The Effects of Managerial Coaching on Work Performance:
The Mediating Roles of Role Clarity and Psychological Empowerment

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Abstract

The purpose of this study is to investigate the effects of managerial coaching on two dimensions of work performance: in-role behavior and innovative behavior. This study also aims to examine whether role clarity and psychological empowerment act as underlying cognitive and motivational mechanisms of the managerial coaching process to mediate the aforementioned relationship. The study addresses the following research questions.

1. What is the relationship between managerial coaching and employees' in-role behavior?

2. What is the relationship between managerial coaching and employees' innovative behavior?

3. Is the relationship between managerial coaching and employees' in-role behavior mediated by role clarity and psychological empowerment?

4. Is the relationship between managerial coaching and employees' innovative behavior mediated by psychological empowerment?

Data were collected through an electronic survey at for-profit companies in South Korea in diverse sectors such as manufacturing, construction, distribution/sales, information technology, finance, and service/consulting. A convenience sampling method was used and resulted in a total of 273 returned surveys. To ensure the construct validity and reliability of each measure, the estimation of Cronbach's alpha, exploratory factor analysis, and a series of confirmatory factor analyses were conducted. As a preliminary analysis, descriptive statistics and correlation analyses were conducted. Each study

variable was correlated. To test the hypotheses on the direct effects, multivariate regression analyses were performed, and structural equation modeling and bootstrap estimations were used to test the hypotheses on the mediating effects.

The findings showed that managerial coaching was positively related to employees' in-role behavior and innovative behavior. In the structural equation model, role clarity was found to fully mediate the relationship between managerial coaching and in-role behavior; however, there was no mediating effect on the relationship between managerial coaching and innovative behavior. Psychological empowerment was found to fully mediate the relationship between managerial coaching and in-role behavior, as well as the relationship between managerial coaching and innovative behavior.

This study expands the literature on the outcomes of managerial coaching by investigating an expanded view of work performance. In addition, the theoretical framework of the current study addresses the relationships between managerial coaching and two work behaviors, as well as the cognitive and motivational underpinnings of the mechanism underlying these relationships. The findings of this study can provide a strong rationale for the necessity of coaching practice in organizations and also offer guidance for interventions to implement coaching effectively. Theoretical and practical implications are discussed, followed by directions for future research.

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CHAPTER 1

INTRODUCTION

In the past 20 years, the practice of coaching within organizations has received considerable attention as an important employee development and management tool (Anderson, 2013; Bartlett & Ghoshal, 2002; Hamilin, Eliinger, & Beattie, 2008; Gilley, 2000; Mihiotis & Argirou, 2016). Managerial coaching, or managers' coaching of their employees, is a method of offering one-on-one feedback and facilitating learning, with the goal of improving performance (Hui, Sue-Chan, & Wood, 2013; Yukl, 2002). Contrary to the traditional management approach of command and control, managerial coaching is recognized as a new approach that facilitates employees' empowerment and self-direction based on fundamental beliefs about human potential (Spence, 2007). It is now recognized as a core leadership skill, and many organizations have determined that managerial coaching is key to both organizational and employee success (Clutterbuck, 2008; Gilley, Shelton, & Gilley, 2011; Kim & Egan, 2011). For example, Google identifies *being a good coach* as its most desired behavior for great managers (Garvin, 2013), and General Electric emphasizes the importance of managers' daily coaching (Baldassarre & Finken, 2015). Additionally, according to a broad range of industrial reports, line managers in more than 50% of organizations have involved in coaching at work (Chartered Institute of Personnel and Development, 2011; Institute of Leadership and Management, 2011). Finally, coaching employees has been identified as the most desirable behavior of middle managers (Kim & Mauborgne, 2014).

Meanwhile, the current business environment has been described as characterized by volatility, uncertainty, complexity, and ambiguity (VUCA; Bennett & Lemoin, 2014), attributed to unprecedented changes and challenges such as innovations in information technology and the rapid progress of globalization. To survive and succeed under these conditions, organizations must not only effectively meet current business demands in the short term but also remain adaptable to environmental changes by constantly innovating over the long term (Raisch & Birkinshaw, 2008). Accordingly, it is expected that individuals in organizations will go beyond performing well in their currently specified tasks by pursuing innovations through self-directed explorations of new solutions to the unexpected issues that they constantly encounter (Good & Michel, 2013; O'Reilly & Tushman, 2013). That is, the meaning of work performance today should be expanded to encompass these dimensions (Griffin, Neal, & Parker, 2007).

Reasons for the increasing attention to and emphasis on coaching in organizations may be found in the aforementioned changes in the business environment and the changing nature of work (Mihiotis & Argirou, 2016). From a leadership perspective, scholars stress that the role of managers is crucial for enabling and motivating employees to effectively perform both their specified tasks and newly required innovative tasks (Mom, Fourne, & Jansen, 2015). Grounded in organizational support theory (Eisenberger, Huntington, Hutchison, & Sowa, 1986), managerial coaching is a potentially effective tool that managers can use to promote these two different types of work performance. Managerial coaching, which can help employees to better understand their job roles and responsibilities, plays a critical role in providing constructive

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resources with which employees can also improve their job performance (Hui et al., 2013). Additionally, managerial coaching creates an empowering and supportive environment by allowing employees to explore new ideas and engage in self-directed learning and development (Heslin, Vandewalle, & Latham, 2006).

Problem Statement

Despite growing attention to managerial coaching, the current literature provides limited insight into the benefits that managerial coaching can provide to organizations (Hagen, 2012). In particular, the first problem is that only a few empirical studies have examined the efficacy of managerial coaching (Agarwal, Angst, & Magni, 2009; Ellinger, Ellinger, & Keller, 2003). Although many researchers and practitioners have insisted on the positive impact of managerial coaching in improving employee outcomes (Evered & Selman, 1989; Ellinger et al., 2003; Graham, Wedman, & Garvin-Kester, 1994; Orth, Wilkinson, & Benfari, 1987), empirical evidence to support this notion is needed to establish legitimacy for coaching in organizations.

Second, the few empirical studies that do exist have investigated coaching outcomes in only a limited manner. Specifically, previous studies of managerial coaching in human resource development (HRD) have focused primarily on indirect outcomes related to organizational performance, such as the facilitation of learning and development (e.g., Ellinger et al., 2003; Park, 2007), job satisfaction (e.g., Kim, 2013), or organizational commitment (e.g., Park, 2007. Moreover, although a few studies have examined the coaching-performance relationship, their focus was limited to in-role performance, which refers to work behaviors as formally described in job descriptions

(e.g., Dahling, Taylor, Chau, & Dwight, 2015; Ellinger et al., 2003; Graham et al., 1994; Kim, 2010). Recently, Kim and Kuo (2015) and Huang and Hsieh (2015) attempted to examine performance outcomes from a broader perspective, including extra-role behavior and proactive career behavior; however, these studies still focused on indirect outcomes, which were not shown to directly relate to organizational performance. Such a narrow investigation may fail to capture the other possible benefits of managerial coaching. Because, as discussed above, employees' innovative behavior has been regarded as a crucial performance dimension in today's business environment, it will be important to investigate the roles of managers in innovation by employees and how managerial coaching contributes to this innovation.

The third problem is that the previous literature has neglected to explore the process through which managerial coaching brings about positive outcomes (Hagen, 2012; Kim & Kuo, 2015). The coaching practiced in organizations is grounded in behavioral and cognitive psychology (Grant & Stober, 2006; Cameron & Ebrahimi, 2014). That is, coaching is aimed at engendering behavioral changes among employees through cognitive and motivational changes. Therefore, exploring employees' internal changes – as related to performance improvement – is critical to understanding the mechanisms of coaching efficacy. Ultimately, revealing the mechanisms at work in the coaching process can help managers and organizations to utilize coaching more effectively. Recently, a few studies have started to examine these intervening variables. For example, Kim, Egan, and Moon (2014) suggested a cognitive variable, role clarity, as a mediator of the coaching-performance relationship. Huang and Hsieh (2015) focused on a motivational variable,

psychological empowerment, as a mediating variable for the coaching-performance

relationship. However, further studies are still needed to clarify the relationships between

these variables and employee performance within an integrated framework

Therefore, this study builds on and extends the previously published findings and

attempts to investigate the effectiveness of managerial coaching by taking a broader view

of work performance. Specifically, this study aims to explain how managerial coaching is

related to work performance by highlighting variables influencing employees' cognition

and motivation.

Purpose of the Study

The purpose of this study is to investigate the effects of managerial coaching on

two dimensions of work performance: in-role behavior and innovative behavior. This

study also aims to examine whether role clarity and psychological empowerment act as

underlying cognitive and motivational mechanisms of the managerial coaching process to

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Significance of the Study

This current study makes several significant theoretical and practical contributions to the literature on managerial coaching. First, there have been calls for more empirical research on managerial coaching to support evidence-based coaching practice (Hagan, 2012; Kim & Kuo, 2015; Park, 2007). This study responds to these calls by providing empirical evidence regarding how and the extent to which managerial coaching can benefit organizations. In particular, building on and extending the existing evidence, this study provides an integrative understanding of the benefits of coaching by drawing on an expanded view of employees' work performance, as well as on cognitive and motivational changes in the coaching process.

Second, this study suggests a theoretical framework for the effectiveness and process of managerial coaching based on organizational support theory. Because coaching is a relatively new field and has been dominated by practices that are unsupported by research (Beattie et al., 2014), there has been criticism that previous studies of coaching relied upon weak theoretical foundations (Kim, 2010; Dahling et al., 2015). This study addresses this concern and advances the field by suggesting a theoretically grounded framework for managerial coaching.

Third, this study takes a broader perspective on work performance in examining the benefits of managerial coaching. Specifically, in going beyond the traditional view of managerial coaching as a tool for improving in-role performance, this study suggests a

possible link between managerial coaching and employees' innovation. In addition, this study attempts to reveal the change mechanism at work in the coaching process. This study can therefore assist managers in understanding why they should care about coaching at work, how their behaviors impact employees' behaviors, and what specific skills and strategies in the coaching process can be utilized to improve performance. Additionally, this study may help to identify effective ways in which HRD professionals can facilitate managerial coaching at work and develop the coaching abilities of managers.

Definitions of Key Terms

Key terms used in this study are defined as below.

Managerial Coaching Behavior

Managerial coaching refers to an effective managerial practice that helps employees develop themselves and improve performance. As a higher-order construct, managerial coaching involves in two complementary sub-activities: guidance and facilitation. Guidance refers to the communication of clear performance expectations and the provision of feedback and suggestions regarding how to improve and performance outcomes, and facilitation refers to encouraging employees explore and evaluate new ideas and self-discover responses to solve challenges by themselves (Heslin et al., 2006; Hui et al., 2013).

Role Clarity

Role clarity is defined as the degree to which an individual understands the necessary job information and performance expectations concerning a given position in an organization (Rizzo et al., 1970).

Psychological Empowerment

Psychological empowerment means that that an individual believes that he or she has discretionary authority with respect to his or her task and job (Spreitzer, 1995). Specifically, psychological empowerment is characterized by four cognitive dimensions: (a) the fit between a job goal or purpose and an individual's own values and beliefs (meaning); (b) an individual's belief in his/her own ability to fulfill his/her responsibilities with skill (competence); (c) autonomy and decision-making in work behavior, processes, pace, and effort (self-determination); and (d) the degree to which a person can influence administrative or strategic consequences at work (impact; Spreitzer, 1995; Thomas & Velthouse, 1990).

In-Role Behavior

In-role behavior refers to the fulfilling behaviors and activities that are formally required by job requirement and reward systems (Williams & Anderson, 1991). In the literature, in-role behavior has been interchangeably used with in-role performance or job performance. The current study uses the term, in-role behavior consistently.

Innovative Behavior

Innovative behavior refers to a multifaceted behavior involving both the introducing new skills or generating new ideas and the realizing or implementing the

ideas (Scott & Bruce, 1994).

Overview of the Remaining Chapters

The rest of this paper is organized as follows: chapter 2 will present the review of literature on the topic and key variables, followed by the research model and hypothesis. Chapter 3 will provide the details about data collection, and the research method and design employed in the current study. Chapter 4 will present the results of data analysis. Chapter 5 will discuss the key findings of the study, theoretical and practical implications, and recommendations for future research.

CHAPTER 2

REVIEW OF LITERATURE

The purpose of the current study is to examine the relationship between managerial coaching and two aspects of work performance: in-role and innovative behavior. In addition, this study aims to examine the mediating effects of role clarity and psychological empowerment on this relationship. This chapter provides a summary of the theories and literature related to this study. The first section of the chapter begins with a detailed review of managerial coaching. The second section provides an overview of extant empirical research on managerial coaching. The third section introduces organizational support theory as a foundational theory undergirding this study, followed by a review of the outcome and mediating variables used for this study. Last, a conceptual framework and hypotheses for this study are proposed to delineate the relationships among the variables.

Managerial Coaching

This section provides an overview of the history of coaching, the theoretical foundations for coaching, and definitions and explanations of coaching skills and behaviors.

History of Coaching

In athletics, the word *coach* – referring to a person who trains or directs players – was popular as early as the 1880s (Evered & Selman, 1989). In the 1950s, coaching was first introduced to the management field by Mace (1950), who initially defined it as a management tool for guiding and developing employees (Gragory & Levy, 2010). According to Gegner (1997), the concept of coaching was not used frequently until the

late 1970s, when Fournies' (1978) book on coaching practice was published. Despite the slow growth of this concept in the management field, by the early 1990s, coaching had emerged as a particular set of managerial activities in private-sector organizations (Wenzel, 2000).

Theoretical Foundations of Managerial Coaching

As an applied field, coaching has been influenced by a variety of disciplines and theories such as social psychology, positive psychology, learning theory, and human development theory (Cameron & Ebrahimi, 2014). Psychology has had the greatest influence on coaching, and the practice has adapted diverse psychological approaches (e.g., humanistic, behavioral, cognitive, psychodynamic, clinical) (Grant & Stober, 2006). Among these widely divergent views, the humanistic approach is "an underlying philosophical foundation of coaching today" (Stober, 2006, p. 17). Key concepts from the humanistic approach that have been applied to coaching include self-actualization, growth-oriented and holistic views of the person, and collaborative and trust relationships. Coaching based on this approach incorporates practices that emphasize sources of motivation, empowerment, and facilitation (Brock, 2008).

In addition, behavioral and cognitive approaches have had a dominant influence, specifically in coaching practiced in organizations (Cameron & Ebrahimi, 2014; Ives, 2008). Considering the fact that managerial coaching and performance improvement cannot be separated from each other (Hargrove, 1995; Orth, et al., 1987), behavioral change among employees is the primary goal of managerial coaching. Based on this approach, diverse behavioral techniques, such as goal-setting and measurement of

progress, are widely used. The cognitive approach adds cognitive dimensions to behavioral change. This approach focuses on perception and consciousness by helping employees to examine their assumptions, schemas, and mental models to look out alternative view (Auerbach, 2006). Through holistic incorporations of behavioral and cognitive techniques, these two perspectives offer effective tool s for coaching and performance improvement (Roman, 2014).

Definition of Managerial Coaching

Managerial coaching has been defined from different perspectives (Hamlin, Ellinger, & Beattie, 2009). The traditional (but outdated) view of coaching is that the process fixes poor performance. Similarly, Fournies (1978) defined coaching as a process for improving problem work performance. Later, many scholars emphasized performance improvement as the primary goal of coaching. For example, Orth et al. (1987), in a highly cited definition, identified coaching as "a day-by-day, "hands-on" process of helping employees recognize opportunities to improve their performance and capabilities." (p. 67). Hargrove (1995) referred to coaching as "Interacting with people in a way that teaches them to produce often spectacular results in their business." (p. 1). Another major perspective on coaching considers it as a developmental process. Peterson and Hicks (1996) defined coaching as "The process of equipping people with the tools, knowledge, and opportunities they need to develop themselves and become more effective." (p. 14). Redshaw (2000) considered coaching "Systematically increasing the capability and work performance of someone by exposing him or her to work-based tasks or experiences that will provide the relevant learning opportunities,

and giving guidance and feedback to help him or her to learn from them." (p. 107).

Within the developmental perspective, scholars have offered additional learning-focused definitions. Ellinger and Bostrom (1999) identified coaching with facilitating learning. Mink et al. (1993) conceived of coaching as "The process by which one individual, the coach, creates enabling relationships with others that make it easier for them to learn." (p. 2). Table 1 presents more exclusive definitions of managerial coaching. Although these definitions are all slightly different, this study encompass both perspectives, defining managerial coaching as an effective managerial practice that helps employees develop themselves and improve performance.

To ensure clarity regarding this construct, it is necessary to distinguish managerial coaching from similar practices. Managerial coaching has often been compared with executive coaching and mentoring (e.g., Joo, Sushko, & McLean, 2012; Gregory & Levy, 2010). Some scholars have recently suggested that in addition to being distinct from these similar practices, managerial coaching can be subdivided into several different types (Beattie et al., 2014).

Managerial coaching and executive coaching. Managerial coaching and executive coaching are the most common types of coaching implemented in today's workplace (Herrera, 2010; Zhang, 2008). These two coaching types have traditionally been used to address weakness or unsatisfactory performance, with the aim of improving performance (Joo, 2005). However, there are three clear distinctions between these types of coaching. First, in terms of the coach-coachee relationship, managerial coaching is mainly conducted by an immediate supervisor, while executive coaching is performed by

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an external, professional coach. Second, in terms of the format of coaching, executive coaching primarily consists of a formal sit-down session, whereas managerial coaching often involves "informal, occasional or even opportunistic" interactions as an integrated part of management activities (Anderson, 2013, p.3).

Third, managerial coaching focuses exclusively on achieving work goals through learning and development (Fillery-Travis & Lane, 2006). In contrast, executive coaching is personalized to allow for an open agenda that may include personal, job, or organization-related issues (Joo, 2005).

Managerial coaching and mentoring. Managerial coaching and mentoring are both one-on-one developmental relationships (Kram, 1985). However, they can be distinguished in several ways. According to Liu and Batt (2010), managerial coaching focuses on specific, short-term performance improvement between an employee and his or her immediate supervisor. In addition, managerial coaching is a predominantly process-oriented activity, occurring through regular interactions to help individuals develop skills and competences and overcome difficulties in performance. Alternatively, mentoring is a long-term, predominantly on-going relationship providing psychological support and resources for career development, and a mentor is not necessarily a direct supervisor. Rather, the mentor could be an expert who has years of experience in specific areas either inside or outside of the organization (Kram, 1985).

Types of managerial coaching. Recently, Beattie et al. (2014) classified managerial coaching practices into four types according to the nature of the coaching relationship: hierarchical, peer, team, and cross-organizational coaching. This

classification of different types of coaching clarified the concept of managerial coaching, given that it had been presented differently in previous studies under the same label of "managerial coaching." According to Beattie et al. (2014), hierarchical coaching involves supervisors coaching their subordinates in one-on-one relationships, which is the most well-known and researched type of managerial coaching. Peer coaching is a type of interaction through which participants learn from each other in reciprocal relationships. Team coaching essentially occurs between a team leader and team members, thus creating completely different dynamics from one-on-one coaching. Cross-organizational coaching occurs through a collaborative effort between two or more organizations. The focus of this study is on hierarchical coaching.

Table 1.

Definitions of Managerial Coaching

Authors	Definition
Fournies (1987, p. xii)	"a step-by-step process that guides managers in their daily efforts to manage people's good and bad performance."
Evered and Selman (1989, p. 18)	"The managerial activity of creating, by communication only, the climate, environment, and context that empowers individuals and teams to generate results."
Orth et al. (1987, p.67)	"a day-by-day, "hands-on" process of helping employees recognize opportunities to improve their performance and capabilities."
Mink, Owen, & Mink (1993, p.2)	"The process by which one individual, the coach, creates enabling relationships with others that make it easier for them to learn."
Hargrove (1995, p.1)	"Interacting with people in a way that teaches them to produce often spectacular results in their business. Coaching is about challenging and supporting people, giving them the gift of your presence."
Peterson & Hicks (1996, p.14)	"The process of equipping people with the tools, knowledge, and opportunities they need to develop themselves and become more effective."

Redshaw (2000, p.107)	"Systematically increasing the capability and work performance of someone by exposing him or her to work-based tasks or experiences that will provide the relevant learning opportunities, and giving guidance and feedback to help him or her to learn from them."
Grant (2006, p.112)	"A collaborative solution-focused, results-oriented and systematic process in which the coach facilitates the enhancement of performance, life experience, self-directed learning, and personal growth of individuals and organizations."
Ellilnger, Ellinger, Hamlin, & Beattie (2010, p.277)	"Provided by a supervisor or manager serving as a facilitator of learning. The manager or supervisor enacts specific behaviors that enable the employee (coachee) to learn and develop, and thereby improve performance."

Skills and Behaviors of Managerial Coaching

As the concept of managerial coaching emerged, studies began to examine what managerial coaching looks like in practice. This area of the literature is relatively robust and has yielded a substantial amount of knowledge (Ellinger, Hamlin, Beattie, Wang, & McVicar, 2011; Hagen, 2012). Two distinct approaches have been used in prior investigations: a skills perspective and a behavioral perspective. From the skills perspective, many practitioners and consultants have suggested specific sets of managerial coaching skills (Ellinger et al., 2003; Gilley, Gilley, Kouider, 2010), and they overlap considerably: listening, questioning, interviewing, observing, analyzing, giving feedback, building trust relationships, and setting goals (Evered & Selman, 1989; Graham et al., 1994; Orth et al., 1987; Peterson & Hicks, 1996; Stowell, 1988). These skills have been described in a normative and prescriptive manner, but they lack empirical evidence. Revising the work of McLean, Yang, Kuo, Tolber, and Larkin (2005), Park, McLean, & Yang (2008) added a new dimension and validated an instrument to measure coaching

skills in five areas: *open communication, team approach, value people, accept ambiguity*, and *facilitate development*.

Another main perspective on managerial coaching is the behavioral perspective. In a foundational quantitative study, Ellinger and Bostrom (1999) identified thirteen managerial coaching behaviors that could be grouped into two clusters: facilitating and empowering. Similarly, Beattie (2002) described twenty-two coaching behaviors and classified them into nine categories: *thinking, informing, empowering, assessing, advising, being professional, caring, developing others*, and *challenging employees to stretch themselves*. Hamlin (2004) identified six behavioral categories of effective coaching with connections to managerial and leadership effectiveness. Hamlin, Ellinger, and Beattie (2006) conducted a meta-analysis of their studies on managerial coaching behaviors and found several common behaviors, even though the examined studies were conducted in different organizational contexts and countries. Common behaviors included "creating a learning environment, caring and supporting staff, providing feedback, communicating, and providing resources including other people" (p. 325). Whereas Ellinger and Bostrom (1999), Beattie (2002), and Hamlin (2004) focused mainly on employees' learning and development through a facilitative approach, Heslin et al. (2006) and Hui et al. (2013) included more direct approaches to improve performance as well as to facilitate learning. Heslin et al. (2006) suggested ten coaching behaviors that were clustered into three sub-constructs: guidance, facilitation, and inspiration. Guidance is related to "the communication of clear performance expectations and constructive feedback regarding performance outcomes, as well as how to improve"

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(p.878). Facilitation refers to "helping employees to analyze and explore ways to solve problems and enhance their performance" (p.878). Inspiration refers to "challenging employees to realize and develop their potential" (p.878). Whereas guidance is a direct intervention, facilitation and inspiration are indirect and empowering interventions. Similarly, Hui et al., (2013) developed two contrasting coaching styles: guidance and facilitation. Table 2 summarizes the coaching skills and behaviors identified in the literature.

Table 2.

Managerial Coaching Skills and Behaviors

Authors	Managerial Coaching Skills / Behaviors
Beattie (2002)	1) Caring 2) Informing 3) Being professional 4) Advising 5) Assessing 6) Thinking 7) Empowering 8) Developing others 9) Challenging employees to stretch themselves
Ellinger et al. (2003)	1) Personalizing learning situations 2) Broadening employees' perspectives 3) Question framing to encourage employees to think through issues 4) Stepping into other's shoes to shift perspectives 5) Providing feedback to employees 6) Soliciting feedback from employees 7) Being a resource 8) Setting and communicating goals and expectations
McLean et al. (2005)	1) Open communication 2) Value people over task 3) Ambiguous nature of the working environment 4) Team approach

Heslin et al. (2006)	1) Guidance
	   - Provide guidance regarding performance expectations
	   - Help you to analyze your performance

	- Provide constructive feedback regarding areas for improvement - Offer useful suggestions regarding how you can improve your performance 2) Facilitation - Act as a sounding board for you to develop your ideas - Facilitate creative thinking to help solve problems - Encourage you to explore and try out new alternatives 3) Inspiration - Express confidence that you can develop and improve - Encourage you to continuously develop and improve - Support you in taking on new challenges
Park et al. (2008)	1) Open communication 2) Team approach 3) Value people 4) Accept ambiguity 5) Develop people
Hui et al. (2013)	1) Guidance - Provided accurate answers to your questions - Asked you to follow exactly what is taught to perform the task after demonstrating how to perform the task - Explained to you why his method of performing the task during the demonstration is efficient - Expressed his confidence that you can develop and improve if you follow his suggestions - Provided direct answers to your questions 2) Facilitation - Encouraged you to continuously develop and improve through generating your own solution - Supported you in taking on new challenges through encouraging you to set your own goals - Encouraged you to learn from mistakes - Facilitated your creative thinking to solve problems - Allowed you to develop your own way of performing the task

Empirical Research on Managerial Coaching

As managerial coaching is an emerging area of HRD, a growing number of empirical studies are exploring it (Ellinger, Ellinger, Hamlin, & Beattie, 2010). This section discusses empirical studies on managerial coaching from the perspective of the nomological network.

Antecedents of Managerial Coaching

The antecedents of managerial coaching are related to the question of what constitutes effective managerial coaching, and the existing literature has two foci: managers' beliefs and motivation, and relational factors between managers and employees.

Underlying beliefs and motivation of managers. Based on the assertion that beliefs are a key determinant of motivation and behavior (Fishbein & Ajzen,1975), many researchers and practitioners have asserted that the beliefs of coaching managers play a fundamental role in determining their level of motivation to coach others (Latham, 2007; Ellinger & Bostrom, 2002; Heslin et al., 2006). Consistent with this notion, Ellinger and Bostrom (2002) conducted an initial qualitative study of managerial coaching beliefs, suggesting that what managers believe about coaching is critical to their ability to coach effectively. This is based on the assumption that beliefs shape the way a person perceives a situation, leading to specific behaviors (Ellinger & Bostrom, 2002). To examine managerial coaching beliefs, they interviewed twelve exemplary coaching managers regarding their effective coaching experiences using a critical incident technique (CIT). From the data collected, they identified five clusters of beliefs, which were then grouped

into three categories. The first category is *beliefs about roles and capabilities*. Coaching managers perceived their role as the facilitation of learning and development. These managers also differentiated coaching from management; they believed that coaching involves helping and supporting employees' growth and development, whereas management requires directing individuals and telling them what they should do. In regard to coaching ability, coaching managers were confident in their coaching roles and were equipped with appropriate skills and experience. The second category is *beliefs about the learning process and learning*. In the learning process, feedback and the integration of work and learning were considered critical. In addition, coaching managers believed that learning must be promoted by the employees themselves and that learning should be "important, ongoing, and shared*"* (p.164). The third category is *beliefs about learners*. This category showed that coaching managers trusted employees' capabilities and willingness to learn. Coaching managers also acknowledged employees' desire for having "a solid information foundation" and for "understanding the whys" (p.166). It should be mentioned that this study was conducted under the assumption that coaching and facilitation of learning are identical, and this was reflected in the labeling of categories and clusters such as learning and learner.

Heslin et al. (2006) empirically demonstrated the quantitative relationship between managers' underlying beliefs about the changeability of personal attributes and their inclination to coach their employees. To measure beliefs, they adopted the *implicit person theory* (ITP), which contains two contrasting perspectives: *entity theory* and *incremental theory*. Persons who adhere to entity theory believe personal attributes are

unchangeable, but those who adhere to incremental theory believe human attributes are changeable and can be developed (Dweck, 2000) After controlling for supervisors' age and management experience, Heslin et al. (2006) found that supervisors with an entity theory approach were less likely to coach their employees, whereas supervisors with an incremental theory approach were more likely to exhibit coaching behaviors. In other words, if supervisors do not believe that employees' attributes can change, they may not invest time and effort in helping employees learn and improve.

Relational factors. Relationships between managers and employees have been considered an essential prerequisite for effective managerial coaching (Hunt & Weintraub, 2002). A study by Gregory and Levy (2010) is notable for its conceptualization of the *coaching relationship*. Although a number of researchers have suggested the importance of the supervisor-employee relationship in determining whether coaching occurs (Evered & Selman, 1989; Graham, et al., 1993; Hunt & Weintraub, 2002; Scandura & Schriesheim, 1994), they have not specifically depicted what these relationships look like. In their pioneering research, Gregory and Levy (2010) developed a twelve-item measure of what they termed *perceived quality of the employee coaching relationship (PQECR)*. This measure is composed of four dimensions: (a) genuineness of the relationship, (b) effective communication, (c) comfort with the relationship, and (d) facilitation of development. The dimension *genuineness of the relationship* describes "how genuine the subordinate perceives the supervisor and relationship to be" (p.118). *Effective communication* refers to "how well the supervisor communicates with the subordinate, as well as how 'available' the subordinate perceives the supervisor to be"

(p.118). *Comfort with the relationship* refers to "how comfortable the subordinate is working with his/her supervisor and discussing his/her needs or goals with the supervisor" (p.118). Last, *facilitation of development* is described as "the extent to which the coaching relationship facilitates learning and development for the subordinate" (p.118). These four dimensions describe what the coaching relationship should look like.

      Anderson (2013) and Sue-Chan, Chen, and Lam (2011) explored the role of leader-member exchange (LMX) in a manager's implementation of coaching. LMX describes "how leaders develop different exchange relationships over time with various subordinates," with an emphasis on "reciprocal influence processes" (Yukl, 2002, p116). As part of his quantitative research, Anderson (2013) found that high-quality LMX increases a manager's propensity for coaching. Anderson emphasized that being a coaching manager requires a manager to take a more interactive and less leader-centric approach to leadership. Based on *attribution theory* (Heneman, Greenberger, Anonyuo, 1989), Sue-Chan, Chen, and Lam (2011) focused on the extent to which LMX relationships could be attributed to employees' perceptions of their supervisors' coaching motives. The effectiveness of the coaching differed depending on how the subordinates perceived their supervisors' coaching motivation. They found that in lower quality LMX relationships, subordinates were likely to attribute their manager's coaching behaviors to the manager's compliance with organizational requirements (*self-focused interests*). Thus, there was no positive effect of managerial coaching on employees' performance. In higher quality LMX relationships, however, subordinates were likely to attribute their manager's coaching to the manager's willingness to help employees and

encourage their development (*other-focused interests*), leading to enhanced performance. Thus, close and positive relationships played a pivotal role in producing desirable results from coaching and affected the employees' perceptions of their managers' behaviors.

Outcomes of Managerial Coaching

Studies exploring the benefits of managerial coaching have been conducted with a primary focus on performance outcomes and relevant variables such as job satisfaction, organizational commitment, and employee learning. In their pioneering research, Ellinger et al. (2003) conducted empirical studies of the relationship between supervisors' coaching behaviors and employees' job performance and job satisfaction. This study of 438 warehouse employees and 67 supervisors showed that a supervisor's coaching behavior is a significant predictor of employees' job performance and satisfaction. Utilizing 187 samples in a technology organization, Park (2007) examined the impact of managerial coaching on employee outcomes. The results indicated positive associations with employee learning and organization commitment and a negative association with turnover intentions.

Three studies have examined the cross-level effects of coaching. Agarwal et al. (2009) examined the impact of managers' coaching intensity on their direct reports' performance at multiple levels. Using 328 sales associates and 93 middle managers, the authors found that managers' coaching intensity affects their subordinates' performance after controlling for job satisfaction. At higher hierarchical levels, this impact decreased. However, no cross-level moderating effects of coaching intensity on the relationship between satisfaction and performance were found. In their multilevel study, Liu and Batt

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(2010) investigated the role of coaching and management practice in improving employee performance. Utilizing a quasi-experimental design in a call center, calls or task assignments were randomly distributed via automated technology. The authors found that the extent to which call center agents received coaching each month predicted their performance improvement. Additionally, this positive relationship was strengthened by the provision of group incentives. More recently, Dahling et al. (2015) conducted a longitudinal study testing the linkage of managerial coaching frequency and skill to the goal attainment of pharmaceuticals sales representatives at multi-levels. Their findings showed that managers' coaching skills were positively associated with the annual goal attainment of their direct sales representatives. The coaching skills moderated the relationship between coaching frequency and goal attainment at a cross level. Moreover, the frequency of coaching negatively influenced sales goal attainment when coaching skills were at a low level.

Recently, a few studies have started to examine intervening variables in the relationship between managerial coaching and performance outcomes. Kim (2014) investigated the effects of a mediating mechanism on the relationship between managerial coaching and employee outcomes. Based on a study of 234 employees at a private Korean company, the author examined the direct effects of managerial coaching on role clarity and job performance. Managerial coaching indirectly influenced job satisfaction through role clarity, organizational commitment through job satisfaction, and job performance through role clarity. Huang and Hsieh (2015) examined the effects of managerial coaching on employees' in-role and proactive career behavior, with an

investigation of the mediating role of psychological empowerment. The results of a data analysis using 324 Taiwan employees showed that managerial coaching has positive effects on employees' performance and proactive career behavior. In addition, this study found a full mediation of psychological empowerment on the coaching-performance relationship and a partial mediation on the coaching-proactive career behaviors relationships.

Organizational Support Theory

Organizational support theory (hereafter abbreviated OST, Eisenberger et al., 1986; Shore & Shore, 1995) was used in the current study as a theoretical rationale for the relationship between managerial coaching and its outcomes. This theory postulates that employees form perceptions and beliefs regarding the degree to which their organization recognizes their hard work, values their commitment, and cares about their physical and psychological health. In the literature, this notion is conceptualized as perceived organizational support (POS, Eisenberger et al., 1986). According to the large volume of POS literature, employees develop a consistent pattern of beliefs regarding their organization's amicable or non-amicable treatment and positive or negative attitude toward its employees.

OST also addresses the psychological process underlying the relationship between employees' beliefs concerning the manner in which the organization treats them and the consequences of these beliefs. First, in line with the reciprocity norm, such beliefs can influence employees' sense of obligation to be concerned about the long-term success and welfare of the organization and to willingly contribute to the attainment of

organizational objectives. Second, approval, respect, and care by the organization should satisfy socio-emotional needs, leading employees to perceive themselves as organizational members, embrace organizational core values, incorporate the organizational image into their social identity, and regard the fate of the organization as theirs. According to empirical studies, these processes have favorable outcomes such as job satisfaction (Miao, 2011), affective attachment to the organization (Eisenberger et al., 1986; Eisenberger, Fasolo, Davis-LaMastro, 1990), job involvement (O'Driscoll & Randall, 1999), and task outcomes (Rhoades & Eisenberger, 2002)

Just as employees construct beliefs in regard to how the organization treats them, they also develop general perceptions concerning the extent to which their superiors value their efforts, place a premium on their contributions to the team, and care about their wellness. Because superiors are principal agents of the organization, with responsibilities for managing and evaluating individuals' performance, employees regard their superiors' orientation and attitude toward them as a sign of support from the organization (Levinson, 1965).

Variables Used in this Study

This study suggests in-role behavior and innovative behavior as outcome variables. Role clarity (Rizzo et al., 1970) and psychological empowerment (Spreitzer, 1995) are suggested as mediating variables in the relationship between managerial coaching and the two outcome variables. A brief review of the literature will be provided in the following section.

In-Role Behaviors

Scholars have long examined what types of behaviors in an organization are directly linked to employees' performance and can contribute to organizational sustainability and wellness (Katz, 1964; Motowildo, Borman, & Schmit, 1997; O'reilly & Chatman, 1986; Willams & Anderson, 1991; Griffin et al., 2007). One of the most representative constructs in the performance domain is in-role behavior in the academic field of HRD (e.g., Dysvik, Kuvaas, & Buch, 2010; Ellinger et al., 2003; Hui et al., 2013; Hwang et al., 2015; Joo, Jeung, & Yoon, 2010; Park et al., 2015; Rasheed, Khan, Rasheed, & Munir, 2015; Reio & Wiswell, 2000; Tang & Reynolds, 1993). In-role behavior refers to the fulfillment of behaviors and activities that are formally required by job requirements and reward systems (Williams & Anderson, 1991). In the literature, in-role behavior has been used interchangeably with task performance or job performance (e.g., Rosen, Levy, & Hall, 2006).

Innovative Behaviors

In this era of fast-paced business environments, researchers have been fascinated by employees' innovative behaviors that extend beyond their job descriptions. These behaviors involve introducing new skills, generating new ideas, and realizing or implementing new ideas (Scott & Bruce, 1994). Creative behavior has often been mentioned as a similar concept, related to generating both ingenious and valuable ideas (Amabile, 1988; Oldham & Cummings, 1996). Because innovative behavior involves not only the generation of new and original ideas but also their implementation, as well as the management of the whole process of implementing these ideas, creative behavior is now

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regarded as a subdimension of innovative behavior (Shalley, Zhou, & Oldham, 2004; Zhou, 2003).

Role Clarity

Role clarity is defined as the degree to which an individual understands the necessary job information and performance expectations concerning a given position in an organization (Rizzo et al., 1970). Role clarity and role ambiguity are often used interchangeably in the literature to describe the degree of understanding an individual has of a role, and the two are generally considered opposite of one another (Tracy & Johnson, 1981). According to role theory, a high level of ambiguity should increase the likelihood of an individual's dissatisfaction with a role, as well as increase the level of job stress and burnout (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964; Papastylianou, Kaila, & Polychronopoulos, 2009), thus reducing the level of performance (Rizzo et al., 1970). Conversely, an increase in role clarity will decrease role strain, the need for problem solving and coping attempts, and the likelihood of a distortion of situational reality (Rizzo et al., 1970).

Psychological Empowerment

Management scholars and practitioners have paid substantial attention to the term "empowerment," particularly in the 1980s (Young, 1992). This notion was derived from employee involvement and participative management (Spreitzer, Kizilos, & Nason, 1997). As the Japanese automobile company Toyota gradually succeeded in both American and global markets, scholars turned their attention to the foundations of Toyota's remarkable success (Honold, 1997). Using various qualitative methods, researchers found (e.g.,

Hamilton & Smith, 1993; Koskela, 1992; Sarin & Kalra, 1988) that one of Toyota's core success factors was employee empowerment, in addition to the company's unique production system. Since this unlocking of the key to Toyota's success, the importance of empowerment has been heavily emphasized (Wellins, 1994). Scholars and practitioners have stressed and implemented policies and practices involving cascading power, delegation, quality circles, and participative decision-making to enhance empowerment at the macro level (Honold, 1997). This approach was later conceptualized as 'structural empowerment' (Liden & Arad, 1996; Spreitzer, 2008).

Meanwhile, the psychological aspect of empowerment at the micro level emerged in the 1990s. Spreitzer (1995) first introduced the notion of psychological empowerment, meaning that an individual believes that he or she has discretionary authority with respect to his or her task and job (Spreitzer, 1995). Specifically, psychological empowerment is characterized by four cognitive dimensions: (a) the fit between a job goal or purpose and an individual's own values and beliefs (meaning); (b) an individual's belief in his/her own ability to fulfill his/her responsibilities with skill (competence); (c) autonomy and decision-making in work behavior, processes, pace, and effort (self-determination); and (d) the degree to which a person can influence administrative or strategic consequences at work (impact; Spreitzer, 1995; Thomas & Velthouse, 1990).

Research Model and Hypotheses

Based on the above literature review, hypotheses and a hypothesized research model have been developed (see Figure 1).

Managerial Coaching and In-Role Behavior

Managerial coaching is an effective manager's intervention designed to help employees become more competent (Peterson & Hicks, 1996). During the coaching process, managers communicate with their employees regarding organizational expectations using diverse coaching skills such as listening, questioning, and offering feedback; managers and employees collaboratively set a performance goal and an implementation plan to achieve that goal. Such ongoing support and engagement from managers throughout task implementation encourages employees to learn task-related knowledge and skills, which in turn leads to improvement in employee performance.

According to organizational support theory (OST, Eisenberger, et al., 1986), managers' support within organizations is an important resource that employees can use to enhance their job performance. Managerial coaching can be a form of social support rendered by managers or supervisors in the form of work-related information and feedback. Through the process of giving feedback, managers express appreciation for employees' efforts and achievements. Employees thus sense the extent to which the organization values them, which leads them to put more effort and time into improving their performance to reciprocally benefit the organization (Shanock & Eisenberger, 2006).

Performance advancement has often been suggested as the primary outcome of managerial coaching (Evered & Selman, 1989; Orth et al., 1987). Empirical research regarding the direct coaching-performance relationship supports this notion. Ellinger et al. (2003) found this positive association in their initial empirical study examining the

effect of managerial coaching on job satisfaction and performance. In addition, a longitudinal study by Liu and Batt (2010) found that the more employees received effective managerial coaching, the more their job performance significantly improved. Huang and Hsieh (2015) also found a positive association between managerial coaching and in-role behavior and proactive career behavior. Based on the above argument and empirical findings, I propose the following hypothesis:

> *Hypothesis 1: Managerial coaching behavior is positively related to employees'*
> *in-role behavior.*

Managerial Coaching and Innovative Behavior

Although the positive effect of managerial coaching on in-role behavior has often been suggested and examined, managerial coaching may also stimulate employees' innovative behavior. Contrary to the traditional management approach of command and control, managerial coaching pursues an approach aimed at self-discovery by empowering and motivating employees to fully engage in their work and to advance from their previous levels of performance (Ellinger et al., 2010; Grant, 2010). Coaching managers encourage employees to explore and develop new ideas and to take on new challenges (Heslin et al., 2006). Innovation involves a series of stages including detecting a problem, generating a novel idea, building support, and finally implementing the idea (Scott & Bruce, 1994). During this process, it is inevitable for employees to experience repeated – and often discouraging – failures associated with innovation. In fact, it has been argued that innovative behavior is largely a question of individuals' motivation (Amabile, 1988), in addition to their relevant knowledge, skills, and abilities (Amabile,

1988; Barron & Harrington, 1981). Accordingly, many scholars have stressed the role of managers in promoting and maintaining employees' innovative behavior (e.g., Rosing, Frese, Bausch, 2011; Scott & Bruce, 1994). In line with OST, employees who receive coaching from their managers may come to believe that the organization will support them by providing instrumental and emotional aid when their job requires them to perform differently and to confront stressful situations caused by initiating new ideas and taking on challenges. Thus, through encouragement and emotional support of employees, managerial coaching can promote employees' innovation.

To my knowledge, there has been no research investigating the direct effect of managerial coaching on innovative behavior; however, there is empirical evidence that managerial support, as obtained from transformational leadership behavior (e.g., Pieterse, Van Knippenberg, Schippers, & Stam, 2010) and feedback behavior (e.g., Noefer, Stegmaier, Molter, & Sonntag, 2009), positively impacts innovative behavior by employees. Thus, I anticipate a positive relationship between managerial coaching and employees' innovative behavior.

Hypothesis 2: Managerial coaching behavior is positively related to employees' innovative behavior.

Mediation by Role Clarity

Sufficient information regarding one's job is essential to perform effectively. Unsatisfactory performance is often caused by a lack of understanding of the goals and responsibilities that a specific job entails (Tubre & Collins, 2000). Role clarity is a perception reflecting the degree to which an individual has the job information and

performance expectations necessary for a given position in an organization (Rizzo, et al. 1970). Communication with managers is critical to acquiring a clear understanding regarding a job. In particular, systematic feedback provided in the process of managerial coaching could help employees increase not only their self-awareness (Peterson & Hicks, 1996) but also their level of role clarity on the job (Whitaker, Dahling and Levy, 2007).

In addition, a high level of role clarity may also help employees to be more creative at work. Many researchers have asserted that having a clear understanding of role expectations or goals affects employees' creativity and creative initiatives (e.g., Ford, 1996; Shalley & Gilson, 2004; Sherman, 1989). Considering that creativity is an inclusive concept of innovation, it would be reasonable to infer that employees' role clarity would be related to their innovative behavior.

Accordingly, this study suggests that role clarity mediates the link between managerial coaching and employees' job performance and the link between managerial coaching and innovative behavior. Whitaker et al. (2007) showed that employees with clearer understandings of their roles and responsibilities displayed higher levels of performance. Several recent studies provide direct empirical evidence that managerial coaching helps employees' better understanding of their role and expectations (e.g., Dahling et al., 2015; Kim 2014; Kim, Egan, Kim, & Kim, 2013). Based on the above argument and empirical evidence, I propose the following hypotheses:

Hypothesis 3: Managerial coaching behavior is positively related to the role clarity of employees.

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Hypothesis 4: The role clarity of employees mediates the relationship between managerial coaching behavior and employees' in-role behavior.

Hypothesis 5: The role clarity of employees mediates the relationship between managerial coaching behavior and employees' innovative behavior.

Mediation by Psychological Empowerment

Psychological empowerment means that an individual believes he or she has discretionary authority with regard to his or her task and job (Spreitzer, 1995). It is characterized by four cognitive dimensions: meaning, competence, self-determination, and impact (Spreitzer, 1995). Specifically, meaning refers to the fit between a job goal or purpose and an individual's own values and beliefs; competence refers to an individual's belief in his/her own ability to fulfill responsibilities with skill; self-determination refers to autonomy and decision-making in work behavior, processes, pace, and efforts; and impact refers to the degree to which a person can influence administrative or strategic consequences at work (Spreitzer, 1995; Thomas & Velthouse, 1990).

This study suggests that the diverse behaviors of managerial coaching could promote the psychological empowerment of employees. Open communication, collaborative goal-setting, and the provision of feedback appear to give employees opportunities to find meaning in their tasks by aligning their own values with organizational goals and by developing relevant work skills and competence. The higher levels of empowerment and autonomy pursued in the coaching process are likely to provide employees with self-determination and an enhanced sense of impact by allowing them to control their work situations on their own. In their meta-analysis of the literature

on psychological empowerment, Seibert, Wang, and Courtright (2011) found that managers' supportive behaviors, such as constructive feedback and coaching, are positively associated with employees' psychological empowerment. In addition, Huang and Hsieh (2015) found that psychological empowerment mediated the coaching-performance relationship.

Previous studies have supported the notion that psychologically empowered employees exhibit not only higher levels of job performance (Gregory, Albritton, & Osmonbekov, 2010; Liden, Wayne, & Sparrowe, 2000; Seibert, Silver, & Randolph, 2004) but also higher levels of innovation (Chang & Liu, 2008; Pieterse et al., 2010; Zhang & Bartol, 2010). Perceiving greater ownership and discretion at work may lead to performance improvement and encourage employees to implement their ideas about change, resulting in greater innovation at work (Kanter, 1983; Spreitzer, 1995). Thus, the following hypotheses are proposed:

Hypothesis 6: Managerial coaching behavior is positively related to the psychological empowerment of employees.

Hypothesis 7: Psychological empowerment of employees mediates the relationship between managerial coaching behavior and employees' innovative behavior.

Hypothesis 8: Psychological empowerment of employees mediates the relationship between managerial coaching behavior and employees' in-role behavior.
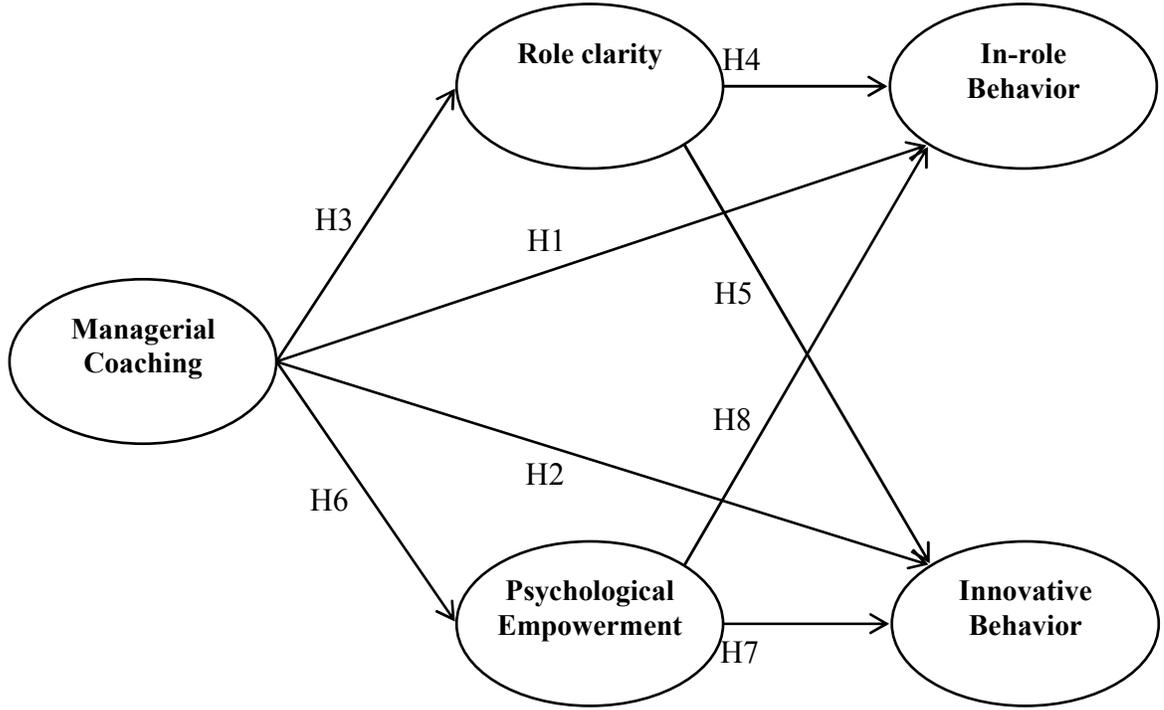
Figure 1. Hypothesized research model

CHAPTER 3

METHODS

The purpose of the present study is to examine the relationship between managerial coaching and two work outcomes: in-role and innovative behavior. In addition, this study aims to examine the mediating effect of role clarity and psychological empowerment on this relationship. To conduct the present study, a correlational design was employed. A multivariate regression analysis and structural equation modeling was used to test hypotheses. The following sections describe the participants, data collection procedures, measurements, and the details of the techniques utilized for the data analysis.

Participants and Data Collection Procedures

The target population for this study comprised employees at for-profit companies in South Korea. Data were collected from diverse sectors including manufacturing, construction, distribution/sales, information technology, finance, and service/consulting. The organizations included were small (< 50 employees), medium (50–1000 employees), and large (>1000 employees), and convenience sampling was employed. After receiving approval from the Institutional Review Board (IRB) at the University of Minnesota (see Appendix A), HR/HRD managers or general managers of the target organizations were contacted using my professional network. Then, a survey along with a cover letter was sent via email to managers who had agreed to participate in the survey. After distribution of the initial survey, two more reminders were sent. In the selection process, however, I excluded employees who had a work relationship with their current manager or

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supervisor of fewer than 6 months because the participants needed sufficient experience

to rate their manager's coaching behaviors.

The questionnaire consisted of three parts. The first included a written agreement

regarding confidentiality and voluntary participation, according to the IRB's protocol. In

the second part, participants were asked to rate their immediate supervisor's coaching

behavior and to assess the clarity of their role, their sense of empowerment, and their in-

role and innovative behaviors. The last part included a questionnaire of participants'

demographic characteristics such as age, gender, education level, years of experience,

and organizational rank (See Appendix B). Overall, 277 surveys were completed.

However, 3 cases were removed from the sample due to incomplete surveys, and 1 case

was eliminated because it used the same responses consecutively. Therefore, the final

sample size for analysis was 273.

Demographic Characteristics of the Participants

To examine the demographic characteristics of the 273 complete cases,

descriptive statistics were computed. As presented in Table 3, of the respondents, 73.6%

were male (n=201). In terms of education level, 96.7% held at least a bachelor's degree,

and 29.3% held a graduate degree. The average age of the sample was 35.5 years, ranging

from 25 to 50 years (SD=5.2). Specifically, 35.2% ($n = 96$) of the participants were 36 -

40 years old, and 27.1% (n=74) were 31-35 years old. Also, 20.9% ($n = 59$) were younger

than 30 years, and 16.9% were older than 40 years. The years of tenure in the current job

were 6.3 years on average. In particular, the largest group of respondents, 48.7% ($n =

133$) had more than 5 years of tenure, and, the smallest group, 9.2% ($n = 25$) had less than

1 year of tenure. The years of relationship with the current manager were 3.8 years on average. The respondents with relationships of 1 to 3 years were the largest group (36.6%), followed by ones with relationships of 6 months to 1 year. The respondents with relationship of 3 to 5 years were the smallest group (18.0%), followed by ones with more than 5 years (21.6%).

Table 3

Demographic Characteristics

	Category	Frequency	Percentage
Gender	Female	72	26.4
	Male	201	73.6
Age	Less than 26	4	1.5
	26 ~ 30	53	19.4
	31 ~ 35	74	27.1
	36 ~ 40	96	35.2
	41 ~ 45	42	15.4
	46 ~ 50	4	1.5
Highest Education level	High school graduate	2	0.7
	Associate degree	5	1.8
	Bachelor's degree	184	67.4
	Masters' degree	77	28.2
	Doctoral degree	3	1.1
Years of Tenure in Current Job	1 year or less	25	9.2
	More than 1 year to 3 years	67	24.5
	More than 3 years to 5 years	48	16.6
	More than 5 years	133	48.7
Years of Relationship with Manager	6 months ~ less than 1 year	61	22.3
	1 ~ 3 years	100	36.6

	3 ~ 5 years	52	18.0
	More than 5 years	59	21.6
Organizational Rank	Individual contributor	58	21.2
	Assistant manager	64	23.4
	Manager	86	31.5
	Senior manager	38	13.9
	General manager	27	9.9
Job Areas	Production	8	2.9
	Marketing/Sales	54	19.8
	Strategy/Planning	28	10.3
	Research and Development	94	34.4
	Administration/Management	50	18.3
	Finance/Accounting	1	0.4
	Others	38	13.9
Industry Type	Manufacturing	97	37.5
	Construction	35	13.5
	Distribution/Sales	35	13.5
	IT	29	11.2
	Finance	13	5.0
	Service/Consulting	44	17.0
	Others	10	3.9
Size of Organization	Less than 50	40	14.7
	50 ~ 100	20	7.3
	100 ~ 300	33	12.1
	300 ~ 700	28	10.3
	700 ~ 1000	10	3.7
	More than 1000	135	49.5

Demographic Characteristics of the Managers

Two demographic characteristics of the managers were also collected from the participants because the perceptions of participants regarding managers' coaching behaviors may be affected by managers' demographic characteristics. As presented in Table 4, 82.4% of the managers were male (n=225). The majority of participants and their managers were male (73.6%, 82.4% respectively). The average age was 44.5 years, ranging from 29 to 68 years (SD=6.4). Specifically, 42% (n=102) of the managers were 41-45 years old, and 30% (n=73) were 46-50 years old. On average, there were about 10 years of age difference between the participants and their managers (35.5 and 44.5 years, respectively).

Table 4

Managers' Demographics Characteristics

	Category	Frequency	Percentage
Gender	Female	40	14.7
	Male	225	82.4
Age	Less than 31	3	1.2
	31 ~ 35	9	3.7
	36 ~ 40	16	6.6
	41 ~ 45	102	42.0
	46 ~ 50	73	30.0
	51 ~ 55	29	11.9
	56 ~ 60	4	1.6
	More than 60	4	1.6

Measures

All of the constructs in this study were measured using multi-item instruments that have been developed and validated in previous literature. Since the original items were created in English, a Korean-version of the instruments was made following a back-translation procedure (Brislin, 1980). Specifically, the researcher translated the items from English to Korean and then a bilingual translator, who has never seen the original items in English, back-translated to English. Lastly, the back-translated items were compared with the original items by the researcher to examine if there were any translation errors which could bring major changes of the original meaning. After several items were reworded through this process, the Korean-version of the instruments was established. The full list of items for the instruments used in this study are provided in Appendix 2.

Managerial Coaching Behavior

Managerial coaching behaviors were measured by 8 items adapted from Heslin et al. (2006)'s *Employee Coaching Measure*. Based on an extensive literature review, Heslin and his colleagues developed a 10-item instrument with three components of employee coaching, which are guidance, facilitation, and inspiration. Responses were scored using a seven-point Likert scale ranging from 1, "strongly disagree," to 7, "strongly agree." As a higher-order construct, they found a high-level of internal consistency for three first-order factors ($\alpha = .92$; guidance, .87; facilitation, and .93; inspiration) and one second-order factor ($\alpha = .94$). Also, confirmatory factor analysis (CFA) showed that the fit indexes for three first-order factors plus one second-order factor fell within an acceptable range (χ^2 [32] = 134.52, $p < .01$; CFI = .96, SRMR = .04).

Adapted from the original instrument of Heslin et al. (2006), this study conceptualized managerial coaching as two dimensions (guidance and facilitation) based on the definition of managerial coaching utilized in the study. Sample questions and the reliability coefficient for each subscales was "My manager provides accurate guideline for performing the task" (guidance, $\alpha =.92$) and "My manager encourages me to explore and try out new alternatives" (facilitation, $\alpha =.94$).The Cronbach's alpha for the overall scale was $\alpha =.93$. The fit indexes for two first order factors plus one second-order factor met an acceptable range ($\chi^2 [34] = , p < .01$; CFI = .93, TLI = .92; RMSEA = .058), suggesting that the dimensions reflected the overall construct of managerial coaching.

Role Clarity

Role clarity was measured by 6 items of Rizzo et al. (1970)'s role ambiguity scale. Rizzo et al.'s scale was originally designed to measure two distinct sub-constructs: role conflict and role ambiguity. A role ambiguity scale was employed to measure role clarity for the current study. Sample items are "I know exactly what is expected of me," "I know what my responsibilities are," and "Clear, planned goals and objectives exist for my job." Cronbach's alphas in previous research have been found to be reliable and valid (e.g., Schuler, Aldag, & Brief, 1977; Teas, Wacker, & Hughes, 1979)

Psychological Empowerment

Psychological empowerment was measured by12 items of Spreitzer (1995). As a higher-order construct, this instrument consists of four subscales (meaning, competence, self-determination, and impact) with three items for each dimension. A sample item for each of the four dimensions is "The work I do is meaningful to me" (meaning), "I am confident about my ability to do my job" (competence), "I have significant autonomy in

determining how I do my job" (self-determinant), and "I have significant influence over what happens in my work area" (impact). In his study, Spreitzer (1995) demonstrated appropriate construct validity and internal consistency of the measurement, confirming a higher-order construct, and this extensively used instrument has been found to be reliable and valid (e.g., Fuller, Morrison, Jones, Bridger, & Brown, 1999; Zhang & Bartol, 2010).

In-Role Behavior

In-role behavior was measured by 5 items developed by Williams and Anderson (1991), excluding 2 reversed-items. Adding to O'Reilly and Chatman (1986)'s study that included three items, Williams and Anderson (1991) developed a seven-item in-role performance measurement as a separate dimension of performance from organizational citizenship behaviors focusing on extra-role behavior. Their study showed acceptable factor loadings ranged from .52 to .88 and a high reliability ($\alpha = .91$). Sample items include "I adequately complete assigned duties," "I fulfill responsibilities specified in job description," and "I engage in activities that will directly affect my performance evaluation."

Innovative Behavior

Innovative behavior was measured by 5 out of 6 items developed by Scott and Bruce (1994), because one item (e.g.,"I am innovative") was articulated as a person's attribute rather than a person's behavior. Cronbach's alpha on this scale was .89, and sample items include "I seek out new technologies, processes, techniques, and/or product ideas," "I generate creative ideas," and "I develop adequate plans and schedules for the implementation of new ideas."

Control Variables

This study included a set of control variables to mitigate potential effects on the hypothesized relationships within the model. Suggested by prior studies (LePine & Van Dyne, 2001), employees' demographics such as age, gender, tenure, education, job area, and job ranking were statistically controlled.

Data Analysis Methods

Prior to analyzing the data, I conducted univariate and multivariate analysis, a data screening approach, to minimize distortion of the results from statistical analysis. I used the Mahalanobis distance (D^2) (Orr, Sackett, & Dubois, 1991) as well as studentized residuals and scatterplots, which are well-known methods for detecting outliers. To check the basic assumptions in regard to regression analysis (i.e., normality, linearity, and homoscedasticity of residuals; Tabachnick & Fidell, 2007), normal probability plots and scatterplots of standardized residuals were examined. Because relatively highly correlated variables were found in the data of this study, I also examined the variance inflation factor (VIF) to avoid multicollinearity issues (Farrar & Glauber, 1967).

Prior to hypothesis testing, the measurements utilized in this study were analyzed. To examine the internal consistency of each measure, reliability was analyzed using Cronbach's alpha. Then, exploratory factor analysis and a series of confirmatory factor analyses were conducted to ensure the convergent and discriminant validity of each measure. The measurement models ware tested by comparing model fit. The fit statistics examined included (a) the chi-squared statistic divided by the degrees of freedom ($\chi 2$ / *df*), (b) comparative fit index (CFI), (c) incremental fit index (IFI), and (d) root-mean-

square error of approximation (RMSEA). CFI and IFI scores greater than .90 (> .90) are

considered to indicate an adequate goodness-of-fit of the hypothesized model (Bollen,

1989; Hu & Bentler, 1998; Kline, 2005). A RMSEA score below .08 is regarded as an

acceptable goodness-of-fit of the model (Browne & Cudeck, 1993).

As a preliminary analysis, descriptive statistics and correlation analysis were

conducted. Descriptive statistics included the number of respondents, the range of the

scores, the means, and the standard deviations for all items in the survey instrument. To

examine whether there were associations between the factors or latent variables, I used

the correlation coefficient (r) for the data analyses in the study. According to McMillan

(2000), an absolute correlation coefficient between .10 and .30 indicates a weak

relationship; between .40 and .60 indicates a moderate relationship; and .70 and above

indicates a strong relationship.

To test the hypotheses, multivariate regression analysis was used to test the direct

relationships hypothesized in the current study (Hypotheses 1 and 2). Then, structural

equation modeling (SEM) was employed (Arbuckle, 2005) to test the indirect effects of

the mediating variables and structural relationships hypothesized. In the academic field of

HRD, it is widely believed that SEM is the most advanced and rigorous statistical method

for examining the mediation hypothesis (e.g., Cho & Egan, 2013; Park et al., 2015;

Zigarmi, Nimon, Houson, Witt, & Diehl, 2011). To test the statistical significance of the

mediation effects (role clarity and psychological empowerment), I used bootstrapping,

which is a resampling method for more rigorous statistical inference. SEM is recognized

as a more accurate estimate of an indirect effect (Shrout & Bolger, 2002).

CHAPTER 4

RESULTS

This chapter presents the results from the statistical analysis of data collected for this study. First, the hypothesized measurement model was tested through reliability analysis, exploratory factor analysis and a series of confirmatory factor analysis. Next, descriptive statistics and correlation analysis among the study variables are presented. Lastly, multivariate regression analyses were performed to test the hypotheses on the direct effects, and structural equation modeling and bootstrap estimations were used to test the hypotheses on the mediating effects.

Test of Measurement Models

To examine the internal consistency of each measure, the reliability was analyzed using Cronbach's alpha. Then, exploratory factor analysis and a series of confirmatory factor analyses were conducted to ensure the convergent and discriminant validity of each measure. This process was required because the data for all the variables in this study were collected from the same source, and furthermore, relatively medium to high correlations were detected among the mediating and dependent variables.

Reliability Analysis

The reliability estimation was computed utilizing Cronbach's alpha. As presented in Table 8, the reliability coefficients of all measures ranged from .88 to .96, which demonstrated high levels of internal consistency.

Table 8

Reliability Estimation of Study Variables

Construct	*N* of items	Cronbach alpha
Managerial Coaching	8	.93
Guidance	4	.94
Facilitation	4	.96
Role clarity	6	.87
Psychological empowerment	12	.92
In-role behavior	5	.89
Innovative behavior	5	.88

Exploratory Factor Analysis

Exploratory factor analysis on the five study variables was performed using SPSS 22.0 version. As presented in Table 6, the results show that managerial coaching, role clarity, psychological empowerment, in-role behavior, and innovative behavior loaded into its own construct respectively. However, managerial coaching, which was suggested as a two-dimensional construct of guidance and facilitation, loaded into one factor. Similarly, psychological empowerment, which was suggested as a four-dimension construct loaded into three factors, with items 7 ~ 9 and items 10 ~ 12 loaded into one factor.

Table 6

Exploratory Factor Analysis: Factor Loadings

Item	Factor						
	1	2	3	4	5	6	7
Guidance1	.818						
Guidance2	.818						
Guidance3	.681						
Guidance4	.832						
Facilitation1	.836						
Facilitation2	.842						
Facilitation3	.860						
Facilitation4	.831						
Role Clarity1		.707					
Role Clarity2		.598					
Role Clarity3		.800					
Role Clarity4		.734					
Role Clarity5		.596					
Role Clarity6		.574					
Psychological Empowerment1			.761				
Psychological Empowerment2			.823				
Psychological Empowerment3			.848				
Psychological Empowerment4				.677			
Psychological Empowerment5				.729			
Psychological Empowerment6				.657			
Psychological Empowerment7					.806		
Psychological Empowerment8					.837		
Psychological Empowerment9					.857		
Psychological Empowerment10					.732		
Psychological Empowerment11					.737		
Psychological Empowerment12					.689		
In-role Behavior1						.661	
In-role Behavior2						.783	
In-role Behavior3						.772	
In-role Behavior4						.728	
In-role Behavior5						.789	

Item	Factor						
	1	2	3	4	5	6	7
Innovative Behavior1							.800
Innovative Behavior2							.792
Innovative Behavior3							.748
Innovative Behavior4							.704
Innovative Behavior5							.655

Confirmatory Factor Analysis

A series of confirmatory factor analyses was performed using Amos 22 version. First of all, I conducted a confirmatory factor analysis according to the theoretical model as shown in Figure 2. The theoretical model is a five-factor model, treating managerial coaching and psychological empowerment as higher-order constructs with two sub-factors and four sub-factors respectively. As presented in Table 7, the results showed that the goodness-of-fit statistics demonstrated an acceptable fit with the data (χ^2=1111.70; χ^2/df = 1.92; TLI = .92; CFI = .93; IFI = .93; RMSEA = .06).

Since the results of exploratory factor analysis demonstrated managerial coaching as one sub-factor and psychological empowerment as three sub-factors, the theoretical model was compared to three alternative models to confirm whether the theoretical model was the most appropriate representation of the data. Model 1 combined two sub-factors of managerial coaching (χ^2 = 1329.78; χ^2/df = 2.29; TLI = .89; CFI = .90; IFI = .90; RMSEA = .07). Model 2 combined the third and fourth sub-factors of psychological empowerment (χ^2 = 1304.78; χ^2/df = 2.25; TLI = .89; CFI = .90; IFI = .90; RMSEA = .07). In these two models, the value of TLI decreased below the benchmark of .90 or higher (Hoyle, 1995), and RMSEA increased than the one of theoretical model. These results showed that

model 1 and model 2 were inferior to the theoretical model. Model 3 combined two sub-factors of managerial coaching and the third and fourth sub-factors of psychological empowerment (χ^2 = 1521.07; χ^2/df = 2.62; TLI = .86; CFI = .87; IFI = .87; RMSEA = .08). The value of TLI, CFI, and IFI decreased below the benchmark of .90 or higher (Hoyle, 1995), and RMSEA increased than the one of the theoretical model. Model 3 was also inferior to the theoretical model. Overall, the theoretical measurement model was confirmed as the most appropriate representation of the data.

Table 7

Comparison of Measurement Models

Model	χ^2	χ^2/df	TLI	CFI	IFI	RMSEA
Theoretical model [a]	1111.70	1.92	0.92	0.93	0.93	0.06
Model 1[b]	1329.78	2.29	0.89	0.90	0.90	0.07
Model 2[c]	1304.78	2.25	0.89	0.90	0.90	0.07
Model 3[d]	1521.07	2.62	0.86	0.87	0.87	0.08

Note. N = 273.
[a] Theoretical model is a five-factor model with managerial coaching with two sub-factors, role clarity, psychological empowerment with four sub-factors, in-role behavior, and innovative behavior. [b] Model 1 treats managerial coaching as one sub-factor. [c] Model 2 treats psychological empowerment as three sub-factors, combining third and fourth ones. [d] Model 3 treats managerial coaching as one sub-factor, and psychological empowerment as three sub-factors combining third and fourth ones.
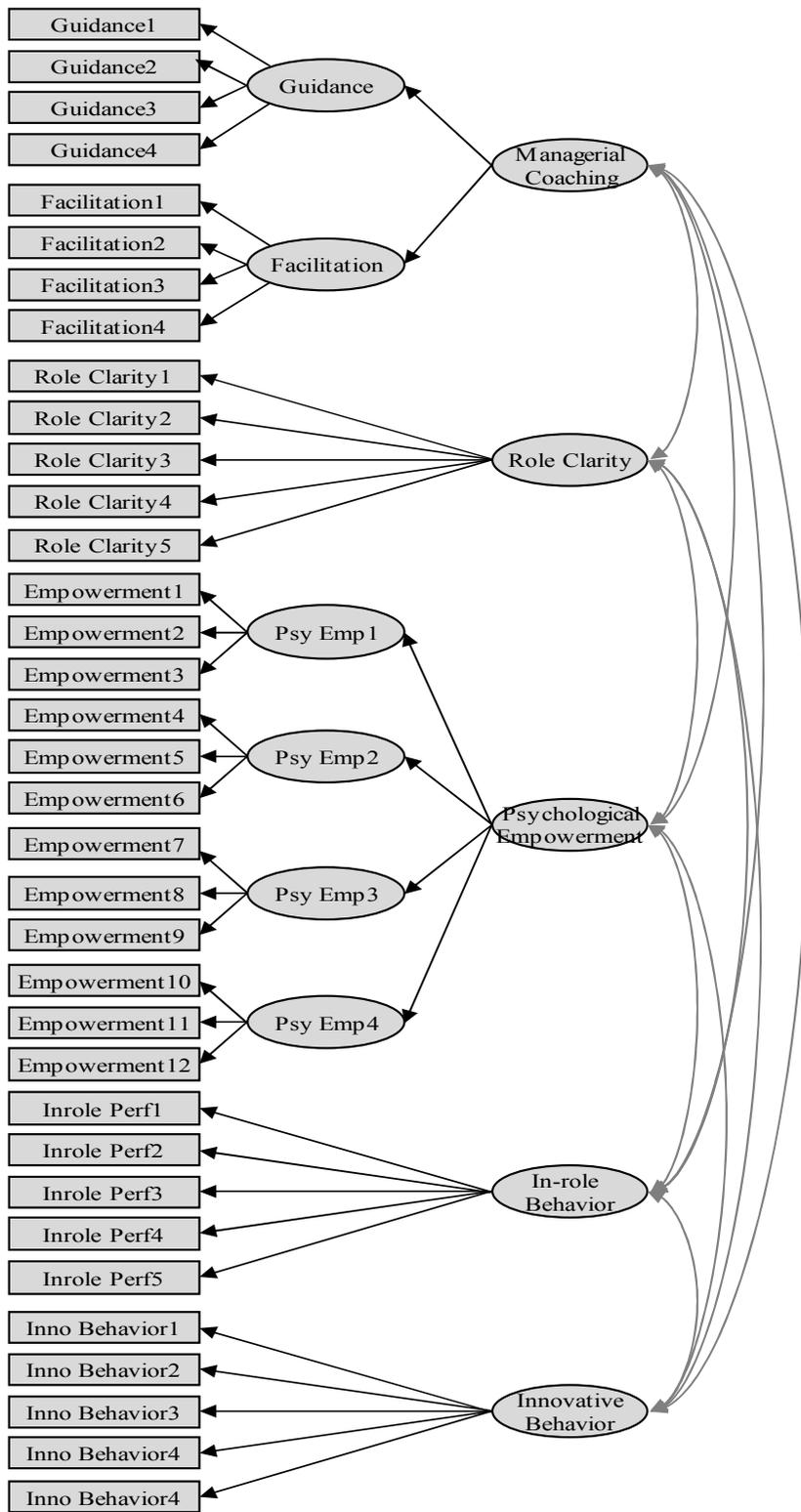
Figure 2. Theoretical measurement model.

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Descriptive Statistics and Correlations

The means, standard deviations, and intercorrelations of the study variables are presented in Table 5. All Pearson correlation coefficients among the five study variables of the study were significant ($.15 < r < .69$). Although these correlation coefficients alone do not provide a full test of the hypothesized relationships, they generally support the expected pattern of results. Specifically, managerial coaching was significantly related to employees' in-role behavior ($r = .15$; $p < .05$) and innovative behavior ($r = .22$; $p < .01$) with a weak but positive relationship. Similarly, managerial coaching was significantly related to employees' role clarity ($r = .30$; $p < .01$) and psychological empowerment ($r = .26$; $p < .01$) with a positive relationship. That is, the relationships among managerial coaching, role clarity, and psychological empowerment are stronger than the relationships among managerial coaching, in-role behavior, and innovative behavior. Role clarity was significantly correlated to employees' in-role behavior ($r = .52$; $p < .01$) and innovative behavior ($r = .49$; $p < .01$) with a moderate relationship. Similarly, psychological empowerment was significantly related to employees' in-role behavior ($r = .55$; $p < .01$) and innovative behavior ($r = .59$; $p < .01$) with a moderate relationship. Regarding the relationship between demographic variables and the study variables, managers' gender and age were significantly related to managerial coaching. Employees' age, education, tenure with the current job, and rank were positively and significantly correlated to their role clarity, psychological empowerment, in-role behavior, and innovative behavior.

Table 8

Means, Standard Deviations, and Correlations between Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender(self)	1.26	0.44													
2. Gender(manager)	1.15	0.36	.364**												
3. Age (self)	35.51	5.22	-.325**	-.151*											
4. Age (manager)	44.49	6.40	-.236**	-.220**	.424**										
5. Education	3.27	0.55	-.132*	-.041	.262**	.121*									
6. Years of Tenure (job)	4.41	1.85	-.188**	-.092	.461**	.163**	.141*								
7. Years of relationship	3.22	1.86	-.120*	-.003	.237**	.145*	.025	.407**							
8. Rank	2.68	1.23	-.248**	-.134*	.836**	.348**	.317**	.420**	.235**						
9. Job area	4.02	1.62	.167**	-.030	-.061	.082	.065	-.024	-.052	-.044					
10. MC	4.22	1.38	.006	.139*	.009	-.168**	.003	-.080	-.066	-.034	-.141*				
11. RC	5.09	0.96	-.012	.085	.219**	.021	.101	.167**	.035	.219**	-.073	.30**			
12. PE	4.95	0.98	-.088	.008	.326**	.087	.197**	.265**	.161**	.306**	-.037	.26**	.69**		
13. IRB	3.92	0.58	-.006	.103	.165**	.108	.142*	.193**	.064	.186**	.013	.15*	.52**	.55**	
14. IB	3.58	0.69	-.183**	-.010	.270**	.180**	.247**	.126*	-.017	.271**	-.116	.22**	.49**	.59**	.51**

Note. *p< .05. ** p< .01. Education: 1 = high school graduate, 2 = associate degree, 3 = bachelor's degree, 4 = masters' degree, 5 = doctoral degree; Rank: 1= individual contributor, 2 = assistant manager, 3 = manager, 4 = senior manager, 5 = general manager; MC = Managerial coaching; RC = Role clarity; PE = Psychological empowerment; IRB = In-role behavior; IB = Innovative behavio

Tests of Hypotheses

Hypothesis 1 predicted that managerial coaching would be positively related to employees' in-role behavior, and Hypothesis 2 predicted that managerial coaching would be positively associated with employees' innovative behavior. The results of correlation analysis described earlier in the previous section provided preliminary evidence to support Hypothesis 1 and Hypothesis 2, indicating the positive relationship between managerial coaching and in-role behavior ($r = .15$; $p < .05$), and the relationship between managerial coaching and innovative behavior ($r = .22$; $p < .01$).

In addition, to test these direct relationships, a multivariate regression analysis was performed separately for two dependent variables using SPSS 22. In step 1, control variables including demographics were entered. In step 2, managerial coaching was entered as an independent variable. The results of regression analysis for both dependent variables are presented in Table 9. Of the control variables, tenure in the current job was significantly related to employees' in-role behavior ($\beta = .20$; $p < 0.01$). Managerial coaching significantly and positively predicted in-role behavior ($\beta = .18$; $p < 0.01$), supporting Hypothesis 1. In addition, employees' level of education was significantly related to their innovative behavior ($\beta = .17$; $p < 0.01$). Managerial coaching significantly and positively predicted employees' innovative behavior ($\beta = .23$; $p < 0.01$), supporting Hypothesis 2.

Table 9

Regression Analysis Summary for In-role Behavior and Innovative Behavior

Dependent variables	In-role Behavior		Innovative Behavior	
	Model 1	Model 2	Model 1	Model 2
Step 1: Control variables				
Gender (self)	.04	.04	-.12	-.12
Gender (manager)	.13	.11	.08	.05
Age (self)	-.07	-.11	.05	-.01
Age (manager)	.09	.13	.12	.16
Education	.07	.06	.17**	.16**
Years of Tenure (job)	.20**	.22**	.09	.11
Years of relationship	-.04	-.03	-.12	-.11
Rank	.12	.15	.10	.13
Job area	.00	.02	-.10	-.08
Step 2: Predictor				
Managerial Coaching		.18**		.23**
F value	1.910**	2.451**	3.856**	4.931**
R	0.281**	0.328**	0.384**	0.442**
R^2	0.079**	0.108**	0.148**	0.195**
Adjusted R^2	0.037**	0.064**	0.109**	0.156**

Note. $^*p< .05,$ $^{**}p< .01.$

To test mediating effects of role clarity and psychological empowerment on the relationship between managerial coaching and in-role behavior, and between managerial coaching and innovative behavior, structural equation modeling was conducted with maximum likelihood estimation using Amos 22.0 version. Figure 3 illustrated the strengths of the relationships among the variables, showing standardized regression coefficients. The hypothesized model indicated an acceptable fit in all indices (χ^2 =1111.70; χ^2/df = 1.92; TLI = .92; CFI = .93; IFI = .93; RMSEA = .06).

With regard to Hypothesis 3, the result indicated that the relationship between managerial coaching and role clarity was statistically significant (.38, p <.01), supporting Hypothesis 3. With regard to Hypothesis 4, although the positive relationship between managerial coaching and in-role behavior was supported in Hypothesis 1, the results of SEM indicated that only the indirect effect of role clarity on the relationship between managerial coaching and in-role behavior was statistically significant with no direct effect. This result suggested that role clarity had a full mediation effect on the relationship between managerial coaching and in-role behavior. Thus, Hypothesis 4 was supported.

With regard to Hypothesis 5, the result indicated that the relationship between managerial coaching and psychological empowerment was statistically significant (.40, p <.01), supporting Hypothesis 5. With regard to Hypothesis 6, although the positive relationship between managerial coaching and in-role behavior was supported in Hypothesis 1, the results of SEM indicated that only the indirect effect of psychological empowerment on the relationship between managerial coaching and in-role behavior was statistically significant with no direct effect. This result suggested that psychological empowerment had a full mediation effect on the relationship between managerial coaching and in-role behavior. Thus, Hypothesis 6 was supported. Similarly, although the positive relationship between managerial coaching and innovative behavior was supported in Hypothesis 2, the results of SEM indicated that only the indirect effect of psychological empowerment on the relationship between managerial coaching and innovative behavior was statistically significant with no direct effect. This result

suggested that psychological empowerment had a full mediation effect on the relationship

between managerial coaching and innovative behavior. Thus, Hypothesis 7 was

supported. Table 10 presented unstandardized regression coefficients, standardized

regression coefficients, and significant levels for the hypothesize model.

Table 10

Unstandardized, Standardized, and Significance Levels for Model in Figure 3

|	Unstandardized	Standardized	S.E.	C.R.	*p*
Managerial coaching → Role clarity	.31	.38	.311	.059	.001
Role clarity → In-role behavior	.16	.29	.163	.038	.001
Managerial coaching → In-role behavior	-.06	-.12	.033	-1.653	.098
Managerial coaching → Psychological empowerment	.29	.40	.059	4.954	.001
Psychological empowerment → Innovative behavior	.45	.71	.065	6.952	.001
Psychological Empowerment → In-role behavior	.35	.57	.055	6.349	.001
Managerial coaching → Innovative behavior	.00	-.01	.029	-.128	.898
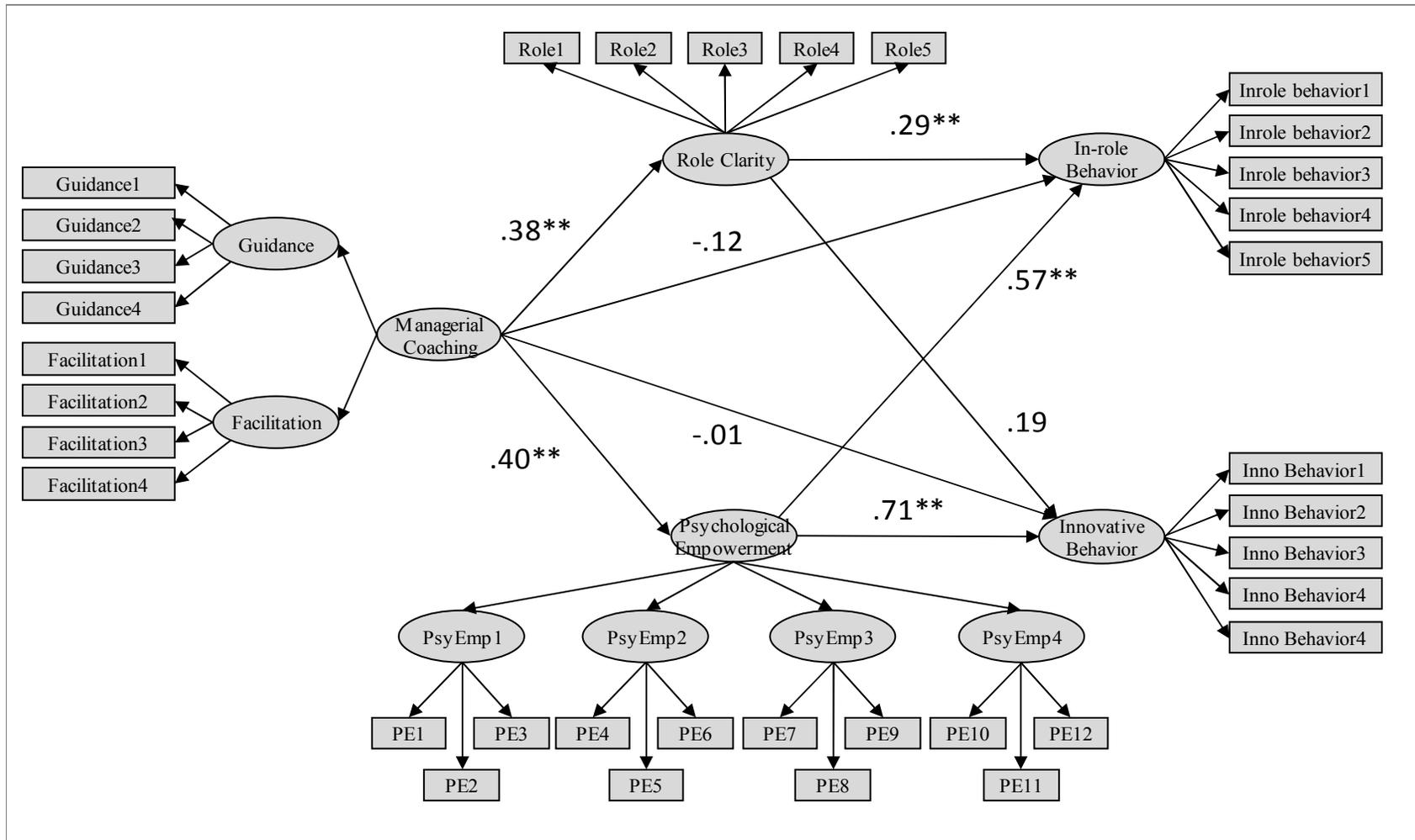
Figure 3. Structural Equation Model with Standardized Regression Coefficients.
Note. *N* = 273, *p* < .05. ** *p* < .01.

Additionally, to verify the significance of the mediation effects (Shrout & Bolger, 2002), a bootstrapping analysis was conducted using AMOS 22.0 version. Bootstrapping is the most rigorous and powerful method for identifying indirect effects under the conditions in which samples are small to moderate (Preacher & Hayes, 2008). Preacher and Hayes (2008) strongly recommended bias-corrected bootstrapping procedure (BC) for examining mediation effects. Following the procedure recommended by Preach and Hayes (2008), I created 1,000 bootstrap random samples from the original data set allowing replacement. The size of each bootstrap sample was 273, which is the size of the original data set. Then I run three structural models, (1) managerial coaching → role clarity → in-role behavior, (2) managerial coaching → psychological empowerment → innovative behavior, and (3) managerial coaching → psychological empowerment → in-role behavior with those bootstrap samples to yield each path coefficient. I included all the control variables in the analyses for the three models. Through bias-corrected (BC) method, the 95% confidence for the indirect effect was obtained. The results showed that the indirect effect did not include zero at the .05 level (Shrout & Bolger, 2002).

As presented in Table 11, the bias corrected 95% CI does not contain zero in all three models. First, the bias corrected 95% CI for MC→RC→IRB were between .049 and .163, indicating that the indirect effect of managerial coaching on in-role behavior through role clarity was significantly different from zero (estimate = .093, $p < .05$, 95% CI [.049, .163]). Therefore, role clarity mediated the relationship managerial coaching and in-role behavior, supporting Hypothesis 4. Similarly, the indirect effect of managerial coaching on in-role behavior through psychological empowerment was statistically

significant (estimate = .132, *p*< .05, 95% CI [.083, .275]), supporting Hypothesis 6. Also,

the indirect effect of managerial coaching on innovative behavior through psychological

empowerment was statistically significant (estimate = .128, *p*< .05, 95% CI [.074, .256]),

supporting Hypothesis 7.

Table 11

Indirect Effects of Managerial Coaching on In-role Behavior and Innovative Behavior through

Role Clarity and Psychological Empowerment

Indirect effect	Bootstrapping			Bias Corrected 95% CI	
	Estimate	*SE*	*p* value	Lower	Upper
MC → RC →IRB	.093	.029	.03	.049	.163
MC → PE → IRB	.132	.036	.02	.083	.275
MC → PE → IB	.128	.038	.03	.074	.256

Note. MC = Managerial coaching; IRB = In-role behavior; IB = Innovative behavior; RC = Role clarity; PE = Psychological empowerment; SE = Standard error; CI = Confidence interval.

CHAPTER 5

DISCUSSION

This chapter provides a brief summary of the current study and discusses the results of the study with comparison to relevant literature. Then, implications for theory and practice are discussed. Lastly, future direction for research are provided.

Summary

The principal purpose of this study was to examine the effects of managerial coaching on two behavioral performances: in-role behavior and innovative behavior. In addition, the study aims to investigate whether role clarity and psychological empowerment mediate the aforementioned relationship as the cognitive and motivational underlying mechanism of managerial coaching process. The study addresses the following research questions.

1. What is the relationship between managerial coaching and employees' in-role behavior?

2. What is the relationship between managerial coaching and employees' innovative behavior?

3. Is the relationship between managerial coaching and employees' in-role behavior mediated by role clarity and psychological empowerment?

4. Is the relationship between managerial coaching and employees' innovative behavior mediated by psychological empowerment?

Data were collected through an electronic survey at for-profit companies in South Korea in diverse sectors such as manufacturing, construction, distribution/sales,

information technology, finance, and service/consulting. A convenience sampling method was used and resulted in a total of 273 returned surveys. To ensure the construct validity and reliability of each measure, the estimation of Cronbach's alpha, exploratory factor analysis, and a series of confirmatory factor analyses were conducted. As a preliminary analysis, descriptive statistics and correlation analyses were conducted. Each study variable was correlated ($.15 < r < .69$; $p < .01$ or $p < .05$). To test the hypotheses on the direct effects, multivariate regression analyses were performed, and structural equation modeling and bootstrap estimations were used to test the hypotheses on the mediating effects.

The findings showed that managerial coaching was positively related to employees' in-role behavior and innovative behavior. In the structural equation model, role clarity was found to fully mediate the relationship between managerial coaching and in-role behavior; however, there was no mediating effect on the relationship between managerial coaching and innovative behavior. Psychological empowerment was found to fully mediate the relationship between managerial coaching and in-role behavior, as well as the relationship between managerial coaching and innovative behavior.

Discussion of the Results

This section discusses the results of the study in comparison to relevant literature.

Hypothesis 1: The Relationship between Managerial Coaching and In-Role Behavior

Hypothesis 1 proposed that perceived managerial coaching behavior would be positively associated with employees' in-role behavior. This Hypothesis was supported by the current study, implying that employees who perceived that they had received

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coaching from their supervisors appeared to perform better at assigned tasks. This result is notable because the previous findings of empirical research regarding a direct relationship between managerial coaching and in-role behavior have been inconsistent; although there has been a general belief that managerial coaching improves employees' job performance (Evered & Selman, 1989; Orth et al., 1987; Zemke, 1996). While some research (e.g., Agarwal et al., 2009; Liu & Batt, 2010) demonstrated a direct influence of managerial coaching on performance improvement, other studies (e.g., Kim et al., 2014) found that there was no direct impact of managerial coaching on performance improvement but that an indirect impact existed. Thus, this study added supporting evidence indicating that managerial coaching is a predictor of employees' in-role behavior.

Hypothesis 2: The Relationship between Managerial Coaching and Innovative Behavior

Hypothesis 2 proposed that perceived managerial coaching behavior would be positively associated with employees' innovative behavior. In line with my expectation, this Hypothesis was confirmed by the current study, indicating that employees who perceived that they had received coaching from their supervisors were more likely to exhibit innovative behavior such as generating and implementing creative ideas at work. In the coaching process, encouraging employees to explore new challenges and ideas and facilitating such exploration may stimulate them to pursue and sustain innovative behavior at work. To the best of my knowledge, there has been no research investigating the direct effect of managerial coaching on innovative behavior; however, this result is in

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the line with the arguments that managers' individualized support (Pieterse et al., 2010), managers' feedback behavior (Noefer et al., 2009), and a high-quality relationship between a leader and follower (De Jong & Den Hartog, 2007) promote employees' innovation.

Hypotheses 3-5: Mediating Effects of Role Clarity

Hypothesis 3 proposed that managerial coaching would be positively associated with employees' role clarity. Hypothesis 3 was supported by the implication that the extent to which employees perceived that they had received coaching from their supervisors predicted their clearness regarding their roles and responsibilities. This result is consistent with the results of previous studies that confirmed the positive effect of managerial coaching on role clarity (e.g., Kim et al., 2013; Kim et al., 2014).

Hypothesis 4 predicted that role clarity would mediate the relationship between managerial coaching and in-role behavior. Role clarity was found to fully mediate the relationship between managerial coaching and in-role behavior, supporting Hypothesis 4. Consistent with the extant literature (e.g., Whitaker et al., 2007), this result showed that employees who believe that they have a high level of role clarity show high levels of performance through enhanced learning regarding their roles and expectations.

Hypothesis 5 predicted that role clarity would mediate the relationship between managerial coaching and innovative behavior. Hypothesis 5 was not supported by the current study. The probable reason for this result is that while a high level of role clarity is conducive to the generation of creative ideas (Amabile, 1983), it may not be sufficient to implement these ideas, which is one of the main aspects of innovative behavior (Scott

& Bruce, 1994). Additionally, considering that individuals' innovation is influenced by their personalities and attributes (Amabile, 1883), moderators such as openness to change may influence the relationship between role clarity and innovative behavior.

Hypotheses 6-8: Mediating Role of Psychological Empowerment

Hypothesis 6 proposed that managerial coaching would be positively related to employees' psychological empowerment. Hypothesis 6 was empirically supported in this study. Specifically, the extent to which employees perceived that they received coaching from their supervisor predicted their sense of meaning, self-competence, and self-determination. This result is consistent with the previous research finding that diverse components of managerial coaching such as open communication, collaborative goal-setting, the provision of feedback, appreciation, and the allowance of high levels of empowerment and autonomy help employees enhance their perception of meaningfulness, competence in terms of doing essential tasks, sense of ownership through self-determination, and control over their work (Huang & Hsieh, 2015).

Hypothesis 7 predicted that psychological empowerment would also mediate the relationship between managerial coaching and innovative behavior. The results showed that psychological empowerment fully mediated the relationship between managerial coaching and employees' innovative behavior, supporting Hypothesis 8. Employees who perceive high levels of psychological empowerment, which is fostered by managerial coaching, are more likely to make proactive suggestions regarding new work processes. This result is in line with the literature suggesting that supervisors can foster work

environments that encourage innovation from employees and that supervisors can direct employees into innovative action (Singh & Sarkar, 2012; Zhang & Bartol, 2010).

Hypothesis 8 predicted that psychological empowerment mediates the relationship between managerial coaching and in-role behavior. It was found that psychological empowerment fully mediates the relationship between managerial coaching and in-role behavior, supporting Hypothesis 7. This result is consistent with previous research (Huang & Hsieh, 2015).

In summary, the present findings demonstrate the positive effect of managerial coaching on employees' in-role and innovative behavior. More importantly, these findings provide an explanation of how managerial coaching is related to these aspects of work performance. The full mediating effects of role clarity and psychological empowerment, as identified in this study, highlight the cognitive and motivational changes underpinning the relationships between managerial coaching and employee performance.

Theoretical Implications

The present study suggests several theoretical implications for the academic literature on managerial coaching. First, this study expands the literature on outcomes of managerial coaching by investigating a broader concept of work performance. While the previous literature focused on in-role performance as the primary outcome (e.g., Dahling et al., 2015; Ellinger et al., 2003; Graham et al., 1994; Kim, 2010), this study took an expanded view of work performance and confirmed that managerial coaching is a predictor of not only in-role behavior but also innovative behavior. To the best of my

knowledge, no research has examined the relationship between coaching and innovation. In the literature on innovation, the role of managers as promoters of employees' innovation has been emphasized; however, there has remained a lack of understanding concerning specific methods and strategies vis-à-vis this role. Thus, this study represents an initial step toward filling this gap in the literature.

Second, another contribution of the current study is that it sheds light on the importance of understanding the mechanisms through which coaching leads to positive outcomes. The coaching literature has shown that coaching exerts direct effects on individual effectiveness through outcomes such as job performance, less attention but has paid to the reasons why these effects occur (Kim & Kuo, 2015; Huang & Hsieh, 2015). Interestingly, the direct relationship as described in the literature has not always been empirically supported, although it has been generally accepted (Park, 2007). The results of this study have demonstrated that employees' role clarity fully mediated the relationship between managerial coaching and in-role behavior, and psychological empowerment fully mediated the relationship between managerial coaching and in-role and innovative behavior. The findings provide insights into how managerial coaching leads to behavioral changes through coachees' cognitive and motivational changes. Furthermore, such results suggest that it is important to pay more attention to the process mechanisms in coaching research.

Third, this study provides a theoretical framework for the managerial coaching process by integrating two mediating and two outcome variables within a structural model. Grounded in OST (Eisenberger et al., 1986), the theoretical framework of the

current study addressed the relationships between managerial coaching and two work behaviors, as well as the cognitive and motivational underpinnings of the mechanism underlying these relationships. This is an important theoretical contribution given that 1) most previous studies have been lacking in the application of foundational theories and 2) no previous research has examined the two aspects of the mediating psychological states and two-dimensional behavioral outcomes in an integrative framework.

Fourth, this study also contributes to the cross-cultural generalizability of the coaching literature by examining the process and effectiveness of coaching in Eastern countries. Coaching appears to be more thoroughly established and researched in Western cultures (Huang & Hsieh, 2015), which are predominantly characterized by a low power distance between managers and subordinates (Hofstede, 1980). Because coaching works well under the circumstances of open communication (Gregory & Levy, 2011), there has been concern about the effectiveness of coaching in Eastern culture, which is commonly characterized by a high power distance between managers and subordinates (Hofstede, 1980). Given that the findings of this study demonstrate the positive relationship between managerial coaching and employees' work performance, the results of this study suggest that coaching practices can be effective in Eastern as well as Western cultures.

Practical Implications

The results of this study offer several practical implications. First, this study provides a strong rationale for the necessity of coaching practice in organizations, supported by empirical evidence on the efficacy of managerial coaching as a predictor of employees' work performance. Organizations need to emphasize the importance of coaching and encourage managers to coach their subordinates at work to maximize their

learning and performance. To do so, the creation of a coaching culture and an organizational support system and the provision of appreciation for managers' coaching practice are essential, as coaching employees requires extra effort and commitment from managers (Hunt & Weintraub, 2002).

Second, considering the benefits of managerial coaching on work performance, this study suggests that managerial coaching should be included in the repertory of managers' work. Moreover, Milner and McCarthy (2016) argued that managerial coaching can be seen as a key element of leadership practice. However, managers are not born with the knowledge of how to provide managerial coaching to their subordinates; stated differently, coaching skills are not innate (Graham et al., 1994). Thus, it is important to provide diverse opportunities for managers to practice coaching skills. For example, HRD departments may design and develop formal training sessions or offer personal or group coaching sessions to help managers become effective coaches. Additionally, the effectiveness of leadership programs, which have been limited to focusing on specific skills and behaviors (Milner & McCarthy, 2016), can be enhanced by incorporating training in coaching skills.

Third, managers need to pay more attention to proxy outcomes of managerial coaching in the coaching process. This study revealed that employees' role clarity fully mediated the relationship between managerial coaching and in-role behavior and that psychological empowerment fully mediated the relationship between managerial coaching and in-role and innovative behaviors. This evidence highlights the importance for employees to have a clear understanding of their roles and a greater feeling of

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psychological empowerment, which would not only lead to enhanced in-role performance by employees but also encourage employees to proactively implement innovative ideas. Therefore, managers should strive to help employees gain clarity about their goals and responsibilities and feel more psychologically empowered.

In addition, managers may use different coaching strategies depending on the target of work performance. According to the results of this study, while in-role behavior was related to role clarity and psychological empowerment, innovative behavior was related to only psychological empowerment. These results suggest that managers can focus on increasing employees' sense of empowerment when their innovative behavior is anticipated.

Future Research Directions

The present study suggests several directions for future research. First, this study employed a cross-sectional design in which the data were collected at one point in time. This design prevents claiming causality in relationships. Thus, future research should consider a longitudinal design to provide more definite implications for the field.

Second, the data on all the variables used in this study were collected from only employees – a single source, which may raise the issue of common method variance. Although the results of exploratory factor analysis and confirmatory factor analyses confirmed that all five variables (managerial coaching, role clarity, psychological empowerment, in-role behavior, and innovative behavior) were differentiated from each other in the measurement model, which shows that common method variance was not a

confounding factor in this study, using multiple sources of data from employees and managers may increase the rigorousness of the research.

Third, the sample used in this study consisted of highly educated males in Korean for-profit companies. To ensure the generalizability of the findings, other types of organizational settings and cultural contexts should be considered in future research.

Fourth, future research is needed to examine other mediating factors that may influence the coaching-outcome relationship. I focused on employees' changes in cognitive and motivational states, demonstrating their full mediating effects on the relationship between managerial coaching and work performance. As demonstrated, understanding the mediating mechanism in the coaching process is crucial. Therefore, further exploration of additional mediating variables would be fruitful, particularly with regard to how managerial coaching influences employee performance and other desired outcomes.

Fifth, future research is needed to explore moderators affecting the relationship between managerial coaching and outcomes. Coaching is a set of individual interactions and communications between managers and subordinates; therefore, the quality of the relationship between the two parties, as well as the personal characteristics of each party, may impact the effectiveness of managerial coaching. Although Sue-Chan et al. (2011) provide initial evidence regarding the influences of the relationships between managers and their subordinates on the effectiveness of coaching, based on LMX theory, further explorations are still recommended.

Sixth, future research should take an integrative approach to managerial coaching, linking it to the general leadership literature. There is no doubt that managerial coaching is a core leadership skill (Anderson, 2013); however, it is still unclear how coaching skills and behaviors are related to different leadership theories and orientations.

Last, future research could add value to the coaching literature by conducting international comparative studies. Although the current study provides support for the potential cross-cultural effectiveness of coaching practice, there is still a need for direct evidence regarding which specific coaching behaviors work most effectively under specific cultural contexts and how managerial coaching differentially impacts outcomes of employees according to the context.

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APPENDIX A

IRB Approval

The IRB: Human Subjects Committee determined that the referenced study is exempt from review under federal guidelines 45 CFR Part 46.101(b) category #2 SURVEYS/INTERVIEWS; STANDARDIZED EDUCATIONAL TESTS; OBSERVATION OF PUBLIC BEHAVIOR.

Study Number: 1507E76921

Principal Investigator: Huh-Jung Hahn

Title(s):
The effects of managerial coaching on employee behaviors

This e-mail confirmation is your official University of Minnesota HRPP notification of exemption from full committee review. You will not receive a hard copy or letter.

This secure electronic notification between password protected authentications has been deemed by the University of Minnesota to constitute a legal signature.

The study number above is assigned to your research. That number and the title of your study must be used in all communication with the IRB office.

Research that involves observation can be approved under this category without obtaining consent.

SURVEY OR INTERVIEW RESEARCH APPROVED AS EXEMPT UNDER THIS CATEGORY IS LIMITED TO ADULT SUBJECTS.

This exemption is valid for five years from the date of this correspondence and will be filed inactive at that time. You will receive a notification prior to inactivation. If this research will extend beyond five years, you must submit a new application to the IRB before the study?s expiration date.

Upon receipt of this email, you may begin your research. If you have questions, please call theIRB office at (612) 626-5654.

You may go to the View Completed section of eResearch Central at http://eresearch.umn.edu/ to view further details on your study.

The IRB wishes you success with this research.

Survey Questionnaire

Section 1: Manager's Coaching Behaviors

The following questions ask your perception of leadership of <u>your direct manager</u> in the workplace. Please read each item and check the button that best describes where you think your current manager.

Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree more disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)

He/She……

1. Provide accurate guideline for performing the task
2. Communicate clear performance expectations
3. Check regularly the process of the plan
4. Provide feedback regarding areas for improvement
5. Facilitate creative thinking to help solve problems
6. Allow me to develop my own way of performing the task
7. Encourage me to explore and try out new alternatives
8. Support me in taking on new challenges

Section 2: Role Clarity and Psychological Empowerment

Please check the button that best reflects your <u>perception of yourself</u>. Your answer will be kept confidential so please respond honestly as much as you can.

Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree more disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)

1. The work I do is very important to me
2. My job activities are personally meaningful to me
3. The work I do is meaningful to me
4. I am confident about my ability to do my job
5. I am self-assured about my capabilities to perform my work activities
6. I have mastered the skills necessary for my job
7. I have significant autonomy in determining how I do my job
8. I can decide on my own how to go about doing my work
9. I have considerable opportunity for independence and freedom in how I do my job
10. My impact on what happens in my work area is large
11. I have a great deal of control over what happens in my work area
12. I have significant influence over what happens in my work area
13. I know exactly what is expected of me
14. I know that I have divided my time properly
15. Explanation is clear of what has to be done
16. I know what my responsibilities are
17. Clear, planned goals and objectives exist for my job
18. I feel certain about how much authority I have

Section 3: In-role and Innovative Behavior

Please check the button that best reflects your <u>perception of yourself</u>. Your answer will be kept confidential so please respond honestly as much as you can.

Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree more disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)

1. I Adequately complete assigned duties
2. I fulfill responsibilities specified in job description
3. I perform tasks that are expected of him/her
4. I meet formal performance requirements of the job
5. I engage in activities that will directly affect his/her performance evaluation

Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree more disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)

1. I seek out new technologies, processes, techniques, and/or product ideas
2. I generate creative ideas.
3. I promote and champion ideas to others
4. I investigate and secures funds needed to implement new ideas
5. I develop adequate plans and schedules for the implementation of new ideas

Section 4: Demographics

1. a) What is your gender?
   b) What is your manager's gender?

2. a) What is your age (in years)? _____
   b) What is your manager's age? (If you are not sure, please estimate) _____

3. What is the highest level of education you complete?
   a) High school diploma
   b) Associate degree
   c) Bachelor's degree
   d) Master's degree
   e) Doctoral degree

4. a) How long have you worked in your current company? _____ (year & month)
   b) How long have you had your current manager? _____ (year & month)

5. What is your organizational rank?
   a) Individual contributor
   b) Assistant manager
   c) Manager
   d) Senior manager
   e) General manager

6. What is your job area?
   a) Production
   b) Marketing/Sales
   c) Strategy/Planning
   d) Research and Development
   e) Administration/Management
   f) Finance/Accounting
   g) Others _____ (Please fill in)

7. What industry is your organization in?
   a) Manufacturing
   b) Construction
   c) Distribution/Sales
   d) IT

e) Service/Consulting

f) Others

8. What is the size of your organization?

a) Less than 50 employees

b) 50 – 99 employees

c) 100-299 employees

d) 300-699 employees

e) 700-1000 employees

f) More than 1000