# Multilevel Analyses of the Relationship amongst Leadership, Employee Creativity and Team Innovation

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# ABSTRACT

Prior creativity studies have demonstrated the key role of leadership in fostering employee creativity. However, two significant questions remain incompletely understood. Firstly, leadership researchers (such as Liden, Wayne, Zhao, & Henderson, 2008; Sendjaya, Sarros, & Santora, 2008; van Dierendonck, 2011; Walumbwa, Hartnell, & Oke, 2010) have illustrated the importance of leadership behaviors that have a strong emphasis on societal benefits, such as follower empowerment, ethical or moral values. To date, little research has examined whether such leadership behaviors also enhance employee creativity. The only study that has been conducted to examine that relationship is reported by Neubert, Kacmar, Carlson, Chonko and Roberts (2008). Nevertheless, single-source data as theirs possess risks of common method variance and one-level analysis is inadequate because leadership is hierarchical by its nature. It is therefore important to examine such a relationship using multi-source data and multi-level analysis to understand the process by which leaders generate outcomes not only from the individuals but also from the collective. The second omission is that we know little about whether these behaviors also apply in different indigenous contexts. This in itself has been labeled an urgent priority by influential scholars (e.g., Avolio, Walumbwa, & Weber, 2009; Gardner, Lowe, Moss, Mahoney, & Cogliser, 2010) and academic bodies (e.g., 2011 Academy of Management Annual Meeting Theme). In addition, we know very little about leadership models, such as paternalistic leadership, that are ubiquitous across other cultural value systems, such as the Asia Pacific region, the Middle East and Latin America, let alone their potential in fostering employee creativity. Thus far, a study reported by Wang and Cheng (2010) is the first and only one of its kind. In view of that, there is an equally reasonable argument that paternalistic leadership provides a

foundation for creativity; therefore it would be interesting to examine its processes in fostering it.

The purpose of these studies is to develop and examine two multi-level relationships between servant and paternalistic leadership and employee creativity in Eastern contexts. The first study examines the process by which servant leaders influence employee creativity and team innovation simultaneously and the conditions under which the effect of such leadership is strongest. The second study examines the positive role of paternalistic leadership in employee creativity and the conditions where its effect is the most positive. Self-concept and team climate research underpin these studies. To test the hypotheses, 154 matched teams, comprised of 154 team leaders and 425 team members from 61 firms in Indonesia and China, were obtained.

These studies offer at least three contributions to the literature and to leaders or managers in practice. First, these studies provide notable insights into the leadership practices in Eastern contexts because of their uniqueness: (1) they are cross-national studies involving Indonesia and China as exemplars from these contexts; and (2) they are also controlled for cultural values, such as vertical collectivism, to take into account potential cross-cultural variation in employees' values. Second, by integrating self-concept and team climate research, the processes by which each leadership approach positively influences employee creativity are identified and understood. In addition, the conditions under which each leadership approach influences employee creativity the strongest are also identified. In the case of servant leadership, for example, it is the team climate signposts support for innovation that plays the key role to boost its effect on employee creativity. But for paternalistic leadership, regardless of the conditions of employees' competence, such effects are still positive. These are

probably the most significant contributions of these studies to the literature. From leaders' or managers' points of view, these studies show that it is important to develop trusting personal and team relationships between the leader and his or her followers and between the leader and the team he or she leads. When such relationships are stronger, the leader is more likely to channel these to foster employee creativity and team innovation. Finally, in Eastern contexts in particular, leaders or managers need to take into account employees' perceptions of their own competencies. As demonstrated by one of the studies, competent employees perceive paternalistic behaviors as indications of a leader's recognition of their proactive efforts as exemplary and valuable employees. Even though such findings are somewhat conflicting, it is understandable that, in these contexts, obedience to an authoritative figure (specifically, the leader or the manager) is embedded in the participants' cultural values.

# STATEMENT OF AUTHORSHIP

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other institution. It is affirmed, to the best of my knowledge, the thesis contains no material previously published or written by other person, except where due reference is made in the text of the thesis. Selected findings from the thesis have been presented at the 2011 Academy of Management Conference and will be submitted immediately to an A\* ERA ranking journal after thesis submission.



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'A man can have nothing, except what he strives for' (Qur'an 53:39)

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#### CHAPTER 1

#### INTRODUCTION

# **Background, Purpose of the Studies and Research Questions**

Creativity provides original and useful ideas (Runco, 2004) and as such, is essential for the advancement of society (Hennessey & Amabile, 2010). Scholars have strived to understand the unique characteristics of certain individuals who are able to generate and implement new solutions and novel ideas and whether *ordinary people* may be able to do something similar. In addition, creativity and innovation are perceived as the answers to many societal challenges in both public and private fields (Hennessey & Amabile, 2010; Runco, 2004). Furthermore, creativity and innovation are believed to be the key for organizational survival and growth (Dervitsiotis, 2010; Wadler, 2009).

Most scholars have defined creativity as the production of novel and useful ideas in the organizations (e.g., Amabile, 1983; Amabile, 1988; Shalley, Zhou, & Oldham, 2004), while innovation is described as the attempts to introduce or implement improved ways of doing things in the workplace (West, 1990). Thus, creativity is different from innovation, but it is a required yet insufficient step toward innovation. This is why some scholars have included creativity when describing and measuring innovation (e.g., Janssen, van de Vliert, & West, 2004; Miron, Erez, & Naveh, 2004; Yuan & Woodman, 2010). Given their strong conceptual similarity, it is surprising how few studies have examined them simultaneously (e.g., Gumusluoğlu & Ilsev, 2009b; Pirola-Merlo & Mann, 2004).

To foster creativity, particularly employee creativity, creativity scholars have utilized the person-context approach, which is originated from Amabile's componential model (1983, 1988) and Woodman and colleagues' (1993) interactionist approach (e.g., George & Zhou, 2001; Shin & Zhou, 2003; Zhou, Shin, Brass, Choi, & Zhang, 2009). Amabile's componential model (1983, 1988) theorizes that employee creativity depends on individual capabilities, individual knowledge that underpins the creative thinking process, and his or her motivation toward the tasks. Woodman and colleagues' (1993) interactionist approach theorizes that employee creativity is the product of the interaction between individual capabilities and the context. The person-context approach therefore theorizes that creativity is a product of personal factors, the contexts, and the interaction between these two (Amabile, 1983, 1988; Shalley, et al., 2004; Woodman, et al., 1993). Note that such conducive contexts are necessary for individuals to experience the motivation and comfort needed for creative endeavors (Mumford & Gustafson, 1988).

In the person-context approach, leadership has been found to be the common key theme in fostering employee creativity and innovation by providing motivation for these employees and creating the right climate (cf. Jung, Chow, & Wu, 2003). In the creativity literature, in particular, most scholars have examined the role of high quality dyad leader-member exchange (e.g., Liao, Liu, & Loi, 2010) and transformational leadership (e.g., Shin & Zhou, 2003) in employee creativity. Recently, some scholars have started to examine the role of leadership that seeks to empower and serve employees interests, on employee creativity (Neubert, Kacmar, Carlson, Chonko, & Roberts, 2008; Zhang & Bartol, 2010). While most leadership and creativity studies have been conducted from the European and North American perspectives (Western contexts), we know very little about leadership practices in the Eastern contexts, let alone their potentials in fostering employee creativity. Thus it would

be interesting to conduct such studies in Eastern cultures. In addition, a substantial body of research has demonstrated the positive influence of an indigenous leadership approach in Eastern contexts, specifically paternalistic leadership, on employee psychological health (Chen & Kao, 2009) and commitment (Erben & Güneşer, 2008), for example.

The purpose of this thesis is thus to develop and test a multilevel relationship between two leadership approaches, servant and paternalistic leadership, and employee creativity in the Eastern contexts. Specifically, these studies seek to address the following research question: when and how do these leadership approaches influence employee creativity? By answering this question, these studies will explain the processes by which each leadership approach influences employee creativity and the condition that makes their effects strongest. For the first study, the question is extended into: when and how does servant leadership influences employee creativity and team innovation, simultaneously? For the second study, I examine the relationship between paternalistic leadership and employee creativity (Pellegrini & Scandura, 2008; Zhou, 2006). In doing so, both studies answer calls by prominent scholars to examine the effects of leaders on individual and team outcomes simultaneously (cf. DeChurch, Hiller, Murase, Doty, & Salas, 2010; Gooty, Connelly, Griffith, & Gupta, 2010). Most importantly, these studies will provide further evidence about the generalization of servant leadership concept in East Asian societies as well as examine the potential creative influence of the of leadership behaviors ubiquitous to many collectivistic cultures reside in East Asia, the Middle East and Latin America such as paternalistic leadership (Pellegrini & Scandura, 2008). To underpin these studies, self-concept theorizing and team climate research were chosen because of their strengths in explaining the individual-level process toward creative endeavors across contexts and time (e.g., Farmer, Tierney, & Kung-McIntyre, 2003; Gong, Huang, & Farh, 2009; Hirst, van Dick, & van Knippenberg, 2009;

Neubert, et al., 2008; Tierney & Farmer, 2002, 2011; Wang & Cheng, 2010; Zhang & Bartol, 2010).

The present studies offer at least three significant contributions to both the literature and managers in practice. Drawing from self-concept (Tajfel & Turner, 1985) and team climate theorizing (Anderson & West, 1998), two cross-level frameworks (Diez-Roux, 2003) were developed and tested. Such frameworks are important because, as mentioned above, leaders need to be able to generate results from both the individuals and the collective. These frameworks answer repeated calls by leadership scholars for study of the influence of leaders on both individuals and teams (Gardner, et al., 2010). From the leaders' perspectives, the findings from these studies are essential to understanding the individual-level processes in fostering employee creativity. These are probably the most significant contributions of the studies. The findings also provide further evidence for the generalization of both theories, since these studies are cross-national studies (Tsui, Nifadkar, & Amy Yi Ou, 2007) involving a massive sample consisted of 154 team leaders and 425 team members from large to small-and-medium firms in Indonesia and China.

Accordingly, the structure of this thesis is as follows. This chapter (Chapter 1) explains the background, purpose and significance of the present studies, as well as their theoretical framework and assumptions. Chapter 2 reviews the creativity literature to take stock of what has been done over the past five years (2005 – 2010); it identifies the gaps in the literature, and delineates fruitful avenues for future research. The timeframe is chosen because the latest literature review on creativity, especially the one that emphasizes the application of the person-context approach in examining employee creativity (i.e., George, 2007), is approaching five years old. Chapter 3 discusses the methods employed for the current

studies. Chapter 4 presents the results from preliminary analyses, which include validity and reliability analyses and validation for cross-level analyses. Since there are two distinct studies in relation to the association between two emerging leadership approaches and employee creativity, the result chapters are divided accordingly. Chapter 5 and Chapter 6 are presented as the result chapters for servant leadership and paternalistic leadership, respectively. Theoretical underpinnings for each study, as well as the corresponding hypotheses, are also described. Finally, in Chapter 7, lessons learnt from the two studies, along with a proposed model for future research, as an extended study from the current studies, are briefly discussed.

# **Theoretical Framework**

To examine the influences of servant and paternalistic leadership in Indonesia and China, the person-context approach (Amabile, 1983, 1988; Woodman, et al., 1993) was utilized. In doing so, the lenses of self-definition on special relationships, also well-known as the identification concept (Hogg & Terry, 2000; Tajfel & Turner, 1985; van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004), self-concept orientation (Spreitzer, 1995; Thomas & Velthouse, 1990; Tierney & Farmer, 2002), as well as team climate research (Anderson & West, 1996, 1998; Eisenbeiss, van Knippenberg, & Boerner, 2008; Pirola-Merlo, Hartel, Mann, & Hirst, 2002; West, 1990), were utilized to underpin the two studies. For the cross-level analysis, procedures detailed by Raudenbush and Bryk (2002) were used for data analyses.

To test the hypotheses that were posited prior the analyses, which included cross-level mediation and moderation and cross-level moderated mediation hypotheses, these studies

followed and adopted the following procedures. For the cross-level mediation analysis, procedures described by MacKinnon, Fritz, Williams and Lockwood (2007), Pituch, Whittaker and Stapleton (2005), Zhang, Zhypur and Preacher (2009), and Raudenbush and Bryk (2002) were employed. Procedures detailed by Aiken and West (1991) and Raudenbush and Bryk (2002) were employed to analyze moderation hypotheses. Finally, for the cross-level moderated mediation analyses, procedures by Preacher and his colleagues (2007) and Tein, Sadler, MacKinnon and Wolchick (2004), Aiken and West (1991), and Raudenbush and Bryk (2002) were employed. The adaptation was needed because no contemporary methods have tapped in to rectify 'problems' embedded with those hypotheses.

# **Key Points from the Present Studies: A Brain-teaser**

As mentioned above, the two studies sought to examine the multi-level framework of the relationship between servant and paternalistic leadership and employee creativity.

Integration of self-concept theorizing was chosen because of its strength in explaining the psychological process within individual toward creative endeavors across context and over time (Gong, et al., 2009; Tierney & Farmer, 2002, 2011), whereas team climate research was chosen because: (1) previous research has shown the positive association between leadership and climate (cf. Ehrhart, 2004; Erben & Güneşer, 2008; Walumbwa, Hartnell, et al., 2010); and (2) the role of climate is significant in fostering employee creativity and innovation (Anderson & West, 1996; Eisenbeiss, et al., 2008; Gumusluoğlu & Ilsev, 2009a). Would these Western-built concepts applicable for Eastern settings such as Indonesia and China? What is the plausible explanation of the creative potential of paternalistic leadership and who will gain the most benefit of it? Chapter 5 and 6 present the answer to these intriguing questions.

#### **CHAPTER 2**

### EMPLOYEE CREATIVITY: REVIEW AND FUTURE RESEARCH AGENDA

#### Abstract

This chapter systematically reviews and integrates empirical research studying employee creativity in the workplace. It takes stock of the remarkable expansion and progress in the field since Shalley and colleagues' (2004) landmark review, as well as discussing key themes that have emerged over the last five years (2005 – 2010). Next, frameworks that have emerged as reliable predictors of employee creativity, as well as questions that remain surprisingly under and even un-researched are discussed. Theoretical and methodological improvements needed in future for theory development are described at the end of this chapter.

#### Introduction

The last two decades have witnessed a rapid proliferation of research interest in studying creativity. From 2005 to 2010, a computer-based search using Business Resource Complete observed 4496 publications, while in the comparable period, 1999 to 2004, only 2480 journals were published in peer-reviewed journals<sup>1</sup>. Along with this marked growth is the application of more diverse theory, as well as the implementation of more sophisticated research designs, techniques and methodologies (such as matched pairs design, and multilevel methods) are becoming standard practice. The sheer number of publications makes it

<sup>&</sup>lt;sup>1</sup> The keywords were used in such research were creativity and creative.

difficult to identify the key themes underpinning these different research orientations. Such analysis is important and particularly useful to guide theory development, as well as providing managers in practice with specific guidelines as to what fosters employee creativity.

# The Need for an Integrative Review on Employee Creativity

Given the massive number of publications on employee creativity for the past two decades, a number of articles have been selected to review the literature, each emphasizing a slightly different focal point. Zhou and Shalley (2003), for example, conducted a critical review of major theoretical frameworks (e.g., Amabile's (1983) componential theory and Woodman, Sawyer and Griffin's (1993) interactionist approach), research methods that had been used in previous studies, and contextual factors and individual differences as antecedents or moderators of creativity. The contextual factors they covered include productivity and creativity goals, performance evaluation and feedback, social influence, supervisor behaviors, leadership, and job design; the individual difference factors include creative personality and self-efficacy and role identity. At the end of the review, Zhou and Shalley (2003) propose areas that remain unanswered, for example, the complex role of reward in creativity, the influences of other contextual factors within the frame of intrinsic motivation, any psychological mechanism that links contextual factors with employee creativity, and the need for a new creativity scale to measure 'useful' as one dimension of creativity. They also explain in brief some 'breaking new theoretical grounds' in creativity research, which include creativity process within groups, how dissatisfaction and bad moods influence creativity, the possibility of any cross-level influences from contextual factors, how social relationships influence creativity, the creativity process at different stages and times, antecedents for

creativity in the international context, and the implication of creativity research for human resource management.

A land mark review by Shalley and her colleagues (2004), on the other hand, emphasizes the person-context study of employee creativity, which stems from both Amabile's (1983) and Woodman and colleagues' (1993) works. They elaborate key issues such as directions for future research, such as the application of self-concept, affect and mood, and creative process and cross-cultural research in order to understand more about employee creativity. In a similar vein, George's (2007) review is more concentrated on how creativity is defined and the individual internal process and contextual influences on employee creativity. She also argues that we know very little about internal group processes and the context in which groups are functioning to foster group creativity. She reveals areas in the literature that remain still under-researched, such as the extent to which apparently opposing internal organization processes, that is, routine processes and control influence employee creativity, the internal individual-level process in creativity that combines conscious and unconscious mind simultaneously, and the extent to which affect and emotion play a significant role as antecedents as well as consequences of creativity.

Another review of the literature by Runco (2004) focuses on disciplinary perspectives on creativity research that have been developed and employed. He recommends more research which integrates different disciplines to better understand creativity. Hennessey and Amabile (2010) echo his suggestion in that they recommend the use of a system perspective in examining and understanding creativity, since no single approach is sufficient for examining the emergence of creative behaviors. Prior to that suggestion, they note the surge of interest in various approaches to understand creativity better and yet these share 'very little overlap in

terms of material suggested' (Hennessey & Amabile, 2010, p. 571). Next, they review the definition and measurement of creativity, for which they acknowledge that psychologists have found difficulties in finding a consensus. They also review contemporary creativity studies which include the following issues: seeing creativity as a product; creativity that is embedded in a creative person; the influence of affect, cognition, and training on creativity; the role of individual differences; groups, teams, work contexts, and organizational influences on employee creativity; and the social psychology approach to creativity.

In spite of differences in how those scholars review the literature, they share a similar concern that all the existing concepts and models diverge significantly in terms of magnitude and direction for future research. The variables that have been utilized in these studies to identify and understand factors influencing creativity in different contexts and across time vary widely from one to another. For instance, to examine the role of leadership in employee creativity, scholars have used, for example, the following theorizing; self-concept, team climate and intrinsic motivation. This leads to problems in generalizing the underpinning concept of fostering employee creativity. The following questions remain to be addressed in future research: How does creativity work and how does one maintain it to maximize its benefit? What are essentially the antecedents and consequences of endorsing and fostering it? Are there any cultural differences in valuing creativity? Can any routine operations in the organization facilitate creativity? Can creativity work side-by-side with routines in organizations to boost up their productivity?

The purpose of this chapter is thus to review and integrate results emerging from the current literature over the past five years, 2005-2010, in relation to the antecedents of employee creativity. Firstly, employee creativity is defined and its connection with innovation is

described. Next, a synthesis and integration of the emergent key research orientations as well as examination on potential confounds and pitfalls in the research are provided and finally, a number of new directions for creativity research are suggested.

This chapter, therefore, offers to advance the current creativity literature in at least three significant ways. First, it analyzes major key findings and seemingly disconnected themes pertinent to creativity which have been studied for the past five years. Second, it critically and constructively evaluates existing research practice in the field to stimulate new research approaches and theory development. Finally, it demonstrates the inter-connection between creativity research and other disciplines such as self-concept and social network analysis, where appropriate, to foster a broader and more useful body of management knowledge.

#### **Creativity and Innovation**

A widely employed definition of employee creativity is the development of novel and potentially useful ideas about products, services, practices, and procedures (Amabile, 1988; Shalley, et al., 2004), which is often considered as a unitary concept (George, 2007). But George (2007) argues that the definition comprises two contrasting concepts, novel versus useful, and also refers to two dimensions, namely, idea generation and problem solving, respectively. According to the Oxford Advanced Learner's Dictionary (2005), novel (adjective) refers to something different from anything known before whereas useful (adjective) refers to something or somebody that can help individuals to achieve what they want. Thus, what is novel is not necessarily useful, since useful involves the understanding of others' needs and benefits (Grant & Berry, 2011). In a similar vein, Unsworth (2001) proposes that the above definition in fact offers two dimensions of creativity, which are based

on drivers for engagement (internal versus external) and problem types (open versus closed). To resolve this confounding problem, she suggests four categories of creativity: responsive (closed, external), expected (open, external), contributory (closed, internal), and proactive (open, internal). Responsive creativity occurs when employees have the least control over choices of problem solving in the organization as a result of the particular situation and the present problem. Expected creativity occurs because an external situation forces employees in such a way that requires them to have 'self-discovered the problem' (p. 292), whereas, contributory creativity occurs when employees are self-determined and is 'based upon a clearly formulated problem' (p. 292). Finally, proactive creativity occurs when employees actively seek to solve problems in the workplace driven by internal motivation. In regarding to such categorization, Unsworth (2001) further posited that people may perceive that responsive creativity is less creative compared to proactive creativity and that some creative processes are more extrinsically rather than intrinsically motivated. She noted however that these categories are contingent upon contextual factors. Despite these caveats, the proposed categories also highlight an under-studied area of creativity, that is, proactive creativity, for which Unsworth (2001) argues that its basic tenet is completely different from the following constructs: taking charge, voice, proactive personality, and personal initiative. Further, Unsworth (2001) suggests that a new creativity scale is needed, especially given the difficulties of measuring proactive creativity in laboratory settings. Nonetheless, the development of such a scale will lead to the following questions worthy of further research: (1) what factors play a role as the antecedent for each category; (2) what the differences of the creativity process are for each category; and (3) to what extent overlapping areas exists in explaining the four categories. These questions, of course, provide great assistance for theory development.

Creativity research has tended to utilize one of the following techniques to measure creativity: consensual assessment techniques, supervisory rating, or objective measures (for further information, see Zhou & Shalley, 2003). For supervisory ratings in particular, most creativity studies have utilized the following scales: 6-item scales developed by Scott and Bruce (1994); 3-item scales developed by Oldham and Cummings (1996); 9-item scales developed by Tierney, Farmer, and Graen (1999); 13-item scales developed by George and Zhou (2001); or 4-item scales developed by Baer and Oldham (2006). All of these are related to one another: for example Baer and Oldham's (2006) scale is adapted from George and Zhou's (2001). These measures tend to be appropriate for supervisory ratings (as supervisors are the witness for any suggestions of new ideas from employees and thus they are in the prime position to rate their employees, as well as be to be comfortable, willing, and fairly adept at conducting evaluative ratings of their subordinates), and conceptualized creativity as a unitary concept. They do share some similarities, and yet have different emphases. All measure employees' behaviors underlying the generation of novel and useful ideas, but one of them adds to measuring the extent to which those ideas are planned and scheduled for implementation, specifically Scott and Bruce (1994, p. 606). In addition, most of these scales are validated using R&D employees within organizations (exceptions are George and Zhou's (2001) and Baer and Oldham's (2006) scales). The latter fact has led Zhou and Shalley (2003, p. 174) to conclude that 'some scales may be more appropriate for studying some population rather than others'.

Following from the use of these creativity scales is the question: do these demonstrate convergent validity with *objective* measurement of employee creativity, such as patents and invention disclosure forms (IDF) and in-role performance measurement? This question is important, given that *objective indicators* are often being seen as the bottom line outcome of

the creative process. However, they should not be seen as superior measures of creativity, since many non-creative factors are involved in realizing the tangible realization of a particular innovation (such as funding and organizational politics) that do not concern or affect individual creativity, and that are contingent on influences other than individual creativity (Zhou & Shalley, 2003). Numbers of studies have provided their support for the convergent validities between creativity scales and objective measurements (e.g., Oldham & Cummings, 1996; Scott & Bruce, 1994; Tierney, et al., 1999). Accordingly, and still following Zhou and Shalley (2003), creativity should be studied in its own right and not through objective outcomes that are contingent on creativity as proxies (even when we should expect a positive relationship between the two, which indeed was found by earlier research). In a similar vein, Tierney and her colleagues (1999) suggest that without employees generating novel and practical ideas, there is nothing to disclose or patent. However, while creative activity is clearly incorporated under the auspices of IDFs and patents, they are not the same phenomena, and one should not expect them to be. In addition, studies that have collected both supervisor ratings and more objective metrics, such as Oldham and Cummings's (1996) and Tierney and colleagues' (1999), have found significant but rather modest correlations (mid-.20s to mid-.30s) between ratings and research reports, IDFs and patents. Also, other studies provide inferred support for the predictive validity of individual ratings (e.g., Frese, Teng, & Wijnen, 1999; Pirola-Merlo & Mann, 2004), reporting correlations with the number of ideas submitted to schemes of suggestions and the number of rewarded suggestions. Perhaps the closest link with creativity ratings and creative behavior is found in Amabile, Barsade, Mueller and Staw's (2005) study, which reports that monthly peer-ratings of creativity were positively related to engagement in creative thought (as scored by coders who assessed spontaneously reported creative thought or problem solving in an employee's daily narrative).

Regarding the validity between creativity scales and in-role performance, prior studies have demonstrated divergent validity between the two and have observed modest associations between them. Neubert and his colleagues (2008), for example, found a non-significant relationship between creativity and in-role performance (r = .08), while Janssen and van Yperen (2004) found that innovative performance, a construct with strong emphasis on ideas implementation, is thus more likely to be related with performance, but had a weak association with in-role performance (r = .17). As the relationship between in-role performance and creativity across different settings has been demonstrated in the literature (Gong, et al., 2009; Janssen & van Yperen, 2004; Zhang & Bartol, 2010), there is a possibility that the associations between the two constructs will be strongest in white-collar work, especially R&D (e.g., Hirst, van Dick, et al., 2009) and weakest in blue-collar work such as production line work (e.g., Baer & Oldham, 2006). Calls have been made for more research to explore the association between creativity and other employee performance, as well as productivity (see Kachelmeier & Williamson, 2010; Shalley, 1995). Studies along these lines help understanding the common threads across the literature as well as the generalizability of different approaches and theory. This, in turn, helps understand important themes across the wider management literature as well as their specific points.

With regard to rating sources, it is believed that there is no perfect rating source, whether self-ratings, peer ratings or supervisor ratings; they are all likely to have some form of error associated with their use. However, a study examining the generalizability of manager developmental ratings across supervisor, peer, subordinate and self-perspectives observes remarkable similarities across the rating patterns of the different raters (Scullen, Mount, & Judge, 2003). In addition, creativity ratings have been found to be consistent across

supervisor, peer and self-ratings (Moneta, Amabile, Schatzel, & Kramer, 2010), providing evidence for convergent validity between supervisor and other sources. To sum up, a new and improved measurement is indeed an important avenue for advancing the methodological sophistication of the creativity literature (Shalley, et al., 2004), but there is also a strong basis to conclude that the current approach provides adequate convergent validity.

Since creativity can be generated by anyone performing any job and at any level in an organization (Madjar, Oldham, & Pratt, 2002), creativity itself may vary in terms of its scope or range of value creation (George, 2007; Madjar, et al., 2002; Shalley, et al., 2004). Shalley et al. (2004) conclude that creativity may range from minor and incremental adaptation in the products, services, practices or procedures to major and radical breakthrough in development of new products, practices or procedures, which adds value directly or indirectly to the organization in either short-term or long-term. Thus, Mumford (2000) argues that creativity is a complex process where high risks and even failure are embedded. Furthermore, Shalley and colleagues (2004, p. 933) assert that the presence of one's creative ideas may lead others to apply those ideas in their work, and so they begin to develop more ideas, and transfer those ideas to others in the organization for their own use and development. This process is imperative for organizations, because it provides the basis to adapt, grow and compete in the market (Atwater & Carmeli, 2009; Dervitsiotis, 2010; Wadler, 2009).

Nonetheless, it is important to distinguish between creativity and innovation as they are not conceptually inter-changeable. Creativity is the product of idea generation which is novel and useful for the organization and we can consider those ideas as an innovation *only* when they are successfully implemented in the organization (Shalley, et al., 2004; West, 1990). Thus, these scholars argue that creativity is the first important yet insufficient step toward

innovation (Shalley, et al., 2004). Surprisingly, given the strong connection between the two concepts, few studies have examined them simultaneously (exceptions are Gumusluoğlu & Ilsev, 2009b; Pirola-Merlo & Mann, 2004). The lack of research raises the question whether these distinctions reflect definitions evident in concept but not in practice. Further clouding this is the fact that studies of individual innovation frequently use items measuring and used in creativity scales. For example, Janssen and van Yperen (2004), Miron, Erez, and Naveh (2004), Yuan and Woodman (2010), and Pieterse, van Knippenberg, Schippers, and Stam (2010) use items that measure innovative behavior, such as 'Generating original solutions to problems', 'Finds unusual solutions', 'Generates creative ideas', and 'Generates original solutions', respectively. For these reasons, rather than trying to fuel this debate, studies regarding innovation, innovative, or innovation behavior are excluded.

The next section discusses the relationship between leadership and creativity since, and then discusses the most utilized approach in examining creativity, the person-context approach. The discussion next moves to the emerging concepts in the literature such as goal-directed behaviors, self-concept (which covers self-definition with special relationship and self-concept orientation concepts), moods, and social networks, as attempts in understanding creativity better, especially in finding an alternate to the well-known key driver of employee creativity, intrinsic motivation (Amabile, 1983; George, 2007; Grant & Berry, 2011). The remaining unanswered questions in the area are discussed next; for example, the potentially different perspective that Western and Eastern may have in defining, measuring and valuing employee creativity and the significant role of cultural context in understanding factors that foster employee creativity.

# **Leadership and Creativity**

Leadership has emerged as a key stimulant for creativity because of its role in motivating followers to work towards common super-ordinate goals, such as organizational goals (Amabile, Schatzel, Moneta, & Kramer, 2004; Shalley, et al., 2004). Jung, Chow and Wu (2003) summarize that leadership may affect employees in direct ways (by raising employees' intrinsic motivation and higher their level of needs: Tierney, et al., 1999), and also indirect ways (by establishing a supportive work environment: Eisenbeiss, et al., 2008; Gumusluoğlu & Ilsev, 2009a). Most of these studies suggest that employees demonstrate creativity when they receive supportive supervision, mostly from high quality dyad leader-member exchange (Atwater & Carmeli, 2009; Tierney, et al., 1999) or from transformational leaders (Gumusluoğlu & Ilsev, 2009b; Jung, 2001; Shin & Zhou, 2007).

However, variable results have led scholars to make a further call to examine any intervening variables to better explain the aforementioned relationship (Atwater & Carmeli, 2009; Tierney, et al., 1999). With regard to the relationship between leader-member exchange (LMX) and creativity, Liao, Liu and Loi's (2010) study found that the association was positive. Using the lens of Social Exchange Theory, Liao and colleagues (2010) explained the process by which leader-member exchange (LMX) and team-member exchange (TMX) influenced individual creativity in a team setting. This longitudinal study was conducted in China using multisource data. The result demonstrated that creative self-efficacy mediated the relationships between LMX and individual creativity and between TMX and individual creativity. Moreover, they also reported that TMX differentiation (i.e., the quality variation of social exchange relationship between one team members with his or her teammates) moderated the relationship between TMX and creative self-efficacy. Their findings corroborated Scott and Bruce's (1994) study, which found a positive relationship between

LMX and innovative behaviors. However, a study by Tierney and her colleagues (1999) demonstrated that there was a significant interaction between LMX and creativity but not with innovation.

In terms of transformational leadership, Shin and Zhou (2003) found that transformational leadership was significantly correlated with follower creativity and follower's value of conservation moderated such a relationship. Value conservation is 'a value which [favors] propriety and harmony in interpersonal and person-to-group relations' (Shin & Zhou, 2003, p. 705). Moreover, they found that intrinsic motivation mediated the relationship between transformational leadership and follower value of conservation and partially mediated the relationship between follower value of conservation and follower creativity. Conversely, Eisenbeiss and Boerner (2010) found that the relationship between transformational leadership and team innovation (was measured by the quality and quantity of ideas generated and then implemented within 52 R&D teams of international companies) took a U-shape, or stated differently, R&D team innovation was high when transformational leadership was both high and low. They argued that this U-shape occurred because R&D teams already had high intrinsic motivation to innovate, as well as expertise in terms of knowledge and technical skills. When transformational leadership was low, it led to a higher level of innovation because the leader protected the R&D team's intellectual autonomy. On the contrary, when transformational leadership was high, a positive result might still occur because team members admired the leader and his or her 'vision for the future creates strong team identification and commitment' (Eisenbeiss & Boerner, 2010, p. 367). In contrast two previous studies, Wang and Rode (2010) demonstrated that transformational leadership was not positively related to employee creativity. Nor did they find that the sense of oneness with the leader whereby individuals merge the leader's aims and goals with their own (i.e., leader

identification) or an innovative climate moderates the aforementioned relationship. Yet the authors found that a three-way interaction among transformational leadership, leader identification and innovative climate was significantly associated with employee creativity. The authors claimed that these findings suggested it would be too risky to merely depend on transformational leadership in fostering employee creativity, because a positive result only occurred when employees had a strong identification with a leader who exhibited transformational behaviors, supported by a strong innovative climate.

# The Emerging Leadership Approaches

As mentioned above, these varying findings, alongside the identification of different leadership approaches, have *encouraged* scholars to study leadership behaviors that seek to develop followers, such as servant leadership, or to enhance their reasoning, such as authentic leadership. As such, some scholars have argued that other forms of leadership such as servant leadership (Neubert, et al., 2008), empowering leadership (Zhang & Bartol, 2010), authentic leadership (Walumbwa, Wang, Wang, Schaubroeck, & Avolio, 2010), or even paternalistic leadership (Wang & Cheng, 2010; Zhou, 2006) may be important stimuli for creativity.

Recently scholars suggest that we need to understand how leaders build and sustain individual relationships with their followers where leaders emphasize the importance of followers and community development (Neubert, et al., 2008; van Dierendonck, 2010) as well as explore the indigenous leadership approach in the Eastern context (Pellegrini & Scandura, 2008; Zhou, 2006). The latter issue is triggered by the fact that most leadership and creativity studies have developed from the perspective of European – North American values. This approach has led to researchers applying these frameworks to different

indigenous cultures to assess their applicability. There is also a need to understand and develop leadership approaches that emerge from other regions and cultures such as East Asia. The corresponding discussions on servant and paternalistic leadership approaches are delineated as follows.

Servant Leadership. Servant leadership refers to leader behaviors which emphasize follower and community development (Hale & Fields, 2007; Liden, et al., 2008; van Dierendonck, 2010). Servant leadership is distinct from transformational leadership or empowering leadership in that servant leaders are focused on promoting others' interests over and above those of the leader or leader-defined organizational interests (Liden, et al., 2008; van Dierendonck, 2010). Thus servant leadership can be identified as 'a people-centered leadership style' (van Dierendonck, 2010, p. 21). In an extensive review of servant leadership, van Dierendonck (2010) argues that servant leaders promote employee satisfaction, commitment and better performance because of its unique characteristics. Neubert et al.'s (2008) study was the first of its kind to study the association between servant leadership and employee creativity.

Neubert and his colleagues (2008) demonstrate that servant leadership positively influences employee creativity because it raises feelings for nurturing within employees, and, subsequently, leads them to exhibit exploratory behaviors that are needed for creative activities. This study was conducted in the Western context, and it would be interesting to examine whether such an influential process holds up in different contexts. As Neubert and colleagues (2008) used data from the same source, it would also be interesting to know if these findings are replicated with data from different sources. Cross-national studies on servant leadership so far have been conducted by Pekerti and Sendjaya (2010), who examined

its application in Australia and Indonesia, and by Yong and colleagues (2010), who examined its application in China. Given its potential as a viable leadership approach, more cross-cultural research is needed to assess generalizability and universality of the servant leadership concept.

Paternalistic Leadership. Paternalistic leadership is defined as 'a style that combines strong discipline and authority with fatherly benevolence' (Farh & Cheng, 2000, p. 91), which implies that paternalistic leaders 'assert authority and control' and at the same time show 'an individualized concern for subordinates' personal well-being' (Pellegrini & Scandura, 2008, p. 567). Pellegrini and Scandura (2008) then suggest that paternalistic leadership has two dimensions, authoritarianism and benevolence. Authoritarianism refers to leader behaviors emphasizing authority and control, whereas benevolence refers to a leader's concern for subordinates' personal well-being. In a paternalistic culture, a leader has an obligation to provide care and protection to his or her subordinates and in exchange, these subordinates will show a strong feeling of gratitude, loyalty, respect, and conformity (Cheng, Chou, Wu, Huang, & Farh, 2004; Niu, Wang, & Cheng, 2009; Pellegrini & Scandura, 2006; Wang & Cheng, 2010). Even though the paternalistic leadership concept is indigenous in Chinese business society (Farh, Cheng, Chou, & Chu, 2006; Farh, Liang, Chou, & Cheng, 2008), scholars have demonstrated that it is relevant to and ubiquitous in many collectivistic, high power distance and high uncertainty avoidance cultures such as the Asia Pacific, the Middle East, and Latin America (Cheng, et al., 2004; Martinez, 2003; Ng & Bligh, 2008; Niu, et al., 2009; Pellegrini & Scandura, 2006; Uhl-Bien, Tierney, Graen, & Wakabayashi, 1990). Note that 'paternalistic leadership is one of the most significant cultural characteristics of Eastern societies' (Soylu, 2011, p. 219) which has rarely been investigated by researchers (Erben & Güneşer, 2008).

Earlier empirical studies have demonstrated the role of paternalistic leadership, a form of a controlling yet effective leadership approach (Pellegrini & Scandura, 2008), in influencing employees' behaviors and performance; it includes extra-role behaviors (i.e., organizational citizenship behaviors/OCB), job satisfaction and commitment. To the best of my knowledge, Wang and Cheng (2010) were the first to explore the relationship between benevolent leadership and employee creativity. In their research, involving 167 dyads of supervisors and subordinates in Taiwan, they found that the strongest effect of benevolent leadership on creativity occurred only when employees' creative role identity was high or employees' job autonomy was high. In addition, they also found that job autonomy was a stronger moderator than creative role identity. Given these prior contingent effects and the prevalence of this leadership behavior, more research is needed to examine the links between paternalistic leadership and creativity.

# Important Unanswered Questions from Contemporary Leadership Studies

Leadership studies by and large have examined the social and psychological processes by which leaders affect employee performance (DeChurch, et al., 2010; Gardner, et al., 2010). Gooty and colleagues (2010), for instance, argue that further research is needed to examine the association between emotional competencies and leadership. For example, research is needed to examine the idea that employees who experience positive affect and emotion tend to evaluate their leader as a charismatic leader, and, in turn, will show the expected performance. These researchers further articulate the importance of multi-level approaches to examine how leadership is enacted across levels simultaneously. Cross-level research examines relations between team and individual-level variables (Diez-Roux, 2003), and is

important in understanding the causes of variability in both individual and team performance (cf. Diez-Roux, 2004).

A call has also been made to study leadership in a naturalistic setting, such as the usage of daily diaries or qualitative studies. To answer this call, it would be beneficial to conduct a longitudinal study using process approaches and the relevant method for data collection (Pettigrew, 1990, 1997). Process approaches are a research approach where the researcher is continuously observing 'a sequence of individuals and collective events, actions, and activities unfolding over time in context ' (Pettigrew, 1997, p. 338). Pettigrew (1997) further explains that the purpose of the process approach is to examine and explain what, why and how links between context, process and outcome *occur and change over time*. From the perspective of process analysis, in terms of data collection method, researchers may examine employee creativity using *employees' creative log books* where employees are asked to write down any ideas that come to along with the background and situation which triggered them producing such ideas. This analysis can be combined with a grounded research method such as ethnography (Atkinson & Hammersley, 2007), for example, where the researcher observes a project team, for instance, in their natural environment for certain of time, to examine factors influencing their creativity.

Gaining insight from current leadership studies, other leadership approaches may also be antecedents of creativity. For example, empowering leaders require employees involvement in decision making which is a vital requirement for creativity (Amabile, 1988; Amabile, et al., 2004). Another new form of leadership which has a possible positive relationship with creativity is authentic leadership, because it generates the feeling of identification to the leader (Walumbwa, Wang, et al., 2010), as well as self-awareness and self-regulated

behaviors (Avolio & Gardner, 2005; Avolio, et al., 2009; van Dierendonck, 2010), which are needed to fuel employees' motivation toward creative endeavors. Apart from these somewhat different leadership approaches and their influences on employee performance in general, further research is needed to reveal the nature of the relationship between leadership approaches and creativity, as well as the extent to which they use a similar influence process (in the case of identification) or exhibit dissimilarity, depending on the context.

# The Person-Context Approach

As mentioned above, the contemporary creativity literature emerges from the utilization of social psychology perspectives when examining antecedents of creativity, and is strongly influenced by the Componential Model of Creativity by Amabile (1983, 1988) and the Interactionist Approach of Organizational Creativity by Woodman and his colleagues (1993). The Componential Model of Creativity describes three main capabilities that provide a foundation for creative performance, that is, domain-relevant skills, creativity-relevant processes and task motivation. Domain-relevant skills are the knowledge and experiences in a particular domain that is affected by an individual's education, cognitive styles, perception, and motor ability. Creative-relevant processes refers to both tacit and explicit knowledge which underpins the production of creative ideas, cognitive styles and work styles for creative activities that are affected by training, experiences and individual traits. Finally, task motivation is an individual's attitude toward a task and his or her perception of their own motivation to complete the task. The latter implies that individuals can experience either intrinsic or extrinsic motivation toward their work. Amabile's (1988) intrinsic motivation concept, which stems from Cognitive Evaluation Theory (Deci & Ryan, 1985), suggests that employees may experience higher intrinsic motivation when they feel competent and possess

self-determination in their tasks, which in turn leads to the production of novel ideas. Thus the contextual factors may have either a positive (informational) or negative (controlling) effect on their creative performance (Zhou & Shalley, 2003). If the contextual factors are informational, the theory argues that employees may experience a higher level of intrinsic motivation, which can be channeled toward creative endeavors and in turn may result in a higher level of creative performance (Amabile, 1983, 1988). However, individual creative performance can be externally motivated when external factors such as reward and evaluation influence better their attitudes toward creative activities (Amabile, 1990). The second theory, the Interactionist Approach, which originates from the Interactional Psychology Concept (Terborg, 1981) proposed that employee creativity can be fostered by optimizing the interaction between individual characteristics and environmental factors and that this interaction is essential for creativity (Zhou & Shalley, 2003).

In contrast to the failure to observe individual differences that consistently and reliably predict creativity, studies examining the interaction between the person and the context have reliably and consistently provided support for this framework in a variety of contexts (George, 2007; Runco, 2004; Shalley, et al., 2004). Different personal and contextual factors have been found to be important for fostering employee creativity which includes identification with teams (Hirst, van Dick, et al., 2009), creative self-efficacy (Tierney & Farmer, 2002), creative requirement of the job (Unsworth, Wall, & Carter, 2005), job complexity (Oldham & Cummings, 1996; Shalley, Gilson, & Blum, 2009), task conflict (Jehn, Rispens, & Thatcher, 2010; Kurtzberg & Mueller, 2005; van Dyne, Jehn, & Cummings, 2002), rewards, recognitions and evaluation systems (Baer, Oldham, & Cummings, 2003; Eisenberger & Aselage, 2009; Zhou & Shalley, 2003), supportive leaders (Amabile, et al., 2004; Neubert, et al., 2008; Wang & Cheng, 2010) and/or supportive co-

workers (Madjar, et al., 2002; Zhou & George, 2003), social networks (Baer, 2010; Perry-Smith, 2006), and psychological safe climate (Amabile, et al., 2004; Kark & Carmeli, 2009; Shin & Zhou, 2003), as well as factors that might potentially inhibit employee creativity such as controlling leadership (cf. Oldham & Cummings, 1996) and bureaucratic practices (Hirst, van Knippenberg, Chen, & Sacramento, 2011). Explanation of each factor is as follows.

More recently researchers have begun to diverge from studying individual personality to examine the contextual conditions when an individual's self-concept has a strong relationship with employee creativity. From the social identity analysis point of view, identification (i.e., self-definition in relation to his or her relationships with others) is a powerful resource to persuade and influence employees to engage in specific activities. As the team is often recognized as a place to generate and test creative ideas to solve workplace-related problems, Hirst and colleagues (2009) show that team identification leads to creativity and employees' creative efforts mediates the relationship. In addition, they demonstrate that the highest creative effort occurs when leader inspirational motivation and leader team prototypicality are high. Emphasizing the strength of individual capabilities by integrating the self-concept, Tierney and Farmer (2002) introduce a new variable, creative self-efficacy, which originated from the self-efficacy concept developed by Bandura (1977). Most recently, they argue and demonstrate that creative self-efficacy is a strong individual driver to engage in creative endeavors and a strong predictor for creative performance across time (Tierney & Farmer, 2011).

From the job-related context, Unsworth and her colleagues (2005) conclude that creative requirement is a 'neglected important proximal determinant for employee creativity and a potentially significant intervention' (p. 541). Moreover, some scholars argue that extrinsic

reward, recognition and evaluation systems are potentially affected employee creativity (Baer, et al., 2003; Eisenberger & Aselage, 2009; Zhou & Shalley, 2003), because some people tend to react more positively to external rather than to internal stimuli (cf. Deci & Ryan, 1985). Unfortunately, little agreement is achieved on the direction of their effects on creativity (Baer, et al., 2003). With regard to conflict in the workplace, Kurtzberg and Mueller (2005), for example, conclude that conflict events (which include task, process, and relationship conflicts) do impact perceptions of creativity on the same day and the next day. Task conflict refers to disagreement or lack of shared understanding on any small workrelated issues such as a work schedule or short-term strategy. Process conflict refers to disagreement or lack of shared understanding on any big work-related issues such as roles and responsibilities or long-term goals. Finally, relationship conflict refers to distrust or dislike or complain about anyone or any teams in the organization. In relation to the connection between a supportive and safe climate and creativity, Perry-Smith (2006, p. 86) argues that we 'know little about how the social context affects individual thinking when it comes to the generation of creative ideas or solutions as evidenced by the relative creativity of work outputs'. Kark and Carmeli (2009, p. 786) then examined this issue and found that employees' 'individuals' perceptions of the consequences of taking interpersonal risks in their work environment' or psychological safety were related to their feeling of vitality toward their jobs and in turn resulted in their involvement in creative work.

Regarding interpersonal relationships in the workplace, Oldham and Cummings (1996) note that employees with high creative-relevant personal characteristics can be assigned to successfully complete complex and challenging jobs, but this condition does not apply for employees with low creative-relevant personal characteristics. In addition, these authors also suggest the need to manage in a supportive manner to facilitate those high creative-relevant

personal characteristics to be creative. Numerous scholars have also suggested similar advice (e.g., Amabile, et al., 2004; Neubert, et al., 2008; Wang & Cheng, 2010).

In relation to the social side of creativity, some scholars have recently examined the role of the extent to which employees have relationships with others and their perception of their positions in the networks on employee creativity (Baer, 2010; Perry-Smith, 2006). The general theme running through these studies is the significant role of weak-ties (i.e., the loose relationships between two actors). In relation to this, brokerage position (which refers to a position in the network where your two friends are not connected to each other) is important for creativity because being in this position may prevent employees from receiving redundant information which may confuse them in generating novel and useful ideas.

# Different Person-Context Theories

Despite the significant contributions of those studies, there are a number of differing person-contextual theories which do not actually fit within the schema of a person-context approach. Person-Environment (P-E) Fit Theory and Trait Activation Theory are two examples. Yu (2009) and Borg, Groenen, Jehn, Bilsky, and Schwartz (2011) note that P-E Fit Theory stems from the notion of *how well a person fits in a particular environment* in order to achieve the desired outcomes, such as job satisfaction, organizational commitment, the intention to stay, and job performance. P-E fit forms several types of fitness, which include fitness between demand of the environment and individual abilities, between individual needs and environment supplies and between organizational culture and individual values. Thus P-E fit is different from a person-context approach, where the value of personal and contextual factors is equal. As mentioned, the focus of the person-context approach is to identify

enhancing or inhibiting factors to influence individual motivation toward the tasks which may either maximize or limit one's effort in creative activities.

Likewise, Trait-Activation Theory is different from the person-context approach since in this theory, the context is more dominant than personal factors and its strength and relevance can be used to explain differences in trait-related behaviors (Haaland & Christiansen, 2002; Lievens, Chasteen, Day, & Christiansen, 2006). Trait-Activation Theory emphasizes the significance of situation trait relevance in understanding differences in the displayed individual behaviors based on one's perception of a specific situation and also the role of situational strength where individual differences are 'obviated when situations have demanding behavioral requirements in terms of ability, skills and personality traits' (Lievens, et al., 2006, p. 248). For example, when situational demands are more difficult – such as those are embedded in creative activities – and require certain competencies to resolve them which are not every individual possesses, then individual differences can be observed with more clarity (cf. Haaland & Christiansen, 2002; Tett & Guterman, 2000). This implies that, in a complex situation such as in creative activities, one can observe individuals' differences in clarity *only* when certain competencies required for such activities are not possessed by everyone. This concept is somewhat contradictory to the person-context approach's basic tenet, where both the person and the context share equal contributions to employee creativity and employees' differences are acknowledged. But what more important is how to maximize the results from those unique characteristics.

# The Emerging Approaches in Understanding the Individual-level Processes of Employee Creativity

As substantial body of research has suggested the important role of intrinsic motivation to explain the individual-level processes of fostering employee creativity (George, 2007; Hennessey & Amabile, 2010; Runco, 2004; Shalley, et al., 2004). Such theorizing stems from Deci and Ryan's (1985, 1987) theorizing that individual behaviors are the outcome of either personal choices or because of pressure from external demands. In the case of employee creativity, the theory *assumes* that intrinsic motivation is the fuel for employee creativity because it enhances employees' desires and efforts to learn new things and they will persevere in their learning (George, 2007; Grant & Berry, 2011). However, empirical evidence does not support such an assumption because the results that have been reported so far are equivocal (Grant & Berry, 2011). Such conditions have prompted some scholars to find more stable concepts to explain the individual-level processes of fostering employee creativity such as goal directed behaviors, self-concept, mood, and social networks. Explanations for each emerging concept are delineated as follows.

#### **Goal-directed Behaviors**

Goal-directed behaviors, or goal-directedness, is defined as individuals' tendency to set goals (Goldman, Masterson, Locke, Groth, & Jensen, 2002). Moreover, Jenks, Kahane, Bobinski and Pierman (1979) state that individuals are goal-directed when they have clearly defined and meaningful goals. Goal-directedness can be initiated by activities like writing a plan to increase the likelihood of implementation and achievement of defined goals (Osborne, 2010). Individuals may experience low goal-directedness when they are trying to achieve goals that

have no personal meaning for them, which in turn, may lead them to become involved in interpersonal conflict (Downie, Koestner, Horberg, & Haga, 2006). Further, Downie and colleagues (2006) explain that a failure in developing a specific plan to implement and achieve the defined goals is also a source for low goal-directedness.

Goldman and colleagues (2002) found that goal-directedness was related to personal identity, but unrelated to job satisfaction. When individuals have a strong personal identity, they are not afraid to set goals and develop a plan to implement them. Osborne (2010) also notes that goal-directedness is empirically related to personal well-being and salary. Within the creativity literature, goal-directedness has been examined using the frame of regulatory focus, proactivity, and goal orientation.

# Regulatory Focus Theory (RFT)

Regulatory Focus Theory (RFT) stems from the belief that individuals tend to minimize the differences between 'actual and desired end states' (e.g., seeking pleasure) and maximize the differences between 'actual and undesired end states' (e.g., avoiding pain) (Meyer, Becker, & Vandeberghe, 2004, p. 996; Neubert, et al., 2008). The course of minimizing such differences is understood as a promotion focus, whereas the course of maximizing them is considered as a prevention focus (Higgins, 1998). Neubert and colleagues (2008) note that promotion focus is evoked when individuals need for growth and nurturance is central, whereas prevention focus is evoked when individuals need for security is dominant. The authors further argue that individuals with promotion focus tend to exhibit exploratory behaviors required in creative activities, while those with prevention focus tend to be more conservative and less open to new ideas which may potentially inhibit creativity. Even though in nature individuals tend to be in favor of one focus, context may 'trigger one focus

over another' (Neubert, et al., 2008, p. 1220). Accordingly, scholars have argued that transformational leadership, empowering leadership and servant leadership tend to evoke promotion focus, while transactional leadership tends to evoke prevention focus (Kark & van Dijk, 2007; Neubert, et al., 2008). However, this argument needs further explanations regarding the extent to which those leadership approaches share any similarities or differences in enacting either promotion or prevention focuses and the existence of any potential moderators that may enhance individual regulatory focus. In relation to creativity research, most recently Neubert and his colleagues (2008) demonstrate that servant leadership which emphasizes leaders' motivation to serve and to lead and the development of others, i.e., followers and community, tends to evoke promotion focus which in turn, influence followers' helping behaviors and creative and innovative behaviors. To strongly conclude that this concept may provide an answer for the individual-level process of fostering creativity, more empirical research is indeed needed.

#### **Proactivity**

Proactivity is generally categorized as 'an active facilitation of meaningful, personal and/or environmental change' (Thomas, Whitman, & Viswesvaran, 2010, p. 276). Thomas and his colleagues (2010) explain that ample empirical evidence has suggested proactivity is associated with proactive personality, personal initiative, voice, and taking charge. Proactive personality refers to the individual tendency to control situational forces and actively shape and influence their environment (Bateman & Crant, 1993). Personal initiative reflects individual tendency to engage in 'a range of proactive behaviors that are specifically aligned with organizational strategies and goals' (Thomas, et al., 2010, p. 277). Voice refers to individual tendencies to discuss ideas proactively, while taking charge reflects individual

efforts to 'restructure and optimize elements within organizational systems' (Thomas, et al., 2010, p. 277).

Proactive behaviors. Proactive behaviors can be defined as 'taking initiative in improving current circumstances or creating new ones; it involves challenging the status quo rather than passively adapting to present conditions' (Crant, 2000, p. 436). Proactive behaviors have been identified as a predictor for various employee performance measurement, such as better performance and career (Parker & Collins, 2010), problem solving (Parker, Williams, & Turner, 2006), creativity (Kim, Hon, & Crant, 2009), and network building (Morrison, 2002). For its relationship with employee creativity in particular, such correlation is sensible because proactive people tend to actively seek information and opportunities, show initiative to act on them, and persevere more in their actions until the intended change occurs. With regard to the correlation between proactive behaviors and employee creativity, Kim and his colleagues (2009) found that proactive personality was positively correlated with employee creativity. Additionally, they also proved that employee creativity fully mediated the relationship between proactive personality and career satisfaction and perceived insider status.

Personal initiative. Personal initiative is defined as 'work behavior characterized by its self-starting nature, its proactive approach and by being persistent in overcoming difficulties that arise in the pursuit of a goal' (Fay & Frese, 2001, p. 133). It is considered an active performance concept where individuals have the first initiative to elicit their strength and positive to achieve organizational goals. Bledow and Frese (2009) further argue that personal initiative is a key to success in today's competitive markets, because organizations need employees who actively search for new opportunities, solve work-related problems and continuously improve their performance. In addition, personal initiative is expected to

generate long-term positive changes for employees and organizations. Thus it is not surprising that the literature has shown that personal initiative has been associated with entrepreneurial success (Krauss, Frese, Friedrich, & Unger, 2005), finding a new job faster (Frese, Fay, Hilburger, Leng, & Tag, 1997), commitment (Den Hartog & Belschak, 2007), and creativity (Binnewies, Ohly, & Sonnentag, 2007). With regard to creativity, Binnewies, Ohly, and Sonnentag (2007) found that personal initiative increased engagement in the creative process at the beginning and was related to employee creativity as an outcome. The authors also posit that research on the creative process using the natural setting 'is sparse and has examined the overall engagement in creative behaviors at work but does not differentiate between several sub-processes' (Binnewies, et al., 2007, p. 433).

Voice. Wood and Wall (2007) define voice in a work context as the expression of dissatisfaction from employees with the intention to rectify the cause where exit is an option to leave the organization. In a similar vein, Pyman, Cooper, Teicher and Holland (2006) describe employee voice as ways for employees to raise their concerns, interests, contributions and participation in workplace decision making, as well as a means to solve workplace problems. Even though employee voice is change-oriented, its objective is not for organizational improvement, but to reduce employees' personal dissatisfaction (cf. Morrison & Phelps, 1999). Thus Kim, MacDuffie and Pil (2010) note that employee voice can take place either directly (through an employee involvement program) or indirectly (through an employee representative such as a union or work councils) between employees and management.

Employee voice has been associated with both employee and organizational performance, which includes job satisfaction (Cotton, Vollrath, Froggatt, Lengnick-Hall, & Jennings,

1988), productivity (Levine and Tyson (1990) as cited by Kim, et al., 2010), organizational performance (Doucouliagos, 1995), and creativity (Zhou & George, 2001). In relation to creativity, Zhou and George (2001) argue that, when employees are dissatisfied with their jobs and exit is a not-viable option to take as it is too costly, then employees will stay in the organization on the basis of necessity. The authors (2001) also note previous research which has demonstrated that this choice has led to employee voice because they think that this strategy is effective to make the intended change happen. Unfortunately, it is hard to find the most current study on voice, thus, it is not surprising that scholars have called for further examination of this variable – and even merging it with personal initiative (cf. Rank, Pace, & Frese, 2004).

Taking charge. Morrison and Phelps (1999) note that taking charge is a neglected form of extra-role behaviors, which can be defined as employees' voluntary and constructive efforts 'to effect organizationally functional change with respect to how work is executed within the contexts of their jobs, work units or organizations' (p. 403). These authors suggest that taking charge is different from other extra-role behaviors in that it is 'inherently change-oriented and aimed at improvement' (p. 403). They further note that, in the area of innovation and strategy, ample empirical evidence has suggested the potential value of taking charge for long-term organizational flexibility as well as promoting employee creativity (cf. Frohman, 1997; Scott & Bruce, 1994).

A computer-based literature search has found no research examining whether, to date, taking charge is related to employee creativity. However, Parker and Collins (2010) empirically proved that taking charge is a distinct variable from voice, proactive personality, and personal

initiative, but taking change and the other three would form a better first-order structure for a proactivity scale, given their high inter-correlations.

#### Goal Orientation

Goal orientation refers to individual 'dispositional or situational goal preferences in achievement situations' (Payne, Youngcourt, & Beaubien, 2007, p. 128). Stemming from educational psychology literatures, this concept has been proven to play an important role in human resources areas such as performance appraisal (VandeWalle & Cummings, 1997) and work-related studies such as leadership (Janssen & van Yperen, 2004). Scholars have identified three types of goal orientation toward developing and demonstrating individuals' abilities, i.e., learning goal orientation, performance-approach goal orientation and performance-avoidance goal orientation (Payne, et al., 2007).

Learning goal orientation is more focused on methods to master tasks. In doing so, individuals are more likely to develop their competencies to learn new skills, as well as to learn from experience. They also tend to have high self-efficacy and are more inclined to seek feedback. Given that self-efficacy and feedback-seeking are important for employee performance, individuals with strong learning goal orientation are therefore more likely to obtain success in various individual performance such as creativity (Hirst, van Knippenberg, & Zhou, 2009) and sales performance (VandeWalle, Brown, Cron, & Slocum, 1999), for instances. On the other hand, performance-approach goal orientation focuses on 'the attainment of competence relative to others', while performance-avoidance goal focuses on 'avoiding the perception of incompetence relative to others' (Payne, et al., 2007, p. 130). Empirical evidence has demonstrated that individuals with a performance-approach orientation are willing to learn new things, but their passion in learning is not as strong as it is

in those with learning goal orientation, and they tend to seek feedback *only* if they think that they have performed well. Thus, in terms of employee creativity, having a high level of performance-approach orientation may be beneficial in some contexts (Elliot & Harackiewicz, 1996; Hirst, van Knippenberg, et al., 2009). Performance-avoidance oriented individuals, on the other hand, tend to have high level of state anxiety and exhibit 'ego-focused and defensive behaviors, such as withdrawing in the face of obstacles, and responding to difficulties with off-task thoughts' (Parker & Collins, 2010, p. 642). Thus these individuals are less likely to get involved in challenging tasks such as creative processes, resulting in decreased intrinsic motivation (Elliot & Harackiewicz, 1996).

The following table provides a summary of the contemporary empirical studies relating goal-directed behaviors concept and employee creativity. These studies have integrated the goal-directed behavior concept in examining antecedents of employee creativity, based on field survey and using both self-report or supervisor rating of creativity. In addition, these studies have utilized the relevant concept to explain the underlying individual-level processes of creativity. Yet only one study differentiated the stages of creativity and explained the role of the particular variable as such. These studies have also identified different moderators of the relationship between goal-directed behaviors and employee creativity. It is also worth noting that no laboratory setting experiment has been conducted. A laboratory setting is believed to alleviate the limitations of field-setting research on the external validity of findings (cf. Avery & Quiñones, 2004). Since the intention is to integrate this concept as an underlying concept to explain the individual-level process of creativity, another critique would be to extent to which the scales developed can really capture the individuals' mental background in either various workplaces or day-to-day situations which require them to respond. An answer to the

earlier question is probably a proposal made by Bledow and Frese (2009): to use the situational judgment test (SJT).

Table 1. Summary of Studies Examining the Influence of Goal Directed Behavior on Employee Creativity in a Chronological Order

Authors	Study and Context	Manipulation and	Results
		Measures	
Zhou and	Field study of 149 office	Employees	Job dissatisfaction can
George (2001)	employees from a company	responded job	be associated to
	that manufactures petroleum	satisfaction,	creativity under
	drilling equipment.	continuance	constructive
		commitment, useful	contextual conditions,
		feedback from co-	such as the presence
		workers, co-	of high levels of
		workers' help and	useful feedback from
		support, and	co-workers, co-worker
		perceived	help and support, or
		organizational	perceived
		support for	organizational support
		creativity.	for creativity.
		Supervisors rated	
		creativity.	
Ohly,	Field study of 278	Employees-rated	Routinization and job
Sonnentag,	employees of a German	routinization, work	control were
and Pluntke	high-tech company.	characteristics, and	positively associated
(2006)		creative and	with creativity. Time
		proactive behaviors	pressure had an
		on different levels	inverted U-shape
		of specification.	relationship with
		Employees also	creativity, but a linear
		rated creativity,	positive relationship
		innovation and	with personal
		personal initiative.	initiative. Supervisor
			support and job
			control were
			positively associated
			with higher personal
			initiative.

Table 1. Continued

Authors	Study and Context	Manipulation and Measures	Results
Binnewies, Ohly, and Sonnentag (2007)	Field study of 52 nurses who worked mainly in nursing the sick and elderly in Germany.	Method 1: participants reported self-rating personal initiative. Method 2: participants were interviewed about the creative processes and an idea they had had at work by a psychologist. Method 3: the ideas were then rated by three subject-matter experts.	Personal initiative was important at the beginning of creative process and for idea creativity as an outcome.
Neubert et al. (2008)	Phase 2: field study of 250 full-time employees randomly recruited by a research services company in Dallas, Texas.	Time 1: employees rated servant leadership, initiating structure, and work regulatory focus (WRF). Time 2: employees rated in-role performance, deviant behavior, helping behavior, and creative behavior.	Promotion focus mediated the relationship between servant leadership and helping and creative behaviors. Prevention focus mediated the relationship between initiating structure and in-role performance and deviant behavior.
Hirst, van Knippenberg and Zhou (2009)	Field study of 25 teams comprising of 255 employees from a crossnational R&D leadership development initiative in a large pharmaceutical company based at four research divisions in three countries (the United States, the United Kingdom, and Sweden).	Employees reported goal orientation and team learning. Supervisor rated employee creativity.	Learning orientation had a cubic relationship with creativity contingent on team learning behavior. Approach orientation was associated with creativity contingent on team learning behavior.

Table 1. Continued

Authors	Study and Context	Manipulation and	Results
		Measures	
Kim, Hon and	Field study of 146 Hong	Employees reported	Employee creativity
Crant (2009)	Kong employees who were	proactive	fully mediated the
	working in various	personality,	relationships between
	organizations and	perceived insider	proactive personality
	completed a 3-wave survey.	status, career	and career satisfaction
		satisfaction, and	and perceived insider
		creativity.	status.
Hirst, van	Field study of 95 teams of	Employees reported	Team bureaucracy
Knippenberg,	Taiwan customs.	goal orientation,	suppressed the
Chen and		centralization and	expression of
Sacramento		formalization.	individual differences
(2011)		Supervisors rated	in terms of goal
		employee creativity.	orientation that might
			generate creativity.

# **Self- Concept**

One of the most significant developments in the creativity literature has been the emergence of research linking the self-concept, comprising self-definition with the special relationship concept (Hirst, van Dick, et al., 2009) and self-concept orientation (Tierney & Farmer, 2002) to employee creativity. The self-concept can be defined as the way we perceive ourselves. It contains a range of representations of the actual self and of the possible self, in a variety of dimensions (Markus & Wurf, 1987, p. 301). The concept has a major impact in explaining what drives individuals to take specific actions as their responses to challenges in creative endeavors. Such a driver reflects these individuals' on-going behavior, as well as directly regulating their behaviors (Hirst, van Dick, et al., 2009; Markus & Wurf, 1987; Tierney & Farmer, 2002).

Identification reflects a sense of oneness between individuals and their relationship either with the leader or their team or their organization. When the leader or the team or the organization exhibits willingness to engage in often challenging activities such as creative endeavors (Mumford, 2000), individuals who are identify themselves with them would see and comprehend that engaging in such process is an essential part for their identity (Hirst, van Dick, et al., 2009). Thus they are more likely to get involved in a similar process. It is believed that the stronger the identification, the more likely that individuals will engage in a similar process as their leader's or their teams' or their organization's (de Cremer & van Vugt, 1999).

On the other hand, when individuals feel empowered, that is, when they believe that they have the required competence and determination to add more meaning to and give impact to their works (Spreitzer, 1995; Thomas & Velthouse, 1990) to do creative tasks, they are more likely to invest considerable energy and time to engage in such behavior. Finally, Tierney and Farmer (2002), in a similar vein, propose that creative self-efficacy, that is, the belief that one can complete his or her tasks creatively, is a potential antecedent for employee creativity. This variable has been successfully proven across context s(Gong, et al., 2009) and even over time (Tierney & Farmer, 2011). Despite the growing interest in these concepts, more research is needed to establish their significance in explaining the individual-level process in fostering creativity.

#### Identification

Self-definition can vary according to the extent to which individuals describe themselves in relation to other individuals, relationships or groups (Pratt, 1998). Cooper and Thatcher (2010, p. 517) note that contemporary research has differentiated identification into relational

identification (with leader, co-workers or subordinates in organization) and collective identification. In relation to creativity research, the following areas of identification have been utilized as a means of awakening employee creativity: identification with the team (Hirst, van Dick, et al., 2009; Janssen & Huang, 2008) and role identity (Farmer, et al., 2003; Wang & Cheng, 2010).

Team identification is defined as the sense of oneness with the team such that individuals perceive the team's goals as their own (Ashforth & Mael, 1989; Mael & Ashforth, 1992).

Team identification stimulates the feeling of high levels of persistence and creative endeavors amongst employees in a team, which in turn influences their team creativity (Hirst, van Dick, et al., 2009). It is hypothesized that a high-level of team identification will motivate employees to invest considerable effort to avoid failure in overcoming challenges, especially if such failure has negative consequences on their own and team identities.

According to the role identity concept, the self consists of various roles that individuals have that derive from the way they see themselves and feedback from their social relations (Riley & Burke, 1995). These reflect a self-reflexivity process where 'an internalized set of role expectations, with the importance of the identity being a function of commitment to the relevant role' (Farmer, et al., 2003, p. 620). In addition to this, a substantial body of research has provided evidence for the consequences of creativity expectation for creative performance, such that supervisors' expectations and co-workers support and encouragement may influence one's creative behaviors (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Farmer, et al., 2003; Madjar, et al., 2002; Scott & Bruce, 1994; Zhou & George, 2001).

Recently Wang and Cheng (2010) find that when creative role identity is high, it enhances the positive influence of benevolent leadership on employee creativity. They argue that 'strong

creative role identity should ease the potential dilemma associated with the link between benevolent leadership and creativity' (p. 109), because employees with a strong creative role identity are very responsive to the contexts which might support or threaten their identities. In addition, these employees benefit from a leader's benevolent behaviors because such behaviors fulfill 'their critical need for self-verification' (p. 109).

# Self-concept Orientation

Self-concept orientation refers to 'general tendencies to think of oneself as an individual, relational partner, or group member' (Cooper & Thatcher, 2010, p. 516). Examples of the application of this concept in creativity research are creative self-efficacy (e.g., Chong & Ma, 2010; Gong, et al., 2009; Jaussi, Randel, & Dionne, 2007; Shin & Zhou, 2007) and self-evaluation (Silvia & Phillips, 2004).

Of the various measures of self-concept, creative self-efficacy is well established as one of the most reliable predictors of creativity (Harrison, Neff, Schwall, & Zhao, 2006), across a range of contexts and countries (Gong, et al., 2009) and over time (Tierney & Farmer, 2011). Stemming from Social Cognitive Theory (Bandura, 1977), creative self-efficacy is defined as whether the individual perceives they can be creative in their work role (Jaussi, et al., 2007; Tierney & Farmer, 2002). To excel in creative works, individuals need to have the knowledge of basic job skills, as well as a strong and sustaining internal force to persevere with the nature of the challenges of creative work. Creative self-efficacy is believed to be that force (Tierney & Farmer, 2002); it provides individuals with the momentum that will enhance their persistence level in performing creative activities. In the wider management literature, questions have been raised about the study of self-efficacy and whether this in effect reflects an individual's own judgment of their ability. Thus individuals high on

creative self-efficacy in effect are likely to perform creatively (cf. Tierney & Farmer, 2002, 2011).

On the other hand, self-evaluation maintenance (SEM) suggests that individuals are motivated to maintain positive self-evaluation and that their relationships with others influence their self-evaluation (Tesser & Campbell, 1982). SEM includes 'reflection process' and 'comparison process', which illustrate different outcomes of social relationships on one's self-evaluation given by other's quality of performance (Tesser, 1988). The latter occurs because individuals tend to exaggerate the performance of someone who is psychologically close to them because it will elevate their self-evaluation *only* when the context is not relevant to their self-definition.

With regard to the relationship between SEM and creativity, Silvia and Phillips (2004) note that considerable empirical findings have demonstrated that an increase of self-evaluation may undermine creativity (e.g., Bartis, Szymanski, & Harkins, 1988; Brickner, Harkins, & Ostrom, 1988; Szymanski & Harkins, 1992). Thus research needs to go further by examining when and how self-evaluation may enhance or inhibit creativity. The authors posit that an individual's expectation of future improvement may moderate the relationship between self-evaluation and creativity, such that the most positive effect occurs when the belief of self-improvement on potential failure is high. Such a belief 'acts as buffer against defensiveness' because it makes individuals – who have it – try harder to implement different approaches to overcome road blocks and challenges in the workplace (p. 1015).

#### Mood

Within the diverse sub-areas of psychology such as social, organizational, personal, clinical and child psychology, mood states show up as 'one of the widely studied' (Baas, De Dreu, & Nijstad, 2008, p. 779), but, in relation to creativity, the association between the two is somewhat inconsistent (George, 2007). Mood states usually involve 'a relationship with some object or event in the individual's environment that directs attention and encourages action' (Davis, 2009, p. 26). Considerable empirical findings have suggested a relationship between mood states and employee creativity (for example: Amabile, et al., 2005; George & Zhou, 2002, 2007). Yet, Davis (2009) and Baas and colleagues (2008) note that the findings about the relationship between mood states and creativity are mixed and inconsistent. A number of studies report a positive relationship between positive mood and creativity (e.g., Amabile, et al., 2005; Hirt, Devers, & McCrea, 2008). Davis (2009) argues that such findings occur because a positive mood makes a person able to access a diverse range of information, which then 'promote[s] divergent thinking and cognitively flexibility' (p. 27) that is required in creative activities. In addition, the author (2009) concludes that positive moods positively relate to creativity where the tasks are considered as fun and relaxed. Some findings, however, suggest the opposite: that a negative mood enhances creativity (George & Zhou, 2002); Davis (2009) argues that this condition occurs because the tasks are considered to be more serious. These conditions imply that further research is needed to explain the nature of these relationships.

In a meta-analysis study on the relationship between mood and creativity, Baas and colleagues (2008) note that most studies have examined the effect of hedonic tone (positive versus negative), activation (activating versus deactivating), regulatory focus (prevention

versus promotion) or other combinations, on employee creativity. At the end of the review, both authors conclude that the relationship between mood states and creativity 'is better understood as a function of various aspects of specific moods than simply in terms of hedonic tone or level of activation' (p. 795). Since people often experience various kinds of emotion at work which include angry, envy, jealousy or sadness, so that future research may provide answers to questions such as when and how these sorts of emotions can be utilized to foster employee creativity.

#### **Social Networks**

Research examining social networks can be described as the belonging to four dimensions (Kilduff & Brass, 2010). First, social relations that study a set of actors and the relations that connect or divide them, which include the frequency of social relations, degree of closeness and level of trust (Chen, Chang, & Hung, 2008; Kijkuit & van den Ende, 2010; McGrath, Vance, & Gray, 2003). Second, the preference of an actor in transacting with those that are similar (widely known as embeddedness) (Staber, 2004; Uzzi, 1996). Third, structural patterning which refers to the position of a focal actor relative to others in a network and the combination of direct and indirect ties surrounding the focal actor (Kratzer, Hölzle, & Gemünden, 2010; Sparrowe, Liden, & Kraimer, 2001). Finally, the utility of one's network connections which may either facilitate or constrain the realization of expected outcomes such as creative ideas (Cattani & Ferriani, 2008; Chen, et al., 2008; Kratzer, Leenders, & Van Engelen, 2010; McGrath, et al., 2003).

Within the creativity field, a strong theme running through those studies is the importance of ties that involve infrequent contact namely weak ties. According to Granovetter's (1983)

theory, weak ties connect to groups outside your own group; these provide access to a greater array of perspectives and resources. Weak ties provide bridges to unconnected individuals to allow diffusion of information between otherwise disconnected communities, which in turn generate creative ideas. While this theory has been supported in various appearance by different studies (e.g., Baer, 2010; Perry-Smith, 2006; Zhou, et al., 2009), the relationships have not always been positively linear. In fact, some recent studies by Baer (2010) and Zhou et al. (2009) have proposed that this relationship is contingent on other variables (e.g., personality and individual values).

On the other hand, other creativity studies have demonstrated how some individuals are more able than others to take advantage of their network position (e.g., Kratzer, Hölzle, et al., 2010; Sparrowe, et al., 2001). Sparrowe and his colleagues (2001) for example, demonstrated that social networks do influence individual and group performance. They found that centrality within an advice network positively influenced individual job performance, but the opposite result occurred in relation to centrality in 'hindrance networks'. Moreover, they found that hindrance networks density was negatively associated with group performance. Most recently, Kratzer, Hölzle and their colleague (2010, p. 115) reported that both team managers and members who were 'more central in terms of retrieving information from their teammates' were more likely to give positive evaluation on team performance. In addition, their result also showed that positive evaluation of team performance was also given by R&D team members nested in teams with a higher network density. These studies can lead to a question as to whether such effects observed for performance are also observed for creativity.

Additionally, a more recent development in social network research, where this concept is employed to explain other research streams such as organizational identification and leadership, is also noted. Findings from Jones and Volpe's (2011, p. 413) study, for instance, indicate that the size of one's network and 'the interaction between relationship strength and prestige' provides a better explanation of organizational identification than one that is 'solely on categorization and social comparison processes'. The authors claim that their findings have brought back a foundational, yet much neglected, premise into the theory of organizational identification. In terms of leadership research, Balkundi and Kilduff (2006), for example, showed the implications of different patterns of direct and indirect ties within which leaders were embedded in the whole organization and the inter-organizational linkages on leadership effectiveness. Finally, in the field of social identity and friendship, Leonard and Mehra (2008) found that, in the context of an ethnically diverse organization, members of minority groups tended to have team identification and to form friendship within groups, and also that these members were equally connected to the center of a friendship network (in other words, homophilious or same minority friendship networks); the latter fact occurred in a majority ethnic groups.

Nevertheless, Oh and Kilduff (2008) asserted that the growing interest in social network brokerage has somewhat neglected its psychological antecedents. Using a sample of 162 Korean expatriate entrepreneurs in a Canadian urban area, they demonstrated that those who were relatively high in self-monitoring tended to occupy positions as brokers or connectors between Korean unconnected communities. For recent arrivals, these authors demonstrated that those who were relatively 'high in self-monitoring tended to establish ties to a wider range of important non-Korean position holders outside the community' (Oh & Kilduff, 2008, p. 1155). Thus these findings imply 'a ripple effect of self-monitoring on social

structure and contribute to a clearer understanding of how personality relates to brokerage at different levels' (Oh & Kilduff, 2008, p. 1155). Klein and her colleagues (2004) posited that individuals' demographic characteristics (such as education and age), values and personality (measured using the Big Five Personality) determined their centrality position within their networks. Contingent on time, education and Neuroticism predicted centrality that highly educated individuals and low in Neuroticism 'became high in advice and friendship centrality and low in adversarial centrality' (Klein, et al., 2004, p. 952). Individual value also determined one's centrality in advice and friendship.

# The Remaining Unanswered Issues and Future Research Agenda

Niu and Sternberg (2002) and Oral, Kaufman and Agars (2007) posit that the current definition of creativity is not universally accepted, because in Eastern cultures, creativity is defined as 'the endless producing and renewing changes of nature' (Niu & Sternberg, 2002, p. 270). Unlike the most favored definition of creativity, Eastern perspectives emphasize social value and harmony rather than individual contribution, there are gender differences in some cases of creative performance (Oral, et al., 2007) and the process is structured within the organization (Basadur, 1992). Hence this indicates philosophical differences between the Western and the Eastern approaches which signposts the significant role of culture in defining, measuring and valuing employee creativity. This fact begs questions as to how much culture influences an individual's creative performance, whether it is malleable for managers in practice to manage in order to boost employee creativity, and whether, then, the Eastern cultures may borrow 'recipes' to foster employee creativity from the Western perspective. For the last issue, Zhou (2006) argues that one should consider such actions carefully, given differences between Western and Eastern cultures.

To further understand this cultural context issue, scholars have conducted studies over the last decade using different lenses to examine the impact of culture or individual values on creativity (Eisenberg, 1999; Farmer, et al., 2003; Goncalo & Staw, 2006; Iyengar & Lepper, 1999; Miron, et al., 2004; Shin & Zhou, 2003). Shin and Zhou (2003), for example, demonstrated that, in Korean settings, transformational leadership, originally developed in Western context, was positively related to follower creativity and that individual conservation value mediated that relationship. They further found that intrinsic motivation mediated the interaction between transformational leadership and conservation value and partially mediated the relationship between transformational leadership and creativity. Another study by Farmer et al. (2003) found that the highest level of employee creativity in Taiwan occurred when there were a creative role identity and employee perceptions that the employing organization valued creative work. They also demonstrated that a creative role identity was positively related to creativity expectations by co-workers, 'self-views of creative behaviors and high levels of exposure to US' (Farmer, et al., 2003, p. 618). These studies, however, have proven that despite the differences in its definition, the value of creativity is somewhat universal (Shin & Zhou, 2003; Zhang & Bartol, 2010). Also, researchers may benefit in developing a generalization of the relevant concept and managers in practice acquire comprehensive understanding of what works to foster employee creativity in a wide array of cultures.

However, Goncalo and Staw (2006) found that, in a laboratory setting, when there was an instruction to be creative, individualistic groups performed better than collectivistic groups.

This seems to further confirm cultural differences in creativity. To explain such results, they suggest that there is a possibility that individualistic groups tend to value the distinctiveness

of different ideas, while collectivistic groups tend to select multi-faceted ideas that combine the contributions of different members. Thus, they concluded, when creativity is a salient goal of an organization, it is more beneficial to have an individualistic value rather than a collectivistic one. To further confirm their conclusion, more research is needed, in particular using field study data. Given the difference in interpreting creativity, Glaveanu (2010) argues that we need a comprehensive framework to further understand the impact of culture on creativity. This can be obtained if we include culture as an 'inside factor', which embeds in any creative actions, rather than as an 'outside factor'.

George (2007), on the other hand, suggests conducting more research by combining more than one contextual factor and acknowledging the cultural context upfront. A recent study by Shalley, Gilson and Blum (2009) is one example where they demonstrated that the interactive effect of work context, job complexity and growth strengthen employee creativity. Other recent study has pointed out the importance of individual social networks in fostering creativity (Baer, 2010; Kijkuit & van den Ende, 2010; Perry-Smith, 2006). Realizing this potential, another research avenue opens for examining, for example, to extent to which individuals may have different interpretations of rewards, networks and the interaction between these two, which in turn influences their creativity.

The creativity literature has also demonstrated that external drivers are as important as internal drivers in fostering creativity, for instance, the role of reward (Baer, et al., 2003; Eisenberger & Aselage, 2009; Kachelmeier & Williamson, 2010) and evaluation and feedback (Shalley, 1995; Zhou, 1998). In spite of the present controversy for some of the above research findings, a much more important issue has been revealed, such as whether individual differences play an important role in perceiving those external demands and

whether the interaction between individuals factors (such as traits and cognitive style) and one of these external factors can better explain employee creativity (George, 2007).

In relation to leadership development that results in employee creativity, research examining a complete leadership chain will give us complete information on what drives leaders to exhibit particular behaviors and how they influence and force employees, to some extent, to engage in creative endeavors. In leadership studies, Extraversion, Conscientiousness, Neuroticism and Openness to Experience have been profoundly related to leader emergence and effectiveness (Judge, Bono, Ilies, & Gerhardt, 2002). But, given the limited evidence on the relationship between Narcissism and creativity (Goncalo, Flynn, & Kim, 2010), it would also be worthy examining the extent to which Narcissism (Raskin & Terry, 1988) may determine the emergence of specific leadership behaviors that in turn affect employee creativity. Additionally, earlier research has examined the link between leaders' personal values and leadership effectiveness (Gardner, et al., 2010). But, considering Deci and Ryan's (1985, 1987) Cognitive Evaluation Theory that behavior is a product of either personal determination or the force from external demands, future research may include personal values for examining and explaining why leaders exhibit certain leadership behaviors. Further, considering van Dierendonck's (2010) proposal that motivation also determine leaders' behaviors, future research may include this variable as antecedent for certain leadership behaviors, as well as being the catalyst for influencing employee creativity. Conducting this research would be valuable for leadership development, on the one hand, and also, on the other, the understanding of leadership influential process in fostering or diminishing employee creativity.

# Conclusion

This chapter takes stock of the most utilized approach in creativity research, as well as some emerging areas such as self-concept, goal-directed behaviors, mood states, and social networks. Some remaining untested areas are discussed in brief, including the potential role of culture in determining employee creativity. Suggested future research has emerged from this review and the present studies and will be discussed at length in Chapter 7. The next chapter will discuss in detail the methodology employed to conduct the present studies on the relationship between servant and paternalistic leadership and employee creativity.

#### CHAPTER 3

#### METHODOLOGY

#### Overview

This chapter covers the methods employed in both studies. First, the research design, the research setting, and the sample, as well as, the procedure for obtaining the sample, are outlined. In each section, theoretical and conceptual bases for the corresponding inferences are delineated. Finally, the procedures used to analyze the data are described.

# Research Design, Research Setting and Sample

The purpose of the study was to develop and examine a multilevel framework of the relationships between servant and paternalistic leadership and employee creativity. Thus the present two studies were carefully designed to ensure that the overall purpose of the research is achieved (Malhotra, Hall, & Oppenheim, 2002). The two studies were empirical in that they involved systematic and structured efforts to examine special problems in the workplace settings which needed solutions. The relationships among factors under studied were posited prior to data collection (Cavana, Delahaye, & Sekaran, 2001; Schwab, 1999). Given the approved timeframe of conducting the research between the researcher and the participating firms, a cross-sectional study by administering survey questionnaires to the study participants (Sekaran, 1993) was chosen. It was chosen since it is an objective, value-free and unbiased approach to the reality under study and thus the procedures were standardized and the

collected data were in 'the form of numbers from precise measurements' (Cavana, et al., 2001, p. 35).

Both studies examined similarities and differences in the two nations, Indonesia and China. These nations were chosen because they are well-known with high power distance, unavoidance behaviors and collectivistic cultures (Hofstede, 2001). These studies included how specific culture influenced micro (individual level) and meso (team level that includes leadership) organizational phenomena and interrelationships between these levels (Gelfand, Erez, & Aycan, 2007; Tsui, et al., 2007; Williams, Satterwhite, & Saiz, 2002). According to Tsui, Nifadkar and Ou (2007), these studies were 'true cross-national studies' because the participants existed and worked in their own nations and 'within their indigenous cultures' (p. 429). In addition, these researchers have strongly emphasized that in cross-national research, it is important to include culture either as independent or moderator variable. Nonetheless, the authors also noted that many cross-national studies did not include culture as one of those two options as such, but merely acknowledged it as the context of the study.

Conducting cross-national research provides 'the opportunities to compare and evaluate different conceptual approaches' and it also opens collaboration of possible direction for future research (Hantrais & Mangen, 1996, pp. 2-3). Nevertheless, often researchers find conflicting findings that may advance the understanding of an organizational phenomenon from a specific cultural perspective (Hantrais & Mangen, 1996, p. 3), and hence significantly contribute to the generalization of that specific phenomenon in the literature (van de Vijver & Matsumoto, 2011). However, with its potentials and benefits, also come challenges and pitfalls. The most notable challenge probably is establishing equivalences in terms of construct equivalence (or, in the other words, a similar meaning of a construct across

nations), measurement unit equivalence (or, in the other words, the equivalence in converting values of the construct across nations), and scalar equivalence (or, in the other words, a similar meaning and interpretation across nations in terms of response given to a particular scale) (Douglas & Nijssen, 2003) amongst the participating nations in the study. But these issues can be anticipated by realizing the research context (Gelfand, et al., 2007), using a shorter scale (Douglas & Nijssen, 2003) and applying back-to-back translation as Brislin (1980) suggests. Another statistical remedy for this issue is to test the differences between the participating nations in the study as suggested by Mullen (1995) and Steenkamp and Baumgartner (1998). The latter method, the statistical remedies, was applied in the current studies to establish scalar equivalence.

A sample is a subset of a population (Cavana, et al., 2001). A multilevel framework in both studies required a bigger sample than a single-level framework, especially at the team level (Scherbaum & Ferreter, 2009). Advice to the researcher was that to get a sufficient level of statistical power in a multilevel framework (or, in the other words, cross-level interactions), a minimum of 30 groups and 30 observations within each group should be achieved. However, a high level of statistical power could still be achieved even with a smaller sample size at the individual level, if a large sample size at the team level existed (Scherbaum & Ferreter, 2009). The sample in both studies was teams nested in the organizations. This included work teams, project teams, and parallel teams but excluded management teams. Thus Cohen and Bailey's (1997) typology on teams was employed. The work team was a group of employees working together in a certain unit/department and they had certain goals to achieve. The project team was a group of employees working together for a limited time and formed on the basis of employees' knowledge, skills and expertise to work on a specific project. The parallel team was a pool of employees coming from different units/departments

and they were in-charge of problem solving and improvement activities. This typology was chosen because it allows teams to be differentiated based on time limitation, that is, on-going and time-limited (Kennedy, 2002). In addition, management teams were excluded from this research because of their limited number in the organizations; potentially this would have led to an insufficient sample to generalize the result.

These studies included both large and small-and-medium firms located in Indonesia and China. The large firms were publicly listed firms listed in LQ45 on the Indonesia Stock Exchange (ISX). The small-and-medium firms were located in an industrial district in Wuxi, Jiangsu Province, China. LQ45 is a list of 45 large firms which have the largest market capitalization, solid financial conditions, the ability to gain high volume transaction in the market, and significant influence in the fluctuation of the Jakarta Composite Index. These firms were chosen because of their appreciations for such research and they had established approval procedures. The industrial district in Wuxi consisted of around 500 small-and-medium firms operating in various industries such as production of medical equipment and pharmacy.

Forty formal invitations were sent out to Indonesian publicly listed firms by e-mail and postal mail. The contact person or address for the other five publicly listed firms was not provided on their website, so they were not invited to participate in these studies. Fifteen firms agreed to participate, but only nine returned the completed questionnaires. Eight out of these nine participating firms were listed in the LQ45; the other one was also a publicly listed firm whose CEO was keen to participate, given the firm's commitment to fostering employee creativity. Even though these firms operated in different industries, 78% of them already included both qualitative and quantitative employee creativity measures in their employee

performance appraisal system. From these participating firms, 74 matched-teams comprised of 78 team leaders and 250 team members (employees), were obtained.

As for the Chinese participants, contacts with 53 small-and-medium size firms in Wuxi were made to invite them to participate in both studies. Wuxi is known as a city with a massive development in its economy and a place for the industrial sector such as textile, manufacturing and high-technology industries (for example, producing medical equipment); it is located in Jiangsu Province (Yanfeng, 2011). Fifty-two firms agreed to participate. Most of these firms (94%) operated in the high technology industries in which creativity was most salient to the senior management. Of the 52 participating firms, 80 matched-teams comprised of 80 team leaders and 217 team members (employees) were obtained.

The present studies, therefore, involved nine Indonesian and 52 Chinese firms. The discrepancy in the number could be attributed to aspects that characterize the Indonesian firms. First, they were among the nation's largest firms listed on the Indonesian Stock Exchange (ISX). Obtaining management approval for the proposed research was quite complex because each participating firm had a particular approval process. Second, although it was already anticipated that those participating firms would have completed their annual general meeting with their shareholders prior to the scheduled data collection, many had unscheduled extra-ordinary general meetings with shareholders. Regretfully, they refused the offer to have the data collection conducted following their unscheduled meetings and chose to withdraw their participation in both studies. In comparison, the participating Chinese firms were small-and-medium size firms operating in a fast-developing region; their procedures for confirming the proposed research were relatively simple by comparison.

In total, the sample consisted of 154 matched-teams (comprised of 154 team leaders and 425 team members) which represented a 69% response rate. These participating teams from both countries were of a comparable split (49% Indonesian and 51% Chinese). The number of teams participating from each firm varied from one to 14 per firm with an average of five. The number of team members from each team varied from two to five individuals with an average of three. Only teams with minimum size of two were included in the analyses. The team leaders were mostly male (70%), around 39 years old (SD = 7.6) and positioned as middle managers (62%) in their current firms. These team leaders had completed their bachelor degree (52%) and worked for more than five years in their current firms (SD = 4.7). As for the team members, they were predominantly male (66%), around 34 years old (SD =8.15) and positioned as non-management/staff (64%). They also had completed their bachelor degree (58%) and had worked in their respective firms for four years on average (SD = 5.11). These participating teams nested in the following units: human resources (23%), production and operations, including quality control and quality assurance (23%), marketing and sales (14%), R&D (12%), and others (28%, for example, general affairs including legal and internal audit, and corporate communication including public relations). All units in the firm were included in these studies since Madjar and her colleagues (2002) argue that being creative is essential to any job across the firm, even though most of the creativity literature has demonstrated that being creative is essential for R&D staff (e.g., Eisenbeiss & Boerner, 2010; Pirola-Merlo, et al., 2002; Pirola-Merlo & Mann, 2004). The participating teams had the responsibilities that required them to be creative, such as leading the internal change processes as well as producing and marketing new products and services in novel ways to obtain the targeted market share. The participating firms operated in the following industries: finance (22%), cement and construction and related services (19%),

telecommunication (13%), pharmacy (11%), agribusiness and food-and-beverages (7%), integrated media (8%), manufacturing (4%), mining and energy (2%), and others (14%).

### **Procedures**

Initial contacts by e-mail or postal mail were made to the CEO or Human Resources Director of each firm. Once the firms agreed to participate, several meetings were set up to discuss the data collection processes. In the Indonesian firms, the CEOs or HR Directors requested the researcher to present the benefits of the current studies to the firm before key Senior Managers. An agreement with the CEO or HR Director of each firm was made that the survey questionnaires were to be completed during office hours and supervised by members of the research team and the designated person-in-charge. To solicit those firms' participation, a summary of the study findings was offered to be forwarded and discussed after the data analysis. The CEOs or Human Resources Directors then agreed to appoint several departments within their firms as the location for both studies then extended the survey invitation to all teams. In the Chinese firms, the presentation of the benefits of each study as above-mentioned was not required, but the summary of the study findings was being offered to all participants despite the fact that only 10% requested it.

Two different sets of survey questionnaires were prepared and administered to each to team leaders and team members (employees); hence data were obtained from multi sources to minimize the common method variance (CMV) effect (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In the survey questionnaires, the team leaders were invited to evaluate each team member's creativity and innovation of the collective. Team members were invited to assess their perceptions on leadership behaviors of their team leader, the extent to which

they identified themselves with the leader (hereafter: leader identification) and saw their leader as an ideal prototype of the team (hereafter: prototypicality), team climate (in terms of the leader's support for innovation, as well as leader's participation and provision of a psychologically safe environment), perceived personal capabilities (individual competence), and personal values (vertical collectivism). Numeric identification codes were included on each questionnaire so that data collected from both groups, that is, team leaders and team members, could be matched for analysis. These codes were provided either by the human resources department or prepared by the researcher. All participants were assured of confidentiality. The original questionnaires were written in English, then subjected to a back-to-back translation process (Brislin, 1980), that is English – Indonesian – English and/or English – Chinese – English, employing two independent qualified translators one for each language. The questionnaires used in these studies are attached in Appendixes 2a to 4b.

To collect the data, several methods were employed to accommodate the preferred procedures each firm had, hence ensuring the highest response rate. First, for most of the participating firms, the researcher delivered the survey questionnaires to the designated person-in-charge and collected the completed ones within one week. Second, the researcher came to the premises where the designated person-in-charge had already booked two separate rooms for the participants to fill out the questionnaires. To ensure anonymity and confidentiality, team leaders would enter the first room whereas team members would enter the second room half an hour later. Third, the soft copy of the survey questionnaires was sent to the designated person-in-charge who would then administer it to all teams. The designated person-in-charge then sent the team members' completed questionnaires, together with their team leaders', to the researcher via emails. For all three data collection procedures described above, the designated person-in-charge provided the numerical code. The fourth procedure

involved the researcher coming to the premises to meet the participants one by one as requested, and the participants completed the questionnaires at that time; for this method, the researcher provided the numerical code.

### **Demographic of the Sample**

The participating firms from Indonesia (see Table 2) operated in the following industries: finance (37%), cement and construction and related services (26%), telecommunication (20%), integrated media (12%), and others (5%). The team leaders were predominantly male (73%) around 41 years old (SD = 6.49). 70% of these team leaders had completed their bachelor degree and worked in their respective firms for a minimum of seven years (SD = 6.17). A majority of them were middle managers (82%). As for the team members, they were mostly male (69%) around 37 years old (SD = 8.17). 80% of these team members had completed their bachelor degree and had worked for six years in their current firm (SD = 6.94). Most team members were non-managerial employees in the participating firm (56%). The participants worked in the following units: human resources (36%), production and operations, including quality control and quality assurance (17%), marketing and sales (14%), general affairs including legal and internal audit (11%), corporate communication including public relations (8%), accounting and finance (5%), and others (9%).

Table 2. Demographic Data of the Indonesian Participants <sup>a</sup>

Criteria –		Team Leader	Team Member
		(%)	(%)
Gender	Male	73	69
	Female	27	31
$Age^b$	≤ 25 years old	2	6
	26 – 40 years old	50	69
	≥ 41 years old	48	25
Education	High school and equals	-	9
	Diploma	6	11
	Technical qualification	-	-
	Bachelor degree	69	60
	Master degree	25	20
	Doctorate degree	-	-
Tenure (in years) b	≤ 5 years	64	62
	6 – 10 years	15	19
	≥ 11 years	21	19
Current position	Executive	-	-
	Middle manager	82	-
	First-line manager	18	44
	Staff	-	56

Note:  $^a$  n (team) = 74; n (employees) = 208.

The participating Chinese firms (see Table 3) operated in the following industries: pharmacy (21%), agribusiness and food and beverages (15%), cement, construction and related services, and suppliers of heavy equipment (13%), manufacturing and trading-and-distribution (8%), finance (7%), telecommunication (6%), integrated media (5%), others (21%). The team leaders were mostly male (66%), around 38 years old (SD = 8.13), and were positioned as the first line (44%) and middle managers (44%). 38% had completed bachelor degree and had worked for five years in their current firms (SD = 3.18). Team members (n = 217) were positioned as non-managerial employees in their respective firms

<sup>&</sup>lt;sup>b</sup> This was measured as a continuous variable.

(72%) and mostly male (63%) around 31 years old (SD = 7.16). 58% had completed their bachelor degree and worked for three years (SD = 2.32) in their respective firms.

Table 3. Demographic Data of the Chinese Participants <sup>a</sup>

Criteria -		Team Leader	Team Member
		(%)	(%)
Gender	Male	66	63
	Female	34	37
$Age^b$	≤ 25 years old	8	27
	26 – 40 years old	55	59
	≥ 41 years old	37	14
Education	Diploma	3	5
	Technical qualification	21	21
	Bachelor degree	37	58
	Master degree	21	14
	Doctorate degree	18	2
Tenure (in years) <sup>b</sup>	≤ 5 years	70	86
	6 – 10 years	26	12
	≥ 11 years	4	2
Current position	Executive	12	-
	Middle manager	44	6
	First-line manager	44	22
	Staff	-	72

Note:  ${}^{a}$  n (team) = 80; n (employees) = 217.  ${}^{b}$  This was measured as a continuous variable.

## Measures

For the first study, the role of servant leadership in fostering employee creativity and team innovation was examined from the social identity (in particular, self-definition with the special relationship concept) and team climate perspectives. For the second study, the positive influence of paternalistic leadership on employee creativity was being tested using the lenses of self-concept orientation (specifically, the psychological empowerment concept)

and team climate research. For both studies, the following measures listed in alphabetical order were used.

Employee Creativity. In Study 1 and 2, employee creativity was measured using Baer and Oldham's (2006) four-item scale. This scale was chosen because it was developed and validated by multiple units in the organizations (see Baer & Oldham, 2006 for the details). The items are 'This employee suggests many creative ideas that might improve working conditions at team', 'This employee often comes up with creative solutions to problems at work', 'This employee suggests new ways of performing work tasks', and 'This employee is a good source of creative ideas'. Each item was rated on a five-point scale ranging from 1, 'strongly disagree', to 5, 'strongly agree'. Internal reliability (Cronbach Alpha) of this variable ranged from .73 (Study 2) to .74 (Study 1).

Individual Competence. Individual competence in Study 2 was assessed using the three-item scale from the complete scale of individual empowerment developed by Spreitzer (1995). The items are 'I am self-assured about my capabilities to perform my work activities', 'I am confident about my ability to do my job', and 'I have mastered the skills necessary for my job'. Each item was rated on a seven-point scale ranging from 1, 'strongly disagree', to 7, 'strongly agree'. Internal reliability (Cronbach Alpha) for individual competence in the second study was .70.

Leader Identification. Leader identification in Study 1 was measured using an adopted sixitem scale of organizational identification developed by Mael and Ashforth (1992). The items are 'When someone criticizes my leader, it feels like a personal insult', 'I am very interested in what others think about my leader', 'When I talk about my leader, I usually say

"we" rather than "he" or "she", 'My leader's successes are my successes', 'When someone praises my leader, it feels like a personal compliment', and 'If a story in the media criticized my leader, I would feel embarrassed'. Each item was rated on a five-point scale ranging from 1, 'strongly disagree', to 5, 'strongly agree'. Internal reliability (Cronbach Alpha) for leader identification in the first study was .79.

Paternalistic Leadership. A thirteen-item scale developed by Pellegrini and Scandura (2006) as listed in their extensive review on paternalistic leadership (Pellegrini & Scandura, 2008) was used to measure paternalistic leadership behavior in Study 2. This scale was selected because it was more suitable for employees' rating (Pellegrini & Scandura, 2008). The items are 'Is interested in every aspect of his/her team members lives', 'Exhibits emotional reactions in his/her relations with his/her team members; does not refrain from showing emotions such as joy, grief, anger', 'Creates a family environment in the workplace', 'Participates in his/her team members' special days (e.g., wedding, funerals, etc.)', 'Consults his/her team members on job matters', 'Tries his/her best to find a way for the company to help his/her team members whenever they need help on issues outside work (e.g., setting up home, paying for children tuition)', 'Is like an elder family member (father/mother, elder brother/sister) for his/her team members', 'Expects his/her team members to be devoted and loyal, in return for the attention and concern he/she shows them', 'Gives advice to his/her team members on different matters as if he/she were an elder family member', 'Gives his/her team members a chance to develop themselves when they display low performance', 'Makes decision on behalf of his/her team members without asking for their approval', 'Believe he/she is the only one who knows what is best for his/her team members', and 'Knows each of his/her team members intimately (e.g., personal problems, family life, etc.)'. Each item

was rated on a five-point scale ranging from 1, 'strongly disagree', to 5, 'strongly agree'. Internal reliability (Cronbach Alpha) for this variable was .82.

Prototypicality. Prototypicality in Study 1 was measured using the four-item scale developed by van Knippenberg and van Knippenberg (2005), as listed in by Cicero, Pierro, and van Knippenberg (2010) in a study of how the role of ambiguity affected the relationship between leader group prototypicality and leadership effectiveness. The items are 'My team leader is a good example of the kind of people that are members of my team', 'My team leader has very much in common with the members of my team', 'My team leader represents team's characteristics', and 'My team leader is very similar to the members of my team'. Each item was rated on a five-point scale ranging from 1, 'disagree', to 5, 'agree'. Internal reliability (Cronbach Alpha) for this variable was .76.

Servant Leadership. Reflecting prior empirical support, the 35-item Servant Leadership Behavior Scale (SLBS) reported by Sendjaya et al. (2008) was selected for Study 1. The reliability and validity of this measure has been established in different studies conducted in both Western and Eastern settings (Pekerti & Sendjaya, 2010; Sendjaya & Cooper, 2010; Sendjaya & Pekerti, 2010). This scale comprises six sub-scales, namely, voluntary subordination (e.g., 'Listens to me with intent to understand'), authentic self (e.g., 'Is not defensive when confronted'), covenantal relationship (e.g., 'Affirms your trust in your team members'), responsible morality (e.g., 'Takes a resolute stand on moral principles'), transcendental spirituality (e.g., 'Is driven by a sense of higher calling'), and transforming influence (e.g., 'Leads by personal example'). All items were rated on a five-point scale ranging from 1, 'strongly disagree', to 5, 'strongly agree'. Internal reliability (Cronbach Alpha) for this variable was .89. The complete items of this scale can be found in the

Appendix 2b, and its translation into Bahasa Indonesia and Chinese can be found in Appendixes 3b and 4b, respectively.

Team Climate. Team climate was measured using the sixteen-item scale of support for innovation and participation-and-safety from the complete scale of Team Climate Inventory developed by Anderson and West (1998). The inclusion of support for innovation and participation-and-safety scales to form the team climate construct was based on Anderson and West's (1998) suggestion that these items received the most attention in the creativity research. The items for support for innovation are 'My team is always moving toward the development of new answers', 'Assistance in developing new ideas is readily available', 'My team is open and responsive to change', 'We are always searching for fresh, new ways of looking at problems', 'In my team we take the time needed to develop new ideas', 'People in this team cooperate in order to help develop and apply new ideas', 'Members of this team provide and share resources to help in the application of new ideas', and 'Team members provide practical support for new ideas and their application'. The items for participationand-safety are 'We have a "we are in it together" attitude', 'We all influence each other', 'People keep each other informed about work-related issue in the team', 'People feel understood and accepted by each other', 'Everyone's view is listened to even if it is in a minority', 'There are real attempts to share information throughout the team', and 'There is a lot of give and take'. Each item was rated on a five-point scale ranging from 1, 'strongly disagree', to 5, 'strongly agree'. Internal reliability (Cronbach Alpha) for team climate included in Study 2 was .79 and internal reliability (Cronbach Alpha) for support for innovation alone (for Study 1) was .82.

Team Innovation. In Study 1, a four-item scale developed by De Dreu (2006) was employed to measure team innovation. The items are 'Team members often implement new ideas to improve the quality of our products and services', 'This team gives little consideration to new and alternatives methods and procedures' (reverse coded), 'Team members often produce new services, methods, or procedures', and 'This is an innovative team'. Team leaders were invited to evaluate their team innovation performance using a five-point scale ranging from 1, 'strongly disagree', to 5, 'strongly agree'. Internal reliability (Cronbach Alpha) for team innovation was .76.

Control Variables. Control variables for both studies were chosen following prior research in both the creativity as well as the leadership literatures (e.g., Neubert, et al., 2008; Pekerti & Sendjaya, 2010; Tierney, et al., 1999; Wang & Cheng, 2010; Zhang & Bartol, 2010). For Level 1 (the individual level), the control variables were gender, education, tenure, function, and vertical collectivism because previous empirical findings demonstrated their significant correlation with employee creativity (e.g., Baer & Oldham, 2006; Hirst, van Dick, et al., 2009; Hirst, van Knippenberg, et al., 2009; Madjar, et al., 2002; Shin & Zhou, 2007; Tierney & Farmer, 2002; Zhang & Bartol, 2010) and innovation (e.g., De Dreu, 2006). Gender was controlled and dummy coded (0 = 'female' and 1 = 'male'). Education was measured using a six-point scale (1 = ``high school'') to 6 = ``doctorate''). Tenure was a continuous variable which was assessed as the numbers of years' working in the organization. Function was assessed as the unit/department that participants were attached to in their respective firms and was measured using dummy codes (1 = 'R&D' and 0 = 'non R&D'). Function was controlled only in the second study because it was found to influence 'the use of power in the decision-making process' (Chong & Ma, 2010: 236). Finally, vertical collectivism was controlled in Study 2 to take into account potential cross-cultural variation in employees'

values. Vertical collectivism was measured using the four-item scale developed by Triandis and Gelfand (1998). The original scale for vertical collectivism scale is part of a four-set measurement of individualism – collectivism scale. This scale was chosen because it fitted more with the design of the two studies. The items are 'Parents and children must stay together as much as possible', 'It is my duty to take care of my family, even when I have to sacrifice what I want', 'Family members should stick together, no matter what sacrifices are required', and 'It is important to me that I respect the decisions made by my team'. Each item of this scale was rated on a seven-point of scale from 1, 'strongly disagree', to 7, 'strongly agree'. Surprisingly, vertical collectivism had a low internal reliability (Cronbach Alpha = .64). Reflecting differences in culture and firm types across the two countries, a dummy variable controlling for nationality was created (0 = 'Indonesia' and 1 = 'China') at the team level of analysis.

## Data Analysis in Hierarchical Linear Models (HLM)

Hierarchical Linear Models (HLM) refer to the model relating units nested within groups, such as students in a class, employees within a team, or divisions within an organization. In spite of the prevalence of hierarchical data structures in many of behavioral and social studies, the conventional statistical techniques 'have often failed to address them adequately in the data analysis' (Raudenbush & Bryk, 2002, p. 5). Such limitation includes aggregation bias, problem within the unit of analysis and misestimated precision (Raudenbush & Bryk, 2002, p. 5). HLM are often referred as multilevel linear models in sociology, or random-coefficient regression models in economics or covariance component models in statistical literature.

There are three general purposes in using HLM. First, HLM improves estimation of individual effects. Social research scholars often try to capture differences in individuals from different cultural backgrounds, and find, for example, that North American people is the majority whereas Hispanic is the minority. But they raise concerns in applying standardized measurements for minority samples because those measurements are developed using the majority samples. However, the researcher could not just ignore the minority samples or just pooling the data together because these actions might lead to a misleading conclusion. By applying HLM, the researcher may use all the data with weighted scores to get precision in the conclusion. Second, HLM can be used to model cross-level effects. Researchers in behavioral and social research are often curious with the effects of one level variable on another. Reuvers, van Engen, Vinkenburg and Wilson-Evered (2008), for example, examined the relevance of gender in the relationship between transformational leadership and innovative work behaviors. In doing so, they collected data on gender at the employee level (Level 1) as well as at the managerial level (Level 2). Both employees and their managers were nested in four Australian hospitals (Level 3). They found a positive relationship between transformational leadership and innovative work behaviors and that gender moderated the aforementioned relationship when transformational leadership was displayed by male managers. The latter confirmed their inference of gender bias hypothesis in the aforementioned relationship. Finally, HLM can be used to partition variance-covariance components. For example, a study of the growth of students' learning within classrooms and schools cited by Raudenbush and Bryk (2002, p. 10) used mathematics achievement data measured in five different times between Grade 1 and Grade 3 and found that 83% of the variance in growth rates was between schools.

In the present studies, the software HLM 6.08 developed by Raudenbush, Bryk and Congdon (2000) was used to analyze the cross-national data. Several actions needed to be taken prior analyzing the data. First, in the data preparation stage a Level 1 data file in SPSS 18 and 19 was created under a special condition that is labeled the 'Name' column with a maximum of four-digit characters. The usage of a maximum of four-digit characters in the 'Name' column is critical because HLM 6.08 requires a maximum of eight-digit characters when analyzing the data. Data collected from the employees were inputted and matched with those collected from their team leaders. Then data cleaning was conducted, and those with more than 10% of missing cases were excluded. Usually, missing data occurs as a result of unanswered questions, or participants refused to answer survey questions, or illegible answers (Buhi, Goodson, & Neilands, 2008). In both studies, 13% of missing data from the Indonesian participants and 27% from the Chinese participants were found, hence averaging of 20%. As for the Indonesian teams, the causes of missing data were the following: (1) no matched questionnaire was found between the employees and their team leader or vice versa; and (2) no responses to more than 10% of the statements in the questionnaires. As for the Chinese teams, the main cause of missing data was because of no matched questionnaires between the employees and their team leader or vice versa.

There are three types of missing data in the social studies. They are missing completely in random (MCAR), missing at random (MAR) and missing not at random (MNAR) (Graham, 2009). Despite the *new methods* of dealing with missing data, such as EM algorithm, multiple imputation (MI) or maximum likelihood (ML), as recommended by Graham (2009) and Schafer and Graham (2002), a conventional approach (i.e., excluding all the missing data manually) was undertaken in both studies. Notwithstanding the potential limitation of such a conventional approach (cf. Scherbaum & Ferreter, 2009), a total of 154 matched-teams,

comprising 154 team leaders and 425 team members from Indonesia and China were obtained after all missing data were removed.

Next a Level 2 data file was created by aggregating the Level 1 data and was double checked to ensure no missing data. This is important because, as mentioned above, multilevel research requires larger sample size than single-level research (Scherbaum & Ferreter, 2009). In addition, studies have proven that in multilevel research increasing the Level 2 sample size results in a greater impact on power (cf. Scherbaum & Ferreter, 2009). In these studies, missing data in Level 2 were not found.

After both data files were ready, data validation and reliability using LISREL 8.5 for Windows (Jöreskog & Sörbom, 2001) was conducted. Confirmatory Factor Analysis (CFA) was conducted at both levels on the model, comprising all predictors (the studied variables) as independent variables, and on the other model, comprising all predictors that were loaded into a single factor. Subsequently, validation for cross-level analyses was conducted by calculating ICCs values (Bliese, 2000) and a mean of  $r_{wg(j)}$  (James, Demaree, & Wolf, 1984) for the studied variables. First, the inter-member reliabilities of ICC(1) and ICC(2) and whether the average scores were differed significantly between teams as indicated by *F-value* from one-way analysis of variance (ANOVA) were calculated. ICC stands for intra-class correlation. ICC(1) represents the proportion of total variance because of variability within teams whereas ICC(2) represents 'the extent to which teams can be used to reliably differentiate in terms of individual ratings' of the studied variable (Tse, Dasborough, & Ashkanasy, 2008, p. 203). Bliese (2000) suggests that the desirable value for ICC(1) would range between .05 and .20 and the values greater than .30 would be rare. In addition, James (1982) reports a median value of .12 for ICC(1) and also notes that a larger value of ICC(1)

reflects the raters are the more similar. As for ICC(2), Klein and Kozlowski (2000, p. 225) add that it represents 'how reliable are the group means within a sample' and that values greater than .60 for ICC(2) are desirable (Glick, 1985). Second, the within-group agreement by a mean of  $r_{wg(j)}$  using a normal distribution was calculated. Klein and Kozlowski (2000) explain that the desirable values for a mean of  $r_{wg(j)}$  are between 0 and 1 and that a value above .70 indicates an adequate within-team agreement. Finally, conclusions on what variables nested in what level of analysis was generated and the data analysis continued in HLM 6.08.

The general models that were used in HLM were described as below. Both models could be extended to multiple predictors. Note that detail of the use of HLM 6.08 is not described here but rather the models used in data analysis.

Level-1 Model: 
$$Y_{ij} = \beta_{0j} + \beta_{Ij} * X_I + r_{ij}$$
 (1)

Level-2 Model: 
$$\beta_{0j} = \gamma_{00} + u_{0j}$$
 (2)

where:

 $Y_{ij}$  = outcome or dependent variable;

 $\beta_{0i}$  = mean score of each *j* unit on *Y* when all predictors are zero;

 $\beta_{Ij}$  = slope of outcome (Y) on predictor (X) for each of j unit;

 $X_1$  = predictor 1;

 $r_{ij}$  = within-unit error term;

 $\gamma_{00}$  = intercept; and

 $u_{0i}$  = between-unit error term.

Another issue that needs to be resolved prior to calculating the 'null model' is data centering. Both Raudenbush and Bryk (2002) and Hofmann and Gavin (1998) highly recommended

group mean-centering of all Level 1 variables and including group means of predictors as Level 2 predictors of the intercept term (Hofmann & Gavin, 1998, p. 630). By taking this option, one can interpret Level 1 intercept equal to between-group variance in the outcome variable  $(Y_j)$  and as a result, Level 2 regression coefficients  $(\gamma_{0j})$  equal to the Level 2 relationship between Level 2 predictor  $(X_j)$  and the outcome variable  $(Y_j)$ . Another option is to grand-mean centering of both Level 1 and Level 2 variables. However, the decision of what option one will take should be driven by the theoretical considerations (for complete explanations, see Hofmann & Gavin, 1998).

Details of each step taken for data analysis were as follows. First, the ICC (1) in the 'null-model' as a prerequisite of data analysis in HLM was tested. ICC (1) shows the total variance in outcome variable occurs between teams and is calculated using the following equation:

$$ICC(1) = \tau^2 / (\tau^2 + \sigma)$$
(3)

where:

 $\tau^2$  = the estimated between variance; and

 $\sigma$  = the estimated within variance.

The results were interpreted from the 'final estimation of fixed effects with robust standard error' table which shows standard errors that are consistent even though the HLM assumptions are mistaken (Raudenbush & Bryk, 2002). After calculating the ICC (1), the mean-as-outcome model was tested to understand whether teams with high X also have high Y. In doing so,  $X_j$  variable was inputted into Equation 2. The model now looked like the following:

Level-1 Model: 
$$Y_{ij} = \beta_{0j} + r_{ij}$$
 (1)

Level-2 Model: 
$$\beta_{0j} = \gamma_{00} + \gamma_{01} * W_1 + u_{0j}$$
 (4)

In this model, the primarily attention was given to  $\gamma_{01}$  (coefficient of  $W_1$ ) and those numbers presented in the table of final estimation of variance components ( $\tau^2$  and  $\sigma$ ); whether those were significant (p < .05) or not. If  $\tau^2$  is significant, it implies that after controlling for  $W_j$ , significant variation in the outcome (Y) still remains to be explained.

Examining the random coefficient model was then conducted. This model is dedicated to understanding the average of the 154-team regression equations, how much those regressions varied from one team to another and also the correlation between the intercepts and the slopes. The model is described below.

Level-1 Model: 
$$Y_{ij} = \beta_{0j} + \beta_{1j} * (X_{ij} - X_{.j}) + r_{ij}$$
 (5)

Level-2 Model: 
$$\beta_{0j} = \gamma_{00} + u_{0j}$$
 (4)

$$\beta_{Ij} = \gamma_{I0} + u_{Ij} \tag{6}$$

where:

 $\gamma_{00}$  = the average of team means on the outcome variable ( $Y_{ij}$ ) across the population of teams;  $\gamma_{10}$  = the average  $X_{ij}$  regression slope across those teams;

 $u_{0i}$  = the unique increment to the intercept associated with team j; and

 $u_{Ij}$  = the unique increment to the slope associated with team j.

In both studies, both mediation and moderation tests were included. To test the cross-level effect model (the moderation model), the slope-as-outcome model as described below was employed.

Level-1 Model: 
$$Y_{ij} = \beta_{0j} + \beta_{Ij} * X_{ij} + r_{ij}$$
 (7)

Level-2 Model: 
$$\beta_{0j} = \gamma_{00} + \gamma_{01} * W_{ij} + u_{0j}$$
 (8)

$$\beta_{1i} = \gamma_{10} + \gamma_{10} * W_{ii} + u_{1i} \tag{9}$$

To understand the nature of such interaction  $(X_{ij} * W_{ij})$ , the simple slope using the values of 1 SD above Mean and 1 SD below Mean was calculated using software developed by Shacham (2009), and then plotted using software developed by Dawson and Richter (2006). For the mediation analysis, both the joint significant effects and the asymmetric confidence limits methods were employed because these tests provide 'the best balance in terms of power and Type I error rate' (Pituch, et al., 2005, p. 10). For a mediation effect to be present, a joint significant test requires both path a (the path from the independent variable to the mediator) and path b (the path from the mediator to the dependent variable with the independent variable controlled) to be statistically significant (MacKinnon, Fairchild, & Fritz, 2007). Subsequently, the confidence limits for the indirect effect were calculated using the software known as PRODCLIN, an acronym for Product Confidence Limits for the Indirect Effect (MacKinnon, Fritz, et al., 2007). A mediation effect presents if zero lies outside the 95% confidence limits. Proportion variance explained at Level 1 and Level 2 were also calculated for the latter three steps to calculate  $R^2$  total using the following equation (Liao & Rupp, 2005):

$$R^{2} \text{ total} = R^{2}_{within-group} * (1 - ICC(1)) + R^{2}_{between-group} * ICC(1)$$
 (10)

### Summary

In this chapter, methods employed for both studies are outlined. This chapter is also providing the rationale for quantitative over qualitative research along with explanations on the research setting and the sample involving 154 matched-teams from Indonesia and China. Finally, methods pertaining to data collection and analyses are also delineated.

The next chapter discusses the preliminary data analyses for both studies which include the validation and reliability analyses and the validation for cross-level analyses. The following two chapters (Chapters 5 and 6) present both the theoretical underpinning and the results of the current studies. In the first study, the role of servant leadership in fostering employee creativity and innovation of the collective was examined. In the second study, the scenario of the positive effect of paternalistic leadership on employee creativity was presented.

#### CHAPTER 4

#### RESULTS ON PRELIMINARY DATA ANALYSES

#### Overview

This chapter presents preliminary analyses for both studies, namely the validity and reliability analyses, using LISREL 8.5 (Jöreskog & Sörbom, 2001) and the validation for cross-level analyses (Bliese, 2000; James, et al., 1984), using SPSS 18 and 19.

## Validity and Reliability Analyses

Validity and reliability analyses for both studies are identical are described as follows. First, confirmatory factor analysis (CFA) of the studied constructs at the individual level were conducted twice; Model 1 included all variables as different factors and Model 2 included all variables as a single factor. The results then determine the model used for the corresponding studies. For both studies, the analysis was extended into conducting a two-groups CFA, as recommended by Mullen (1995) and Steenkamp and Baumgartner (1998). Results from this analysis were used to determine whether to combine or separate the Indonesian and the Chinese data.

# Study 1: Servant Leadership - Employee Creativity - Team Innovation

The Model 1 CFA, which included servant leadership, leader identification, prototypicality and support for innovation as separate constructs, yielded an excellent fit to the data:  $\chi 2$  (df =

449) = 851.2, RMSEA = .05, 90% confidence interval for RMSEA ranged from .05 to .06, CFI = .97, and SRMR = .03. The Model 2 CFA, where all constructs loaded on to a single factor, resulted in a poor fit:  $\chi 2$  (df = 464) = 2344.83, RMSEA = .12, 90% confidence interval for RMSEA ranged from .11 to .12, CFI = .86, and SRMR = .10. The second CFA for the four Level 2 constructs, where all constructs loaded as separate constructs, was conducted subsequently. This model used aggregated data. The model yielded a good fit to the data:  $\chi 2$  (df = 203) = 361.10, RMSEA = .08, 90% confidence interval for RMSEA ranged from .06 to .09, CFI = .97, and SRMR = .07. A one-factor measurement model, however, resulted in a poor fit:  $\chi 2$  (df = 464) = 1358.82, RMSEA = .14, 90% confidence interval for RMSEA ranged from .13 to .14, CFI = .89, and SRMR = .12. These results thus supported construct validity.

Because data were collected from different countries, a two-group CFA (using the same measurement models as the previous CFAs) to test measurement equivalence was conducted (Mullen, 1995; Steenkamp & Baumgartner, 1998). The constrained two-group CFA (that is, where factor loadings were constrained to be equal) displayed acceptable fit (RMSEA = .07, 90% confidence interval for RMSEA ranged from .07 to .08, CFI = .90). A significant change in the chi-square comparing constrained and unconstrained models suggested that the factor structure was not invariant across groups ( $\Delta\chi^2(32) = 256.93$ , p < .05). However, the unconstrained CFA (i.e., where parameters were freely estimated in each group) displayed only a slightly better fit (RMSEA = .066, 90% confidence interval for RMSEA ranged from .061 to .070, CFI = .92). Thus, while the global measurement model was a good fit to the data, the two-group CFA demonstrated partial support for metric equivalence. On the basis of these results, a conservative strategy was adopted to test the sensitivity of the regression analyses. Nationality was included as a control variable of the hypothesized relationships.

## Study 2: Paternalistic Leadership - Employee Creativity

A CFA for both levels was conducted separately. At the individual level, CFA comprising the three predictors (i.e., paternalistic leadership, team climate and individual competence) as three independent factors illustrated that the model provided a good fit to the data:  $\chi^2$  (df = 588) = 1416.89, RMSEA = .06, 90% confidence interval for RMSEA: .055 to .062, and CFI = .93 (cf. Browne & Cudeck, 1989; Medsker, Williams, & Holahan, 1994). An alternative model, which loaded all predictors into a single factor, was then examined. This model provided a poor fit to the data:  $\chi^2$  (df = 594) = 2306.81, RMSEA = .10, 90% confidence interval for RMSEA: .098 to .10, and CFI = .84. Subsequently, the second CFA for all predictor at the team level using the aggregated data was performed. The result was a good fit (cf. Browne & Cudeck, 1989):  $\chi^2$  (df = 588) = 1045.61, RMSEA = .075, 90% confidence interval for RMSEA: .068 to .082, and CFI = .94. But, when the fitness of one factor loading of those predictors was examined at the team level, the result was a poor fit,  $\chi^2$  (df = 594) = 1522.86, RMSEA = .12, 90% confidence interval for RMSEA ranged from .12 to .13, and CFI = .87. Since these results supported construct validity, these variables were treated as three independent variables.

Using the similar procedure as for the first study, a two-group CFA to test measurement equivalence was conducted since data were collected from different countries (Mullen, 1995; Steenkamp & Baumgartner, 1998). The result showed that the constrained two-group CFA (i.e., where factor loadings were constrained to be equal) displayed acceptable fit (RMSEA = .07, 90% confidence interval for RMSEA ranged from .06 to .07, CFI = .87). When comparing the chi-square of constrained and unconstrained models, a significant change was found. This result suggested that the factor structure was not invariant across groups ( $\Delta \chi^2$ (88)

= 312.13, p < .001). However, when all parameters were freely estimated in each group (that is, the unconstrained CFA), the result displayed no better fit (RMSEA = .068, 90% confidence interval for RMSEA were ranging from .063 to .073, CFI = .87). These analyses demonstrated only partial support for metric equivalence. On the basis of these results, a conservative strategy was adopted to test the sensitivity of the regression analyses. Thus, for this study, nationality was included as a control variable of the hypothesized relationships.

# **Validation for Cross-level Analyses**

The analyses for both studies included both individual- and team-level constructs. Consequently, two different analyses were performed to validate whether the data structure were statistically adequate for aggregation. First, according to one-way analysis of variance (one-way ANOVA), servant leadership, paternalistic leadership, support for innovation, team climate and prototypicality differed between teams (p < .001) as represented by their values of intra-class correlations (ICCs), see Table 4. Second, a mean of  $r_{wg(j)}$  above and equal to .95 across teams for servant leadership, paternalistic leadership, support for innovation, and prototypicality, was calculated using a uniform null distribution, and suggested a high level within-team agreement (James, et al., 1984). These results showed that aggregation of servant leadership, paternalistic leadership, support for innovation, team climate and prototypicality were justified.

Table 4. ICCs and A Mean of  $r_{wg(j)}$  of the Studied Variables

Variable Name	ICC(1)	ICC(2)	Mean of $r_{wg(j)}$
Individual Competence	.17	.26	N/A
Leader Identification	.18	.26	N/A
Paternalistic Leadership	.46	.70	.98
Prototypocality	.24	.46	.95
Servant Leadership	.41	.65	.97
Support for Innovation	.22	.44	.98
Team Climate	.23	.45	.99
Vertical Collectivism	.03, p > .05	.08, p > .05	N/A

#### Note:

N/A = not applicable because the ICCs values indicated that these variables were individual-level variable

## **Summary**

This chapter describes the preliminary analyses conducted for both studies. The analyses include the validity and reliability analyses (CFA) and the validity for cross-level analyses (i.e., ICCs and a mean of  $r_{wg(j)}$ ). Results for both studies are delineated in the following two chapters.

Chapter 5 presents the first study on servant leadership and employee creativity and team innovation. Chapter 6 presents the second study on paternalistic leadership and employee creativity. Chapter 7 outlines the lessons learnt resulting from reviewing the literature, as well as from conducting the two studies, and finally, a model for future research is proposed.

#### CHAPTER 5

# SERVANT LEADERSHIP, EMPLOYEE CREATIVITY, AND TEAM INNOVATION<sup>2</sup>

#### Abstract

Advancing leadership research and understanding of the creative process, a multilevel model integrating servant leadership, social identity, and team climate theories is developed and tested. The result shows that servant leadership enhances employee creativity by creating a feeling of identification with the leader and the most positive effect of such identification occurs when support for innovation is high. Moreover, it is proven that prototypicality mediates the positive relationship between servant leadership and team innovation but support for innovation does not enhance this relationship.

## Introduction

Creativity and innovation are crucial for organizational success and survival (Dervitsiotis, 2010; Wadler, 2009), thus it is not a surprise that many studies have examined this topic (George, 2007; Hennessey & Amabile, 2010; Runco, 2004; Shalley, et al., 2004). Despite little cross-fertilization between creativity and innovation (cf. Gumusluoğlu & Ilsev, 2009b; Pirola-Merlo & Mann, 2004), these studies have articulated the key function of leaders in the creative and innovative process (Amabile, et al., 2004; Pirola-Merlo, et al., 2002; Shalley, et al., 2004) as well as the role of the context in bringing out leaders' full potential (Eisenbeiss,

<sup>&</sup>lt;sup>2</sup> Earlier version of this chapter was presented at the 2011 Academy of Management Conference in San Antonio, Texas, US, on 12 – 16August, 2011. We are heavily indebted to Silke A. Eisenbeiss and Daan van Knippenberg for their invaluable comments on the first draft of the accepted paper.

et al., 2008; Gumusluoğlu & Ilsev, 2009a; West et al., 2003). According to the most recent reviews of leadership literature, it is not sufficient for team leaders to only stimulate individual creativity, because they also need to be able to generate results from the team (DeChurch, et al., 2010; Gardner, et al., 2010). To understand these influential processes on both the individual and the collective, it is important to understand how leaders build and sustain not just personal relationships with follower but also the collective's respect and willingness to trust. By integrating self-definition with special relationship concept (Cooper & Thatcher, 2010) or otherwise known as the identification theory (Tajfel & Turner, 1985), this study posits that when leaders demonstrate a genuine interest in both followers and team development; they are seen as role models representing desirable leader and team characteristics. Such role modeling processes build follower identification and self-esteem, sustaining their commitment and perseverance necessary to develop and implement new solutions to challenging workplace problems. In addition, such processes also develop the sense that the leader is an ideal representative of the team by which members of the team work together toward a greater goal. Despite the integral role of leaders in both stimulating the creative process and representing the team, to the best of my knowledge, no research has examined this topic.

The purpose of this research is thus to examine leadership behaviors that promote follower identification and collective sense of leaders as representative of the group by which then stimulate creativity and innovation through enhanced engagement to leaders' actions. Reflecting this orientation, leadership behaviors which exemplify the leader's genuine commitment to help followers grow and at the same time serve the team's interests was chosen (Neubert, et al., 2008; van Dierendonck, 2010). Servant leadership that emphasizes the development and needs of those led over self-interest, embodies these desired

characteristics, hence it provides an ideal means to build follower identification. Applying the identification theory, this study proposes servant leaders will build trusting and loyal relationships with their followers and develop follower's leader identification. Thus, as a consequence of, it will enhance followers' effort toward creative endeavors (cf. Hirst, van Dick, et al., 2009; Shamir, House, & Arthur, 1993). At the team level, this study further proposes that as servant leaders serve the collective, they will be likely to be perceived as representative and prototypical of the group's desired norms and characteristics (cf. van Knippenberg & van Knippenberg, 2005). In turn, as a consequence of such sense of 'oneness', the collective will be empowered to explore new ideas and solutions developing and implementing innovative solutions to problems. In addition, these processes are contingent to the work context that encourages and supports innovation indicating these behaviors are important for the team, and as such the aforementioned associations will be strongest (Gumusluoğlu & Ilsev, 2009a; Jung, et al., 2003; Pirola-Merlo, et al., 2002). Literature has shown that the presence of support for innovation climate provides practical support creativity and innovation (Anderson & West, 1996, 1998; West, 1990), thereby encouraging employees to prioritize innovative activities such as problem solving or exploration (Eisenbeiss, et al., 2008). As such, the creative and innovative consequences of servant leadership will also be greatest in teams operating in such context is anticipated.

This research extends the field in at least three ways. First, this study provides insight into internally sustaining motivational processes (Deci & Ryan, 2000) by which leaders stimulate creativity and innovation. Despite the intuitive links between employee creativity and team innovation, research examining the two is extremely rare (cf. Gumusluoğlu & Ilsev, 2009b; Pirola-Merlo & Mann, 2004). Thus, examining influential processes that operate at the individual level and at the collective simultaneously represents a significant integrative

contribution to the literature (cf. Gardner, et al., 2010; Pirola-Merlo & Mann, 2004). To the best of my knowledge, no field studies have examined leadership outcomes, in terms of servant leadership, of the two variables simultaneously. Second, although self-definition with special relationship concept is malleable and readily responsive to managerial intervention (Markus & Kunda, 1986), it remains un-tested as a simultaneous creative and innovative resources for servant leaders. Further, the examination of support for innovation adds to converging recognition across both the creativity and leadership literature of the importance of context and its role in realizing leaders' full potential (Shalley, et al., 2004). Finally, and of great relevance for practice, this study extends the previous study of empowering and moral leadership behaviors to show the important role of leaders who have a genuine interest in follower development in the individual creative and collective innovation processes (cf. Neubert, et al., 2008).

## Theory and Hypotheses

Employee creativity at work is understood as the generation of practical and new solutions to workplace challenges, providing a tangible and useful outcome for the organization (Amabile, 1988). On the other hand, team innovation refers to the combination of the quality and quantity of novel and useful ideas that are developed and implemented (Pirola-Merlo & Mann, 2004). As leaders influence and motivate followers to work towards common greater goals (or, in the other words, the leader-defined organizational goals) to develop and implement novel and useful solutions to problems, it is not surprising that leadership has emerged as a key stimulant for creativity and innovation (Shalley, et al., 2004).

Contemporary research has examined the role of leader-member exchange and transformational leadership on employee creativity resulting in mixed and confusing findings (Eisenbeiss & Boerner, 2010; Shin & Zhou, 2003; Wang & Rode, 2010) But, given previous empirical research has proven that other leadership approaches have significant impact on employee performance (cf. DeChurch, et al., 2010; Gardner, et al., 2010), some scholars have started the attempt to study the relationship between servant leadership and employee creativity (Neubert, et al., 2008). Using a different angle from Neubert and his colleagues (2008), this study posits that servant leadership, which refers to leader behaviors that place the good of those led over the self-interest of the leader and emphasizing leader behaviors that focus on follower development (Hale & Fields, 2007; van Dierendonck, 2010), will generate employee creativity and team innovation simultaneously. Servant leadership is distinct from transformational leadership or empowering leadership in that servant leadership emphasizes followers and community development rather than the achievement of the leader or leader-defined organizational interests (Liden, et al., 2008; van Dierendonck, 2010). In addition, servant leadership emphasizes on its influential process on followers rather than merely on the outcomes, both leaders' and organizational goals (Ehrhart, 2004). As such, the focus of this study extends beyond a mere validation of servant leadership concept to the creativity and innovation domain (cf. Neubert, et al., 2008) and also to include the individual and team level processes in a theoretically derived framework.

### Servant Leadership, Leader Identification and Employee Creativity

Apart from follower development and service to the community, servant leadership also focuses on fairness and morality in the work context, willingness to self-sacrifice for the greater good, ethical principles, as well as providing guidance and direction to follow (Barbuto Jr & Wheeler, 2006; Liden, et al., 2008; Neubert, et al., 2008; Sendjaya, et al., 2008;

van Dierendonck, 2010; van Dierendonck & Nuijten, 2011; Walumbwa, Hartnell, et al., 2010). Exhibiting these behaviors builds follower respect and in turn, their identification to the leader. Employees of such leaders will be encouraged and inspired by their leader's developmental and ethical stance and view them as role models. According to the identification theory, role modeling implies a process by which follower's beliefs, feelings, and behaviors are influenced by and gel with those of the leader, and hence, promoting a sense that one's own identity is aligned and connected with those of their leader, which in turn, leading to a strong sense of personal identification (Kark, Shamir, & Chen, 2003; Shamir, et al., 1993). Personal identification evokes followers' self-concept in the recognition that they share similar values with the leader and give rise to followers' desire to change their self-concept so that their values and beliefs become more similar to those of the leader (cf. Kark, et al., 2003).

Identification has been found to be a means to awaken employee creativity (Farmer, et al., 2003; Hirst, van Dick, et al., 2009). Personal identification with the leader (hereon: leader identification) reflects a sense of oneness with the leader whereby followers merge the leaders' aims and goals with those of their own (Ashforth & Mael, 1989; Haslam, 2004). Such internalization of one's identity processes creates a powerful drive to contribute to the leader's goals and successes (de Cremer & van Vugt, 1999; van Knippenberg, 2000). The more a person identifies with the leader, the more likely he or she will work towards achieving the goals of the leader which is also their own goals (Ashforth & Mael, 1989; Dutton, Dukerich, & Harquail, 1994; Haslam, 2004; van Dick, 2001; van Dick, Hirst, Grojean, & Wieseke, 2007; van Knippenberg, 2000).

The merging of an employee's self-concept to his or her leader also provides an incentive for identified employees to overcome barriers and challenges in the workplace that may impede progress and potentially serve as threat to the leader's status. For highly identified employees, failure to overcome those challenges also poses a severe threat to their selfesteem, particularly if failure has negative consequences for their leader's standing and their related identity. This desire to avoid negative evaluations will stimulate identified employees to invest sustained effort toward creative endeavors that by its definition involves uncertain and untested approaches which hold a high risk of error and even failure. The risk of failure, in particular, will have significant perceived negative consequences for identified employee's self-concept. This will drive them to tackle these challenges by investing considerable efforts. Persistence and investment of effort promote knowledge acquisition and deep processing strategies that facilitate the mastery of complex and uncertain tasks (Elliot & McGregor, 2001; Fisher & Ford, 1998) which provides the basis for creative performance. As creativity involves the development of new and useful solutions to work challenges, it appears likely that a considerable proportion of this effort will be directed to solve challenges which may threaten the leader' standing and reputation, and thus, creative problem solving provides a means of demonstrating one's capabilities and so the leaders and one's own status.

In addition to task-related motivation, identification is also likely to foster a self-motivating interest in work activities. When people identify with their leader, they assimilate the leader's requirements into their sense of self, and so the goals of the leader will be integrated intra-psychically (Deci & Ryan, 2000). Evaluations of the likelihood of success and in particular expectancy of rewards that may influence externally motivated individuals' persistence will be of much lesser importance than successful task accomplishment. Thus, identification is conducive to adaptive problem focused strategies which encourages

individuals to view task accomplishment as an important end in itself (cf. Deci & Ryan, 2000). These strategies provide an impetus for creative behavior. Moreover, the internalization of group aims will create a sense that the individual has control over their activities fulfilling a basic human need for self-control (Deci & Ryan, 2000), which in turn, will promote enthusiasm and effort grappling with the task at hand. Similarly, identification is perceived as under the autonomous control of the individual, and like intrinsic motivation, will promote problem focused behaviors. Therefore, the following hypothesis is posited:

Hypothesis 1: Leader identification mediates the relationship between servant leadership and employee creativity.

# The Creativity Enhancing Function of Support for Innovation

However, identification does not always lead to creative outcomes. There are times when group norms and the context do not necessarily encourage creativity potentially as greater emphasis is placed on other performance outcomes such as efficiency and reliability (Hirst, van Dick, et al., 2009). In these conditions while highly identified employees will still be motivated to invest effort, it will be directed towards other activities such as streamlining existing practices or minimizing wastage to promote efficiency that may be of great value but have lesser creative returns. On the other hand, when the climate and norms of the teams encourage the employee to view creativity and innovation as important, in these contexts, employee's identification will be more directly channeled to creative activities. Such contexts relate to the extent to which support for innovation, which refers to the practical support of attempts to introduce new and improved ways of doing things in the work environment (West, 1990), encourages employees to take risks and persist with challenges and obstacles to develop creative solutions to problems. Employees in innovation supporting climates will be encouraged to try new approaches, explore uncertain but potentially

promising methods and also show persistence in problem solving activities (Baer & Oldham, 2006). In this case, identification with the leader will display the strongest association with creative outcomes. A supportive for innovation climate will encourage followers to invest additional effort towards creative endeavors as these activities are central to the team and related to the identity of the leader. As such, support for innovation enhances the positive association between leader identification and employee creativity is anticipated.

While leader identification is likely to enhance creativity as delineated above, certain contexts necessitate that innovation is not encouraged due to other priorities (for example, efficiency, reliability and predictability). In such circumstances, identification does not necessarily lead to employees developing creative outcomes. When teams have a low climate for innovation potentially prioritizing efficiency or timeliness, leader identification may not always translate to a higher level of creative performance. In these teams with lower support for innovation, followers are likely to perceive that their creative activities do not necessarily benefit the leader and by implication, the leader-defined organizational goals, and hence, are likely to be motivated to engage activities other than those stimulating creativity. As such, it is anticipated that the effect of leader identification on the relationship between servant leadership and employee creativity is weaker or non-existent when support for innovation is low. Thus, this study proposes:

Hypothesis 2: Leader identification mediates the relationship between servant leadership and employee creativity and the most positive effect from such mediation occurs only when support for innovation is high.

## Servant Leadership, Prototypicality and Team Innovation

Self-definition with special relationship theory (Cooper & Thatcher, 2010), or identification theory in short (cf. Haslam, 2004; Haslam, van Knippenberg, Platow, & Ellemers, 2003; Hogg & Terry, 2000), proposes that an important part of our self-concept or the way we see ourselves stems from our relationships with the leaders who are the influential member of social groups (Shamir, et al., 1993). It is believed that the extent to which the leader represents group's characteristics is an important referential source for their self-esteem. Leader in-group prototypicality (hereon: prototypicality) is the extent to which the leader is seen to represent group characteristics including the beliefs, norms and attitudes of the team (Lipponen, Koivisto, & Olkkonen, 2005). Leaders who are perceived as prototypical are more likely to be trusted by followers to provide advice and counsel. Specifically, it is believed that the very behaviors that embody servant leadership, which are a genuine interest in follower and team development as well as a willingness to place the group's interests over the leader's self-serving goals, will promote the sense that the leader provides an ideal prototypical representation of the group's characteristics. As a consequence of being perceived as prototypical by the collective and so an appropriate representative of the group, higher levels of prototypicality will be associated with higher levels of group member task ownership. This will empower followers by connecting them to a bigger and stronger entity, increasing their sense of self-worth and self-esteem, and raising their self- and collectiveefficacy beliefs (Shamir, et al., 1993). In turn, as self-driven motivation (Amabile, 1988) and empowerment (Harrison, et al., 2006) have been identified as key antecedents to innovation, the following hypothesis is proposed:

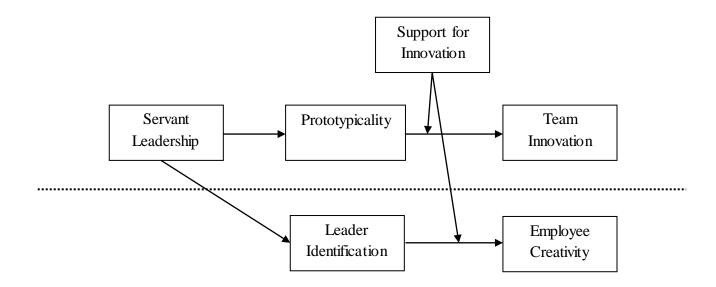
Hypothesis 3: Prototypicality mediates the positive relationship between servant leadership and team innovation.

The Innovation Enhancing Function of Support for Innovation for Prototypicality Leader prototypicality relates to the extent leader is perceived to reflect desirable team characteristics. A leader who is prototypical may inspire a sense of trust and willingness to work towards the team goals and this will empower the team. This source of inspiration, however, does not necessarily include the drive to engage in innovative activities. For example, some teams and their related norms evidenced by the team climate may express a strong desire to work collaboratively, but not necessarily innovatively. A team climate that supports innovation, which is led by a leader who is prototypical, signals that the leader is both representative of team's norms and values and that these norms support innovation. As such, an increasing level of leader prototypicality signals an increasingly close link between the leader's representativeness and the group's innovation encouraging behavior. In this situation, not only does the leader increasingly represent and so re-affirm the group's norms, but these norms also suggest an appetite and enthusiasm to try new approaches. In conditions where team climate does not support innovation, motivating and empowering individuals to engage in innovative activities do not necessarily encourage them to be innovative as they may potentially place a higher priority on other activities. Therefore, the following hypothesis is posited:

Hypothesis 4: Support for innovation moderates the positive association between prototypicality and team innovation, such that this relationship is strongest and most positive when support for innovation is high.

The model of the present study is depicted below.

Figure 1. The Multilevel Framework of the Relationship between Servant Leadership and Employee Creativity



### **Results**

Research methods, procedures, sample, and measures used in the present study are delineated in Chapter 3. Results from preliminary analyses, which include validity and reliability analyses as well as validation for cross-level analyses, are described in Chapter 4. In this chapter, the hypotheses testing processes are described. Hypotheses testing was conducted by following the procedures suggested by MacKinnon, Fritz, and colleagues (2007), Pituch and colleagues (2005) and Zhang and colleagues (2009) for cross-level mediation analysis, and Preacher, Rucker, and Hayes's (2007) suggestions for the team-level moderated mediation. For cross-level moderation analysis, procedures described by Raudenbush and Bryk (2002) were employed. Additionally, to test the cross-level moderated mediation hypothesis, the procedures described by Preacher, et al. (2007), Tein, Sandler, and colleagues (2004), Aiken and West (1991), and Raudenbush and Bryk (2002) were adopted.

# Hypothesis Testing

Table 5 displays means, standard deviations, correlations, and internal consistency reliabilities of the studied variables. The cross-level correlation analyses showed that team innovation was positively correlated with servant leadership, prototypicality and support for innovation. Interestingly, team innovation was negatively related to tenure in the organization. The result also showed that employee creativity was not significantly associated to all the studied variables as well as to control variables. Finally, all the studied variables were correlated to each other.

Table 5. Means, Standard Deviations, and Correlations <sup>a</sup>

No	Variable	M	SD	1		2	3	4	5	6	7		8		9		10
1	Team Innovation	3.77	.56	(.76)													
	Employee																
2	Creativity	3.64	.47	.44	**	(.74)											
3	Nationality	.51	.50	.20	*	04											
4	Gender	.66	.47	08		.02	07										
5	Education	3.78	1.00	.11		.05	.07	08									
6	Tenure (in years)	4.37	5.12	28	**	06	34 **	.08	08								
	Servant																•
7	Leadership	3.84	.35	.18	*	04	.50 **	.13	.00	31 **	(.89)						
8	Prototypicality	3.81	.51	.21	**	.05	.40 **	.16	08	09	.69	**	(.76)				
	Leader																
9	Identification	3.66	.62	.14		.09	.51 **	02	.08	14 **	.46	**	.40	**	(.79)		
	Support for																
10	Innovation	3.96	.35	.21	**	.15	.26 **	.05	04	25 **	.66	**	.56	**	.43	**	(.82)

Note:  $^a$  The above values represent cross-level correlations from the studied variables whereas reliability values are in the parentheses along the diagonal lines. n = 150 - 154 teams comprising of 369 - 425 employees.

<sup>\*</sup> *p* < .05

<sup>\*\*</sup> p < .01

Hypothesis 1, a cross-level mediation model with lower-level mediator (cf. Mathieu & Taylor, 2007), predicts that leader identification mediates the relationship between servant leadership and employee creativity. Hierarchical linear modeling (HLM 6.08) was used to test this cross-level hypothesis with group-mean centering of Level 1 predictors as recommended by Raudenbush and Bryk (2002) and Hofmann and Gavin (1998). As a necessary precondition to use HLM, a significant variation in employee creativity should be tested. From the null model, the result showed that ICC(1) = .25, indicating that 25% of the variance resided between teams and the chi-square test indicated that between-team variance was significant ( $\chi 2 = 289.97$ , p < .001). These results justified the use of HLM to test the cross-level hypothesis. To test Hypothesis 1, both the joint significance test and asymmetric confidence limits methods were used because these tests provide 'the best balance in terms of power and Type I error rate' (Pituch, et al., 2005, p. 10). For a mediation effect to be present, a joint significant test requires both path a (i.e., the path from the independent variable to mediator) and path b (i.e., the path from the mediator to dependent variable with the independent variable controlled) to be statistically significant (MacKinnon, Fairchild, et al., 2007). Subsequently, the analysis was continued by calculating the confidence limits for the indirect effect using software known as PRODCLIN, an acronym for Product Confidence Limits for the Indirect Effect (MacKinnon, Fritz, et al., 2007). A mediation effect presents if zero lies outside the 95% confidence limits.

Step 1 and Step 2 in Table 6 summarizes the result of the cross-level mediation analysis. It was found that servant leadership was positively related to leader identification (path a;  $\gamma =$  .70, t = 4.72, p < .01). It was also found that leader identification was positively related to employee creativity (path b;  $\gamma = .15$ , t = 2.00, p < .01). According to the joint significance test, this result supported the hypothesis that leader identification mediates the relationship

between servant leadership and employee creativity. To support this conclusion, the asymmetric confidence limits using PRODCLIN software was calculated and the result showed that the 95 % confidence limits were between .03 (lower limit) and .20 (upper limit). Since zero was excluded from the upper and lower confidence limits, this result further supported the previous inference of mediation. Thus, Hypothesis 1 was supported. Since the direct path from servant leadership to employee creativity was not statistically significant (see Table 6 Step 3), this indicated a full mediation condition. Therefore, it is concluded that leader identification mediates the relationship between servant leadership and employee creativity.

Table 6. Results of Cross-level Moderated Mediation Analysis  $^{\it a}$ 

	γ		SE	t	$R^2$
STEP 1 → DV = Leader Identification	-				.40
Level 1 Variables					
Gender	05		.07	-0.75	
Education	02		.07	-0.25	
Tenure	.00		.01	0.11	
Level 2 Variables					
Nationality	.38	***	.07	5.39	
Servant Leadership	.70	***	.05	4.72	
STEP 2 → DV = Employee Creativity					.10
Level 1 Variables					
Gender	.00		.05	0.06	
Education	.09		.06	1.63	
Tenure	01		.01	-0.67	
Leader Identification	.15	**	.06	2.00	
Level 2 Variables					
Nationality	17	*	.07	-2.48	
Servant Leadership	05		.11	-0.52	
STEP $3 \rightarrow DV = Employee Creativity$					.15
Level 1 Variables					
Gender	.01		.05	0.23	
Education	.11		.06	1.87	
Tenure	01		.01	-0.76	
Leader Identification	86	*	.42	-2.04	
Level 2 Variables					
Nationality	11		.07	-1.56	
Servant Leadership	25		.14	-1.79	
Support for Innovation	.36	**	.13	2.81	
Cross-level Interaction					
Leader Identification X Support for					
Innovation	.22	*	.10	2.17	

a n (team) = 147 and n (employee) = 360, after listwise deletion.

<sup>\*</sup> p < .05
\*\* p < .01
\*\*\* p < .001

Hypothesis 2 states that the mediation effect of leader identification is contingent on the condition of support for innovation (moderator) and its strongest effect occurs *only* when support for innovation was high<sup>3</sup>. This hypothesis is a cross-level moderated mediation model with the moderator operating on path b of the mediation analysis (cf. Preacher, et al., 2007). To the best of my knowledge, no relevant test of the conditional indirect effect is available to directly test such hypothesis in a multi-level context<sup>4</sup>. Therefore, the procedures described by Preacher, et al. (2007), Tein, et al. (2004), Raudenbush and Bryk (2002), and Aiken and West (1991) was extended and combined to test Hypothesis 2. Specifically, in the present case this approach involves centering the moderator at conditional values of interest and interpreting the path b coefficients as simple slopes<sup>5</sup>.

Hypothesis 2 implies that there was: (1) a mediation effect of leader identification on the relationship between servant leadership and employee creativity, and (2) a significant interaction between leader identification and support for innovation. First, as reported above, the existence of a relationship between servant leadership and leader identification (path a;  $\gamma = .70$ , t = 4.72, p < .01) was already established. Second, the interaction between support for innovation and leader identification predicting employee creativity was tested using a slopes-as-outcomes model (Raudenbush & Bryk, 2002). If the interaction is significant, one can probe the simple slopes of the b path using the conventional values of 1 SD below M and 1

<sup>&</sup>lt;sup>3</sup> An additional analysis to test whether nationality moderated the relationship between support for innovation and employee creativity was conducted. The result was not statistically significant ( $\beta = .15$ , t = 1.39, p > .05). Subsequently, a model where nationality moderated the relationship between servant leadership and team innovation was also tested. The result was not significant as well ( $\beta = .03$ , t = .47, p > .05). Thus, these findings supported the previous assumption that for the relevant measures differences between the two nationalities, Indonesia and China, did not relate to the results, and hence, the data was combined.

<sup>&</sup>lt;sup>4</sup> Dr. Kristopher Preacher had confirmed this issue.

<sup>&</sup>lt;sup>5</sup> I am indebted to Dr. Brian Cooper of the Department of Management, Monash University, for his brilliant idea to solve this confounding problem.

SD above M. The conditional indirect effect was calculated as the product of the a and b (simple slope) paths and was tested with PRODCLIN.

A random coefficient model was tested and found significant random variation in the Level 1 slope coefficient (U1 variance = .17, p < .05). Subsequently, this hypothesis was tested using a slopes-as-outcomes model (Raudenbush & Bryk, 2002). A positive interaction between leader identification and support for innovation was found ( $\gamma$  = .22, t = 2.14, p < 05). To understand the nature of the interaction, the HLM-interaction test 5.8 macro developed by Shacham (2009) was used; the result is depicted in Figure 2. The figure shows that the effect of servant leadership influences on employee creativity through its leader identification occurs only when support for innovation is high (simple slope:  $\gamma$  = .14, t = 1.91, p < .05; conditional indirect effect = .10; 95% confidence limits: .02 (lower limit) and .20 (upper limit)). In addition, when support for innovation is low, such conditional indirect effect is weak but non-significant (simple slope:  $\gamma$  = .08, t = -0.99, t > .05; conditional indirect effect = .06; 95% confidence limits: -.17 (lower limit) and .05 (upper limit)). Hence, the inference that leader identification mediates the relationship between servant leadership and employee creativity only when support for innovation is high, is supported.

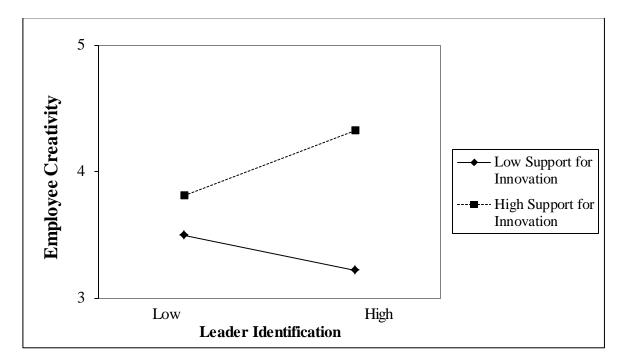


Figure 2. The Moderated Mediation Effect of Support for Innovation

Hypothesis 3 predicted that prototypicality mediated the relationship between servant leadership and team innovation. The previous test had found that the path between servant leadership and prototypicality (path a) was positive ( $\beta$  = .68, t = 9.91, p < .001). Subsequently, it was also found that the path between prototypicality and team innovation, after controlling for servant leadership (path b), was statistically significant ( $\beta$  = .27, t = 2.35, p < .05). Since both paths were statistically significant, then according to the joint significant effect, these results supported our hypothesis (see Table 7 Steps 1 and 2). To support this conclusion, the asymmetric confidence limits using PRODCLIN software was used to test whether no zero lies between the 95% upper and lower confident limits. It was found that the 95% confident limits were between .04 (lower limit) and .34 (upper limit), hence supporting the previous inference of mediation. Again, a full mediation effect was found since the direct effect between servant leadership and team innovation was not significant ( $\beta$  = -.08, t = -0.67,

p > .05). Thus, a conclusion that prototypicality fully mediates the relationship between servant leadership and team innovation can be drawn.

Hypothesis 4 stated that prototypicality mediated the relationship between servant leadership and team innovation and its mediation effect occurred *only* when support for innovation was high. This hypothesis was tested using Preacher, et al.'s (2007) approach for moderated mediation. All control variables was included in the analysis and thus, Level 1 control variables were aggregated. For moderated mediation to be present, the interaction term between prototypicality and support for innovation must be statistically significant. Unfortunately, this interaction was not significant ( $\beta = .06$ , t = 1.09, p > .05); see Table 7 Step 3. Since Hypothesis 4 was not supported, then one may conclude that the influence of servant leadership on team innovation through prototypicality was not affected by any conditions of support for innovation.

Table 7. Result of Team-level Moderated Mediation Analysis  $^a$ 

	γ		SE	T	$R^2$
STEP 1 $\rightarrow$ DV = Protoypicality	-				.52
Controls					
Gender b	.02		.06	0.36	
Education <sup>b</sup>	12	*	.06	-2.04	
Tenure b	.16	*	.07	2.40	
Nationality	.14		.07	1.84	
Predictor					
Servant Leadership	.68	***	.07	9.91	
STEP 2 → DV = Team Innovation	.00		.07	7.71	.13
Control					
Controls Gender b	04		.08	-0.51	
Education <sup>b</sup>	0 <del>4</del> .14		.08	1.65	
Tenure b		*			
	22	-4-	.09	-2.43	
Nationality	.04		.10	0.36	
Predictor					
Servant Leadership	08		.12	-0.67	
Prototypicality <sup>c</sup>	.27	*	.11	2.35	
STEP $3 \rightarrow DV = Team Innovation$					.15
Controls					
Gender b	04		.08	-0.48	
Education <sup>b</sup>	.14		.08	1.65	
Tenure <sup>b</sup>	22	*	.08	-2.46	
Nationality	.05		.10	0.51	
Predictor					
Servant Leadership	15		.14	-1.01	
Prototypicality <sup>c</sup>	.21		.12	1.79	
Support for Innovation <sup>d</sup>	.21	*	.11	1.98	
				., -	
Cross-level Interaction					
Prototypicality X Support for Innovation	.06		.06	1.09	

*Note*:

*a* n (team) = 149, after listwise deletion b all aggregated, c mediator, d moderator p < .05 \*\*\* p < .001

#### Discussion

Prior creativity research has measured the impact of different leader behaviors (for example, transformational leader and leader-member exchange) on employee creativity, and yet these studies are mute in regards to whether leader can achieve comparable results whilst leader genuinely shows interest in both followers' and team's development over self- and organizational-interest. This study provides robust evidence extending Neubert and colleagues' (2008) findings observing that servant leadership behavior predicts individual creativity as well as the innovation of the collective using a multi-source data. This is a much needed topic for research to demonstrate both followers' and teams' development and also enhance organizational outcomes as well as to advance managerial practice for leadership development.

By applying identification theory, this study also contributes to a growing body of research (Farmer, et al., 2003; Hirst, van Dick, et al., 2009; Yuan & Woodman, 2010) which illustrates that the way we see ourselves with regard to our relationship with others is a powerful driver in the creative and innovative processes. The result illustrates that leader who serves followers' and team's development is more likely to build followers' identification and respect. Identification, which refers to followers' self-concept that blends nicely with the leader's, is again proven to be a powerful resource toward creative activities that often related to high risk of errors and even failure. Integrating the team climate research, the result shows that high identification may lead to higher creative performance *only* when climate of supports for innovation is high. This result also implies that when support for innovation is low, followers translate this condition as a lesser incentive for creative activities, which is why they tend to engage in a less creative performance. In addition, given the servant

leaders' emphasis on team's development, team members are more likely to perceive him or her as the ideal representation of the team, and thus, these teams are more likely to accept his or her influence. Such influential effect can be utilized to foster the team to develop and implement new solutions to challenging problems. However, at the team level, any significant effect of support for innovation on the association between prototypicality and team innovation was not found. Based on the insights gleaned from the charismatic leadership theory (Conger & Kanungo, 1987, 1988), it is suspected that the effect of support for innovation is 'blocked' because team's imitation on their prototypical leader is considered enough to drive their willingness toward working collectively to achieve leader's goal, team innovation. Finally, this study, alongside with Yong, Kakabadse, and Kakabadse's (2010) and Pekerti and Sendjaya's (2010) studies, shows that servant leadership holds up in the Asian context and plays an important role in fostering simultaneously employee creativity and the innovation of the collective.

# Theoretical Contribution

The present study contributes to the creativity literature by integrating servant leadership, social identity and team climate theories. The results show that the integration of these three streams enriches our understanding on the multi-level relationship between servant leadership and individual and team outcomes simultaneously. In addition, this study provides answer to a standing call in leadership studies to explain how individual and team activity is synchronized and collectively tied together (cf. DeChurch, et al., 2010; Gardner, et al., 2010). It is important to study both levels at the same time because examining one level at the time prevents ones to understand whether factors at one level is also important for the other level (Kozlowski & Klein, 2000). Although servant leadership promotes strong individual exchanges (Liden, et al., 2008; Neubert, et al., 2008), this study is the first to illustrate its role

in driving the innovation of the collective simultaneously. These results alongside Ehrhart's (2004) illustrate that servant leadership influences employees beyond an exchange between the individual and their leader to the collective engagement of the group.

Shamir and his colleagues (1993) found that charismatic leaders encourage followers to identify and see themselves as one with their leader. On the other hand, Kark and his colleagues (2003) demonstrated that transformational leadership may lead to a very strong followers' identification with the leader, which in turn, create a feeling of dependency. This research illustrates the generalizability of identification process to servant leader's influence, although it is a different leadership behavior (Avolio & Gardner, 2005). The process of liking and becoming attracted to one's leader appears to be a bridge by which different leaders' behaviors may influence followers' self-concept, and in turn, their performance. The observation that charismatic, transformational and servant leader behaviors stimulate follower identification raises questions as to how far these influence processes generalize. This is definitely a key issue that should be addressed in the future research.

The observation that innovation-supporting climates strengthen the association between leader identification and employee creativity illustrates the important role of such climate in influencing individual behavior. It also provides an answer to the question posed by Hirst and colleagues (2009) as to whether processes of identification similarly encourage creativity in environments when this behavior is not a key element of group practice. This study shows that when the support for innovation is low, leader identification has a weak negative relationship with creativity. Thus, it can be concluded that team climates provide two-fold benefits to enhance creativity because it creates social environments encouraging innovation and directly facilitates employee creativity.

By integrating servant leadership and social identity theories, this study provides the first evidence of the importance of building respect and trust of the collective in fostering team innovation. As servant leader displays genuine interest in team's development, team members perceive him or her as an ideal representation of their team. Consequently, the team's effort is more likely to be channeled toward developing and implementing creative and innovative actions. In addition, this study also shows that regardless of the level of support for innovation, team's collective belief and sense of trust on their servant leader, as an appropriate representative of their group, is a powerful motivational source toward working collectively in innovation activities. This result raises a question whether any other team climate constructs such as participation and safety, vision, or social desirability (Anderson & West, 1996, 1998) will enhance the influence of servant leadership on team innovation. Indeed, this is an open avenue for future research.

### Limitations and Directions for Future Research

Longitudinal research would be valuable as this study was cross-sectional; therefore, causality cannot be inferred. Second, this study did not examine the influence of either individual or team empowerment on the relationship between servant leadership and employee creativity or team innovation. In addition, it did not test the influence of other team climate variable in enhancing team innovation. Future research integrating these measures would be valuable given that servant leadership empowers followers and broader community to achieve common goals (Liden, et al., 2008). Further, this study also highlights differences between the firms in the two countries may have led to uncontrolled variance and noise being introduced to the data. In order to account for these differences, national differences were

controlled and a conservative analysis strategy was adopted when examining cultural differences.

# **Practical Implications**

This study highlights the importance of building psychological connections with employees in order to enact employee creativity and innovativeness of the collective simultaneously. This study also notes that the creative and innovative benefits of servant leaders' behaviors stem from team climates encouraging creative and innovative practices. Moreover, team climate prioritizing innovation provides the conditions conducive to creativity and so, appears as the most potent means to enhance creative outcomes. Additionally, it is also important for servant leaders to build collective norms and interest to enact employee creativity.

Much of the creativity field has emphasized personality contextual interactions to understand factors influencing intrinsic motivation (George, 2007; Shalley, et al., 2004). An important but largely unheralded development has been an accumulation of support for self-concept approaches. Studies from a diverse range of perspectives have found that self-identification in one's task capabilities (e.g., Farmer, et al., 2003) is an important creative stimulant. The practical contribution of this study is that one's attraction to one's leader which is something readily influenced by development and selection is also a powerful resource.

This research illustrates the benefits of applying servant leadership behavior in relation to individual creativity and collective innovation. This illustration provides a road-map to develop leaders who emphasize followers' development above self- and organizational-interest because they are potent sources of optimism and energy in economically uncertain times. This study also shows that while servant leadership enhances individual creativity

through strong subordinate relations or directly impacts on team innovation, its effects are contingent on the team climate. When team climates do not encourage innovation, the creativity related benefits of servant leaders are limited. In comparison, climates supporting innovation augment servant leadership and as such, this study highlights the need to focus on the leader and team system to consistently drive innovation outcomes.

#### CHAPTER 6

### PATERNALISTIC LEADERSHIP AND EMPLOYEE CREATIVITY

#### Abstract

Using a cross-national sample comprised of 154 teams from China and Indonesia, this study examines when and how paternalistic leadership has a positive influence on employee creativity. This study finds that the positive influence of paternalistic leadership on employee creativity is mediated by a team's climate of support for innovation and participation and safety. In addition, this study finds that competent employees get the most benefit from paternalistic leaders. Interestingly, this study later finds that the positive effect of team climate on the relationship between paternalistic leadership and employee creativity is not contingent on individual competence. The study contributions and implications, in particular for fostering employee creativity in collectivistic cultures, are discussed.

## Introduction

As employee creativity provides a foundation for organizational innovation, adaptation and growth (Dervitsiotis, 2010; Wadler, 2009), organizations invest considerable effort to foster employee creativity that is typically enacted within team contexts (Chen & Klimoski, 2003; Eisenbeiss & Boerner, 2010; Hirst, van Dick, et al., 2009; Jaussi, et al., 2007; Pirola-Merlo & Mann, 2004). Despite considerable research and consistent evidence illustrating that team leaders play a key role in promoting employee creativity in a wide array of cultures (e.g., Chong & Ma, 2010; Zhang & Bartol, 2010), research examining this topic has by and large

adopted leadership models derived from European – North American cultural values (e.g., Amabile, et al., 2004; Eisenberger & Aselage, 2009; George & Zhou, 2007; Neubert, et al., 2008; Tierney & Farmer, 2002). As a result, we know very little about the creative potential of leadership behaviors such as paternalistic leadership (Pellegrini & Scandura, 2008) that are ubiquitous in other indigenous contexts such as East Asia, the Middle East and Latin America. Thus, despite widespread cultural norms encouraging paternalistic leadership behavior in these economies, we know remarkably little about the relationship between these leadership behaviors and employee creativity (Wang & Cheng, 2010). This is an interesting question as there are equally plausible arguments that the encouragement provided by paternalistic leaders may lead individuals to engage more intensively with their work, providing a foundation for creativity (cf. Iyengar & Lepper, 1999; Niu & Sternberg, 2003; Wang & Cheng, 2010). Paternalistic leadership has the potential to reduce employees' latitude for decision making, diminishing opportunities for creativity (Wang & Cheng, 2010).

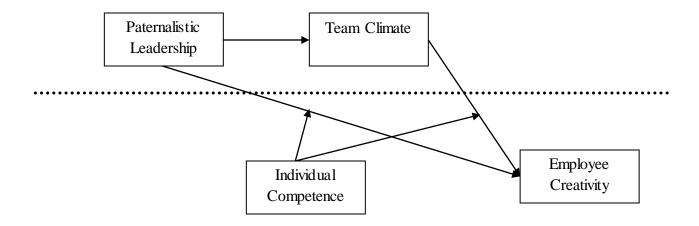
The purpose of the present study is, thus, to examine when and how paternalistic leadership relates positively to employee creativity. Given that paternalistic leadership encompasses a hierarchical concern for employees' welfare, previous research has suggested that benevolent leadership seeks to encourage employees to conform to their leader's influence and also that these same employees are working in a supportive and secure environment (Pellegrini & Scandura, 2008; Wang & Cheng, 2010). Thus it is anticipated that the extent to which employees perceive themselves as competent or less competent will determine whether the supportive behaviors afforded by paternalistic leadership enhance or diminish employee creativity. According to empowerment theory, competent employees tend to take proactive actions toward shaping and influencing their work environment (Spreitzer, DeJanasz, & Quinn, 1999). Hence, these employees are more likely to display initiating behaviors and a

willingness to invest considerable effort to achieve the desirable outcomes, and to show persistence in facing obstacles and challenges in the workplace (Spreitzer, 1996; Thomas & Velthouse, 1990). These behaviors are valuable for creative endeavors. Although these behaviors present a dilemma from the paternalistic leader's point of view, yet given the salient value of obedience toward an authoritative figure in these contexts (Pellegrini & Scandura, 2008; Zhou, 2006), it is more likely that competent employees will perceive paternalistic behaviors, such as providing direction, determining an employee's authority for decision making, choosing experimental tasks, and monitoring employees in performing their tasks, as an indication that the leader recognizes them as exemplary and valuable employees. Employees who perceive such recognition tend to show a strong sense of gratitude, loyalty and conformity, and in turn will receive more task-related resources from the leader signposts for the leader's support for their creative activities (Amabile, 1988) – which are conducive to building the feelings of interpersonal trust and comfort required for creativity (Mumford & Gustafson, 1988). However, there are possibilities that adverse effects may occur as well when such values are not prominent for certain employees. As suggested by empowerment literature, competent employees need a leader's authority delegation (Lee & Koh, 2001) as well as 'autonomy through boundaries' in performing their jobs (Seibert, Silver, & Randolph, 2004; Spreitzer, 1995). In relation to creativity, substantial number of studies have demonstrated that what these competent employees really need to perform their tasks creatively are 'clear strategic direction and procedural autonomy' (Amabile, et al., 2004, p. 7). So, when paternalistic leaders display constant direction and monitoring, some competent employees may also perceive these behaviors as a form of authoritative and controlling leadership, which may lead them to feel irritated and in turn, fewer or no creative results are obtained.

Integrating insight from team climate research (Anderson & West, 1996, 1998), this study posits that employees perceive paternalistic behaviors as a form of leader's support for innovation and effort to create a participative and safe environment for creative task completion. Such a perception will fuel employees' exploration of new ideas and solutions in the workplace, and hence they are more likely to persevere to complete the tasks (cf. Iyengar & Lepper, 1999; Zhou, 2006). Finally, this study proposes that such a climate has a stronger effect on the relationship between paternalistic leadership and employee creativity when individual competence is high. A high level of competence will amplify employees' safety feelings toward completing tasks creatively. Further, given the hierarchical nature of paternalistic leadership, it is anticipated that the positive effect of team climate on employee creativity will still hold despite the condition of employees' competencies. Paternalistic leaders tend to take most responsibility for task completion when less competent employees are around. They provide more guidance and monitoring for less competent employees to feel safe to engage in ensuring task completion. However, these actions may diminish employees' opportunities to engage in uncertain and challenging activities that actually act as a springboard for potential creative outcomes. But, as demonstrated in the previous studies that guidance from authoritative figures is important in these contexts (Iyengar & Lepper, 1999), then it is anticipated that the relationship between paternalistic leadership and employee creativity is weaker for less competent employees. The model is depicted in the following figure.

Figure 3. A Multi-level Relationship between Paternalistic Leadership and

Employee Creativity



This study contributes to the literature in at least three ways. First, it extends the study of leadership behaviors beyond European – North American models to provide much needed insight into the effects of leadership practices germane to East Asia and examine their association with employee creativity. In doing so, the examination of the important interactive role of follower self-concept both advance prior leader-centric research and an emerging stream of creativity research which illustrates the importance of follower self-concept in the creative process (Farmer, et al., 2003; Hirst, van Dick, et al., 2009; Tierney & Farmer, 2002). Secondly, this study corroborates previous findings that individual competence and a supportive and safe team climate are important antecedents of employee creativity (Alge, Ballinger, Tangirala, & Oakley, 2006; Pirola-Merlo, et al., 2002; West, 1990; Zhang & Bartol, 2010). Finally, it provides new insights into when and how paternalistic leadership enhances employee creativity.

# Theories and Hypotheses

Employee creativity is defined as the production of novel and useful ideas in the organization (Amabile, 1983, 1988). Considerable research has demonstrated that leaders have been consistently found to play a central role in influencing employee creativity by raising employees' motivation toward creative processes as well as by establishing a supportive climate (Jung, et al., 2003; Madjar, et al., 2002; Shin & Zhou, 2003). Scholars have examined a wide variety of leadership concepts including leader-member exchange (LMX) (Atwater & Carmeli, 2009; Liao, et al., 2010; Scott & Bruce, 1994), charismatic leadership (Murphy & Ensher, 2008), and transformational leadership (Shin & Zhou, 2003, 2007), and their influences on employee creativity. However, many of these studies are conducted by adopting the European – North American perspective. Thus we know very little whether leadership approach common to different indigenous cultures may foster employee creativity (Wang & Cheng, 2010). Reflecting the interest of the current study in indigenous leadership approaches, in this study the focus is on examining the influential process of paternalistic leadership behavior in fostering employee creativity.

# The Moderating Role of Individual Competence

Paternalistic leadership is known as 'a style that combines strong discipline and authority with fatherly benevolence' (Farh & Cheng, 2000, p. 91), comprising two dimensions of authoritarianism and benevolence (Pellegrini & Scandura, 2008). Authoritarianism refers to leader behaviors which emphasize authority and control, whereas benevolence refers to leader's concern for subordinates' personal well-being. The basic tenet of paternalistic leadership is subordinates' welfare, and it implies that paternalistic leaders direct both professional and personal lives of their subordinates in a way similar to a parent (Gelfand, et

al., 2007). Paternalistic leaders provide directions, determine employees' authority for decision making, choose experimental tasks for their employees, and monitor employees performing their tasks to ensure that they complete them in accordance with the leaders' or organizational preference. In addition, the leaders also get involved in employees' personal lives for the sake of their welfare (Farh & Cheng, 2000; Iyengar & Lepper, 1999; Pellegrini & Scandura, 2008; Zhou, 2006).

In collectivistic cultures where paternalistic leadership is a frequently and ubiquitously practiced leadership behavior, leaders are expected and obliged to provide care and protection for their subordinates, and in exchange, these subordinates show gratitude, loyalty, respect and conformity (Aycan, Kanungo, & Sinha, 1999; Cheng, et al., 2004; Pellegrini & Scandura, 2008). Even though paternalistic leadership is often talked about in relation to Chinese society because it meets the requirement of compliance and harmony (Westwood, 1997), scholars have observed that these leadership practices reside in many cultures in the Middle East, the Asia Pacific region and Latin America (Martinez, 2003; Pellegrini, Scandura, & Jayaraman, 2010; Uhl-Bien, et al., 1990). Despite the prevalence of these leadership behaviors in many societies, we know little about whether they encourage creativity in these settings (Wang & Cheng, 2010).

Using the lens of self-concept orientation research, in particular the psychological empowerment concept (Spreitzer, 1995; Thomas & Velthouse, 1990), this study posits that individual competence enhances the influence of paternalistic leadership on employee creativity. This concept was chosen because the literature suggests that paternalistic leadership can be considered as somewhat empowering to Eastern societies (Pellegrini & Scandura, 2008). Individual competence can be defined as individuals' beliefs that they can

perform their task skillfully (Gist, 1987; Spreitzer, 1995) and it emerges as a result of these individuals' considerable effort and persistence in challenging situations, setting and managing high expectations and achieving high performance (Bandura, 1977; Ozer & Bandura, 1990; Spreitzer, 1995; Thomas & Velthouse, 1990). The literature has suggested that employees with high individual competence will actively shape and influence their work environment and are more likely to be creative and innovative because they have certain expectations of success (Spreitzer, et al., 1999). But, because of the salient value of obedience to authoritative figures in these contexts, it is anticipated that competent employees perceive paternalistic behaviors as an indication that the leader is interested in their welfare, implicitly demonstrating their value and importance. These lead them to show a strong sense of gratitude, loyalty and conformity to the leader's actions, and in turn to receive more task-related resources from the leader. This process is conducive to building the interpersonal trust and comfort required for creativity (Mumford & Gustafson, 1988). It is also anticipated that some competent employees may perceive paternalistic leadership behaviors as a form of controlling leadership. However, it is anticipated that these employees will show obedience to authoritative figures because failure in fulfilling their roles may result in personal and social costs (Burke, 1991). Thus, for these employees, the relationship between paternalistic leadership and employee creativity will still be positive but weaker compared to those of competent employees. Because less competent employees tend to avoid situations where the risks are high, such as ones that involve creative processes (Bandura, 1977; Thomas & Velthouse, 1990), paternalistic leaders may encourage and coerce them to choose appropriately challenging tasks and provide intense guidance and monitoring in performing those tasks. In turn, these actions will help them to achieve a certain level of creative performance. Therefore the following hypothesis is posited:

Hypothesis 1: Individual competence moderates the relationship between paternalistic leadership and employee creativity in such a way that the relationship is most positive when individual competence is high.

## Paternalistic Leadership, Team Climate and Employee Creativity

A substantial body of research has demonstrated that the two dimensions of paternalistic leadership behaviors result in different employee outcomes. First, considerable evidence shows that benevolent leadership is effective in increasing employee behaviors and productivity, such as organizational citizenship behaviors, satisfaction with the leader, organizational commitment and in-role performance (Farh & Cheng, 2000; Farh, et al., 2006; Pellegrini & Scandura, 2008), because it leads employees to experience a strong sense of gratitude which will increase their willingness to reciprocate and obey the leader. Wang and Cheng (2010) understand that such behaviors conflict with the requirement of 'out-of-the-box thinking' embraced in creativity literature (p. 107). But the authors theorize that such behaviors may positively influence employee creativity because employees perceive such behaviors as a form of leader support providing a safe environment to foster creativity. On the other hand, the authoritarian tone of paternalistic leadership has been associated with employees' fear and leader anger which generate compliance with the leader's behaviors (Farh, et al., 2006), but which are not conducive for ideas generation.

The present study examines Wang and Cheng's (2010) inference that employees' perception of the leader's support and commitment when led by paternalistic leaders fosters their creativity. To measure such perception, the team climate concept of support for innovation and participation-and-safety concept is included, following Anderson and West's (1998) suggestion. Support for innovation is defined as '...the expectation, approval, and practical

support of attempts to introduce new and improved ways of doing things in the work environment' (West, 1990, p. 38) and this variable has been empirically proven to have a positive relationship with employee creativity (Eisenbeiss, et al., 2008; Gumusluoğlu & Ilsev, 2009a; Pirola-Merlo, et al., 2002). Participation-and-safety, on the other hand, is related to being actively involved in a group's interaction, which is predominantly exemplified by the team's trust and support (Anderson & West, 1998). This variable is understood to illustrate the leader's trust and action in creating a safety climate required by employees for creative endeavors which are often characterized by their involving high risks or even failure. Such climates, in turn, will foster employee creativity (cf. Iyengar & Lepper, 1999; Zhou, 2006), and hence the following hypothesis is proposed:

Hypothesis 2: Team climate of support and safety mediates the positive relationship between paternalistic leadership and employee creativity.

# Competence Enhancing Team Climate Influence

Paternalistic leaders often centralize resources and allocate them in such a way that employees are *free to use them but need guidance on how to use them most effectively* (Gelfand, et al., 2007; Zhou, 2006). Rather than being intimidated by such leader power and involvement, employees with high competence are well aware of their capacity and boundaries, and hence they are able to work in harmony with the leader's expectation.

Therefore a high-level of individual competence may enhance the effect of support and safety climate on the relationship between paternalistic leadership and employee creativity. By understanding employees' perception of paternalistic behaviors, for less competent employees, the effect of such climates on creativity may still be positive because of the leader's power in forcing them to complete tasks creatively. The leader then assigns special

tasks for less competent employees and provides constant guidance and monitoring to ensure that they can perform tasks as requested. Thus it is posited that:

Hypothesis 3: Individual competence moderates the mediation effect of team climate in the association between paternalistic leadership and employee creativity, such that the relationship between team climate and employee creativity is strongest and most positive when individual competence is high.

#### **Methods**

The research design, research setting, sample, procedures, methods, and measures used in this study are described in Chapter 3. The preliminary analyses include validity and reliability analyses as well as validation for cross-level analyses are discussed in Chapter 4. However, this study is different from the previous study (see Chapter 5) in that function and vertical collectivism are included as control variables. Function was included because it might influence 'the use of power in the decision-making process' (Chong & Ma, 2010, p. 236). Vertical collectivism was controlled to take into account potential cross-cultural variation in employees' values. As mentioned previously, vertical collectivism refers to individuals' value emphasizing collective aspects (Triandis & Gelfand, 1998).

An additional analysis was conducted to test whether vertical collectivism amplified the influence of paternalistic leadership on employee creativity. In such analysis, individual competence was replaced with vertical collectivism for both hypotheses (i.e., Hypotheses 2 and 3) and they were re-run accordingly. Regrettably, only one significant result was found: for Hypothesis 2, but not for Hypothesis 3 (for Hypothesis 2,  $\gamma = .26$ , t = 2.40, p < .05; for Hypothesis 3,  $\gamma = .06$ , t = 0.46, t = 0.4

vertical collectivism value is beneficial because it will amplify the positive effect of paternalistic behaviors on employee creativity, but it does not necessarily amplify the effect of team climate, which in turn leads to employee creativity. Thus a conventional approach was taken that treated vertical collectivism as a control variable at the individual level (note: ICC(1) = .03 and ICC(2) = .08 both at p > .05).

### **Results**

Hypothesis testing for cross-level mediation hypothesis was conducted following the procedures suggested by MacKinnon, Fritz and their colleagues (2007), Pituch and his colleagues (2005) and Raudenbush and Bryk (2002) chosen because these tests provide 'the best balance in terms of power and Type I error rate' (Pituch, et al., 2005, p. 10). To test the moderation analysis, Aiken and West's (1991) procedures were employed. Finally, to test the cross-level moderated mediation hypothesis, the procedures described by Preacher et al. (2007), Tein et al. (2004) and Aiken and West (1991) were adopted because they provide a more comprehensive evaluation of the significance of the conditional indirect effects.

### Hypothesis Testing

Means, standard deviations, and internal consistencies of the studied variables are displayed in Table 8. As stated in Chapter 3 all missing data were excluded prior to conducting correlation analysis. The correlation analysis was performed including all studied variables at their own level of analysis (see Table 4 for the ICCs and means of  $r_{wg}$  (j) values). Of the studied variables, only team climate was positively correlated with employee creativity. In addition, paternalistic leadership was significantly associated with team climate but not with

individual competence. Also, team climate was significantly correlated with individual competence. Finally, only vertical collectivism was positively correlated with individual competence.

Table 8. Means, Standard Deviations, and Correlations <sup>a</sup>

No	Variable	M	SD	1	2	3	4		5	6	7	8	9
	Employee												
1	Creativity	3.64	.47	(.73)									
2	Nationality	.51	.50	04									
3	Education	3.78	1.00	.05	.07								
	Tenure (in												
4	years)	4.37	5.12	06	34 **	08							
5	Function	3.73	2.15	01	20 **	.16 **	.11	*					
	Vertical												
6	Collectivism	5.57	.79	10	04	.10 **	.01		.03	(.64)			
	Paternalistic												
7	Leadership	3.66	.39	03	.66 **	.07	31	**	09	.14	(.82)		
8	Team Climate	3.94	.32	.18 *	.23 **	05	21	*	12	.11	.59 **	(.79)	
	Individual												
9	Competence	5.79	.69	.04	22 **	.02	.17	**	.08	.20 **	.02	.21 *	** (.70)

Note: <sup>a</sup> These values represent cross-level correlations from the studied variables. n = 150 - 154 teams comprising of 368 - 421 employees. Reliability values are in the parentheses along the diagonal.

Hypothesis 1 predicts that individual competence moderates the relationship between paternalistic leadership and employee creativity, such that the most positive association is evident when individual competence is high. This hypothesis was tested using the slope-asoutcome model with group-mean centering the Level-1 variables (Hofmann & Gavin, 1998; Raudenbush & Bryk, 2002). As a necessary precondition for using HLM, a significant variance in employee creativity should be found. From the null model, it was found that 24% of the variance resided between teams (ICC(1) = .24) and the chi-square test indicated that the between-team variance was significant ( $\chi^2 = 280.66$ , p < .01). This result justified the use of HLM to test the cross-level moderation model. Subsequently, a random coefficient model of individual competence was tested and this yielded a significant random variation at the Level-1 analysis (U1 variance = .17,  $\chi^2 = 280.66$ , p < .01). A significant positive interaction of paternalistic leadership and individual competence was found ( $\gamma = .22$ , t = 2.76, p < .05); see Table 9.

Table 9. Results of Cross-level Moderation Analysis <sup>a</sup>

	γ		SE	T	$R^2$	
DV = Employee Creativity					.09	
Level 1 Variables						
Education	.07		.05	1.29		
Tenure	00		.01	-0.68		
Function	.36	**	.10	3.57		
Vertical Collectivism	02		.04	-0.59		
Individual Competence	.05		.06	0.77		
Level 2 Variables						
Nationality	12		.09	-1.29		
Paternalistic Leadership	.23	*	.11	2.00		
Cross-level Interaction						
Paternalistic Leadership x Individual Competence	.22	*	.08	2.76		

Note:

To understand the nature of the interaction, the above results were then plotted using the HLM-interaction test 5.8 macro developed by Shacham (2009); see Figure 4. The Figure shows that the effect of paternalistic leadership on employee creativity is the most positive when individual competence is high (simple slope:  $\gamma = .30$ , t = 2.65, p < .01). As anticipated, for less competent employees, the influence of paternalistic leadership on employee creativity is also positive but weaker than those of competent employees (simple slope:  $\gamma = .24$ , t = 2.64, p < .01). Thus, these results support the hypothesis that individual competence moderates the relationship between paternalistic leadership and employee creativity such that its effect is the most positive when individual competence is high.

<sup>&</sup>lt;sup>a</sup> n (team) = 147 and n (employee) = 355, after listwise deletion.

<sup>\*</sup> *p* < .05

<sup>\*\*</sup> *p* < .01

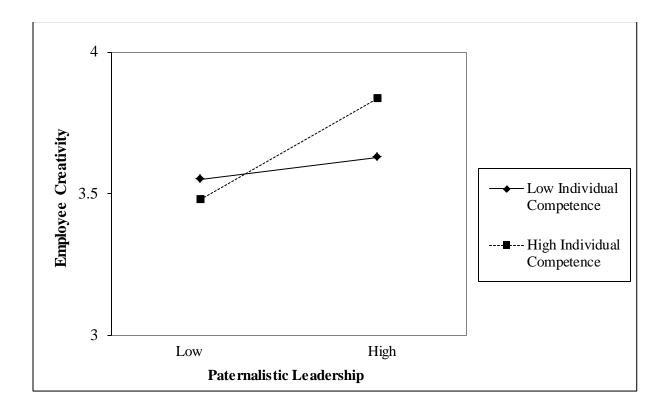


Figure 4. The Moderating Role of Individual Competence

Hypothesis 2 is a cross-level mediation model with an upper-level mediator (cf. Mathieu & Taylor, 2007) that predicts that team climate mediates the positive relationship between paternalistic leadership and employee creativity. As mentioned above, to justify this mediation hypothesis, both the joint significant test and asymmetric confidence limits methods were employed. A joint significant test requires both path a (the path from the independent variable to mediator) and path b (the path from the mediator to dependent variable with the independent variable controlled) to be statistically significant (MacKinnon, Fairchild, et al., 2007) for the presence of a mediation effect. Then the asymmetric confidence limits for the indirect effect were calculated using PRODCLIN (MacKinnon, Fritz, et al., 2007). If zero lies outside the 95% confidence limits, then a mediation effect is justified. Since paternalistic leadership and team climate were Level-2 variables, the linear

regression procedures outlined by Aiken and West (1991) were used to test the significance of path a. For the significance of path b, a slope-as-outcome model in HLM with groupmean centering of Level-1 variables as suggested by Hofman and Gavin (1998) and Raudenbush and Bryk (2002) was used.

The results of the upper-level mediation analyses are summarized in Table 10, Step 1 and Step 2. In the simple linear regression analysis, it was found that paternalistic leadership was positively related with team climate (path a:  $\beta$  = .66; t = 8.09; p < .01), and also, using HLM 6.08 (Raudenbush, et al., 2000), team climate was positively related with employee creativity after controlling for paternalistic leadership (path b:  $\gamma$  = .32; t = 2.48; p < .05). According to the joint significant tests, this result supports the mediation hypothesis. Subsequently, the analysis was continued by calculating the asymmetric confidence limits using PRODCLIN to further support the inference of mediation, which yielded 95% confidence limits between .04 (lower level) and .40 (upper level). Because zero was not included in the confidence limits, this result further supported the mediation hypothesis. Interestingly, the direct path from paternalistic leadership to employee creativity was still statistically significant ( $\gamma$  = .25; t = 2.36; p < .05), indicating partial mediation (see Step 3). Thus it can be concluded that team climate partially mediates the relationship between paternalistic leadership and employee creativity.

Table 10. Results of Cross-level Moderated Mediation Analyses  $^{\it a}$ 

	В	SE	T	$R^2$
STEP 1 → DV = Team Climate				.41
Level 1 Variables (aggregated)				
Education	10	.06	-1.69	
Tenure	.06	.07	0.98	
Function	07	.05	-1.42	
Vertical Collectivism	.12	.08	1.52	
Level 2 Variables				
Nationality	17 *	.07	-2.45	
Paternalistic Leadership	.66 **	.08	8.09	
	Γ	SE	T	$R^2$
STEP 2 $\rightarrow$ DV = Employee Creativity				.11
Level 1 Variables				
Education	.07	.05	1.36	
Tenure	01 **	.01	-0.71	
Function	.32	.13	2.74	
Vertical Collectivism	04	.04	-1.05	
Level 2 Variables				
Nationality	09	.08	-1.22	
Paternalistic Leadership	.06	.12	0.54	
Team Climate	.32 *	.13	2.48	
STEP 3 → DV = Employee Creativity				.09
Level 1 Variables				
Education	.07	.05	1.36	
Tenure	01	.01	-0.71	
Function	.32	.12	2.74	
Vertical Collectivism	04	.04	-1.05	
Level 2 Variables				
Nationality	15	.08	-1.91	
Paternalistic Leadership	.25 *	.11	2.36	
STEP 4 → DV = Employee Creativity				.11
Level 1 Variables				
Education	.07	.05	1.30	
Tenure	01	.01	-0.84	
Function	.35 **	.11	3.16	
Vertical Collectivism	03	.04	-0.72	
Individual Competence	.00	.06	0.50	
Level 2 Variables				
Nationality	09	.09	-1.05	
Paternalistic Leadership	.06	.12	0.50	
Team Climate	.32 *	.13	2.48	
Cross-level Interaction				
Team Climate x Individual Competence	.21 **	.09	2.35	

Note: a n (team) = 145-149 and n (employee) = 354-357, after listwise deletion. \* p < .05; \*\* p < .05.01

Hypothesis 3 predicts that the mediation effect of team climate on the relationship between paternalistic leadership and employee creativity will be most positive when individual competence is high. The procedures described by Preacher et al. (2007), Tein et al. (2004) and Aiken and West (1991) were extended and combined to test this hypothesis since, to the best of my knowledge, no relevant test is available to test such a hypothesis in a multilevel context, especially a procedure that relates to interpreting the path b coefficients as simple slopes. This hypothesis implies that there are (1) a significant path from paternalistic leadership to team climate (path a) and (2) a significant path from team climate to employee creativity when individual competence is high after controlling for paternalistic leadership (path b).

As reported above, a significant path from paternalistic leadership to team climate was found (path a:  $\beta$  = .66; t = 8.09; p < .01). Subsequently, the interaction between team climate and individual competence was tested using a slope-as-outcome model (Raudenbush & Bryk, 2002). If the interaction is significant, one can calculate the simple slopes of path b using the values of 1 SD above M and 1 SD below M. The conditional indirect effect was calculated as the product term of path a and path b (simple slope) and was tested with PRODCLIN. A significant interaction between team climate and individual competence was found ( $\gamma$  = .21, t = 2.35, p < .01); see Table 10 Step 4. To understand the nature of the interaction, the HLM-interaction test 5.8 macro developed by Shacham (2009) was used to plot the result; the plot is depicted in Figure 5. The figure shows that the influence of paternalistic leadership on employee creativity through team climate occurs when individual competence is high (simple slope:  $\gamma$  = .39, t = 2.28, p < .05; conditional indirect effect = .26; 95% confidence limits: .04 (lower limit) and .50 (upper limit)). As anticipated, when individual competence was low, the conditional effect of team climate was also positive (simple slope:  $\gamma$  = .30, t = 2.27, p <

.05; conditional indirect effect = .20). Surprisingly, the PRODCLIN test showed that there was a moderated mediation effect because no zero lay between the 95% confidence limits (95% confident limits were .03 (lower limit) and .38 (upper limit)). Hence the hypothesis is supported that the influence of paternalistic leadership on employee creativity through team climate is positive irrespective of the variation of individual competence.

Low Individual Competence

High

Team Climate

High

Figure 5. The Moderated Mediation Effect of Individual Competence

## **Discussion**

This study examines the positive influence of paternalistic leadership on employee creativity in East Asia, using Indonesian and Chinese teams as exemplars of such cultural norms evidenced in this region. This study demonstrates that competent employees get the most

benefit from paternalistic leaders. Moreover, this study confirms a prior inference that the influence of paternalistic leadership on employee creativity is mediated by team climate of support for innovation and safety. Further, this study confirms that the mediated effect of team climate on the relationship between paternalistic leadership and employee creativity is still upheld regardless of competence.

The first two results advance previous findings reported by Wang and Cheng (2010). The research also corroborates a conclusion draw by Iyengar and Lepper (1999) and Niu and Sternberg (2003), who reported that Asian students need specific instructions for performing their jobs in compliance with an authoritative figure's preferences. When authoritative figures, in this case are the team leaders, want creative results from their team members, then they must give such instructions so that these employees generate the intended outcomes. These findings also imply that employees perceive the leader's paternalistic behaviors as promoting a climate that encourages participation and support for innovation, which in turn stimulates the feeling of a psychologically safe environment needed for creative endeavors (cf. Johnson & Dipboye, 2008).

The third finding, however, at first sight appears to conflict with previous findings, which demonstrate that a form of controlling leadership has a negative effect on employee creativity (Madjar, et al., 2002; Shalley, et al., 2004). This triggers a question as to whether there are differences in the forms of leadership expected and anticipated in different cultures. This study provides empirical evidence that in Eastern cultures leaders need to create such a supportive environment in which employees feel safe in order to perform creatively. Leaders are expected to be more active in their role of leadership by choosing experimental tasks, determining employees' authority in decision making and monitoring employees in

performing their tasks. Thus it can be concluded that a more leader-centric approach to ensure employee creativity exists in the Eastern context. However, considerable research conducted in Western cultures has shown that empowering practices actually *drive employees most* to invest extra effort and develop further understanding of how to perform and monitor their work (cf. Johnson & Dipboye, 2008; Keller & Dansereau, 1995; Madjar, et al., 2002). An example of empowering practice is providing an autonomous climate which encourages employees to engage in a greater level of work independence and decision making. Such practices, in turn, will enhance employee creativity. Therefore I hesitate to conclude that similar practices, specifically, paternalistic leadership, may bring similar results in the Western context. In view of this equivocal finding, future research has to take this cultural issue more seriously.

## Theoretical Significance

Paternalistic leadership is perceived as an effective form of leadership in many non-Western cultures (Pellegrini & Scandura, 2008) and this study also adds that it as an important antecedent for employee creativity (Wang & Cheng, 2010). With regard to its association with creativity, employees' perception of their level of competencies is also an important contingency in that its effects are most beneficial for creativity when individuals perceive high levels of competence. Competent employees perceive their leaders' paternalistic behaviors as a form of leader recognition of their proactive efforts which will lead them to show a strong sense of gratitude, loyalty, and conformity. Leaders then tend to give more task-related resources to these employees and this is very important for building a level of trust and comfort needed in creative endeavors (Mumford & Gustafson, 1988; Wang & Cheng, 2010). There is possibility that the same competent employees may feel irritated with the approaches taken by their leaders. But, given the salient value of obedience to

authoritative figures, social harmony and understanding that a failure in performing their roles as employees and 'children' to some extent can be very costly, it can be concluded that having a high-level of competence will, to some extent, alleviate the negative effect of practicing paternalistic leadership, such as employees' fear, anger and job dependence (Aronoff & Ward, 1993; Farh, et al., 2006; Pellegrini & Scandura, 2008). Future research may address this inference. Moreover, paternalistic behaviors help employees to experience support and safety needed to engage in creative endeavors, which in turn, will foster their creativity.

This study is the first that empirically demonstrates the psychological process by which paternalistic leadership influences employee creativity. Thus it confirms Wang and Cheng's (2010) inference that paternalistic behavior is beneficial for employee creativity because it creates the support and safety climate needed for creative endeavors. When employees experience such support and security, they are more likely to invest considerable effort in creative endeavors which by their very nature involve high risk or even failure.

From the additional analyses, this study provides empirical evidence that collectivism plays an important role in fostering employee creativity, because it amplifies the positive effect of paternalistic behaviors on employee creativity. But such value will not necessarily lead to employee creativity. Although the findings of this study converge with Goncalo and Staw's (2006), it cannot be concluded here that when creativity is a salient goal of an organization, it is beneficial to have individualistic cultural values rather than collectivistic ones, because this study did not conduct a comparative study between the two values. In addition, these findings show a context specific understanding about the meaning of controlling leadership.

A different story may occur when replicating this study using Western contexts in future research.

# **Practical Implications**

This study highlights the importance of building a safe and innovative team climate required for creative endeavors in two collectivistic culture countries in such a way, as providing directions and monitoring, determining the limit for employees' authority and choosing experimental tasks. By exhibiting paternalistic behaviors, employees perceive that the leader supports them by creating a supportive and safe workplace environment. Second, this study shows that building individual competence is important since it will enhance employee creativity. Thus, from the point of view of human resources practices, this implies that from the very beginning of the processes such as recruitment and selection, leaders or managers should invest energy and time in developing and enhancing employees' competence in terms of their knowledge and skills, as well as their strong belief in possessing those. Along the way, both leaders or managers and employees are responsible for increasing the level of those competencies in order to get the most benefit from paternalistic leaders.

## Limitations and Directions for Future Research

First, a cross-sectional study like this study limits any inferences for causality, and thus longitudinal or experimental research would be valuable. In addition, cross-cultural study would be the key to understanding any similarities or differences of such a scenario (see Figure 3) so that generalizability can be generated. It would be particularly useful to provide an understanding of the boundary conditions when paternalistic leadership is and is not effective, as well as providing understanding of key dimensions of cultural values that

determine the benefits of such leadership behaviors. Finally, it would be valuable if future research were to address the potential mediating or moderating role of other psychological empowerment constructs, such as self-determination, meaningfulness and impact, on employee creativity, given the sparse results reported so far (Alge, et al., 2006; Zhang & Bartol, 2010).

#### Conclusion

This study examines when and how paternalistic leadership positively influences employee creativity from the Eastern perspective using 154 teams from Indonesia and China.

Integrating the self-concept approach, this study finds that competent employees get the most from leaders who display paternalistic behaviors. Gaining insight from team climate research, this study finds that when employees perceive that displaying paternalistic behaviors equals to providing support for innovation and creating a safe environment, they are more likely to engage in creative processes. These findings, however, conflict with a number of empirical research studies conducted in Western contexts (e.g., Madjar, et al., 2002; Oldham & Cummings, 1996), which inevitably placing an important message that future research needs to take these cultural issues more seriously.

#### CHAPTER 7

#### LESSONS LEARNT

Research has increasingly recognized that creativity and innovation provide important technological advances, answer many societal challenges and play significant roles in determining organizational survival and growth (Amabile, 1988; Dervitsiotis, 2010; Hennessey & Amabile, 2010; Runco, 2004; Wadler, 2009). Thus it is not surprising that a surge of interest has led to a proliferation of publications in creativity studies, especially over the last decade (George, 2007; Hennessey & Amabile, 2010; Runco, 2004; Shalley, et al., 2004; Zhou & Shalley, 2003).

Nearly three decades ago, Amabile (1983) developed a stream of research and theory that led to creativity becoming a popular topic in management literature. Her theorizing on the importance of the social context as a facilitator of creativity is undoubtedly her most significant contribution to the field thus far. The utilization of such an approach does bring benefit to the richness of the field. But at the same time, a wide variety of different approaches has been adopted, which means that contemporary studies have examined a variety of constructs, some of which may have conceptual overlap while others differ (George, 2007; Hennessey & Amabile, 2010; Runco, 2004; Shalley, et al., 2004; Zhou & Shalley, 2003). The challenge is trying to understand how these different studies inter-relate and whether they are sufficiently similar to arrive at common conclusions, or whether discordant findings reflect a lack of replication.

Most creativity studies have employed the person – context approach, which theorizes that employee creativity is a product of the interaction between personal and contextual factors, and that intrinsic motivation (toward the tasks) is the fuel to foster creativity (George, 2007; Shalley, et al., 2004; Zhou & Shalley, 2003). As such, creativity scholars have tested divergent personal and contextual factors that foster or inhibit employee creativity. In this approach, leadership has been identified as one of the most important contextual factors to foster employee creativity. Research has found that leaders influence employees both directly or indirectly to make them invest considerable efforts with regard to achieving the greater common goals creatively (Jung, et al., 2003; Madjar, et al., 2002; Scott & Bruce, 1994; Tierney, et al., 1999). In this regard, scholars have studied the influence of highquality dyad of leader-member exchanges (e.g., Tierney, et al., 1999) and transformational leadership (e.g., Shin & Zhou, 2003). More recently, fuelled by societies' greater emphasis on leaders providing greater moral, ethical and development benefits to those whom the leaders lead, scholars have started to examine empowering leadership (Zhang & Bartol, 2010) and servant leadership (Neubert, et al., 2008). These scholars believe that such leadership approaches have the potential as antecedents of employee creativity because of their emphasis in follower development. Such an emphasis is important for employee creativity because of the very nature of creativity itself, which demands that employees to think 'out-ofthe-box' and show persistence in the process.

Inconsistent evidence on the direct link between intrinsic motivation and employee creativity (Grant & Berry, 2011) has led scholars to introduce and empirically demonstrate other potential concepts that may explain the individual-level psychological process for fostering employee creativity. These concepts include the application of self-concept theorizing, affect and emotion (in particular, mood states) concept and the social networks approach. What

makes scholars propose these concepts? These concepts offer *a relatively new explanation* of what really happens at the individual-level processes. They also offer extended explanation on individual differences: why some individuals are more easily persuaded to engage in a creative process and why others are not; and why some individuals that sit in a specific position in their networks are more or less creative than others. These concepts also open enormous potential for generalizing the findings for further theory development, given the stability of such concepts across context and times (cf. Tierney & Farmer, 2011).

Given the fact that the creativity concept is generated from European – North American perspectives, the next question would be: will this concept hold up in Eastern contexts? With regard to this issue, Niu and Sternberg (2002) and Oral, Kaufman and Agars (2007) argue that the West and the East place a different emphasis on defining creativity. However, numerous studies have proven that the impact of such differences *does not exist* (for example: Farmer, et al., 2003; Wang & Cheng, 2010). Nonetheless, recently Zhou (2006) posits that one should be careful in borrowing and blending recipes to foster employee creativity in Eastern contexts, because people in these contexts have different values and experience different contextual factors than those in Western contexts.

The present studies suggest three key lessons for the critical roles of leadership, particularly servant and paternalistic leadership, in employee creativity. First, the present studies provide further evidence that both identification and self-concept orientation are applicable to these East Asian settings; note that this concept was developed in Western contexts (Tajfel & Turner, 1985; Tierney & Farmer, 2002) and the two studies provides evidence for its application in Eastern contexts. Integrating the identification concept, the first study demonstrates that follower identification with servant leaders is a powerful driver for

employees to become involved in creative endeavors. In addition, this study finds that, when the team has a strong preference for creative and innovative activities, the strongest effect of such identification on employee creativity occurs. This study also provides further evidence that servant leadership can be generalized across contexts (Pekerti & Sendjaya, 2010; Yong, et al., 2010). However, it also highlights the need for servant leadership scholars to define the construct with a greater clarity, so that we can really see the clear-cut distinction between servant and other leadership approaches, such as empowering or authentic leadership.

Drawing from the psychological empowerment concept, the second study also reveals that employees who are highly competent will be likely to get the most benefit from paternalistic leaders. Third, results from the second study, in particular, corroborate prior research that, within the collectivistic, high power distance and high uncertainty avoidance cultures, such as Indonesia and China (Hofstede, 2001), employees need to experience the feeling of support and safety to engage in creative activities (Iyengar & Lepper, 1999; Ng & Bligh, 2008; Wang & Cheng, 2010; Zhou, 2006). When individuals in those countries feel and perceive that their workplace environment is psychologically safe, they are more likely to engage in creative endeavors.

These findings underscore the importance of having a better understanding of the underlying process by which creativity occurs in various contexts and across time. As such, no single recipe works for every context and situation. At the very heart of the creative process lies employees' motivation toward their tasks, and there are four primary stakeholders (employees, leaders, teams, and organizations) who are responsible to foster and nurture it. When employees are excited about their tasks and are motivated to complete them, it is more likely that they are more than willing to be creative, in particular, when encountering

workplace problems. Their interest then leads them to be willing to learn new things and persevere more in their learning. In the East Asian region especially, it is demonstrated that, apart from employees' interest in the tasks, leaders play an important role in influencing employee creativity. When the leaders exhibit a certain leadership approach, such as servant leadership, employees are more likely to identify themselves with the leader and build their self-esteem based on such a role modeling process. In this case, leaders can then easily persuade employees to engage in the creative process, as it is part of their self-esteem and their leader's standing. In addition, since collectivistic and high uncertainty avoidance values are salient, leaders are expected and obliged to provide both work-related and non-workrelated care for their employees. At the same time, leaders must be able to provide guidance, set boundaries for employees' decision making processes and perform monitoring and control to ensure that the process and results are achieved as expected. Interestingly, the second study finds that competent employees get the most benefit from such practices. This is an important message for managers in Eastern contexts - that they need to create a safe climate and at the same time develop employees' competence in order to achieve the intended performance: employee creativity.

# Conclusion

This final chapter describes the lessons learnt from the present studies. The literature has indicated that creativity in itself, particularly in workplace, is a complex phenomenon in which many stakeholders become involved in determining the intended result. As such, no single approach or concept is the best for understanding this phenomenon. These studies therefore provide further evidence that, to understand better factors influencing employee creativity, a researcher needs to integrate different concepts and theories. These concepts and

theories are needed, in particular, to understand factors that drive individuals' intrinsic motivation. When individuals are motivated to complete their tasks creatively, then the intended results are more likely to be achieved.

But is there any ways for leaders to maintain employee motivation toward their tasks so that the creative performance can be sustained? From the related intention — behavior literatures, such as theory of planned behaviors, implementation intentions theory and actual behavioral control theory, researchers may find that there is a gap between the intention and the actual behaviors. Understanding this gap and how to close it are clearly important for theory development and managers in practice. This is indeed an open avenue for future research. Another potential avenue for future research is to identify and understand the process by which servant leadership may lead to *less desirable outcomes*, so that leaders can take preventive actions to minimize the occurrence of such effects. The findings will certainly contribute to servant leadership's theory development.

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#### Appendix 1.

#### **GLOSSARY**

The following are the operational definitions of each variable used in alphabetical order.

*Employee creativity.* Following previous studies, employee creativity is defined as production of novel and potentially useful ideas by employees (e.g., Amabile, 1988; Amabile, et al., 1996; Hirst, van Dick, et al., 2009; Hirst, van Knippenberg, et al., 2009; Pirola-Merlo, et al., 2002; Tierney, et al., 1999; Wang & Cheng, 2010; Zhou & George, 2003). In the two studies, the two embedded concept in creativity definition was not differentiated because the intention was to provide further evidence rather than develop a new creativity construct.

Individual competence. Individual competence is defined as one's belief that he or she has the capabilities to perform his or her work skillfully (Chen, Kirkman, Kanfer, Allen, & Rosen, 2007; Gist, 1987; Lee & Koh, 2001; Spreitzer, 1995). Competence is a result of putting in considerable effort and persistence in challenging situations, setting and managing high expectations and achieving high performance (Gecas, 1989; Locke, Frederick, Lee, & Bobko, 1984; Ozer & Bandura, 1990; Spreitzer, 1995; Thomas & Velthouse, 1990). This construct originates from psychological empowerment theory (Spreitzer, 1995; Thomas & Velthouse, 1990). But since its focus is on dealing with the self, then it is possible to categorize it as the self-concept.

*Leader identification*. Leader identification is described as the sense of followers' self-referential or self-definition with their leader (Kark, et al., 2003). Leader identification

reflects followers' perception that they share similar values and common goals with their leaders.

Paternalistic leadership. Paternalistic leadership is typically understood as 'a style that combines strong discipline and authority with fatherly benevolence' (Farh & Cheng, 2000, p. 91). Pellegrini and Scandura (2008) summarize that paternalistic leadership has been proven as an effective leadership approach in many non-Western countries. In the paternalistic culture, the leader is expected and obliged to provide care and protection to his or her subordinates, and in exchange, his or her subordinates show a strong feeling of gratitude, loyalty and respect to the leader (Aycan, et al., 1999; Cheng, et al., 2004; Pellegrini & Scandura, 2008).

*Prototypicality*. Prototypicality is defined as the extent to which the team leader represents shared identity of his or her team (Hogg, 2001). In terms of fostering creativity and innovation, a prototypical leader may inspire a sense of trust and willingness among his or her team members to work towards the team's goals in which highly value creativity and innovation.

Servant leadership. Even though there is no consensus about its definition yet so far (van Dierendonck, 2010; van Dierendonck & Nuijten, 2011), Hale and Fields (2007) define servant leadership as 'an understanding and practice of leadership that places the good of those led over the self-interest of the leader, emphasizing leader behaviors that focus on follower development, and de-emphasizing glorification of the leader' (p. 397). Servant leader builds follower respect by emphasizing follower development and service to the community, promoting fairness in work context, displaying genuine willingness to self-

sacrifice for the greater good, endorsing ethical principles, and providing guidance and direction to follow (Barbuto Jr & Wheeler, 2006; Liden, et al., 2008; Neubert, et al., 2008; Sendjaya, et al., 2008; Walumbwa, Hartnell, et al., 2010).

Team Climate. Team climate is defined as the shared perceptions within the team about their workplace (Anderson & West, 1998, p. 236). Shared perception on support for innovation is only included in the first study, which is defined as the practical support of attempts to introduce new and improved ways of doing things in the work environment (West, 1990), encouraging employees to take risks and persist with challenges and obstacles to develop creative solutions to problems. Employees in innovation supporting climates will show greater persistence in idea generation efforts when they receive support and encouragement from their team (Baer & Oldham, 2006). Eisenbeiss and colleagues (2008) describe support for innovation as cooperative behaviors that support the realization of innovative outcomes. Cooperative behaviors alongside norms that value and support creative ideas encourage teams to explore consider and implement those ideas without fear. As for the second study, the complete items of the shared perception on support for innovation and participation-and-safety are included. Anderson and West (1998) suggest that participation-and-safety climate relates to 'active involvement in group interaction wherein the predominant interpersonal atmosphere is one of non-threatening trust and support' (p. 240).

**Team innovation.** Following prior research, team innovation is described as the combination of the quality and quantity of novel and useful ideas that are developed and implemented (Eisenbeiss, et al., 2008; Pirola-Merlo & Mann, 2004).

#### Appendix 2a.

#### TEAM LEADERS' QUESTIONNAIRES IN ENGLISH

# **MONASH** University



#### **TEAM LEADER SURVEY QUESTIONNAIRE**

### **EXPLANATORY STATEMENT OF** SURVEY OF THE RELATIONSHIPS BETWEEN LEADERSHIP STYLES AND **TEAM INNOVATION**

#### You may keep this page and return the rest of the survey questionnaire once it is completed

Dear Survey Participants,

This survey is part of a research of the relationships between leadership styles and team innovation. You are invited to evaluate your team innovation in the first section and their individual creativity in the second section. Please provide candid responses for the following questions. The demographic details at the end of this questionnaire will be used only for statistical purposes. There is no way that it will possibly identify you and your organisation. Your completion of the survey indicates your willingness to participate in this research.

This survey will take no more than fifteen minutes to complete. Please be assured that your participation is voluntary. You may discontinue your participation at any time prior to submitting your responses. As soon as we receive your response, we will separate and store separately any information identifying either you or your organisation. Your responses will be kept strictly confidential. Only the research team will have access to the data. All data collected will be stored securely for five years, according to Monash University regulation and then destroyed. The result of this survey will be examined and presented at aggregate level only.

Should you have any complaints regarding the process of this research, please send an email to: Mr Setiadi Djohar of PPM School of Management at std@ppm-manajemen.ac.id. He will pass on your complaints directly to Standing Committee on Ethics in Research involving Humans (SCERH) of Monash University.

Thank you in advance for your participation.

Diah Tuhfat Yoshida PhD Candidate of Department of Management Monash University

If you would like to contact the researchers about any aspect of

Should you have any queries with regards to the manner in this study, please do not hesitate to contact:

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#### **TEAM LEADER SURVEY QUESTIONNAIRE**

#### SECTION ONE: TEAM INNOVATION

#### Instruction:

Please evaluate your team innovation performance by circling the most appropriate number.

Items		Disagree	Neither	Agree	Strongly Agree
Team members often implement new ideas to improve the quality of our products and services	1	2	3	4	5
This team gives little consideration to new and alternatives methods and procedures	1	2	3	4	5
Team members often produce new services, methods or procedures	1	2	3	4	5
This is an innovative team	1	2	3	4	5

#### SECTION TWO: INDIVIDUAL CREATIVITY TEAM MEMBERS

#### Instruction

 $Please\ evaluate\ each\ of\ your\ team\ members'\ creativity\ performance\ \textbf{by\ circling}\ the\ most\ appropriate\ number.$ 

#### 1) (Name).

To what extent that this person as your team member	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Suggests many creative ideas that might improve working conditions at team	1	2	3	4	5
Often comes up with creative solutions to problems at work	1	2	3	4	5
Suggests new ways of performing work tasks	1	2	3	4	5
Is a good source of creative ideas	1	2	3	4	5

#### 2) (Name).

To what extent that this person as your team member	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Suggests many creative ideas that might improve working conditions at team	1	2	3	4	5
Often comes up with creative solutions to problems at work	1	2	3	4	5
Suggests new ways of performing work tasks	1	2	3	4	5
Is a good source of creative ideas	1	2	3	4	5

#### 3) (Name).

To what extent that this person as your team member	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Suggests many creative ideas that might improve working conditions at team	1	2	3	4	5
Often comes up with creative solutions to problems at work	1	2	3	4	5
Suggests new ways of performing work tasks	1	2	3	4	5
Is a good source of creative ideas	1	2	3	4	5



### 4) (Name).

To what extent that this person as your team member	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Suggests many creative ideas that might improve working conditions at team	1	2	3	4	5
Often comes up with creative solutions to problems at work	1	2	3	4	5
Suggests new ways of performing work tasks	1	2	3	4	5
Is a good source of creative ideas	1	2	3	4	5

### 5) (Name).

To what extent that this person as your team member	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Suggests many creative ideas that might improve working conditions at team	1	2	3	4	5
Often comes up with creative solutions to problems at work	1	2	3	4	5
Suggests new ways of performing work tasks	1	2	3	4	5
Is a good source of creative ideas	1	2	3	4	5

### 6) (Name).

To what extent that this person as your team member	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Suggests many creative ideas that might improve working conditions atteam	1	2	3	4	5
Often comes up with creative solutions to problems at work	1	2	3	4	5
Suggests new ways of performing work tasks	1	2	3	4	5
Is a good source of creative ideas	1	2	3	4	5

### 7) (Name).

To what extent that this person as your team member	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Suggests many creative ideas that might improve working conditions at team	1	2	3	4	5
Often comes up with creative solutions to problems at work	1	2	3	4	5
Suggests new ways of performing work tasks	1	2	3	4	5
Is a good source of creative ideas	1	2	3	4	5

#### 8) (Name).

To what extent that this person as your team member	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Suggests many creative ideas that might improve working conditions at team	1	2	3	4	5
Often comes up with creative solutions to problems at work	1	2	3	4	5
Suggests new ways of performing work tasks	1	2	3	4	5
Is a good source of creative ideas	1	2	3	4	5



#### SECTION THREE. DEMOGRAPHIC DATA

	YOUR PERSONAL DETAILS	
Gender	Type of Sector in Which Your	Your Function (please choose one)
Female	Organisation is Operating	
Male Male	Agriculture, Aquaculture, Plantation	Production/Operation, (include Quality
Your age is years	Banking, Non-banking Institution,	Control/Assurance)
	Insurance	Research & Development
Formal Education	Cement Industry	Accounting and Finance
High School	Construction and Related Services Food & Beverages	Supplies Sup
Diploma degree	Integrated Media	Human Resources
Technical qualifications	Manufacturing Products	Marketing and Sales
Bachelors	Mining & Energy	General Affair (incl. Legal, Internal Audit)
Masters  Doctorate	Pharmacy Supplier of Heavy Equipments	General Anali (Incl. Legal, Internal Addit)
Position in Organisation (please	Telecommunication	Corp. Communication (include: Public Relation)
choose one)	Trading & Distribution	Relation)
Executives (e.g. Directors)	Others (please specify)	Others (please specify)
ACCUSED AND MADE OF		
Middle Managers (e.g. Department Head)		
First Line Managers		
Non-management		
Years in current position		
years		

Thank you very much for your participation!

#### Appendix 2b.

#### TEAM MEMBERS' QUESTIONNAIRES IN ENGLISH

## **MONASH** University



#### **TEAM MEMBER SURVEY QUESTIONNAIRE**

# EXPLANATORY STATEMENT OF SURVEY OF THE RELATIONSHIPS BETWEEN LEADERSHIP STYLES AND TEAM INNOVATION

#### You may keep this page and return the rest of the survey questionnaire once it is completed

Dear Survey Participants,

This survey is part of a research of the relationship between leadership styles and team innovation. You are invited to evaluate your team leader's leadership behaviours in the first section and your perception of your own work behaviours in the second section. Please provide candid responses for the following questions. The demographic details at the end of this questionnaire will be used only for statistical purposes. There is no way that it will possibly identify you and your organisation. Your completion of the survey indicates your willingness to participate in this research.

This survey will take no more than thirty minutes to complete. Please be assured that your participation is voluntary. You may discontinue your participation at any time prior to submitting your responses. As soon as we receive your response, we will separate and store separately any information identifying either you or your organisation. Your responses will be kept strictly confidential. Only the research team will have access to the data. All data collected will be stored securely for five years, according to Monash University regulation and then destroyed. The result of this survey will be examined and presented at aggregate level only.

Should you have any complaints regarding the process of this research, please send an email to: Mr Setiadi Djohar of PPM School of Management at <a href="mailto:std@ppm-manajemen.ac.id">std@ppm-manajemen.ac.id</a>. He will pass on those complaints directly to Standing Committee on Ethics in Research involving Humans (SCERH) of Monash University.

Thank you in advance for your participation.

Diah Tuhfat Yoshida
PhD Candidate of Department of Management
Monash University

If you would like to contact the researchers about any aspect of this research, please contact the chief investigator:

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Name:		
valle.		



#### **TEAM MEMBER SURVEY QUESTIONNAIRE**

#### SECTION ONE: LEADERSHIP BEHAVIOURS

#### Instruction

Please evaluate your team leader's leadership behaviours by circling the most appropriate number.

My team leader	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Is not defensive when confronted	1	2	3	4	5
When criticised, he/she focuses on the messages not the messenger	1	2	3	4	5
Practices what he/she preaches	1	2	3	4	5
Is willing to say" I was wrong" to other people	1	2	3	4	5
Is willing to let me take control of situations when appropriate	1	2	3	4	5
Gives me the right to question his/her actions and decisions	1	2	3	4	5
Affirms his/her trust in me as his/her team member	1	2	3	4	5
Accepts meas lam, irrespective of my failures	1	2	3	4	5
Responds to problems by listening first	1	2	3	4	5
Respects me for who I am, not how I make him/her feel	1	2	3	4	5
Treats people as equal partners in the organisation	1	2	3	4	5
Does not exhibit favouritism among his/her team members	1	2	3	4	5
Takes a resolute stand on moral principles	1	2	3	4	5
Empha sises on doing what is right rather than looking good	1	2	3	4	5
Employs morally justified means to achieve legitimate ends	1	2	3	4	5
Encourages me to engage in moral reasoning	1	2	3	4	5
Enhances my capacity for moral actions	1	2	3	4	5
Is driven by a sense of higher calling	1	2	3	4	5
Helps me to find a clarity of purpose and direction	1	2	3	4	5
Promotes values that transcend self-interest and material success	1	2	3	4	5
Helps me to generate a sense of meaning out of everyday life at work	1	2	3	4	5
Arti cul atesa shared vision to give inspiration and meaning to work	1	2	3	4	5
Leads by personal example	1	2	3	4	5
Inspires me to lead others by serving	1	2	3	4	5
Allows me to experiment and be creative without fear	1	2	3	4	5
Draws the best out of me	1	2	3	4	5
Minimises barriers that inhibit my success	1	2	3	4	5
Contributes to my personal and professional growth	1	2	3	4	5
Consider others' needs and interests a bove his/her own	1	2	3	4	5
Us es power in service to others, not for his/her own ambition	1	2	3	4	5
Is more conscious of his/her responsibilities than rights	1	2	3	4	5
Serves people without regard to their backgrounds (gender, race, etc.)	1	2	3	4	5
Demonstrates his/her care through sincere, practical deeds	1	2	3	4	5
Listens to me with intent to understand	1	2	3	4	5
Assists me without seeking a cknowledgement or compensation	1	2	3	4	5
Is interested in every aspect of his/her team members' lives	1	2	3	4	5
Exhibits emotional reactions in his/her relations with his/her team members; does not	1	2	3	4	5
refrain from showing emotions such as joy, grief, anger					
Creates a family environment in the workplace	1	2	3	4	5
Participates in his/her team members' special days (e.g. wedding, funerals, etc.)	1	2	3	4	5
Consults his/her team members on job matters	1	2	3	4	5
Tries his/her best to find a way for the company to help his/her team members whenever	1	2	3	4	5
they need help on issues outside work (e.g. setting up home, paying for children's tuition)					
Is like an elder family member (father/mother, elder brother/sister) for his/her team	1	2	3	4	5
members					

Name:		

Page	2	of	5
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My team leader	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Expects his/her team members to be devoted and loyal, in return for the attention and concern he/she shows them	1	2	3	4	5
Gives a dvice to his/her team members on different matters as if he/she were an elder family member	1	2	3	4	5
Gives his/her team members a chance to develop themselves when they display low performance	1	2	3	4	5
Makes decision on behalf of his/her team members without asking for their approval	1	2	3	4	5
Believe he/she is the only one who knows what is best for his/her team members	1	2	3	4	5
Knows each of his/her team members intimately (e.g. personal problems, family life, etc.)	1	2	3	4	5

My team leader	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree
Is a good example of the kind of people that are members of my team	1	2	3	4	5
Has very much in common with the members of my team	1	2	3	4	5
Represents what is characteristic of the team	1	2	3	4	5
Is very similar to the members of my team	1	2	3	4	5
Resembles the members of my team	1	2	3	4	5

#### SECTION TWO: PERCEPTION OF YOUR OWN WORK BEHAVIOURS

#### Instruction

Please evaluate your perception of your own work behaviours by circling the most appropriate number.

Items	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
My team is always moving toward the development of new answers	1	2	3	4	5
Assistance in developing new ideas is readily available	1	2	3	4	5
My team is open and responsive to change	1	2	3	4	5
We are always searching for fresh, newways of looking at problems	1	2	3	4	5
In my team we take the time needed to develop new ideas	1	2	3	4	5
People in this team cooperate in order to help develop and apply new ideas	1	2	3	4	5
Members of this team provide and share resources to help in the application of new ideas	1	2	3	4	5
Team members provide practical support for new ideas and their application	1	2	3	4	5
We share information generally in the team rather than keeping it to ourselves	1	2	3	4	5
We have a`we are init together' attitude	1	2	3	4	5
We all influence each other	1	2	3	4	5
People keep each other informed a bout work-related issue in the team	1	2	3	4	5
People feel understood and accepted by each other	1	2	3	4	5
Everyone's view is listened to even if it is in a minority	1	2	3	4	5
There are real attempts to share information throughout the team	1	2	3	4	5
There is a lot of give and take	1	2	3	4	5

Our team	Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
Has confidence in itself	1	2	3	4	5	6	7
Be lieves that it can be very productive	1	2	3	4	5	6	7
Can get a lot done when it works hard	1	2	3	4	5	6	7
Believes that its projects are significant	1	2	3	4	5	6	7
Finds that what we are trying to do is meaningful	1	2	3	4	5	6	7
Feels that its group tasks are worthwhile	1	2	3	4	5	6	7
Feels as though it can select different ways to do its work	1	2	3	4	5	6	7
Believes that it can determine as a team how work gets done	1	2	3	4	5	6	7
Can make its own choices without being told by management	1	2	3	4	5	6	7

Name:	



Our team	Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
Feels that it has a positive impact on this company	1	2	3	4	5	6	7
Believes that it performs tasks that matter to this company	1	2	3	4	5	6	7
Makes a difference in this organization	1	2	3	4	5	6	7

Items	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
When someone criticizes my leader, it feels like a personal insult	1	2	3	4	5
lam very interested in what others think about my leader	1	2	3	4	5
When I talk about my leader, I usually say 'we' rather than 'he' or 's he'	1	2	3	4	5
My leader's successes are my successes	1	2	3	4	5
When someone praises myleader, it feels like a personal compliment	1	2	3	4	5
If a story in the media criticized my leader, I would feel embarrassed	1	2	3	4	5

Items	Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
The work   do is very important to me	1	2	3	4	5	6	7
My job activities are personally meaningful to me	1	2	3	4	5	6	7
The work I do is meaningful to me	1	2	3	4	5	6	7
l am confident about my a bility to do my job	1	2	3	4	5	6	7
lam self-assured about my capabilities to perform my work activities	1	2	3	4	5	6	7
I have mastered the skills necessary for my job	1	2	3	4	5	6	7
I have significant autonomy in determining how I do my job	1	2	3	4	5	6	7
I can decide on my own how to go about doing my work	1	2	3	4	5	6	7
$\label{thm:considerable} I have considerable opportunity for independence and freedom in how I do my job$	1	2	3	4	5	6	7
My impact on what happens in my department is large	1	2	3	4	5	6	7
have a great deal of control over what happens in my department	1	2	3	4	5	6	7
have significant influence over what happens in my department	1	2	3	4	5	6	7

Items	Very Strongly Disagree	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Very Strongly Agree
I feel I am good at generating novel ideas	1	2	3	4	5	6	7
I have confidence in my ability to solve problems creatively	1	2	3	4	5	6	7
I have a knackfor further developing the ideas of others	1	2	3	4	5	6	7
lam good at finding creative ways to solve problems	1	2	3	4	5	6	7

Items	Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
l al ways look for better ways to do things	1	2	3	4	5	6	7
If I believe in an idea, no obstade prevents me from making it happen	1	2	3	4	5	6	7
Nothing is more exciting than seeing my ideas turn into reality	1	2	3	4	5	6	7
No matter what the odds, if I believe in something, I make it happen	1	2	3	4	5	6	7
Wherever I am, I am a powerful force for change	1	2	3	4	5	6	7
Parents and children must stay together as much as possible	1	2	3	4	5	6	7
It is my duty to take care of my family, even when I have to sacrifice what I want	1	2	3	4	5	6	7
Family members shoulds tick together, no matter what sacrifices are required	1	2	3	4	5	6	7
It is important to me that I respect the decisions made by my team	1	2	3	4	5	6	7

Name:		



#### SECTION THREE: DEMOGRAPHIC DATA

	YOUR PERSONAL DETAILS	
Gender Female Male  Your age isyears	Years in This Organisation years  Position in Organisation (please choose one)  Executives (e.g. Directors)  Middle Managers (e.g. Department Head)  FirstLine Managers  Non-management	Formal Education  High School Diploma degree Technical qualifications Bachelors Masters Doctorate
Production (please choose one)  Production/Operation (include Quality Control/Assurance)  Research & Development  Accounting and Finance  Human Resources  Marketing and Sales  General Affair (incl. Legal, Internal Audit)  Corp. Communication (include: Public Relation)	Type of Sector in Which Your Organisation is Operatin  Agriculture, Aquaculture, Plantation  Banking, Non-banking Institution, Insurance  Cement Industry  Construction and Related Services  Food & Beverages  Integrated Media  Manufacturing Products  Mining & Energy  Pharmacy  Supplier of Heavy Equipments  Telecommunication	ng
Others (please specify)	Trading & Distribution  Others (please specify)	<u> </u>

Thank you very much for your participation!

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Name:	

#### Appendix 3a.

#### TEAM LEADERS' QUESTIONNAIRES IN BAHASA INDONESIA

## **MONASH** University



#### SURVEI KUESIONER UNTUK PEMIMPIN TIM

# PENJELASAN TENTANG SURVEI HUBUNGAN ANTARA TIPE KEPEMIMPINAN DAN INOVASI TIM

#### Anda dapat menyimpan halaman ini dan mengembalikan kuesioner yang telah lengkap Anda isi

Yth Partisipan Survei,

Survei ini adalah bagian dari penelitian tentang hubungan antara tipe kepemimpinan dan inovasi tim. Anda kami undang untuk memberikan penilaian terhadap (1) inovasi tim Anda di bagian pertama dan (2) kreativitas individual setiap anggota tim Anda di bagian kedua. Tolong berikan jawaban yang terbuka dan jujur untuk pertanyaan-pertanyaan berikut. Data demografi di bagian akhir hanya akan digunakan hanya untuk kepentingan statistika, dan tidak akan dapat dipergunakan untuk mengidentifikasi Anda dan organisasi Anda. Kelengkapan pengisian survei ini mencerminkan kesediaan Anda untuk berpartisipasi dalam penelitian ini.

<u>Survei ini hanya membutuhkan sekitar 10-15 menit untuk melengkapinya.</u> Partisipasi Anda bersifat sukarela dan tanpa nama Anda pribadi. Anda boleh menghentikan partisipasi Anda kapan saja sebelum menyerahkan jawaban Anda. <u>Jawaban Anda akan dijaga kerahasiaannya.</u> Hanya tim peneliti yang memiliki akses terhadap data. Semua data yang terkumpul akan disimpan selama 5 (lima) tahun, sesuai peraturan *Monash University*, dan kemudian dimusnahkan. Hasil survei ini akan dianalisis dan dipresentasikan dalam bentuk kesimpulan secara garis besar dari seluruh data.

Setelah kami menganalisa hasil survei ini, kami ingin melakukan wawancara dengan Anda selaku pemimpin tim. Jika Anda bersedia diwawancara atau memiliki pertanyaan terkait dengan penelitian ini, silakan menghubungi saya di email: Diah. Yoshida@buseco.monash.edu.au.

Jika Anda memiliki keluhan sehubungan proses penelitian ini, silakan kirim *e-mail* ke: Bapak Setiadi Djohar, Sekolah Tinggi Manajemen PPM, di <a href="mailto:std@ppm-manajemen.ac.id">std@ppm-manajemen.ac.id</a>. Beliau akan meneruskan keluhan Anda secara langsung ke Standing Committee on Ethics in Research involving Humans (SCERH), Monash University.

Terima kasih sebelumnya untuk partisipasi Anda.

Diah Tuhfat Yoshida Kandidat PhD, Department of Management Monash University

Ji ka Anda ingin mengontak peneliti sehubungan aspek apapun dari penelitian ini, silakan menghubungi ketua tim peneliti: Ji ka Anda memiliki pertanyaan mengenai pelaksanaan penelitian ini, silakan

Dr. Sen Sendiava

Monash University

PO. Box 197 Caulfield East Vic 3145 Australia Tel epon: +61 3 9903 2089

E-mail: Sen.Sendjaya@buseco.monash.edu.au

**Human Ethics Officer** 

The Standing Committee on Ethics in Research Involving Humans(SCERH) Bldg 3D, Research Grants and Ethics Branch, Monash University VIC 3800 Telepon: +61 3 9905 2052 Faks: +61 3 9905 1420

E-mail: scerh@adm.monash.edu.au



#### SURVEI KUESIONER UNTUK PEMIMPIN TIM

#### BAGIAN PERTAMA: INOVASI TIM

#### Petunjuk:

Tolong berikan penilaian Anda mengenai kinerja inovasi tim Anda dengan **melingkari** nomor yang paling sesuai.

Pernyataan	Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
Anggota tim sering mengimplementasikan i de-ide baru guna meningkatkan kualitas produk dan jasa yang kami hasilkan/tawarkan	1	2	3	4	5
Tim ini hanya sedikit mempertimbangkan penggunaan meto de dan prosedur baru dan alternatifnya	1	2	3	4	5
Anggota tim seringkali menghasilkan jasa-jasa baru, metode-metode baru, atau prosedur-prosedur baru	1	2	3	4	5
Tìm ìni adalah tìm yang inovatif	1	2	3	4	5

#### BAGIAN KEDUA: KREATIVITAS INDIVIDUAL ANGGOTA TIM

#### Petuniuk

Tolong berikan penilaian Anda mengenai kinerja kreativitas **setiap orang** dari anggota tim Anda dengan **melingkari** nomor yang paling sesuai.

#### 1) (Nama).

Seberapa jauh kreatifitas orang ini sebagai anggota tim Anda	Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
Mengusulkan berbagai i de-i de kreatif ya ng dapat meningkatkan kondisi kerja ti m	1	2	3	4	5
Sering mengusulkan solusi-solusi kreatif atas masalah-masalah yang berkaitan dengan pekerjaan	1	2	3	4	5
Mengusulkan cara-cara baru dalam melakukan pekerjaan	1	2	3	4	5
Merupakan sebuah sumber i de kreatif yang bagus	1	2	3	4	5

#### 2) (Nama).

Seberapa jauh kreatifitas orang ini sebagai anggota tim Anda	Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
Mengusulkan berbagai i de-i de kreatif yang dapat meningkatkan kondisi kerja ti m	1	2	3	4	5
Sering mengusulkan solusi-solusi kreatif atas masalah-masalah yang berkaitan dengan pekerjaan	1	2	3	4	-5
Mengusulkan cara-cara baru dalam melakukan pekerjaan	1	2	3	4	5
Merupa kan sebuah sumber i de kreatif yang bagus	1	2	3	4	5

#### 3) (Nama).

Seberapa jauh kreatifitas orang ini sebagai anggota tim Anda	Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
Mengusulkan berbagai i de-i de kreatif ya ng dapat meningkatkan kondisi kerja ti m	1	2	3	4	5
Sering mengusulkan s olusi-solusi kreatif a tas masalah-masalah ya ng berkaitan dengan pekerjaan	1	2	3	4	5
Mengusulkan cara-cara baru dalam melakukan pekerjaan	1	2	3	4	5
Merupakan sebuah sumber i de kreatifyang bagus	1	2	3	4	5



#### 4) (Nama).

Seberapa jauh kreatifitas orang ini sebagai anggota tim Anda	Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
Mengusulkan berbagai i de-i de kreatif ya ng dapat meningkatkan kondisi kerja ti m	1	2	3	4	5
Sering mengusulkan s olusi-solusi kreatif a tas masalah-masalah yang berkaitan dengan pekerjaan	1	2	3	4	5
Mengusulkan cara-cara baru dalam melakukan pekerjaan	1	2	3	4	5
Merupakan sebuah sumber i de kreatif yang bagus	1	2	3	4	5

### 5) (Nama).

Seberapa jauh kreatifitas orang ini sebagai anggota tim Anda	Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
Mengusulkan berbagai i de-i de kreatif yang dapat meningkatkan kondisi kerja ti m	1	2	3	4	5
Sering mengusulkan s olusi-solusi kreatif a tas masalah-masalah yang berkaitan dengan pekerjaan	1	2	3	4	5
Mengusulkan cara-cara baru dalam melakukan pekerjaan	1	2	3	4	5
Merupa kan sebuah sumber i de kreatif yang bagus	1	2	3	4	5

#### 6) (Nama).

Seberapa jauh kreatifitas orang ini sebagai anggota tim Anda	Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
Mengusulkan berbagai i de-i de kreatif yang dapat meningkatkan kondisi kerja ti m	1	2	3	4	5
Sering mengusulkan solusi-solusi kreatif atas masalah-masalah yang berkaitan dengan pekerjaan	1	2	3	4	5
Mengusulkan cara-cara baru dalam melakukan pekerjaan	1	2	3	4	5
Merupakan sebuah sumber i de kreatif yang bagus	1	2	3	4	5

### 7) (Nama).

Seberapa jauh kreatifitas orang ini sebagai anggota tim Anda	Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
Mengusulkan berbagai i de-i de kreatif yang dapat meningkatkan kondisi kerja ti m	1	2	3	4	5
Sering mengusulkan solusi-solusi kreatif atas masalah-masalah yang berkaitan dengan pekerjaan	1	2	3	4	5
Mengusulkan cara-cara baru dalam melakukan pekerjaan	1	2	3	4	5
Merupakan sebuah sumber i de kreatif yang bagus	1	2	3	4	5

#### 8) (Nama).

Seberapa jauh kreatifitas orang ini sebagai anggota tim Anda	Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
Mengusulkan berbagai i de-i de kreatif yang dapat meningkatkan kondisi kerja ti m	1	2	3	4	5
Sering mengusulkan solusi-solusi kreatif atas masalah-masalah yang berkaitan dengan pekerjaan	1	2	3	4	5
Mengusulkan cara-cara baru dalam melakukan pekerjaan	1	2	3	4	5
Merupakan sebuah sumber i de kreatif yang bagus	1	2	3	4	5



### BAGIAN KETIGA: DATA DEMOGRAFI

	DATA DIRI ANDA	
Jenis Kelamin	Organisasi Anda tergolong sektor	Fungsi Anda dalam Organisasi (pilih salah satu)
Perempuan Laki-laki Usia Anda adalah tahun	Pertanian, Perikanan, Perkebunan Bank, Institusi Non Bank, Asuransi	Produksi/Operasi, (termasuk QC dan QA)
Pendidikan Formal	Industri Semen  Konstruksi dan Jasa-jasa Terkait  Makanan&Minuman	Riset&Pengembangan  Akunting dan Keuangan
SMA/SMU dan sederajat	Media Terintegrasi	Sumberdaya Manusia
Diploma  Kualifikasi Teknis	Manufaktur Produk  Pertambangan&Energi	Pemasaran&Penjualan
Sarjana (S1)	Farmasi	Umum (termasuk Hukum, Audit Internal)
Master/Magister (S2)  Doktoral (S3)	Penyedia Peralatan Berat  Telekomunikasi	Komunikasi Korporat (termasuk PR)
Posisi di Organisasi (pilih salah satu)	Perdagangan&Distribusi Lainnya (tolong jelaskan)	Lainnya (tolong jelaskan)
Eksekutif (misal direktur)		
Manajer Madya (misal kepala departemen)		
Staf		
Lama bekerja di posisi saat ini		
Kualifikasi Teknis Sarjana (S1) Master/Magister (S2) Doktoral (S3)  Posisi di Organisasi (pilih salah satu)  Eksekutif (misal direktur) Manajer Madya (misal kepala departemen) Manajer Lini Pertama Staf	Pertambangan&Energi Farmasi Penyedia Peralatan Berat Telekomunikasi Perdagangan&Distribusi	Umum (termasuk Hukum, Audit Inte

Terima kasih banyak untuk partisipasi Anda!

#### Appendix 3b.

#### TEAM MEMBERS' QUESTIONNAIRES IN BAHASA INDONESIA

## **MONASH** University



#### SURVEI KUESIONER ANGGOTA TIM

# PENJELASAN TENTANG SURVEI HUBUNGAN ANTARA TIPE KEPEMIMPINAN DAN INOVASI TIM

#### Anda dapat menyimpan halaman ini dan mengembalikan kuesioner yang telah lengkap Anda isi

Yth Partisipan Survei,

Survei ini adalah bagian dari penelitian tentang hubungan antara tipe kepemimpinan dan inovasi tim. Anda kami undang untuk memberikan penilaian tentang perilaku kepemimpinan yang ditunjukkan oleh pemimpin tim Anda di bagian pertama, dan persepsi Anda sendiri mengenai perilaku kerja Anda di bagian kedua. Data demografi di bagian akhir hanya akan digunakan hanya untuk kepentingan statistika, dan tidak akan dapat dipergunakan untuk mengidentifikasi Anda dan organisasi Anda. Kelengkapan pengisian survei ini mencerminkan kesediaan Anda untuk berpartisi pasi dalam penelitian ini.

<u>Survei ini hanya membutuhkan tak lebih dari 20 menit untuk melengkapinya.</u> Tolong pastikan bahwa partisipasi Anda bersifat sukarela dan tanpa nama. Anda boleh menghentikan partisipasi Anda kapan saja sebelum menyerahkan jawaban Anda. <u>Jawaban Anda akan dijaga kerahasiaannya.</u> Hanya tim peneliti yang memiliki akses terhadap data. Semua data yang terkumpul akan disimpan selama 5 (lima) tahun, sesuai peraturan *Monash University*, dan kemudian dimusnahkan. Hasil survei ini akan dianalisis dan dipresentasikan dalam bentuk kesimpulan secara garis besar dari seluruh data.

Jika Anda memiliki keluhan sehubungan proses penelitian ini, silakan kirim *e-mail* ke: Bapak Setiadi Djohar, Sekolah Tinggi Manajemen PPM, di <a href="mailto:std@ppm-manajemen.ac.id">std@ppm-manajemen.ac.id</a>. Beliau akan meneruskan keluhan Anda secara langsung ke Standing Committee on Ethics in Research involving Humans (SCERH), Monash University.

Terima kasih sebelumnya untuk partisipasi Anda.

Diah Tuhfat Yoshida Kandidat PhD, *Department of Management Monash University* 

Ji ka Anda ingin mengontak peneliti sehubungan aspek apapun dari penelitian ini, silakan menghubungi ketua tim peneliti: Ji ka Anda memiliki pertanyaan mengenai pelaksanaan penelitian ini, silakan menghubungi:

Dr. Sen Sendiava

Monash University

PO. Box 197 Caulfield East Vic 3145 Australia

Telepon:+61 3 9903 2089

E-mail: Sen.Sendjaya@buseco.monash.edu.au

#### **Human Ethics Officer**

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E-mail: scerh@adm.monash.edu.au



#### SURVEI KUESIONER ANGGOTA TIM

#### BAGIAN PERTAMA: PERILAKU KEPEMIMPINAN

#### Petuniuk

Tolong berikan penilaian Anda tentang perilaku kepemimpinan yang ditunjukkan oleh pemimpin tim Anda dengan **melingkari** nomor yang paling sesuai.

nomor yang paling sesuai.				vc	
Pemimpin tim saya	Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
Tidak membela diri apabila dikonfrontasi	1	2	3	4	5
Kalau dikritik, ia berfokus pada apa yang disampaikan bukan siapa yang menyampaikan	1	2	3	4	5
Mempraktekkan apa yang ia sendiri katakan	1	2	3	4	5
Bersedia mengatakan "Saya yang bersalah" kepada orang lain	1	2	3	4	5
Mempercayai saya untuk memegang kontrol (misal, membuat keputusan penting) di saat yang tepat	1	2	3	4	5
Memberi saya hak untuk mempertanyakan keputusan dan aksinya	1	2	3	4	5
Menunjukkan rasa percayanya kepada saya	1	2	3	4	5
Menerima saya apa adanya, terlepas dari kegagalan-kegagalan saya	1	2	3	4	5
Merespon permasalahan dengan mendengarkan terlebih dulu	1	2	3	4	5
Menghargai siapa saya sebagai individu, bukan se jauh mana saya dapat menyenangkan hatinya	1	2	3	4	5
Memperlakukan orang lain sebagai rekan kerja yang selevel	1	2	3	4	5
Tidak menunjukkan siapa yang ia percayai diantara anggota timnya	1	2	3	4	5
Berdiri di atas prinsip moral yang jelas dan tegas	1	2	3	4	5
Memilih untuk berbuat apa yang benar, terlepas dari persepsi orang lain terhadap dirinya	1	2	3	4	5
Memakai cara-cara yang benar untuk mencapai tujuan yang benar pula	1	2	3	4	5
Mendorong saya untuk aktif berpikir secara moral atau etis	1	2	3	4	5
Membangun kapasitas saya untuk mengambil keputusan / aksi etis	1	2	3	4	5
Hidupnya diarahkan oleh sebuah panggilan hidup yang lebih besar dari dirinya sendiri	1	2	3	4	5
Membantu saya untuk menemukan kejelasan tujuan dan arah	1	2	3	4	5
Menge depankan nilai-nilai ya ng diatas hal-hal ya ng materialistik dan kepentingan diri sendiri	1	2	3	4	5
Membantu saya melihat arti dibalik rutinitas kerja sehari-hari	1	2	3	4	5
Mengkomunikasikan vi si bersama yang memberi arti dan inspirasi terhadap apa yang saya kerjakan	1	2	3	4	5
Memimpin orang lain dengan teladan hidup pribadi	1	2	3	4	5
Menginspirasisaya untuk memimpin orang lain dengan melayani	1	2	3	4	5
Mengijinkan saya untuk bereksperimen dan kreatif tanpa kuatir	1	2	3	4	5
Menol ong saya memaksimalkan potensi diri saya	1	2	3	4	5
Meminimalisasi hal-hal yang menghalangi kesuksesan saya	1	2	3	4	5
Berkontribusi pada pengembangan diri saya secara pribadi dan profesional	1	2	3	4	5
Menaruh kepentingan orang lain di atas kepentingannya sendiri	1	2	3	4	5
Menggunakan otoritas posisinya untuk melayani orang lain, bukan untuk ambisi pribadinya	1	2	3	4	5
Lebih tanggap akan tanggung jawabnya ketimbang hak-haknya	1	2	3	4	5
Mel a yani orang lain tanpa mempedulikan latar belakang mereka (gender, keturunan, suku, dst.)	1	2	3	4	5
Menunjukkan kepeduliannya terhadap saya dengan hal-hal yang praktis	1	2	3	4	5
Mau mendengar saya dengan tujuan untuk mengerti saya	1	2	3	4	5
Memberi saya bantuan tanpa pamrih dan tanpa harapan ti mbal-balik	1	2	3	4	5
Tertarik dengan setiap aspek dalam kehidupan anggota timnya	1	2	3	4	5
Menunjukkan reaksi e mosi dalam hubungan nya dengan a nggota tim; tidak menahan dirinya untuk	1	2	3	4	5
menunjukkan emosi seperti senang, sedih, marah	=			10.50	2501
Membentuks ebuah lingkungan keluarga di tempat kerja	1	2	3	4	5
Berpartisipasi dalam hari-hari khusus anggota timnya (misal: pernikahan, pemakaman, dll)	1	2	3	4	5
Berunding dengan anggota timnya mengenai pekerjaan	1	2	3	4	5
Berusaha sebaik mungkin untuk menemukan jalan bagi organisasi untuk membantu anggota ti mnya	1	2	3	4	5
tatkala mereka membutuhkan bantuan dalam hal-hal di luar pekerjaan (misal: mendirikan rumah,				10.50	2501
membayar uang sekolah a nak-anak}					
The muayar darigs excitant a riak-ariaky	ļ	ļ	ļ	,	Ĺ



Pemimpin tim saya	Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
Berperilakus eperti anggota keluarga yang lebih tua (ayah/ibu, kakak laki-laki/perempuan) untuk anggota timnya	1	2	3	4	5
Mengharapkan agar anggota timnya dekat dan loyal kepadanya, sebagai balasan atas atensi dan perhatian yang diperlihatkannya kepada mereka	1	2	3	4	5
Memberikan nasihat kepada anggota timnya untuk beragam hal selaya knya anggota keluarga yang lebih tua	1	2	3	4	5
Memberikan kesempatan kepada anggota timnya untuk mengembangkan diri jika mereka menunjukkan ki nerja yang buruk/rendah	1	2	3	4	5
Membuat keputusan-keputusan atas nama anggota timnya tanpa meminta persetujuan mereka (anggota timnya)	1	2	3	4	5
Percaya bahwa dia merupakan satu-satunya orang yang mengetahui apa yang terbaik untuk anggota timnya	1	2	3	4	5
Mengenal anggota timnya dengan sangat baik (misal: masalah-masalah personal yang dimiliki, kehidupan keluarga, dll)	1	2	3	4	5

Pemimpin tim saya	Tidak Setuju	Sedikit Tidak Setuju	Netral	Sedikit Setuju	Setuju
Merupakan contoh yang baik dari tipe orang yang menjadi anggota tim saya	1	2	3	4	5
Memiliki banyak kesamaan dengan anggota tim saya	1	2	3	4	5
Mewakili karakteristik yang dibutuhkan sebuah tim	1	2	3	4	5
Sangat mirip/sama dengan anggota tim saya	1	2	3	4	5
Memiliki kesamaan dengan anggota tim saya	1	2	3	4	5

### BAGIAN KEDUA: PERSEPSI TENTANG PERILAKU KERJA ANDA

#### Petunjuk:

 $Tolong\ berikan\ penilaian\ terhadap\ perilaku\ kerja\ Anda\ dengan\ \textit{melingkari}\ nomor\ yang\ paling\ sesuai\ .$ 

Pernyataan	Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
Ti m i ni senantiasa bergerak maju dalam membangun ja waban-jawaban baru	1	2	3	4	5
Bantuan dalam membanguni de-ide baru sudah tersedia	1	2	3	4	5
Ti m i ni terbuka dan responsif terhadap perubahan	1	2	3	4	5
Anggota tim ini selalu mencari cara-cara baru dalam menganalisis masalah-masalah	1	2	3	4	5
Dalam ti mini, kami memanfaatkan waktu yang kami perlukan untuk membangun i de-i de baru	1	2	3	4	5
Anggota tim bekerja sama untuk membantu membangun dan mengaplikasikan ide-ide baru	1	2	3	4	5
Anggota tim menyediakan dan membagi sumberdaya untuk membantu mewujudkan ide-ide baru		2	3	4	5
Anggota tim menyediakan dukungan praktis untuk i de-i de baru dan aplikasinya	1	2	3	4	5
Kami biasanya berbagi informasi dalam timini daripada menyimpannya untuk diri kami masing-masing	1	2	3	4	5
Kami memiliki sikap "kami ada di dalam tim ini bersama-sama"	1	2	3	4	5
Kami saling mempengaruhi satu sama lain	1	2	3	4	5
Anggota tim saling menginformasikan satu sama lain mengenai hal-hal terkait pekerjaan dalam tim	1	2	3	4	5
Anggota tim merasa saling mengerti dan saling menerima satu sama lain	1	2	3	4	5
Pandangan masing-masing anggota didengarkan bahkan ji ka ia merupakan minoritas	1	2	3	4	5
Banyak upaya untuk membagi informasi ke seluruh tim	1	2	3	4	5
Banyak hal yang harus diberi dan diambil	1	2	3	4	5

Tim Kami	Sangat Tidak Setuju	Tidak Setuju	Sedikit Tidak Setuju	Neither	Sedikit Setuju	Setuju	Sangat Setuju
Memiliki kepercayaan akan diri kami	1	2	3	4	5	6	7
Percaya bahwa kami dapat menjadi sangat produktif	1	2	3	4	5	6	7
Dapat menyelesaikan banyak pekerjaan bila bekerja keras	1	2	3	4	5	6	7



Tim Kami	Sangat Tidak Setuju	Tidak Setuju	Sedikit Tidak Setuju	Netral	Sedikit Setuju	Setuju	Sangat Setuju
Percaya bahwa proyek-proyek yang kami lakukan berarti/berharga	1	2	3	4	5	6	7
Merasakan bahwa apa yang sedang kamilakukan sangat berarti	1	2	3	4	5	6	7
Mera sa bahwa tugas kami bermanfaat	1	2	3	4	5	6	7
Merasa walaupun sulit, kami dapat memilih cara-cara yang berbeda untuk melakukan pekerjaan kami	1	2	3	4	5	6	7
Percaya bahwa kami dapat memutuskan sebagai sebuah timtentang <i>bagaimana</i> menyelesaikan tugas-tugas kami	1	2	3	4	5	6	7
Dapat membuat pilihan-pilihannya sendiri tanpa diberitahu manajemen	1	2	3	4	5	6	7
Mera sa bahwa kami memiliki pengaruh yang positif terhadap perusahaan ini	1	2	3	4	5	6	7
Percaya bahwa kami dapat menyelesaikan tugas-tugas yang pentinguntuk perusahaan ini	1	2	3	4	5	6	7
Membuat perbedaan di perusahaan/organisasi ini	1	2	3	4	5	6	7

Pernyataan	Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
Keti ka seseorang mengkritik pemimpin saya, rasanya seperti menghina diri saya	1	2	3	4	5
Saya sangat tertarik dengan apa yang dipikirkan orang lain tentang pemimpin saya	1	2	3	4	5
Keti ka saya berbicara tentang pemimpin saya, saya biasanya mengatakan "kami" daripada "dia"	1	2	3	4	5
Ke suksesan pemimpin saya adalah kesuksesan saya	1	2	3	4	5
Keti ka seseorang memuji pemimpin saya, rasanya seperti pujian kepada diri saya sendiri	1	2	3	4	5
Ji ka sebuah cerita di media mengkritik pemimpin saya, saya merasa malu	1	2	3	4	5

Pernyataan	Sangat Tidak Setuju	Tidak Setuju	Sedikit Tidak Setuju	Netral	Sedikit Setuju	Setuju	Sangat Setuju
Pekerjaan saya sangat penting bagi saya	1	2	3	4	5	6	7
Aktivitas pekerjaan saya sangat berarti bagi saya secara personal	1	2	3	4	5	6	7
Pekerjaan ya ng saya lakukan sangat berarti bagi saya	1	2	3	4	5	6	7
Saya yakin akan keahlian saya dalam melakukan pekerjaan saya	1	2	3	4	5	6	7
Saya meyakini kemampuan saya untuk melakukan a ktivitas pekerjaan saya	1	2	3	-4	5	6	7
Saya menguasai keahlian yang diperlukan untuk pekerjaan saya	1	2	3	4	5	6	7
Saya memiliki otonomi dalam menentukan bagaimana saya melakukan pekerjaan saya	1	2	3	4	5	6	7
Saya dapat memutuskan sendiri bagaimana melakukan pekerjaan saya	1	2	3	4	5	6	7
Saya memiliki banyak peluang untukkemandirian dan kebebasan dalam melakukan pekerjaan saya	1	2	3	4	5	6	7
Pengaruh saya akan apa yang terjadi di bagian saya besar	1	2	3	4	5	6	7
Saya memiliki kontrol yang besaratas apa yang terjadi di bagian saya	1	2	3	4	5	6	7
Saya memiliki pengaruh yang besar atas apa yang terjadi di bagian saya	1	2	3	4	5	6	7

Pernyataan :	Sangat Tidak Setuju Sekali	Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju	Sangat Setuju Sekali
Saya merasa bahwa saya ahli dalam hal melahirkan i de-ide baru	1	2	3	4	5	6	7
Saya memiliki keyakinan akan kemampuan saya dalam menyelesaikan masalah secara kreatif	1	2	3	4	5	6	7
Saya memiliki kecakapan untuk mengembangkan lebih lanjut i de-ide orang lain	1	2	3	4	5	6	7
Sa ya a hli dalam menemukan cara-cara kre atif untuk menyel esaikan masalah	1	2	3	4	5	6	7

Pernyataan	Sangat Tidak Setuju	Tidak Setuju	Sedikit Tidak Setuju	Netral	Sedikit Setuju	Setuju	Sangat Setuju
Sa ya selalu mencari cara yang lebih baik untuk melakukan sesuatu	1	2	3	4	5	6	7
Ji ka saya percaya sebuah i de, ti daka da halangan bagi saya untuk mewujudkan nya	1	2	3	4	5	6	7



Pernyataan	Sangat Tidak Setuju	Tidak Setuju	Sedikit Tidak Setuju	Netral	Sedikit Setuju	Setuju	Sangat Setuju
Ti da ka da yang lebih menyenangkan daripada melihat i de-ide saya terealisasi	1	2	3	4	5	6	7
Apa pun peluangnya, ji ka saya mempercayai sesuatu, saya akan mewujudkannya	1	2	3	4	5	6	7
Di manapun saya, saya a dalah kekuatan untuk perubahan	1	2	3	4	5	6	7
Orangtua dan anak harus selalu bersama selama mungkin	1	2	3	4	5	6	7
Adalah tugas saya untuk menjaga keluarga saya, walaupun saya harus mengorbankan apa yang saya inginkan	1	2	3	4	5	6	7
Anggota keluarga harus selalu bersama, walaupun membutuhkan banyak pengorbanan	1	2	3	4	5	6	7
Sangat penting bagi saya untuk menghargai keputusan yang dibuat oleh tim	1	2	3	4	5	6	7

#### BAGIAN KETIGA: DATA DEMOGRAFI

	DATA DIRI ANDA	
Jenis Kelamin	Organisasi Anda tergolong sektor	Fungsi Anda dalam Organisasi (pilih salah satu)
Perempuan Laki-laki Usia Anda adalahtahun	Pertanian, Perikanan, Perkebunan Bank, Institusi Non Bank, Asuransi Industri Semen Konstruksi dan Jasa-jasa Terkait	Produksi/Operasi, (termasuk QC dan QA)  Riset&Pengembangan  Akunting dan Keuangan
Pendidikan Formal  SMA/SMU dan sederajat	Makanan&Minuman Media Terintegrasi	Sumberdaya Manusia
Diploma  Kualifikasi Teknis	Manufaktur Produk Pertambangan&Energi	Pemasaran&Penjualan  Umum (termasuk Hukum, Audit Internal)
Sarjana (S1)  Master/Magister (S2)  Doktoral (S3)	Farmasi Penyedia Peralatan Berat Telekomunikasi	Komunikasi Korporat (termasuk PR)
Posisi di Organisasi (pilih salah satu)  Eksekutif (misal direktur)  Manajer Madya (misal kepala departemen)  Manajer Lini Pertama  Staf	Perdagangan&Distribusi Lainnya (tolong jelaskan)	Lainnya (tolong jelaskan) ————————————————————————————————————
Lama bekerja di posisi saat initahun		

Terima kasih banyak untuk partisipasi Anda!

#### Appendix 4a.

#### TEAM LEADERS' QUESTIONNAIRES IN CHINESE

### **MONASH** University



### 团队领导者调查问卷 领导风格与团队创新之间关系的情况调查表

#### 如果你完成了本份调查问卷,你可以保存本页,问卷的其他部分请你归还。

尊敬的问卷参与者:

这份调查问卷是关于"领导者风格和团队创新能力之间的关系"这项研究的一部分。 问卷第一部分及第二部分邀请您分别评估团队的创新能力以及团队成员的个人创造力。 请对下面的问题作出坦诚的答复。这份问卷的最后部分关于你的个人信息,将只用于数据(统计) 目的。你或者你的组织不会被别人识别。如果你完成了本份调查问卷,就说明你愿意参加这项调查。

#### 请在15分钟以内完成这份调查。

请确保参加人员是完全自愿的。你可以在任何时候停止参与,并提交你的回复。我们一收到你的回复,将分离并单独储存有关你或者你的团队的所有信息你的回复将完全保密。只有研究人员才有机会获得您所提供的信息。根据莫奈什大学管理条例,获得的数据将会被安全地存放五年,然后销毁。调查结果将被仔细核对并且只显示总体水平。

如果你对调查过程有任何意见,请发邮件至: <u>std@ppm-mana.jemen.ac.id</u>. 学校管理人员 Mr Setiadi Djohar of PPM。他会将你的意见直接递交给纳莫什大学人类伦理学研究中心的全体成员。谢谢您之前的参与。

Diah Tuhfat Yoshida 博士研究生管理事务部 纳莫什大学

如果你想联系研究员询问有关研究的事宜,请联系总负责人 Sen Sendjaya 博士

莫纳什大学

信箱: 197 Caulfield East Vic 3145 Australia

电话: +61 3 9903 2089

邮箱: Sen. Sendjaya@buseco. monash. edu. au

对于这项研究您有任何疑问,请立刻联系我:

人类伦理研究所:

人类伦理学研究常务委员会

信箱: 3A号, 莫纳什大学, 维多利亚 3800

电话: +61 3 9905 2052 传真: +61 3 9905 1420

邮箱: scerh@adm. monash. edu. au



## 团队领导者调查问卷

#### 第一部分: 团队创新

#### 说明:

请评估你团队的创新能力,并用圆圈圈出最合适的号码:

项目	强烈反对	反对	中立	同意	非常同意
为了提高我们的产品和服务的质量,团队成员经常实施新的创意。	1	2	3	4	5
团队很少提出新的或可替代的(实施)方法和程序	1	2	3	4	5
团队成员经常创新服务、方法或者程序	1	2	3	4	5
这是一个有创新意识的团队	1	2	3	4	5

#### 第二部分: 团队成员的个人创造力

#### 说明:

请评估你团队的创新能力,并用圆圈圈出最合适的号码:

#### 1) 名字.

你们团队的成员达到什么样的标准	强烈反对	反对	中立	同意	非常同意
能提出许多有可能改善团队工作状况的创新性的建议	1	2	3	4	5
在工作中经常想出具有创意的解决问题的方法	1	2	3	4	5
在执行工作任务中建议尝试新方法	1	2	3	4	5
是一个很好的创意来源	1	2	3	4	5

#### 2) 名字.

你们团队的成员达到什么样的标准	强烈反对	反对	中立	同意	非常同意
能提出许多有可能改善团队工作状况的创新性的建议	1	2	3	4	5
在工作中经常想出具有创意的解决问题的方法	1	2	3	4	5
在执行工作任务中建议尝试新方法	1	2	3	4	5
是一个很好的创意来源	1	2	3	4	5

#### 2) 名字.

你们团队的成员达到什么样的标准	强烈反对	反对	中立	同意	非常同意
能提出许多有可能改善团队工作状况的创新性的建议	1	2	3	4	5
在工作中经常想出具有创意的解决问题的方法	1	2	3	4	5
在执行工作任务中建议尝试新方法	1	2	3	4	5
是一个很好的创意来源	1	2	3	4	5

#### 3) 名字.

你们团队的成员达到什么样的标准	强烈反对	反对	中立	同意	非常同意	
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Page 2 of 4

				1/2/	* /5/
能提出许多有可能改善团队工作状况的创新性的建议	1	2	3	4	5
在工作中经常想出具有创意的解决问题的方法	1	2	3	4	5
在执行工作任务中建议尝试新方法	1	2	3	4	5
是一个很好的创意来源	1	2	3	4	5

#### 4) 名字.

你们团队的成员达到什么样的标准	强烈反对	反对	中立	同意	非常同意
能提出许多有可能改善团队工作状况的创新性的建议	1	2	3	4	5
在工作中经常想出具有创意的解决问题的方法	1	2	3	4	5
在执行工作任务中建议尝试新方法	1	2	3	4	5
是一个很好的创意来源	1	2	3	4	5

### 5) 名字.

你们团队的成员达到什么样的标准	强烈反对	反对	中立	同意	非常同意
能提出许多有可能改善团队工作状况的创新性的建议	1	2	3	4	5
在工作中经常想出具有创意的解决问题的方法	1	2	3	4	5
在执行工作任务中建议尝试新方法	1	2	3	4	5
是一个很好的创意来源	1	2	3	4	5

### 6) 名字.

你们团队的成员达到什么样的标准	强烈反对	反对	中立	同意	非常同意
能提出许多有可能改善团队工作状况的创新性的建议	1	2	3	4	5
在工作中经常想出具有创意的解决问题的方法	1	2	3	4	5
在执行工作任务中建议尝试新方法	1	2	3	4	5
是一个很好的创意来源	1	2	3	4	5

### 7) 名字.

你们团队的成员达到什么样的标准	强烈反对	反对	中立	同意	非常同意
能提出许多有可能改善团队工作状况的创新性的建议	1	2	3	4	5
在工作中经常想出具有创意的解决问题的方法	1	2	3	4	5
在执行工作任务中建议尝试新方法	1	2	3	4	5
是一个很好的创意来源	1	2	3	4	5

### 8) 名字.

你们团队的成员达到什么样的标准	强烈反对	反对	中立	同意	非常同意
能提出许多有可能改善团队工作状况的创新性的建议	1	2	3	4	5
在工作中经常想出具有创意的解决问题的方法	1	2	3	4	5
在执行工作任务中建议尝试新方法	1	2	3	4	5
是一个很好的创意来源	1	2	3	4	5

第三部分: 个人信息

Φ Φ

<b>您的个人信息</b>						
性別 口女 口 男	在这个机构中工作了多少 年?					
您的年龄岁	□ 执行官 (or 董事)) □ 经理(or 部门领导) □ 生产线管理人员 □ 职员					
您的职能(请选择一项)	你的部门属于哪一类?					
□ 生产/操作(包括质量控制/保险) □ 研发	□ 农业、水产业、种植业 □ 银行、非银行机构、保险业 □ 建材业					
□ 会计和金融	□ 建造及与其相关的服务					
□ 人力资源 □ 市场和销售	<ul><li>□ 食物和饮料</li><li>□ 综合媒体</li><li>□ 制造业</li></ul>					
□ 总务(包括法律、内部审计)	□ 采矿&能源					
│ │□ 公司法人(包括:公众关系) │	□ 制药 □ 重型设备供应商					
□ 其他(请列举)	□ 电信					
	□					

谢谢您的参与!

#### Appendix 4b.

#### TEAM MEMBERS' QUESTIONNAIRES IN CHINESE

## **MONASH** University



### 团队成员调查问卷 领导风格与团队创新之间关系的情况调查表

如果你完成了本份调查问卷,你可以保存本页,问卷的其他部分请你归还。

尊敬的问卷参与者:

这份调查问卷是关于"领导者风格和团队创新能力之间的关系"这项研究的一部分。 问卷第一部分及第二部分邀请您分别评估团队的创新能力以及团队成员的个人创造力。 请对下面的问题作出坦诚的答复。这份问卷的最后部分关于你的个人信息,将只用于数据(统计) 目的。你或者你的组织不会被别人识别。如果你完成了本份调查问卷,就说明你愿意参加这项调查。

#### 请在15分钟以内完成这份调查。

请确保参加人员是完全自愿的。你可以在任何时候停止参与,并提交你的回复。我们一收到你的回复,将分离并单独储存有关你或者你的团队的所有信息你的回复将完全保密。只有研究人员才有机会获得您所提供的信息。根据莫奈什大学管理条例,获得的数据将会被安全地存放五年,然后销毁。调查结果将被仔细核对并且只显示总体水平。

如果你对调查过程有任何意见,请发邮件至: <u>std@ppm-mana.jemen.ac.id</u>. 学校管理人员 Mr Setiadi Djohar of PPM。他会将你的意见直接递交给纳莫什大学人类伦理学研究中心的全体成员。谢谢您之前的参与。

Diah Tuhfat Yoshida 博士研究生管理事务部 纳莫什大学

如果你想联系研究员询问有关研究的事宜,请联系总负责人 Sen Sendjaya 博士

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### 团队成员调查问卷

## 第一部分: 领导行为

#### 说明:

请评估你团队的创新能力,并用圆圈圈出最合适的号码

我的团队领导	强烈反对	反对	中立	同意	非常同意
面对困难不会退缩	1	2	3	4	5
被批评时,他/她更关注批评的内容而不是谁在批评他/她	1	2	3	4	5
实践他/她的承诺	1	2	3	4	5
对其他人敢于说"我错了"	1	2	3	4	5
在合适的时候,能够让我负责某些事情	1	2	3	4	5
给我权利来质疑他/她的行为和决定	1	2	3	4	5
作为他/她的团队成员,他/她非常信任我	1	2	3	4	Б
无论我失败与否都能接受我	1	2	3	4	Б
遇到问题,总是先倾听	1	2	3	4	5
尊重我是因为我的内在,而不是我的外在	1	2	3	4	5
在组织中平等对待每个人	1	2	3	4	5
在他/她的团队成员中不存在偏袒	1	2	3	4	5
在道德准则方面有着坚定的立场	1	2	3	4	5
更关注做正确的事情而不是表面的事情	1	2	3	4	5
公平的招聘对获得好的人才来说很重要	1	2	3	4	5
鼓励我参与思想道德建设	1	2	3	4	5
提高我的道德修养	1	2	3	4	5
有着更高的使命感	1	2	3	4	5
帮助我找到明确的目标和做出正确的决定	1	2	3	4	5
提倡超越私人利益和物质成就的价值观	1	2	3	4	5
帮助我在工作中获得超越日常生活意义的感觉	1	2	3	4	5
表达(团队)共同的愿望来赋予工作灵感和意义	1	2	3	4	5
以身作则	1	2	3	.4	5
激励我通过服务来领导他人	1	2	3	4	5
鼓励我大胆创新实践	1	2	3	.4	5
激发我最大的潜能	1	2	3	4	5
最大限度的减少阻碍我成功的因素	1	2	3	4	5
为我的个人成长和专业技能的提升作出了贡献	1	2	3	4	5
先考虑别人的需求和兴趣后考虑自己的	1	2	3	4	5
利用权力服务他人,而不是利用权力实现自己的野心	1	2	3	4	5
比起权力,更注重他/她的责任	1	2	3	4	5
对待别人没有任何歧视(性别、种族等)	1	2	3	4	5
通过实际行动来表示他/她对别人的关心	1	2	3	4	5
				12	
耐心听我说,直至能理解我的意图	1	2	3	4	5

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对他/她的团队成员生活的方方面面都很关心	1	2	3	4	5
在他/她的团队成员面前表现个人情感而不是压抑自己,例如高兴、伤心、愤 怒	1	2	3	4	5
在工作场所营造了一个家庭氛围	1	2	3	4	5
参加他/她的团队成员的特殊的日子(例如结婚、葬礼等)	1	2	3	4	5
与他/她的团队成员商讨工作事宜	1	2	3	4	5
无论任何时候他/她的团队成员需要工作以外的帮助时,尽他/她的最大努力找 到合适的方法来帮助团队成员(例如:安排住宿,代付孩子的学费)	1	2	3	4	5
在团队中,他/她像年长的家庭成员(父亲/母亲,年长的哥哥/姐姐)	1	2	3	4	5
我的团队领导	强烈反对	反对	中立	同意	非常同意
期待他/她的团队成员能够用忠诚来回报他/她对他们的关心与爱护	1	2	3	4	5
就像家庭中的长辈一样给他/她的团队成员在不同的事情上给予帮助。	1	2	3	4	5
当他们表现不佳时,给予他/她团队成员一个机会彰显自我	1	2	3	4	5
无需征得团队成员的的同意即可代表他们作出决定	1	2	3	4	5
	1	2	3	4	5
相信他/她是唯一知道他/她的团队成员最需要什么的人	1	85.5	257	177	200

我的团队领导	反对	有点反对	中立	有点同意	同意
是团队成员的一个好榜样	1	2	3	4	5
与团队成员有着很多共同的愿景	1	2	3	4	5
代表着团队的风格	1	2	3	4	5
和我的团队成员有很多相似之处	1	2	3	4	5
记得每个团队成员	1	2	3	4	5

## 第二部分:对你自己工作的认识

说明

请评估你团队的创新能力,并用圆圈圈出最合适的号码

项目	强烈反对	反对	中立	同意	非常同意
我的团队勇于追求创新	1	2	3	4	5
我的团队乐于创新	1	2	3	4	5
我的团队是开放的、能适应变化的	1	2	3	4	5
我们一直寻找看待问题的全新视野	1	2	3	4	5
在我的团队,我们花时间来启发新思路	1;	2	3	4	5
为了寻找、应用新方法,团队成员间相互合作	1	2	3	4	5
团队成员提供并且分享资源以帮助新思路的应用	1	2	3	4	5
团队成员为新的想法及其运用提供实际支持	1	2	3	4	5
在团队里,我们共同分享信息而不是自己享用	1	2	3	4	5

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Name:	
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我们有着共识"我们是个团队"。	1	2	3	4	5
我们相互影响着	1	2	3	4	5
在团队中,有困难我们相互告知。	1	2	3	4	5
成员能够相互理解和彼此接受	1	2	3	4	5
每个人的观点都会被聆听,哪怕只是少数人的	1	2	3	4	5
整个团队都真心分享信息	1	2	3	4	5
我们付出了很多,也收获了很多。	1	2	3	4	5

我们的团队	强烈 反对	反对	有点 反对	中立	有点 同意	同意	非常同意
坚信自己	1	2	3	4	5	6	7
坚信能获得累累硕果	1	2	3	4	5	6	7
当工作遇到困难时,能够努力进取	1	2	3	4	5	6	7
坚信我们的工作非常有意义	1	2	3	4	5	6	7
发现我们试图做的是很有意义的	1	2	3	4	5	6	7
感觉团队任务是非常有价值的	1	2	3	4	5	6	7
感觉好像能选择不同的方法来做这项工作	1	2	3	4	5	6	7
坚信团队能够决定工作的完成方式	1	2	3	4	5	6	7
能在没有管理层领导下做出自己的选择	1	2	3	4	5	6	7
我们的团队	强烈 反对	反对	有点 反对	中立	有点 同意	同意	非常同意
感觉团队在这个公司有着积极的影响	1	2	3	4	5	6	7
坚信团队的表现对公司非常重要	1	2	3	4	5	6	7
在这个组织中团队是与众不同的	1	2	3	4	5	6	7

项目	强烈反对	反对	中立	同意	非常同意
当有人批评我的领导时,会感到耻辱	1	2	3	4	5
我非常关心别人对我的领导的看法	1	2	3	4	5
当我讨论我的领导时,我经常说"我们"而不是"他"或者"她"	1	2	3	4	5
我的领导的成功就是我的成功	1	2	3	4	5
当有人表扬我的领导时,会感到很高兴	1	2	3	4	5
如果有媒体批评我的领导,我将会感到很窘迫	1	2	3	4	5

项目	强烈 反对	反对	有点 反对	中立	有点 同意	同意	非常同意
我的工作对我非常重要	1	2	3	4	5	6	7
我的工作行为对我个人来说非常有意义	1.	2	3	4	5	6	7

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Name:	
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我的工作对我非常有意义	1	2	3	4	5	6	7
我相信我的能力能做好我的工作	1	2	3	4	5	6	7
我对我完成工作的能力非常自信	1	2	3	4	5	6	7
我对我的工作能熟练掌握	1	2	3	4	5	6	7
我有重大的自主权来决定如何做我的工作	1	2	3	4	5	6	7
我能决定自己如何去做好我的工作	1	2	3	4	5	6	7
对于我如何完成工作,我有很大的空间和自由	1	2	3	4	5	6	7
我在部门的影响非常大	1.	2	3	4	5	6	7
在我的部门发生的事情,我能很好的处理	1	2	3	4	5	6	7
我对我部门发生的事情有重大影响	1	2	3	4	5	6	7

项目	强烈 反对	反对	有点 反对	中立	有点 同意	同意	非常同意
我感觉我擅长于创新	1	2	3	4	5	6	7
我坚信我的能力能创造性的解决问题	1	2	3	4	5	6	7
我有推进别人进行创新的才能	1	2	3	4	5	6	7
我擅长于找出新的方法来解决问题	1	2	3	4	5	6	7

項目	强烈 反对	反对	有点 反对	中立	有点 同意	同意	非常同意
我总是寻找更好的方法来做事	1	2	3	4	5	6	7
如果我坚定我的想法,任何障碍都阻止不了我。	1	2	3	4	5	6	7
没有任何事比看见我的想法得到实现更高兴	1	2	3	4	5	6	7
不管发生什么事,只要我确定某件事,我就会不遗余力的去做	1	2	3	4	5	6	7
无论我在哪里,我都是变革的强大动力	1	2	3	4	5	6	7
父母和子女尽可能的生活在一起	1	2	3	4	5	6	7
照顾我的家庭是我的职责,即使有时需要放弃我想要的	1	2	3	4	5	6	7
无论牺牲什么,家人必须在一起	1	2	3	4	5	6	7
重要的是,我尊重我团队做出的决定	1	2	3	4	5	6	7

第三部分: 个人信息

Name:
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你的个人信息				
性别:	在这个机构中工作了多少年?       正式教育         中学       中专         在这个机构中的职务(请选择一项)       中专         以行官(or董事))       技校         公理(or部门领导)       学士         生产线管理人员       硕士         职员       博士			
您的职能 (请选择一项)	你的部门属于哪一类?			
□ 生产/操作(包括质量控制/保险)	□ 农业、水产业、种植业 银行、非银行机构、保险业			
□ 研发	建材业			
□ 会计和金融	建造及与其相关的服务			
□ 人力资源	□ 食物和饮料 □ 综合媒体			
□ 市场和销售	制造业			
□ 总务(包括法律、内部审计)	□ 采矿&能源			
□ 公司法人(包括:公众关系)	制药			
□ 其他(请列举)	□ 重型设备供应商 □ 电信			
	□ 贸易&物流			
	□ 其他(请列举)			

谢谢您的参与!

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Name:		

#### Appendix 5a.

### LETTER OF APPROVAL FROM THE STANDING COMMITTEE ON ETHICS IN RESEARCH INVOLVING HUMANS (SCERH)



Standing Committee on Ethics in Research Involving Humans (SCERH) Research Office

#### **Human Ethics Certificate of Approval**

Date: 15 January 2009

Project Number: CF08/3331 - 2008001648

Project Title: A multilevel study of linkages between leadership styles and team

performance and innovation

Chief Investigator: Dr Sen Sendiava

Approved: From: 15 January 2009 to 15 January 2014

#### Terms of approval

- The Chief investigator is responsible for ensuring that permission letters are obtained and a copy forwarded to SCERH before any data collection can occur at the specified organisation. Failure to provide permission letters to SCERH before data collection commences is in breach of the National Statement on Ethical Conduct in Human Research and the Australian Code for the Responsible Conduct of Research.
- Approval is only valid whilst you hold a position at Monash University. It is the responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval and to ensure the project is conducted as approved by SCERH.
- You should notify SCERH immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.
- The Explanatory Statement must be on Monash University letterhead and the Monash University complaints clause must contain your project number
- Amendments to the approved project (including changes in personnel): Requires the submission of a Request for Amendment form to SCERH and must not begin without written approval from SCERH. Substantial variations may require a new application.
- Future correspondence: Please quote the project number and project title above in any further correspondence.
- Annual reports: Continued approval of this project is dependent on the submission of an Annual Report. This is determined by the date of your letter of approval.
- Final report: A Final Report should be provided at the conclusion of the project. SCERH should be notified if the project is discontinued before the expected date of completion.
- 10. Monitoring: Projects may be subject to an audit or any other form of monitoring by SCERH at any time
- Retention and storage of data: The Chief Investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.

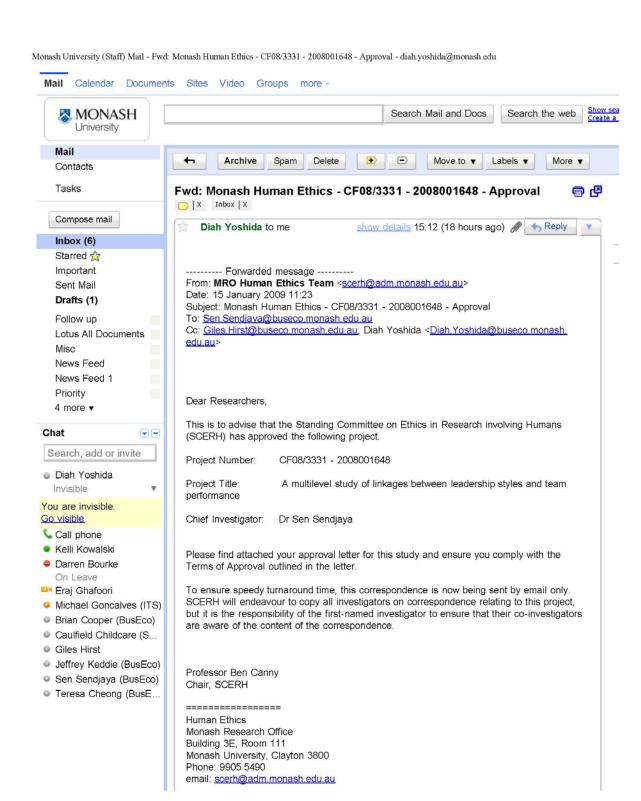
Professor Ben Canny Chair, SCERH

Ben Carry

Cc: Dr Giles Hirst; Ms Diah Yoshida

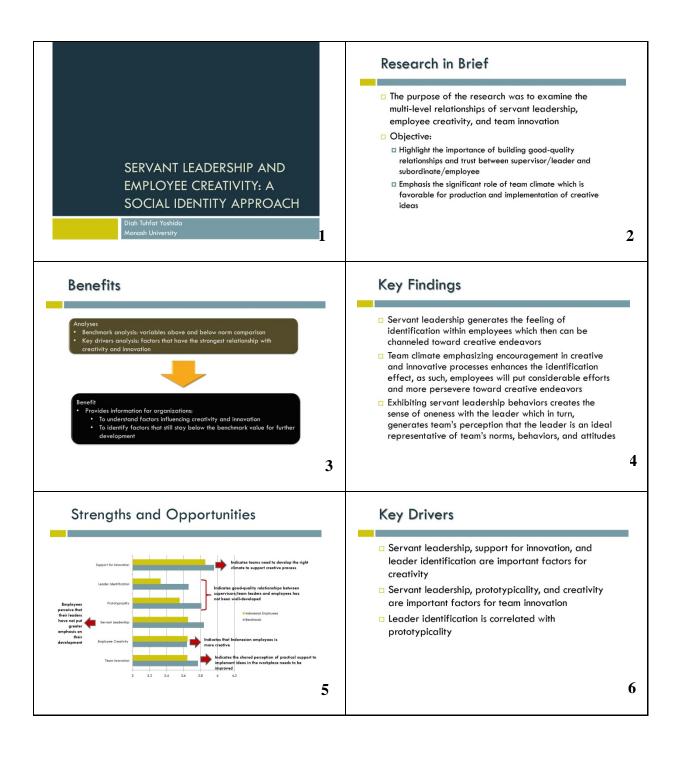
#### Appendix 5b.

# APPROVAL (COPY) FROM THE STANDING COMMITTEE ON ETHICS IN RESEARCH INVOLVING HUMANS (SCERH)



#### Appendix 6.

#### RECOMMENDATION FOR THE INDONESIAN PARTICIPANTS



#### Description of Key Drivers - 1

- Benchmark refers to values averaged from the participants
- Servant leadership:
  - Emphasis followers development as well as willingness to self-sacrifice for the greater good
     Service to the community

  - □ Promoting fairness in work context
  - Endorse ethical principles
- □ Providing guidance and direction to follow
- Support for innovation is shared perceptions amongst team members about practical support of attempts to introduce new and improved ways of doing things in the work environment

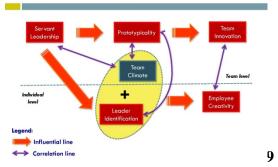
#### Description of Key Drivers - 2

- $\hfill \Box$  Leader identification reflects followers' perception that they share similar values and common goals with their leaders
- □ Prototypicality refers to the extent to which the team leader represents shared identity of his or her team
- □ Creativity is the production of novel and potentially useful ideas by the employees
- □ Innovation is the combination of the quality and quantity of novel and useful ideas that are developed and implemented

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#### Key Driver Analysis



Summary

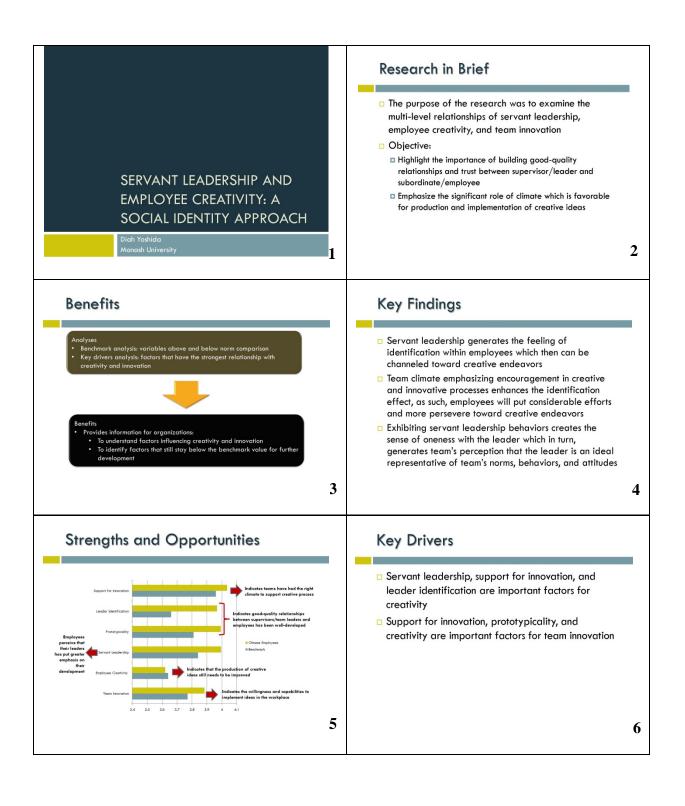
eir creativity can be improved by considering the following factors.

- It is important to build respectable relationships betw and members at the individual level and team level
- Respectable relationship is the result of exhibiting servant dership where leaders put a great emphasis on both individuals and team development
- 3. It is also important to develop a shared perception amongst team embers that the practical support for producing and implementing creative ideas are present and accessible for all

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#### Appendix 7.

#### RECOMMENDATION FOR THE CHINESE PARTICIPANTS



### Description of Key Drivers - 1

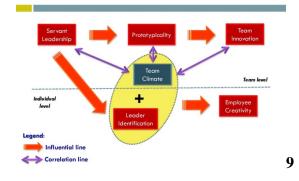
- Benchmark refers to values averaged from the participants
- Servant leadership:
  - Emphasise followers development as well as willingness to selfsacrifice for the greater good
  - □ Service to the community
  - □ Promoting fairness in work context
  - Endorse ethical principles
  - □ Providing guidance and direction to follow
- Support for innovation is shared perceptions amongst team members about practical support of attempts to introduce new and improved ways of doing things in the work environment

### Description of Key Drivers - 2

- Leader identification reflects followers' perception that they share similar values and common goals with their leaders
- Prototypicality refers to the extent to which the team leader represents shared identity of his or her team
- Creativity is the production of novel and potentially useful ideas by the employees
- Innovation is the combination of the quality and quantity of novel and useful ideas that are developed and implemented

7

#### Key Driver Analysis



#### Summary

This slides show the key findings for the current research:

- Overall, Chinese employees perform above the benchmark in terms of innovation.
- It is important to build respectable relationships between team
  leaders and team members.
- Respectable relationships are the result of exhibiting servant leadership where the leaders put a great emphasis on team members development
- 4. Chinese employees need more encouragement in producing

**10** 

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