, whom have acted to help your career
	and/or work to-date by speaking on your behalf, providing you with
	career or work related information, resources, support,
	opportunities, advice or with whom you have regularly spoken
	regarding difficulties at work, alternative job opportunities or long-
	term career goals." "People" was clarified as "business or personal
	contacts, internal or external to your organization, known to you in
	any capacity, who have helped you at any point in your career, at
	work, in any job."
	[Name interpreter]
	1. Sex (male/female)
	2. Relationship with the person listed? (e.g., friend, co-worker, or
	family member)
	3. Is the person listed internal or external in your organization?
	(1= same department, 2= same org., 3= different org.)
	4. Closeness/tie strength (1~5 Likert)
	5. Contact frequency (1~5 Likert)
	6. [Trust] Please indicate the units which you believe you can rely on without any fear that they will take advantage of you or your
	unit even if the opportunity arises. In general, people from
	which of the following units will always keep the promises they
	make to you?
	[Cognitive dimension]
	1. Our unit shares the same ambitions and vision with other units
	at work
	2. People in our unit are enthusiastic about pursuing the collective
	goals and missions of the whole organization
	3. People in our unit view themselves as the partner who co-leads
	the unit
Career success	1. I am satisfied with the success I have achieve in my career
	2. I am satisfied with the progress I have made toward meeting my
	overall career goals
	3. I am satisfied the progress I have made toward meeting my
	goals for income
	4. I am satisfied the progress I have made toward meeting my
	goals for advancement

	5. I am satisfied the progress I have made toward meeting my
	goals for the development of new skills
Career	1. (concern) Thinking about what my future will be like
adaptability	2. (concern) Preparing for the future
	3. (concern) Becoming aware of the educational and career
	choices that I must make
	4. (control) Making decisions by myself
	5. (control) Taking responsibility for my actions
	6. (control) Counting on myself
	7. (curiosity) Looking for opportunities to grow as a person
	8. (curiosity) Investigating options before making a choice
	9. (curiosity) Observing different ways of doing things
	10. (confidence) Taking care to do things well
	11. (confidence) Learning new skills
	12. (confidence) Working up to my ability
Organizational	1. People in my organization frequently share knowledge based on
knowledge	their experience.
sharing	2. People in my organization frequently collect knowledge from
	others based on their experience.
	3. People in my organization frequently share knowledge of know-
	where or know-whom with others.
	4. People in my organization frequently collect knowledge of
	know-where or know-whom with others.
	5. People in my organization frequently share knowledge based on
	their expertise.
	6. People in my organization frequently collect knowledge from
	others based on their expertise.
	7. People in my organization will share lessons from past failures
	when they feel necessary
	8. People in my organization frequently share existing reports and
	official documents with members of my organization.
	9. People in my organization frequently share reports and official
	documents that they prepare by themselves with members of my
	organization.
	10. People in my organization frequently collect reports and official
	documents from others in their work
	11. People in my organization are frequently encouraged by
	knowledge sharing mechanisms.
	12. People in my organization are frequently offered a variety of
	training and development programs
	13. People in my organization are facilitated by IT systems invested
	for knowledge sharing
Psychological	1. This is MY organization.
ownership	2. I sense that this organization is OUR company.

	3. I feel a very high degree of personal ownership for this
	organization
	4. I sense that this is MY company
	5. This is OUR company
	- ·
	6. Most of the people that work for this organization feel as
	though they own the company
	7. It is hard for me to think about this organization as MINE.
Perceived	1. My supervisor takes the time to learn about my career goals and
supervisor	aspirations.
support	2. My supervisor cares about whether or not I achieve my career
	goals.
	3. My supervisor keeps me informed about different career
	opportunities for me in the organization
	4. My supervisor makes sure I get the credit when I accomplish
	something substantial on the job.
	5. My supervisor gives me helpful feedback about my
	performance.
	6. My supervisor gives me helpful advice about improving my
	performance when I need it.
	7. My supervisor supports my attempts to acquire additional
	training or education to further my career.
	8. My supervisor provides assignments that give me the
	opportunity to develop and strengthen new skills.
	1. 9. My supervisor assigns me special projects that increase my
	visibility in the organization.
	visionity in the organization.

### Survey Questionnaire (Korean)

1. 다음은 귀하의 조직 내/외의 사회적 자본 혹은 네트워크에 관한 질문입니다. 귀하의 커리어(경력) 및/혹은 직무와 관련하여 정보, 지원, 기회, 그리고 조언 등을 제공하거나, 직장에서 어렵거나 새로운 일에 직면했을 때 도움을 주는 사람을 아래 표에 기입해 주시기 바랍니다. 또한, 해당 조력자와의 관계, 정보 교환 빈도 및 친밀도, 그리고 신뢰 정도에 해당하는 번호를 기입해 주시기 바랍니다. (회사 내/외를 모두 포함하여 10 명까지 기입하실 수 있습니다)

	No.1	No.2	No.3	No.4	No.5	No.6	No.7
예시	김동은	2	4	5	2	4	5
	혹은 동칠						
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

No.1 조력자의 이름 혹은 별명

No.2 조력자와의 관계는?: 1) 같은 회사, 같은 팀/부서 2) 같은 회사, 다른 팀/부서 3)다른 회사 4) 기타 (직접 기재)

No.3 조력자와의 친밀도: 1) 매우 친밀하지 않다 2) 친밀하지 않다 3) 보통이다 4) 친밀하다 5) 매우 친밀하다 No.4 조력자와의 정보교환 빈도 (전화, 메신저, 대면접촉, 메일 등 포함): 1) 전혀 연락하지 않는다 2) 거의 연락하지 않는다 3) 가끔 연락한다 4) 자주 연락한다 5) 매우 자주 연락한다

No.5 조력자의 성별은?: 1) 남성 2) 여성

No.6 조력자는 믿을만하다: 1) 전혀 그렇지 않다 2) 그렇지 않다 3) 보통이다 4) 그렇다 5) 매우 그렇다 No.7 조력자는 중요한 의사결정시 자신의 이익뿐만 아니라 나의 이익도 고려할 것이다: 1) 전혀 그렇지 않다 2) 그렇지 않다 3) 보통이다 4) 그렇다 5) 매우 그렇다

2. 다음은 귀하의 '사회적 자본 중 인지적 측면'에 대한 문항입니다. 각 문항을 잘 읽어보시고 각 진술에 대하여 동의하는 정도를 가장 잘 나타내는 곳에 체크(V)해 주시기 바랍니다. (반드시 하나만 선택)

번호	질문내용	전혀 아니다	그렇지 않은 편이다	보통 이다	그런 편이다	매우 그렇다
1	팀원 혹은 부서원들은 공통된 가치와 목표를 공유하고 있다.	1	2	3	4	(5)
2	팀원 혹은 부서원들은 스스로를 팀/부서 조직을 이끌어가는 파트너라고 생각한다	1)	2	3	4	(5)

3	팀원 혹은 부서원들은공동의 목표와 미션을	1	2	3	4	(5)
	추구하는 데 있어서 열정적이다					

3. 다음은 귀하의 '경력성공'에 대한 문항입니다. 각 문항을 잘 읽어보시고 각 진술에 대하여 동의하는 정도를 가장 잘 나타내는 곳에 체크(V)해 주시기 바랍니다. (반드시 하나만 선택)

되 성	질문내용	전혀 아니다	그렇지 않은 편이다	보통 이다	그런 편이다	매우 그렇다
1	나의 직장 경력을 돌이켜 볼 때, 나는 지금까지 내가 성취한 것에 대해 만족한다	1	2	3	4	(5)
2	나의 경력 관련 목표들을 비추어 볼 때, 나는 지금까지의 나의 직장 경력에 만족한다	1)	2	3	4	(5)
3	연봉 혹은 경제적 보상 측면에서 볼 때, 나는 지금까지의 직장 경력에 만족한다	1	2	3	4	(5)
4	나는 승진과 관련하여 볼 때, 지금까지의 직장 경력에 만족한다	1)	2	3	4	(5)
5	나는 새로운 기술과 능력 개발과 관련하여 볼 때, 지금까지의 직장 경력에 만족한다	1	2	3	4	5

4. 다음은 귀하의 '경력 적응성'에 대한 문항입니다. 각 문항을 잘 읽어보시고 각 진술에 대하여 동의하는 정도를 가장 잘 나타내는 곳에 체크(V)해 주시기 바랍니다. (반드시 하나만 선택)

번 호	질문내용	전혀 아니다	그렇지 않은 편이다	보통 이다	그런 편이다	매우 그렇다
1	나는 내 미래 모습은 어떨지에 대해 생각한다	1	2	3	4	(5)
2	나는 미래에 대한 준비를 한다	1	2	3	4	(5)
3	나는 내가 해야 할 교육 및 직업선택에 대해 알고 있다	1	2	3	4	(5)
4	나는 내 스스로 결정을 내린다	1	2	3	4	(5)
5	나는 내 행동에 대해 책임을 진다	1	2	3	4	(5)
6	나는 내 자신을 믿는다	1	2	3	4	(5)
7	나는 스스로 성장할 기회를 찾는다	1	2	3	4	(5)
8	나는 선택을 하기 전 다른 대안들을 탐색한다	1	2	3	4	(5)
9	나는 일을 처리하는 다른 방법들을 탐색한다	1	2	3	4	(5)
10	나는 일을 잘 처리하고, 잘하려고 한다	1	2	3	4	(5)
11	나는 새로운 스킬(기술)을 배우려고 노력한다	1	2	3	4	(5)
12	나는 내 능력을 다 발휘한다	1	2	3	4	(5)

5. 다음은 귀하가 인식하는 조직 내 '지식공유'에 대한 문항입니다. 각 문항을 잘 읽어보시고 각 진술에 대하여 동의하는 정도를 가장 잘 나타내는 곳에 체크(V)해 주시기 바랍니다. (반드시 하나만 선택)

번 호	질문내용	전혀 아니다	그렇지 않은 편이다	보통 이다	그런 편이다	매우 그렇다
1	우리 회사 구성원들은 동료들과 각자의 경험이나 지식을 자주 공유한다	1)	2	3	4	(5)
2	우리 회사 구성원들은 동료들의 경험지식을 자주 수집한다.	1	2	3	4	(5)
3	우리 회사 구성원들은 지식의 출처나, 누가 해당 지식을 알고 있는지 동료들에게 자주 공유한다	1	2	3	4	(5)
4	우리 회사 구성원들은 지식을 어디에서, 누구로부터 얻었는지 자주 수집한다	1	2	3	4	(5)
5	우리 회사 구성원들은 전문지식을 동료들과 자주 공유한다	1	2	3	4	(5)
6	우리 회사 구성원들은 동료들의 전문지식을 자주 수집한다	1	2	3	4	(5)
7	우리 회사 구성원들은 동료들과 과거 실패의 교훈을 공유할 것이다.	1	2	3	4	(5)
8	우리 회사 구성원들은 동료들과 보고서와 업무관련 문서들을 자주 공유한다.	1	2	3	4	(5)
9	우리 회사 구성원들은 동료들과 자신들이 작성한 보고서와 업무관련 문서들을 서로 자주 공유 한다	1)	2	3	4	(5)
10	업무를 수행하기 위해 동료들의 보고서와 업무관련 문서들을 자주 수집 한다	1)	2	3	4	(5)
11	회사는 규범이나 절차 등을 통하여 동료들과 지식을 공유할 것을 권유한다	1	2	3	4	(5)
12	지식공유를 위한 다양한 교육 프로그램들을 제공받는다	1)	2	3	4	(5)
13	지식공유를 위해 회사 인트라넷 등 IT 시스템을 편하게 활용한다.	1)	2	3	4	(5)

6. 다음은 귀하의 '심리적 주인의식'에 대한 문항입니다. 각 문항을 잘 읽어보시고 각 진술에 대하여 동의하는 정도를 가장 잘 나타내는 곳에 체크(V)해 주시기 바랍니다. (반드시 하나만 선택)

번호	질문내용		지 항 이 한 면	보통 이다	그런 편이다	매우 그렇다
1	나는 회사를 '나의 조직'이라고 생각한다.	1	2	3	4	(5)
2	나는 회사를 우리들의 조직이라고 생각한다.	1	2	3	4	(5)
3	나는 회사에 대해 개인적으로 높은 주인의식을 느낀다.	1	2	3	4	(5)

4	회사는 우리들의 조직이다.	1	2	3	4	(5)
5	대부분의 조직원들은 회사를 '자신의 조직'으로 생각한다.	1	2	3	4	(5)
6	나는 회사가 '내 조직'이라 생각하고 열심히 일한다.	1	2	3	4	(5)

7. 다음은 귀하가 인식하는 '상사 지원'에 대한 문항입니다. 각 문항을 잘 읽어보시고 각 진술에 대하여 동의하는 정도를 가장 잘 나타내는 곳에 체크(V)해 주시기 바랍니다. (반드시 하나만 선택)

五 성	질문내용	전혀 아니다	그렇지 않은 편이다	보통 이다	그런 편이다	매우 그렇다
1	상사는 나의 경력과 관련한 목표 혹은 바라는	1)	2	3	4	(5)
	것에 대해 시간을 내서라도 알고 싶어한다.					
2	상사는 나의 경력 목표 달성여부에 관심을 갖는다	1	2	3	4	(5)
3	상사는 조직 내에서 경력과 관련된 다양한 기회	1	2	3	4	(5)
	혹은 정보를 알려준다.					
4	상사는 내가 어려운 업무를 하거나 목표 달성을	1	2	3	4	(5)
	하였을 때 공적을 인정해준다					
5	상사는 나의 성과에 대해 유익한 피드백을	1	2	3	4	(5)
	제공한다					
6	상사는 내가 업무를 향상시키고자 할 때 도움이	1	2	3	4	(5)
	되는 조언을 해준다.					
7	상사는 나의 미래의 경력을 위해 교육이나 학습할	1	2	3	4	(5)
	수 있는 기회를 지원해준다.					
8	상사는 내가 새로운 기술을 개발하고 강화시킬 수	1	2	3	4	(5)
	있는 업무기회를 제공한다					
9	상사는 회사 내에서 내가 더 드러날 수 있는	1	2	3	4	(5)
	특별한 업무를 부여하기도 한다.					

8. 다음 항목들은 통계 분석의 정확성을 높이고 설문 결과의 패턴을 찾는 목적으로만 사용됩니다. 정확한 분석과 해석을 위해 꼭 빠짐없이 해당되는 곳에 체크(V) 또는 작성바랍니다.

번 호	질문내용		항목
1	귀하의 성별은?	①	② <del>Q</del>
2	귀하의 연령은?	(만) (	) 세
3	귀하의 최종 학력은?	① 고졸	
		② 전문대졸	

		③ 4년제 대졸
		④ 대학원 (석사) 졸
		⑤ 대학원 (박사) 졸
4	귀하의 직급은?	① 사원 ()
		② 대리()
		③ 과장()
		④ 차장 ()
		⑤ 부장()
		⑥ 임원 ()
5	귀하의 직무는?	① 관리/지원 ()
		② 전략/기획 ()
		③ 마케팅/영업 ()
		④ 연구/개발 ()
		⑤ 기타 ()
6	현재 조직에서의 근속년수는?	( )년( )월
7	타 조직을 포함한 총 근속년수는?	( )년( )월

 $\label{eq:appendix} \mbox{APPENDIX F}$  DESCRIPTIVE STATISTICS OF EACH ITEM

Factor	Item	Min	Max	Mean	SD	Skew.	Kurt.
Social capital	Structural 1	1.00	5.00	3.96	0.675	-1.144	2.957
	Structural 2	1.00	5.00	3.79	0.671	-0.567	1.569
	Relational 1	2.00	5.00	4.12	0.573	-0.444	0.546
	Relational 2	1.00	5.00	3.83	0.685	-0.428	0.432
	Cognitive 1	1.00	5.00	3.80	0.765	-0.563	0.640
	Cognitive 2	1.00	5.00	3.69	0.834	-0.532	0.276
	Cognitive 3	1.00	5.00	3.62	0.823	-0.415	0.274
Subjective	SCS1	1.00	5.00	3.50	0.872	-0.554	0.050
career success	SCS2	1.00	5.00	3.42	0.916	-0.515	0.036
	SCS3	1.00	5.00	3.26	1.034	-0.433	-0.449
	SCS4	1.00	5.00	3.12	0.998	-0.321	-0.531
	SCS5	1.00	5.00	3.17	0.957	-0.275	-0.321
Organizational	OKS1	1.00	5.00	3.95	0.726	-0.714	1.547
knowledge	OKS2	1.00	5.00	3.70	0.804	-0.456	0.298
sharing	OKS3	1.00	5.00	3.52	0.829	-0.189	-0.232
	OKS4	2.00	5.00	4.00	0.713	-0.412	0.138
	OKS5	2.00	5.00	4.12	0.659	-0.378	0.208
	OKS6	1.00	5.00	3.95	0.724	-0.479	0.643
	OKS7	2.00	5.00	3.77	0.776	-0.238	-0.293
	OKS8	2.00	5.00	3.87	0.694	-0.269	0.041
	OKS9	2.00	5.00	3.81	0.686	-0.281	0.115
	OKS10	1.00	5.00	4.07	0.665	-0.473	0.860
	OKS11	2.00	5.00	3.85	0.773	-0.384	-0.096
	OKS12	1.00	5.00	3.68	0.748	-0.348	0.227
	OKS13	1.00	5.00	3.58	0.816	-0.601	0.341
Career	CA1	1.00	5.00	3.56	0.828	-0.510	0.287
adaptability	CA2	1.00	5.00	3.57	0.827	-0.590	0.443
	CA3	1.00	5.00	3.43	0.854	-0.367	0.024
	CA4	1.00	5.00	3.47	0.904	-0.414	-0.067
	CA5	1.00	5.00	3.45	0.867	-0.382	0.075
	CA6	1.00	5.00	3.50	0.875	-0.507	0.261
	CA7	1.00	5.00	3.62	0.856	-0.782	0.886
	CA8	1.00	5.00	3.52	0.874	-0.543	0.159
	CA9	1.00	5.00	3.56	0.825	-0.461	0.201
	CA10	1.00	5.00	3.64	0.827	-0.507	0.531
	CA11	1.00	5.00	3.47	0.902	-0.404	0.015
	CA12	1.00	5.00	3.59	0.904	-0.532	0.251

Psychological	PO1	1.00	5.00	3.44	0.905	-0.417	-0.003
ownership	PO2	1.00	5.00	3.56	0.854	-0.661	0.521
	PO3	1.00	5.00	3.25	1.000	-0.257	-0.386
	PO4	1.00	5.00	3.53	0.883	-0.726	0.685
	PO5	1.00	5.00	3.22	0.903	-0.267	-0.149
	PO6	1.00	5.00	3.41	0.919	-0.474	0.193
Perceived	PSS1	1.00	5.00	3.12	0.930	-0.181	-0.527
supervisor	PSS2	1.00	5.00	3.33	0.901	-0.350	-0.013
support	PSS3	1.00	5.00	3.31	0.978	-0.362	-0.384
	PSS4	1.00	5.00	3.49	0.915	-0.646	0.479
	PSS5	1.00	5.00	3.38	0.946	-0.485	0.062
	PSS6	1.00	5.00	3.46	0.910	-0.659	0.360
	PSS7	1.00	5.00	3.27	0.973	-0.424	-0.225
	PSS8	1.00	5.00	3.27	0.959	-0.410	-0.204
	PSS9	1.00	5.00	3.17	0.968	-0.466	-0.200

Note. SD= standard deviation; Skew.= skewness; Kurt.= kurtosis

APPENDIX G
STANDARDIZED FACTOR LOADINGS

Construct	Item	Estimate	S.E.	p
Social capital	Structural 1	.675	.068	<.001
_	Structural 2	.648	.037	<.001
	Relational 1	.755	.031	<.001
	Relational 2	.750	.049	<.001
	Cognitive 1	.805	.025	<.001
	Cognitive 2	.838	.020	<.001
	Cognitive 3	.822	.021	<.001
Career	Concern 1	.608	.039	<.001
adaptability	Concern 2	.685	.038	<.001
	Concern 3	.668	.037	<.001
	Control 1	.662	.039	<.001
	Control 2	.758	.036	<.001
	Control 3	.688	.034	<.001
	Curiosity 1	.688	.035	<.001
	Curiosity 2	.616	.041	<.001
	Curiosity 3	.703	.035	<.001
	Confidence 1	.661	.036	<.001
	Confidence 2	.667	.035	<.001
	Confidence 3	.700	.033	<.001
Subjective career	Item 1	.783	.025	<.001
success	Item 2	.827	.022	<.001
	Item 3	.743	.027	<.001
	Item 4	.746	.026	<.001
	Item 5	.780	.030	<.001
Psychological	Item 1	.766	.027	<.001
ownership	Item 2	.764	.025	<.001
	Item 3	.835	.016	<.001
	Item 4	.819	.021	<.001
	Item 5	.667	.035	<.001
	Item 6	.833	.018	<.001
Organizational	Item 1	.760	.025	<.001
knowledge	Item 2	.758	.026	<.001
sharing	Item 3	.800	.022	<.001
	Item 4	.777	.023	<.001
	Item 5	.841	.017	<.001
	Item 6	.784	.025	<.001
	Item 7	.667	.032	<.001

	Item 8	.830	.021	<.001
	Item 9	.858	.018	<.001
	Item 10	.789	.023	<.001
	Item 11	.643	.036	<.001
	Item 12	.607	.039	<.001
	Item 13	.581	.037	<.001
Perceived	Item 1	.710	.023	<.001
supervisor	Item 2	.703	.023	<.001
support	Item 3	.828	.015	<.001
	Item 4	.771	.019	<.001
	Item 5	.838	.014	<.001
	Item 6	.810	.016	<.001
	Item 7	.834	.015	<.001
	Item 8	.863	.013	<.001
	Item 9	.830	.015	<.001