The Effect of Psychological Collectivism on Creative Work Involvement: The Role of Prosocial Motivation and Leadership Style
Abstract

Collectivism is a common concept in the cultural study, which is used to describe a community whose motivation and emphasis are strongly tied to collective perspective. Considering previous research's suggestions on another level of analysis of collectivism, and limitations of the cultural-based view of collectivism in studying organizational behaviors, this thesis examined collectivism at the individual level as a personality trait, termed psychological collectivism. Prior research investigated several outcomes of psychological collectivism. Out of them, creative work involvement has been neglected. Given the importance of innovation processes, in which creative engagement is essential, in the current knowledge-based economy, and advantages of the collective attitude in facilitating group-based project works, the relationship between psychological collectivism and creative work involvement should be explored. This thesis objective is to study (1) the effect of psychological collectivism on creative work involvement, (2) the mediating role of prosocial motivation in this relationship, and (3) the moderating effect of three different leadership styles (i.e. transformational leadership, transactional leadership, laissez-faire) on the psychological collectivism-creative work involvement relationship.

To address these objectives, this thesis utilized a quantitative approach. A sample of 167 organizational members working in different organizations was studied. The data were collected by the online web-based questionnaire, and all the variables were measured at the same point of time. After that, Structural Equation Modeling (SEM) method is used to analyze the data. The results indicated that psychological collectivism is positively related to creative work involvement; prosocial motivation partially mediates this relationship; transactional leadership marginally weakens the psychological collectivism-creative work involvement relationship; whereas, transformational leadership and laissez-faire show no significant moderating effect. The research findings suggested that employees who have a stronger orientation to work in groups will devote more time and effort to creative processes associated with work, and one of the mechanisms explained this motive is through employee’s motivation to help others. Also, leaders who strongly emphasize on results, and use rewards as motivators for employees’ job accomplishment may undermine their willingness to carry out creative activities. These make several implications for management practices such as a proper human resource allocation for innovation projects, customized training programs, and suitable leadership behaviors to different groups of employees.

Keywords: psychological collectivism, creative work involvement, prosocial motivation, transformational leadership, transactional leadership, laissez-faire
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# TABLE OF CONTENTS

1. **Introduction** .................................................................................................................. 1  
   1.1. Background of the study .......................................................................................... 1  
   1.2. Research objective and research question ............................................................ 4  

2. **Theoretical Background and Hypotheses Development** .............................................. 6  
   2.1. **Theoretical Background** ....................................................................................... 6  
      2.1.1. Psychological collectivism ................................................................................. 6  
      2.1.2. Creative work involvement ............................................................................. 11  
      2.1.3. Prosocial motivation ....................................................................................... 12  
      2.1.4. Leadership styles .............................................................................................. 15  
   2.2. **Hypotheses Development** .................................................................................... 18  
      2.2.1. Psychological collectivism and creative work involvement ............................... 18  
      2.2.2. Psychological collectivism, prosocial motivation and creative work involvement ....... 22  
      2.2.3. Moderating role of leadership ....................................................................... 26  

3. **Methodology** .................................................................................................................. 32  
   3.1. Rationale for the method ......................................................................................... 33  
   3.2. Setting, subjects and procedure ............................................................................. 33  
   3.3. Measures ................................................................................................................. 35  

4. **Data analysis and Results** ............................................................................................ 40  
   4.1. CFA measurement model ...................................................................................... 42  
   4.2. Structural model ..................................................................................................... 45  

5. **Discussion** .................................................................................................................... 48  

6. **Conclusion** .................................................................................................................... 59  

APPENDIX .......................................................................................................................... 61  

REFERENCES ....................................................................................................................... 63
LISTS OF TABLES

Table 1: Mean, standard deviation and correlations for all the variables 41
Table 2: The Cronbach alpha, CR and AVE value of each construct 42
Table 3: Standardized loadings, CR and AVE of each construct 44
Table 4: The results of structural models 45

LISTS OF FIGURES

Figure 1: Key facets of the Psychological Collectivism construct 9
Figure 2: The research model 32
Figure 3: The moderating effect of transactional leadership on psychological collectivism-creative work involvement relationship 47
Figure 4: The hypothesized model with results 47
1. Introduction
1.1. Background of the study

In modern society, given the development of technology and the high level of job difficulty, the nature of work has changed significantly (Jackson et al., 2006). A collaborative attitude and teamwork skills become employee’s essential qualifications to perform tasks. Being a good teammate is a crucial criterion in performance assessment. Individuals should coordinate with other members and strive for group prosperity to be an effective teammate.

Collectivism plays an important role in predicting one’s ability to cooperate within a group (Wagner, 1995; Eby & Dobbins, 1997; Jackson et al., 2006). It describes individuals’ propensity to be motivated by group interests, and willing to devote their intellectual capability to group success (Triandis, 1995). Many researchers considered collectivism as an element of national culture and took Hofstede’s cultural score as the basis for their studies. Few examined collectivism as a personality trait to study the outcomes (Jackson et al, 2006). Collectivism at individual level is called allocentrism; nevertheless, to avoid confuses and lay the foundation for future research, Jackson et al. (2006) termed it as psychological collectivism.

This research would consider collectivism at individual level and explore the effects of psychological collectivism on organizational behaviors. This is warranted because (1) the concept of psychological collectivism is novel both in research and practice; there should be more studies on this topic to enrich the relevant knowledge; (2) collectivism could be constructed as a personality trait but not only as a national cultural dimension in lots of research, since in collectivist cultures, there is a large proportion of individuals showing their individualism preference (Jackson et al., 2006); and (3) psychological collectivism deserves an adequate attention in the relationship with employee behavior in work place as it reflects employee’s team spirit, which is of great importance in the contemporary business environment (Jackson et al., 2006).

Prior researches examine several outcomes of psychological collectivism (Wagner, 1995; Moorman & Blakely, 1995; Hui & Yee, 1999; Dyne et al., 2000; Jackson et al., 2006; Dierdorff et al., 2011; Turel & Connely, 2011; Love & Dustin, 2014). Out of them, creative work involvement – “the extent to which an employee engages his or her time and effort resources in creative processes associated with work” (Carmeli & Schaubroeck
2007, p.36) - has been neglected. It is necessary to fill in this research gap. Many researchers assembled the evidence that given the knowledge-based economy, which strongly relies on technology development, and the unpredictable market; innovation looms large on the horizon (Shalley & Gilson, 2004; Gilson et al., 2005; Atwater & Carmeli, 2009; Kark & Carmeli, 2009; Zhang & Barton, 2010; Grant & Berry, 2011). Employee’s engagement in the creative process is a prerequisite condition for an innovation to emerge and flourish (Kark & Carmeli, 2009). Being aware that psychological collectivism is one of creative work involvement’s predictors could be an advantage in facilitating organization’s innovation processes. Furthermore, the psychological collectivism – creative work involvement relationship is strongly relevant to the organizations where both orientation toward coordination and creative work are demanding. As mentioned, being a good group member plays a major part in the success of current work that is mostly group-based project. Strong team spirit has been an essential requirement in any workplace. It would be advantageous for organizations if this personality trait results in a behavior favorable for organizational development. Creative work involvement becomes the first choice as the criterion, taking into consideration the importance of this activity in the contemporary business environment and their potential relationship. Some researchers proposed that employee’s orientation toward group welfare and conformity to the norm pushed them to spend resources on creative ideas and solutions (Shin & Zhou, 2003; Ellemers et al., 2004; Adler & Chen, 2011). Taken together, it is worthwhile filling the research gap, and seeing how psychological collectivism influences employee engagement in the creative process at work. Studying this relationship helps not only enrich the literature, which conceptualizes psychological collectivism as a personality trait, but also generate important implications for management practices, such as a proper human resources allocation for innovation projects, customized training program and suitable management principles to different groups of employees and leaders.

Building on several theories and findings, such as social identity, psychological safety and task interdependence (Kazanjian et al., 2000; Kark & Carmeli, 2009; Adler & Chen, 2011), I predict that psychological collectivism encourages employees to participate in creative processes at work. Although some researchers placed a counter argument that collectivism leads to negative outcomes regarding creative activities (e.g. homogeneous mindset) (Triandis, 1995; Triandis & Suh, 2002; Goncalo & Staw, 2006), the positive effect of psychological collectivism on creative work involvement is more likely to occur given the
high frequency of group interaction and performance assessment strongly associated with group. The key mechanism by which this effect occurred should also be explored. This study takes prosocial motivation as a potential mediator of the relationship. Psychological collectivism may augment prosocial motivation - ‘the desire to expend effort to benefit other people’ (Grant, 2008, p.49). Prosocial motivation, in turn, is likely to enhance employee’s creative work involvement. Widely recognized, an individual personality can initiate a behavior mostly through their cognitive process, or motivational process (Ellemers et al., 2004; Adler & Chen, 2011). Therefore, it is with a great possibility that prosocial motivation will mediate the relationship between psychological collectivism and creative work involvement.

The debate of the linkage between psychological collectivism and creative work involvement implies that this relationship depends on context. Creative work involvement is a work-related phenomenon; thus, organizational attributes might have influences on this relationship. One of the remarkable elements that may interact with psychological collectivism to affect creative work involvement is leadership. This study will examine the moderating effect of different leadership styles on the psychological collectivism-creative work involvement relationship for several reasons.

First, leadership plays a vital role in influencing followers’ attitudes and behaviors (Smith et al. 1984; Tierney et al., 1999; Shin & Zhou, 2003; Atwater & Carmeli, 2009; Tost et al., 2013). Smith et al. (1984) proved that effective leadership helped improve organizational performance through reinforcing follower’s contributions. Tost et al. (2013), on the other hand, emphasized the negative impact of inappropriate leadership on team performance. Leadership with over-centralization of power will increase leaders’ domination in social interactions and decreases their intention of authority openness, resulted in diminishing effective communication among team members and team performance.

Second, leadership is a main contributor of organizational success. The necessity of effective leadership is widely recognized not only at top-level management but also in day-to-day activities (Kotter, 1988). Given the fierce competition, rapid development of technology and resource constraints, companies should adopt strategies to reduce costs, increase stakeholders’ value, and retain competitive advantages in the market. Leadership plays a critical role in this mission, since it has a significant effect on organization’s activities and performance.
Last but not least, leadership is anticipated to moderate the relationship between psychological collectivism and creative work involvement. Although it is more likely that collectivists will engage in the creative process at work; this relationship does depend on context. Collectivists are strongly influenced by the working environment, the nature of work and job requirements (whether they are group-specific or individual-specific) (Triandis, 1995; Eby & Dobbins, 1997; Kazanjian et al., 2000; Triandis and Suh, 2002; Ellemers et al., 2004; Kark & Carmeli, 2009). In some cases, collectivists prefer safe and usual ways to complete the tasks rather than try new ideas (Gagné & Deci, 2005; Carmeli & Schaubroeck, 2007; Chua et al., 2014). Leadership can affect this process by defining the context (e.g. they assign the tasks, guide employees, set the expectations, assess performance, provide rewards etc.). If leadership practices can induce collectivists’ effort on seeking new ideas and novel solutions, they will enhance the positive effect of psychological collectivism on creative work involvement. In contrast, some leadership behaviors may diminish collectivist’s willingness to unleash their creativity, resulted in weakening this relationship.

1.2. Research objective and research question

My research aimed to explicate the knowledge of psychological collectivism and recommend some implications for management and leadership practices. First, I introduce the concepts of psychological collectivism and creative work involvement, and some mechanisms attributable to the positive effect of group-orientation mindset on employees’ effort in the creative process. If the positive relationship between psychological collectivism and creative work involvement exists, human resource managers should take it into consideration when they design training programs and assign tasks to employees. Second, a central mechanism is zoomed in to specify the mediator of this relationship. Particularly, prosocial motivation was proposed to hold accountable for the relation between psychological collectivism and creative work involvement. Based on this influence, in practice, managers and leaders may identify methods, policies or incentives to boost up employees motivation so that it can uplift creative behaviors at work. Third, my research explores the moderating effects of different leadership styles on the focused relationship: how the way leaders influence others can interact with collectivism to encourage or discourage employees’ effort on the creative process at work.
To meet these objectives, three main research questions need answering:

1. What is the effect of psychological collectivism on creative work involvement?

2. What is the role of prosocial motivation in this relationship?

3. How do different leadership styles moderate the psychological collectivism - creative work involvement relationship?

To answer these research questions, a sample of 167 organizational members was studied. Those respondents worked in different organizations and industries. The data were collected by using online web-based questionnaire, and all the variables were measured at the same point of time.
2. Theoretical Background and Hypotheses Development

2.1. Theoretical Background

2.1.1. Psychological collectivism

Collectivism can occur at different levels. At cultural level, it was conceptualized as a cultural dimension to reflect the common values and beliefs of a society, community or nation. At individual level, it is perceived as a personality trait, which is distinct for each individual. In my study, the later approach is utilized. Previous literature of this concept at two levels will be presented.

Collectivism was first studied from cultural-difference-based view. It originated from Hofstede’s research. He conceptualized it as a cultural dimension to describe the level of cooperation or collateraterality in a society (Triandis et al., 1988; Dierdorff et al., 2011). Specifically, it is ‘a social pattern consisting of closely linked individuals’ whose perception, motivation, responsibility, priority and emphasis are tight to collective perspective (Triandis, 1995; p.2). In those cultures, people have a strong interdependence on their groups (family, tribe, nation etc.). They also appreciate intimate and long-lasting relationship, thus, those communities are quite stable (Triandis, 1995; Triandis & Suh, 2002). Most researchers followed this approach and used the dimension score from Hofstede’s research to study collectivism (Jackson et al., 2006). At the cultural level, they assume that individuals from the same culture will have similar sets of values and beliefs, and perform identical behaviors. All members in collectivist culture are predisposed to have similar attitudes and reactions toward the same situations.

However, there were some evidences proving that within-culture homogeneity in collectivism was not as large or systematic as often perceived; and another level of analysis on collectivism could be cultivated. Triandis & Suh (2002) found that only around 60% of individuals in a collectivist society represented collectivism, and approximately 60% of individuals in an individualist society were considered individualistic. This was resulted from immigrants, social and geographical mobility (Triandis et al., 1988); individual’s own beliefs and values; teamwork experiences; and needs for social approval (Eby & Dobbins; 1997). These factors affect individuals level of collectivism-individualism through cultural adjustment, leading to a single society with a mixed of collectivists and individualists. Moreover, Triandis et al. (1988) claimed that each element of collectivism receives a different level of emphasis in each society. For instance, Far East
culture emphasizes in-group harmony in which each member needs to make a great effort to reduce conflicts within group; whereas, Mediterranean and Latin America prioritize respect or dignity – members should be loyal and honorable. Despite of being labeled collectivists, those people’ perspectives and attitudes are diverse toward different aspects. Besides, not only a collectivist society may have both individualists and collectivists, individuals themselves could have both collective and individualistic mindset, depending on the matters they are referring to (Moorman & Blakely, 1995; Triandis & Suh, 2002).

All the previous arguments suggested studying collectivism as an individual-difference variable. Conceptualizing collectivism as a cultural dimension might cause invalid results for studies of organizational behaviors. With the individual-difference-based view of collectivism, researchers do not evaluate individual’s degree of collectivism based on their community’s culture, but rather by specific measurement items; and thus, make sure that each employee brings out a distinct outcome regarding collectivism. Indeed, it is more appropriate to construct collectivism at individual level in the research on individual personality and organizational behavior. Linking all these analysis with the thesis objective to study the effects of individual’s collective mindset within organizational contexts, this thesis examines collectivism at psychological level, which is distinct for each individual and constructed by different dimensions.

At psychological level, collectivism and individualism are termed allocentrism and idiocentrism, respectively. Allocentrics ‘believe, feel, and act very much like collectivists do around the world’ and idiocentrics ‘believe, feel and act the way individualists do around the world’ (Triandis, 1995; 5). Allocentrism emphasizes on social support, interdependence and group attachment; whereas, idiocentrism correlates with self-reliance, achievement preference and perceived loneliness. Idiocentrism and allocentrism are orthogonal. They should be conceptualized as two distinct constructs rather than opposite ends of a single continuum, as an individual can be high or low on both allocentrism and idiocentrism (Triandis & Suh, 2002; Hui et al., 2003). This study focuses on allocentrism only.

Allocentrics take social entities as reference for their values and behaviors (Wagner, 1995; Hui & Yee, 1999; Triandis & Suh, 2002). They are willing to think from the perspective of groups, construct life and evaluate situations in alignment with their community’s expectations. As a result, the situations that demand allocentrism are resource
interdependence, favorable outcomes only existing in groups, and individual’s self-interest and obligations attached to their group work (Triandis et al., 1995).

Jackson et al. (2006) labeled allocentrism as psychological collectivism because it was used in several studies and less confusing. Psychological collectivism is collectivism at individual level, considered as a personality trait rather than a cultural dimension. Accordingly, individuals with a high level of psychological collectivism commit to groups by seeing themselves as a part of them, conforming to the norm and shared beliefs, prioritizing the goals and interest of groups, and valuing the collaboration within groups. This laid the foundation for a comprehensive construct and reliable measurement of collectivism at individual level developed by these researchers afterward (Hui & Yee, 1999; Love & Dustin, 2014).

In Jackson et al.’s (2006) article, based on the previous literature of psychological collectivism, the authors categorized them into three families: the Triandis, Earley and Wagner. One common issue in those studies was that the measurement of collectivism had the problem of reliability and content validity, leading to the inconsistency of results. Taking the initiative, Jackson et al. (2006) aimed to build a more comprehensive construct of psychological collectivism with a higher reliability and validity. They proposed five facets of psychological collectivism: preference, reliance, concern, norm acceptance and goal priority, which are indicated briefly in the figure below:
Consistent with those ideas, they collected the data from 241 full-time employees of a multinational consulting firm and tested the measure. The results showed that the data fit the constructed model well with high reliability (α=0.84 for the whole scale, and α=0.86; α= 0.81; α=0.90; α=0.90 and α=0.87 for each dimension respectively). After that, they used this set of measurement to examine some causal relationships; and the models demonstrated a high validity. Later researchers recognized these contributions of Jackson et al. (2006) and took their study as a key reference of individual-difference-based approach of collectivism. This study takes it as the framework as well.

Psychological collectivism has many effects on individuals as well as on their entity. From the perspective of individuals with a high level of psychological collectivism, their relationships with in-group members are intensive and interdependent. They consider group members as "friends," and perceived this relationship as a life-long intimate with many obligations (Wagner, 1995). As a result, they will have a better performance when working in groups than those with individualistic orientation (Eby & Dobbins, 1997). Moreover, collectivists have a strong propensity to take advices from relatives or supervisors who are closely related to them (Shin & Zhou, 2003; Carmeli & Schaubroeck, 2007). This helps foster the reliance and coordination within groups. They are also motivated to boost other members’ performance, help them (Moorman & Blakely, 1995) and have a low level of social loafing – the situation when members do less than their actual capability in case of no observation (Wagner, 1995). Indeed, the groups with a
higher proportion of collectivists achieved higher productivity thanks to the higher level of cooperation within groups and of perceived self-efficacy (Eby & Dobbins, 1997).

Psychological collectivism is a novel concept emerged in recent years; thus, there have been a small number of empirical findings regarding the effect of psychological collectivism on organizational behaviors. Previous studies examined the direct relationship between psychological collectivism and job factors, such as citizenship behavior (Moorman & Blakely, 1995; Dyne et al., 2000; Jackson et al., 2006), counterproductive behavior, withdrawal behavior, task performance (Jackson et al., 2006), employee propensity to take charge (Love & Dustin, 2014), e-collaboration tool using (Turel & Connely, 2011), job satisfaction (Hui & Yee, 1999), coordination in group (Wagner, 1995) and team performance (Dierdorff et al., 2011). Some studied psychological collectivism as the moderator of several relationships: participative decision-making and employee performance (Lam et al., 2002); supervisor-subordinate personality similarity and employee performance in service offerings (Hui et al., 2003).

Generally, in those researches, the effect of psychological collectivism is positive. This trait encourages favorable outcomes for groups, enhances members’ sense of responsibility, and disassociates individual with negative behaviors such as withdrawal or counterproductive. In the moderating role, psychological collectivism strengthens the positive relationships, leading to better results.

In terms of the effect on individuals, since members with a higher level of psychological collectivism appreciate group’s support and harmony, they feel less stressful and face less internal competition, which ultimately lead to social ill mitigation and psychological enhancement in dealing with unexpected life events (Triandis et al., 1988).

On the other hand, psychological collectivism caused several drawbacks. Collectivists are more likely to have low self-esteem and feel unhappy as they seriously care about group members’ opinions on themselves rather than their own needs and wants (Hui et al., 2003; Love & Dustin, 2014). Corruption also happens as a consequence of gift-exchange norm; and in case of wrong policies of government or incompetent leaders, strong reliance on group members leads to low economic development and group deficiency. Another disadvantage of psychological collectivism associates with the consensus and homogeneity mindset. Individuals with a high level of collectivism easily compromise to maintain the group harmony, and have a strong belief in the power of members’ similarity. This, in
some cases, reduces the diversity of ideas. Moreover, psychological collectivism may inhibit individuals’ motivation to widen their relationships and networks because those people appreciate in-group relationships rather than out-group ones. (Triandis et al., 1988; Wagner, 1995).

### 2.1.2. Creative work involvement

Creativity is a complex concept. Researchers defined creativity from different approaches: a process, product, or personality trait (Carmeli & Schaubroeck, 2007). Under the product approach, creativity was conceptualized based on the end products. An activity, product, or idea is considered creative if it is disruptive and innovative. However, in fact, many activities are creative in nature despite they are merely useful ideas for daily work improvement, and have similar characteristics with the new solutions (Carmeli & Schaubroeck, 2007). To address this concern, Amabile (1988, p.126) defined creativity as “the production of novel and useful ideas by an individual or small group of individuals working together”. This definition is comprehensive, used in a lot of reliable research (Tierney et al., 1999; Carmeli & Schaubroeck, 2007; Kark & Carmeli, 2009) and lays the foundation for creative work involvement definition in this study.

Creative work involvement refers to “the extent to which an employee engages his or her time and effort resources in creative processes associated with work” (Carmeli & Schaubroeck 2007, p.36). This behavior is crucial to facilitate the innovation process, and help organizations cope with the changing business environment, which requires a high level of responsiveness (Kark & Carmeli, 2009).

Creative work involvement is a good predictor of creativity at work (Kark & Carmeli, 2009). When individuals have a strong engagement in the creativity process, it is more likely for them to produce creative ideas. Although a high level of creative work involvement does not always result in creative outcomes, it reflects individuals’ effort to find new ideas, and propensity to accept new things rather than stick to business-as-usual.

Both situational factors and personal factors can affect creativity (Shin & Zhou, 2003). In terms of personal factors, Tierney et al. (1999) verified the positive effects of individual intrinsic motivation and cognitive style on creativity. Further, perceived normative expectations (individual’s perception of expectations from leaders, supervisors or organization) and normative reference group (action that takes creative behaviors of other members within group as their standards) increase individual’s self-expectation for
creativity; ultimately, positively affect employee’s creative work involvement (Carmeli & Schaubroeck, 2007). Moreover, Kark & Carmeli (2009) examined the relationship between psychological safety and vitality on creative work involvement. The results indicated that individuals who are psychologically safe dare to take risks and new challenges without fears of negative consequences, hence, they are more willing to contribute to creative processes. The feeling of vitality at work also pushes them to carry out creative activities.

In terms of situational factors, some researchers focused on the influence of leadership on creative work involvement. In particular, leader-member exchange promotes employee’s creativity at work. This positive effect is strengthened when employees have cognitive styles favorable for creativity, and leaders and followers have a similarity in the level of intrinsic motivation (Tierney et al., 1999). For example, interacting with followers’ feelings of energy, leader-member exchange has a stronger positive relationship with employee’s creative work involvement (Atwater & Carmeli, 2009). Transformational leadership is also positively related to creativity in the workplace. Followers’ intrinsic motivation enhances this relationship; whereas, conservation, known as the appreciation of expectation, order, and hierarchy in interrelationship, plays a role as an enhancer when it is high and as a neutralizer when it is low (Shin & Zhou, 2003). In addition, creative team environment was proved to stimulate individual’s engagement in the creative process at work (Gilson & Shalley, 2004; Gilson et al., 2005). In this environment, employees receive clear instructions, and requirements for creativity. They are expected to interact with other members to share their opinions. This cross-fertilization of ideas facilitates creative activities; consequently, helps foster employees’ willingness to seek novel solutions at work. Furthermore, task design is an antecedent of creative work involvement (Gilson & Shalley, 2004). Jobs requiring complexity or variety of skills and knowledge will drive individuals to find effective ways of working.

2.1.3. Prosocial motivation

Prosocial motivation is defined as the ‘individual’s desire to expend effort to benefit other people’ (Grant 2008, p.49). It can be conceptualized as a personality trait or a psychological state. In terms of personality trait, prosocial motivation is reflected in Agreeableness trait, which is sympathetic, generous, forgiving and helpful (Penne et al., 2005; Graziano et al., 2007) or in the concern for the needs of others (Meglio & Korsgaard, 2004; De Dreu, 2006). In terms of psychological state, prosocial motivation is
associated with the intention to protect and promote the interests of other people when they need help (Grant, 2007, 2008). In a nutshell, prosocial motivation, which is different from self-interest or self-concern, is the orientation toward concerning the welfare of others, and making a positive impact on others. Prosocially motivated individuals take meaning and purpose, but not enjoyment and pleasure, as their drivers of effort (Grant, 2008).

Individuals with a high level of prosocial motivation exert their effort based on their desire to benefit others (Grant, 2008). The decision to expend their effort is less autonomous. Individuals do not feel naturally drawn toward completing their work, but rather the goals of avoiding guilt and protecting their self-esteem push them to complete the tasks. Furthermore, prosocially motivated individuals are outcome-focused. They do not perceive the work as a process that has a beginning and an end itself; instead, they see the work as a mean to achieve their final goal, which is to benefit others (Grant, 2008). Such individuals are also future-focused. They seek to achieve the meaningful outcomes upon task accomplishment (Grant, 2007, 2008).

As an illustration, a university professor delivers the lectures to students. If the teacher is prosocially motivated, his/her driver of effort will be the students’ learning through education. They feel fulfilled when the students acquire knowledge from their lectures. The teacher is not motivated by the enjoyment of lecturing itself but rather by the learning outcomes of student (Grant, 2008).

Prosocial motivation has several main antecedents. According to De Dreu (2006), individual’s orientation to help others depends on the personality and the context. Individuals who are more willing to accept advices or requests to be helpful from others are more likely to understand others’ feelings and act for others’ benefits (Meglino & Korsgaard, 2004). Moreover, prior research indicated that individual’s personality trait also affects his/her level of prosocial motivation (Meglino & Korsgaard, 2004). If individuals value empathy, altruism and social responsibility, they will have a strong concern for the welfare of others. Resilient children were more likely to adopt prosocial behaviors (e.g. volunteers) because they are motivated by the values of helping others (Penner et al., 2005). Agreeableness and other traits associated with agreeableness also correlate with prosocial motivation.

Besides, relational job design positively affects prosocial motivation (Grant, 2007). The relational architecture of jobs is defined as the ‘structural properties of work that shape
employees’ opportunities to connect and interact with other people’ (Grant 2007, p. 396). It enables individuals to perceive their impact on others, thus engage them in making distinct and volitional contributions to others’ lives. When jobs provide opportunities for contacting to and influencing others’ life, individuals pay more attentions to other people and care about those people’s welfare. Variation in the level of individualism-collectivism also leads to the difference in prosocial motivation (Meglino & Korsgaard, 2004). Collectivists show a higher propensity toward helping others.

Prosocial motivation is positively associated with organizational citizenship behavior – the voluntary behavior that is not enforceable and specified in employment contracts or any organization’s official document (Penner et al., 2005). When individuals are motivated by the needs of others, they are willing to help them although this behavior is not compulsory or formally recognized by reward systems. Penner et al. (2005) also stated that prosocial motivation strengthens the coordination within the group. Individuals with a strong sense of interpersonal helping engage in common goals and coordination. Furthermore, according to De Dreu (2006), prosocial motivation moderates the relationship between social identification and work motivation. Individuals base part of their identity on their group’s characteristics. This identity enhances their work motivation and commitment.

Prosocial motivation also affects individuals themselves. It brings them the feelings of competency and self-determination, ultimately, induces their sense of distinction (Grant, 2007). Individual’s psychological needs for autonomy and connectedness are also fulfilled thanks to their active orientation to help others (Grant, 2008). Besides, prosocial motivation has an influence on individual’s rationality (Meglino & Korsgaard, 2004). Persons with a low level of prosocial motivation take their interests, beliefs and values as the reference for their behaviors. They critically analyze the consequences of their actions in relation with their well-beings, which is more involved in the rational cognitive process. On the other hand, persons who have a high level of other-orientation will less likely to take actions or absorb the information that serve their self-interest but rather the welfare of others (Meglino & Korsgaard, 2004). They predispose to accept the information consistent with the collective’s interests.
2.1.4. Leadership styles

Northouse (2004, p.3) defines leadership as “a process whereby an individual influences a group of individuals to achieve a common goal”. There are numerous leadership styles a leader could use to direct the employee’s behaviors.

This study applies the leadership model of transformational, transactional and laissez-faire, which includes seven different factors along a single leadership continuum (Northouse, 2006 quoted in Bass, 1985). First, this model is comprehensive. It not only includes the two main dimensions of leadership (relationship and task focus) as the classic models did, but also adds some important elements such as visionary and charisma. It also comprises of an ineffective factor of leadership (laissez-faire) in addition to effective ones (idealized influence, inspirational motivation etc.), which helps provide the results regarding the negative impact (besides the positive impact) of leadership style on individual behaviors. Second, this model introduces transformational leadership – the leadership style was commonly believed to generate positive outcomes for organizations, especially in the unpredictable and turbulent business environment and in the context when trust is extensively required (Bass, 1999). Third, those leadership styles are widely studied, which would be an advantage in forming a solid theoretical background for this research.

Transformational leadership

Transformational leadership is a process in which leaders motivate followers to accomplish more than what is usually expected of them (Hater & Bass, 1988; Dvir et al., 2002; Kark & Sharmi, 2003; Northouse, 2006). It is involved with the long-term objectives, individual values, beliefs and ethics. Leaders are responsible to encourage followers, and enhance their well-being. Transformational leadership also aims at fostering autonomy and challenging works (Bass, 1999). Therefore, transformational leaders should possess charisma and visionary capability in addition to supportive and directive ability. To encompass all these characteristics, Northouse (2006, p.186) defined transformational leadership as “the process whereby an individual engages with others and creates a connection that raises the level of motivation and morality in both the leader and the followers”. Transformational leadership includes four main factors (Bryant, 2003; Bass et al., 2003; Eagly et al., 2003; Northouse, 2006).

Idealized Influence: leaders who exercise this leadership will act as a role model for followers to refer to (Bryant, 2003; Bass et al., 2003; Judge & Piccolo, 2004; Northouse,
They have a strong sense of morality and ethic. These leaders are highly respected and trusted by followers. Employees commit to the vision conveyed by these leaders and are willing to be their followers. Idealized influence comprised of two dimensions: attributional and behavioral (Eagly et al., 2003; Northouse, 2006). Attributional dimension refers to the attributions of leaders perceived by the followers that can help leaders earn their respect and pride; whereas, behavioral dimension is associated with the follower’s observations on leader’s behaviors such as communicating organizational values, missions and visions.

**Inspirational Motivation:** Leaders who have this factor can communicate high expectations to followers without demotivating or casting pressure on them (Bryant, 2003; Bass et al., 2003; Judge & Piccolo, 2004; Northouse, 2006). Instead, they inspire, talk optimistically about the future, and stimulate them to commit to the shared goals and vision. Their focus is team spirit building and follower’s willingness to reach the objectives.

**Intellectual Stimulation** describes leadership that encourages followers to challenge organization old pattern of thinking, be creative and innovative. Followers are expected to think outside the box and try new approaches to solve problems (Bass & Steidlmeier, 1999; Bass et al., 2003; Bryant, 2003; Northouse, 2006). It is also the degree to which leaders challenge assumptions, take risks and proactively ask for new ideas from followers (Judge & Piccolo, 2004).

**Individualized Consideration** in this model is similar to consideration dimension in the classic model of leadership. However, leaders having this factor should exert more effort to assist their followers in reaching their full potentials (Bryant, 2003; Bass et al., 2003; Judge & Piccolo, 2004; Northouse, 2006). Leaders support followers to make sure their needs are fulfilled. They also care about followers’ well-being and treat them in a unique way. Empowerment in some cases is utilized to help followers deal with challenges.

The most remarkable difference between transformational leadership and transactional leadership is the recognition of followers’ needs, and the attempt to help them reach their fullest potential. Its emphasis is on follower development both at present and in the future (Dvir et al., 2002). Transactional leaders, on the other hand, focus on fulfilling current needs of followers through a contractual agreement. Besides, transformational leaders engage followers in a shared vision, but transactional leaders motivate followers by rewards and promotions upon task accomplishment (Hater & Bass, 1988).
A lot of research confirmed the positive effect of transformational leadership on followers’ and organizations’ development. In particular, transformational leadership positively affects followers’ motivation and performance (Dvir et al., 2002); supervisory evaluations of managerial performance (Hater & Bass, 1988); unit performance (Howell & Avolio, 1993; Bass et al., 2003); followers’ creativity (Shin & Zhou, 2003; Pieterse et al., 2010); citizenship behaviour (Smith et al., 1983; Podsakoff et al., 1990), and organizational innovation (Jung et al., 2003; Gumusluoglu & Ilsev, 2009).

**Transactional leadership**

Transactional leadership does not emphasize on followers personal development but focuses on the exchange relationship between leaders and followers. Leaders provide followers rewards and other benefits upon work accomplishment but make criticisms or corrections in case of their bad performance. There are two factors of transactional leadership. (Bryant, 2003; Bass et al., 2003; Eagly et al., 2003; Judge & Piccolo, 2004; Northouse, 2006).

*Contingent reward*: Leaders use rewards to motivate followers to achieve the agreed-upon goals. This exchange relationship is described as follows: followers have to complete their work to get the benefits while leaders meet their objectives thanks to followers’ task accomplishment. Rewards represent the recognition of goal achievement. Followers are inspired and influenced by the interests they will get from leaders. In order to be effective, leaders using this style need to communicate clearly their objectives and payoffs to their followers.

*Management by exception*: Those leaders specify clear standards for compliance and factors resulted in ineffective performance. They will make corrections, criticisms and negative feedbacks to followers who do not meet the expectations. Leaders using active management-by-exception closely supervise followers in work performance and rule obedience. If followers make mistakes, they will immediately do corrective actions. On the other hand, leaders exercising passive management-by-exception intervene in the working process only after followers cannot meet the goals, and problems arise.

Transactional leadership is based on the exchange relationship between goals and rewards (i.e. tasks for rewards). As a consequence, individuals are not motivated to do extra work beyond what is stated in the contract, if this action will not generate any benefit for them.
(Bryant, 2003). This is a disadvantage of transactional leadership, especially in the environment where clear job descriptions and outcomes cannot be set.

According to previous studies, transactional leadership was found to have a positive impact on followers’ commitment and satisfaction (Bycio et al., 1995), followers’ performance (MacKenzie et al., 2001), citizenship behavior (Podsakoff et al., 1990; Walumbwa et al., 2008), and unit performance (Bass et al., 2003).

**Laissez-faire**

Laissez-faire is usually defined as hands-off leadership in which leaders hardly care about followers needs, do nothing to support them, delay in decision-making and give no feedback or rewards to followers. There is no exchange relationship, and no strong interaction between leaders and followers. Followers do things at their discretion as these leaders exercise an absolute empowerment. (Bass et al, 2003; Eagly et al., 2003; Judge & Piccolo, 2004; Northouse, 2006). Those leaders physically occupy the leadership position and have nominated power, but mostly escape the responsibilities and duties. Laissez-faire is not only a zero-leadership but also destructive leadership due to the avoidance of subordinates’ legitimate expectation (Eagly et al., 2003).

Laissez-faire leadership is negatively related to job satisfaction (Judge & Piccolo, 2004), and positively associated with role conflict, role ambiguity, conflicts with coworkers, and bullying at work (Eagly et al., 2003). The negative effects can be explained by the lack of leader’s presence, and low level of communication and interaction between leaders and followers. Teams do not have common goals, directions and guidance, resulted in workplace stressors for followers and highly conflict social climate.

### 2.2. Hypotheses Development

#### 2.2.1. Psychological collectivism and creative work involvement

According to the social identity theory, when individuals perceive themselves as a member of a group, they have the psychological attachment to this group. They refer to group’s norms and expectations to shape their values. Group identity strongly affects their motivational process and behaviors (Ellemers et al., 2004; Adler & Chen, 2011). Goals, needs, and outcomes of the groups become their drivers of effort. Group interest is more important than their immediate self-interest. As a result, they are motivated to do extra jobs to achieve collective goals, to strive for the whole group’s welfare rather than individual
rewards, and to commit to their group. Collectivists have the typical characteristics that the social identity theory describes. They perceive themselves as a part of groups, prefer to work in groups, prioritize group interests and conform to group norms (Dierdorff et al., 2011). Their work motivation is attached to their social identity. They are predisposed to act on their group’s behalf and invest time and resources on group works. Group interest rather than self-interest is prioritized; thus, they are more likely to think from the group perspective. In fact, collectivist’ conformity to the group norms of support helped foster collaboration within groups and incremental form of creativity (Adler & Chen, 2011). Therefore, it is with a great likelihood that individuals with the high level of psychological collectivism are willing to spend their resources to find new ideas and solve the problems that cause difficulties to other members when they perceive this action is not for their immediate self-interest, but rather for the sake of the whole identity.

In Kark & Carmeli’s (2009) research, psychological safety has a positive effect on creative work involvement. Psychological safety is defined as the ‘individuals’ perceptions of the consequences of taking interpersonal risks in their work environment’ (Kark & Carmeli 2009, p.787). Psychologically safe individuals do not fear of judgment and self-image or status destruction; hence, they feel comfortable to express themselves and engage in risky activities. Collectivists have a strong emotional attachment to the entity they belong to (Hui & Yee, 1999; Hui et al., 2003). The relationship among group members is quite intimate, and most actions of collectivists represent “we” rather than “I”. They have feelings of support and empathy from other members. Collectivists are likely to acquire psychological safety when working in groups. This state stimulates them to express opinions and take risks (Kark & Carmeli, 2009).

Kazanjian et al. (2000) also confirmed the advantages of group interaction effect in the creativity process. The levels of interdependence within groups could stimulate employee’s engagement in the creativity process. A cross-functional team represents the potential of integration and coordination to find solutions associated with creativity. Team members are able to develop a good understanding of capabilities as well as constraints of other functions, and incorporate that knowledge into their planning and designs. When they understand other function roles, capability, their importance to group performance, they know how to utilize those resources, support each other member, and think in a holistic term. As such, task interdependence has an effect on the individual level of motivation,
responsibility, and satisfaction. Ultimately, it stimulates interpersonal communication, resource exchange and flexibility to finish the works (Gilson & Shalley, 2004), which is a prerequisite for creative activities to occur. Moreover, team’s common goals and supportive climate encourage individuals to participate in the creative process and problem solving (Gilson & Shalley, 2004). When a mutual interest is defined and the environment is favorable for mutual development, team members have a positive attitude toward fulfilling their goals and supporting others, and hence, explore new ideas and novel solutions. Collectivists have strong interdependence within groups, strong motivation for the sake of whole groups, and strong recognition of common goals. They embrace all the characteristics that Gilson & Shalley (2004) mentioned to actively carry out creative activities. Thus, they are likely to get involved in the creative process at work.

It can be clearly seen from the above arguments that when collectivists work in groups, they are influenced by group interaction, which make them prioritize their group interest over their immediate self-interest. As a result, they are likely to explore new ideas, and willing to take part in the creative process. In other words, in case of strong group interdependence and positive environment preferable for cooperation and group performance assessment, the relationship between psychological collectivism and creative work involvement is expected to be positive.

On the other hand, there were some studies suggesting that individuals with the high level of collectivism would be less likely to involve in the creative process at work.

As mentioned in the previous parts, one disadvantage of psychological collectivism associates with the consensus and homogeneity mindset. Highly collective individuals prefer the similarity in the qualification among group members; everyone should contribute the same amount of effort and be equal in groups. They easily compromise to adhere to the standards of group coordination (Triandis, 1995). As a consequence, they stand within their comfort zone and have little propensity to take risks. They also strongly conform to the majority view, and do not develop new ideas during group discussions. Further, in brainstorming task, collectivist’s fear of negative judgments from others restrains their creativity capability. If the environment is not perceived as safe, they will refrain from expressing strange ideas and have a high sensitivity to rejection (Triandis & Suh, 2002). These contexts inhibit them from pursuing creativity, reduce the diversity of ideas, and limit the group ability to explore novel solutions (Goncalo & Staw, 2006).
Some researchers provided empirical findings on the collectivism and creativity relationship. Goncalo & Staw (2006) explained the less creative work of collectivists compared to individualists under specific instructions for creativity by proposing the concept of conformity. Collectivists value group traditions and follow strictly the rules, but individualists prioritize the uniqueness and personal development; hence, they generate more new ideas and novel solutions.

Similarly, Shin & Zhou (2003) examined the role of conservation in the relationship with creativity engagement. Conservation is ‘a value favoring propriety and harmony in interpersonal and person-to-group relations’ (Shin & Zhou 2003, p.705). Conservation comprises of three elements: tradition, conformity and security. ‘Tradition refers to commitment to, respect for, and acceptance of the custom and norms that a traditional culture prescribes. Conformity refers to the restraint of actions, inclinations, and impulse likely to upset or harm others and violate social expectations or norms. Security refers to the safety, harmony, and stability of society, relationships and self’ (Shin & Zhou 2003, p.705). Social order, hierarchy, others’ expectations and harmony of in-group relationships are critical values to individuals with the high level of conservation. In their society, they have their own status and prefer to set up clear roles for each position.

Collectivism in fact embraces the characteristics of conservation. Highly collective individuals value group harmony, stability, and conformity (Wagner, 1995). That means individuals with a high level of collectivism should have a high level of conservation as well. In Shin & Zhou’s (2003) study, conservation positively moderates the relationship between transformational leadership and creativity. Conservative employees try to meet their leader’ expectations, conform to the norms, concern group’s well-being, and respect the hierarchical relationships. Therefore, when conservation interacts with transformational leadership, which involves inspiring employees to be creative and prioritizing group interaction, they could boost the employee’s level of creativity. However, according to Goncalo & Staw (2006), collectivism negatively affects individual’s creativity. It can be inferred that the positive effect of either conservation or collectivism on creative work involvement is not likely to occur without the interaction effect of transformational leadership. Since in that situation, collectivists are more likely to sustain their own status, and prefer the group stability and homogeneity rather than spend their resources on idea exploration.
Based on the above arguments, in some specific contexts, collectivists are less likely to engage in the creative process at work, such as clear instructions for work accomplishment, collectivist’s strong perception for the immediate self-interest, negative working environment, or collectivist’s preference of group harmony and homogeneity. However, in other cases, when group interdependence is essential to solve problems, group performance is prioritized, a strong group interaction for mutual goals is required, and employees are stimulated to think outside the box, collectivists can disregard their personal interests to find new ideas and solve the problems (Wagner, 1995). Given the massive number of group works and the high frequency of group assessment (Jackson et al., 2006; Dierforff et al., 2011), together with the openness of creative ideas and encouragement of new perspectives in contemporary workplace (Gilson et al., 2005; Atwater & Carmeli, 2009; Zhang & Bartol, 2010; Grant & Berry, 2011), it is more likely that the group contexts are predominant; and collectivists will explore new ideas and solve problems at work.

Thus far, I proposed that:

*Hypothesis 1: Psychological collectivism has a positive effect on creative work involvement.*

### 2.2.2. Psychological collectivism, prosocial motivation and creative work involvement

Previous literature claimed that motivation plays an important role in shaping individual behaviors (Zhang & Bartol, 2010; Nauta et al., 2002; Ellemers et al., 2004; Polman & Emich, 2011; Grant & Berry, 2011; Adler & Chen, 2011). A personality can initiate a behavior mostly through the cognitive process, or the motivational process (Ellemers et al., 2004; Adler & Chen, 2011). For instance, satisfaction of psychological needs will be associated with a more effective performance because employees have a strong motivation toward fulfillment of those needs (Chua et al., 2014). Some researchers examined the cognitive process underlying employee’s behavioral choices to explain their work-related efforts. Motivational process was proved to be relevant to work-related behaviors (Ellermers et al., 2004). Work motivation stimulates individuals to invest their resources in task accomplishment, as they want to fulfill particular needs (Ellemers et al., 2004). For examples, motivation to avoid the feeling of guilt, shame and disapproval, and motivation to achieve the value-congruence affect employee’s creativity and coordinative behaviors (Adler & Chen, 2011). Also, intrinsically motivated employees show a strong interest in
the tasks and attempt to achieve self-satisfaction upon job accomplishment. Thus, intrinsic motivation is positively related to individual’s creativity (Shin & Zhou, 2003).

It is with a great likelihood that psychological collectivism enhances employee’s prosocial motivation, in turn, prosocial motivation encourages employees to engage in the creative process at work. One of the mechanisms explains the collectivist’s propensity to spend time, effort and resources on being creative at work might be their motivation to benefit others.

**Psychological collectivism and prosocial motivation**

Triandis (1995) stated that the emotion and cognition of collectivists are other-focused (like empathy). Collectivist’s motivation depends on the needs of others. They prefer the jobs that can generate benefits for their community. He also confirmed that “collectivists tend to emphasize effort as a determinant of performance”. Performance = Ability + Effort formulation (Triandis 1995, p. 73). Performance is assessed in terms of the group quality. They can reach targets if one member in groups is competent and others provide supports. A member’s work effort is always for the sake of the whole group; and, that effort expended stems from the needs to benefit other members.

According to Triandis (1995), collectivism is associated with the personality such as agreeable, pleasant, attractive and non-critical. Being selfish or self-centered is considered unacceptable to highly collective individuals. Helping behavior is also a mean to fulfill morality. They act according to others expectations. They try to keep peace in most situations while avoid negative behaviors, which cause damages to others. Collectivists are mindful about the consequences of their behaviors and take group members’ benefits into consideration when making decisions. Thus, they are less self-monitoring and autonomous.

Prosocial motivation refers to the desire to benefit others. Prosocially motivated individuals are less autonomous, responsible and empathy. The personality that reflects individual’s willingness to help others, such as Sympathy or Agreeableness, is an antecedent of prosocial motivation (Penner et al., 2005). As mentioned above, collectivism is associated with the traits like Agreeableness and Sympathy, and embraces the characteristics of group reliance, group concern, and group priority. Therefore, it is possible that collectivism and prosocial motivation intercorrelate. Batson et al.’s (2011) supported this argument. The ultimate goal of collectivists is to increase the welfare of the whole group rather than of an individual alone. Collectivists help others because they want
to avoid the feeling of guilt and shame. This is consistent with the nature of prosocial motivation; and hence, collectivism and prosocial motivation are closely linked.

Some empirical findings also suggested that collectivists demonstrated a greater motivation to benefit others (Meglino & Korsgaard, 2004). They are more likely to support other people, as social responsibility becomes a norm in their groups. They want to maintain a positive self-image, and fulfill personal needs through bringing the group welfare (Penner et al., 2005).

Taken together, a high degree of psychological collectivism is likely to induce a high level of prosocial motivation.

**Prosocial motivation and creative work involvement**

Zhang & Bartol (2010) stated that the degree of engagement in the creative process varies according to the individual’s level of attention to the problems. If solving problems is of great importance, individuals will fully engage their time, resources and effort in finding solutions. That means when the demand for the creative work is high, they will spark interest in cultivating new ideas. According to De Dreu (2006), prosocially motivated individuals base their work motivation on their group’s prosperity. The desire to benefit others pushes them to pay attention to others’ needs. As such, the possibility that they utilize their creativity to seek novel solutions is high.

Grant and Berry (2011) also validated this argument. Orientation to benefit others plays an important part in driving individuals to explore useful solutions. Those solutions are ideas beneficial to a wide range of people (i.e. colleagues, customers, and organization), not only individuals themselves. To adopt such solutions, prosocially motivated individuals have to consider the problems in a broader context and take into account different parties’ perspective. The motivation and demand for the usefulness of proposals lead them to focus on novel alternatives. Thus, they engage their curiosity in developing new ideas that bring fruitful results to the whole department.

Whereas, Polman & Emich (2011) justified that relationship based on the construal level theory. ‘People ascribe abstract variables (i.e. high-level construals) to both their future selves’ and others’ behaviors’ (p.493). When the psychological distance is high, which indicates the high-level construal, individuals have to think more critically and creatively to solve problems. As a result, people who carry out creative activities on behalf of others
generate more applicable ideas and solve more insightful problems than those whose target is their own interests. This hypothesis was empirically confirmed by studying 137 undergraduates. The findings showed that making decisions that benefit others is categorized as a high-construal level situation. It affects how individuals process information and level of resources they engage in the process. Thus, according to the construal level theory, prosocially motivated individuals might pay a great effort on novel solutions.

Nauta et al. (2002) provided another empirical evidence regarding the linkage between concern for others’ interests and problem-solving behavior. If individuals care about other department’s goals, they are more likely to involve in the negotiation process. To reach the objectives, individuals jointly exchange information, ask questions and explore effective alternatives in an active and creative way (Nauta et al., 2002). The more diverse employee’s background and perspective are, the more likely the novel ideas will be generated (Woodman et al., 1993). Also, when individuals value the good outcomes for all the parties, they have a stronger motive to seek win-win solutions. Such solutions require effort and creativity, and hence, they may spend extra time and resources on this process. In other words, prosocially motivated individuals, who value the goals of not only their apartment but also of the others, are willing to find the new ways to solve problems. The rationale behind this is their attempt to bring values for all parties and their interaction with others during the information exchange process, which helps foster their creative behaviors.

The role of common goal pursuit for prosocially motivated individuals in the creative process at work was also mentioned in Penner et al.’s (2005) research. These individuals respect the objectives that benefit everyone involved. They want to create values for others, thus, they have a strong orientation toward coordination. They exert efforts to solve problems causing difficulty for the whole group.

Drawing on the above research, it is likely that prosocial motivation has a positive relationship with creative work involvement. Individuals with a high level of prosocial motivation are willing to participate in exploring new ideas and solving problems associated with works because collective goals, group interest, and others’ needs are their motivators.
In brief, psychological collectivism is positively related to prosocial motivation – the individual’s desire to benefit others - because the emotion and cognition of collectivists are other-focused. Their work effort is primarily driven by others’ needs. In turn, prosocial motivation is expected to have a positive relationship with creative work involvement. When individual’s focus is others’ well-being, they are more likely to invest their resources in helping others, solving their problems, and reaching the collective goals. As previously recognized, motivational state significantly contributes to the process of personality and behavior. Based on the above justifications regarding the positive relationship between psychological collectivism and prosocial motivation, and between prosocial motivation and creative work involvement, it is possible that one mechanism that explains the positive effect of psychological collectivism on creative work involvement is through prosocial motivation. There might be other mechanisms underlying this relationship, however, this research examines only one. Thus, I predict that:

Hypothesis 2: Prosocial motivation partially mediates the relationship between psychological collectivism and creative work involvement.

2.2.3. Moderating role of leadership

The relationship between psychological collectivism and creative work involvement is expected to be positive, however, in some cases, a high level of psychological collectivism could lead to a low level of creative work involvement. The exact outcome depends on the working context (i.e.leadership style). As indicated in the previous sections, collectivists engage their creativity in works if they have a strong interaction with group members, the performance assessment is group-specific, and working environment is favorable for seeking new ideas. On the other hand, when they prioritize their immediate self-interest, collectivists restrain themselves from creative behaviors. Accordingly, the leadership styles, which foster group interdependence and innovation, will enhance the psychological collectivism-creative work involvement relationship. In contrast, leadership styles, which emphasize individual performance, might weaken this relationship.

Prior research suggested some circumstances when the interaction of leadership with other organizational elements is helpful for the creative work. This lays the foundation to predict the moderating effect of leadership style in this research.

First, based on Woodman et al.’s (1993) article, practices that restrain the evaluation of ideas being generated would stimulate members to find solutions from diverse
perspectives. Collectivists care about others’ opinions and are sensitive to judgments (Triandis, 1995). To engage collectivists in the creative process at work, leaders should set the norms fostering diversity and diminishing evaluations.

Second, according to Shin & Zhow (2003), value is a critical factor to anticipate how followers respond to leader’s influence. Employees, who show commitment to the groups and respect the leader-follower hierarchical relationship, will take their leader as a role model. From these employees’ perspective, leaders play an important part in defining expectations and directing followers’ behaviors. Collectivists have a strong perception of social order (Triandis, 1995). In a leader-follower relationship, they clearly specify their status, and respect the order. Based on Shin & Zhow’s (2003) argument of value congruence, collectivists will be receptive to their leader’s influence. In case leaders provide the intellectual encouragement and communicate compelling visions, collectivists will be exited and energized. They accept the challenges, and try to fulfill their subordinate role, which are associated with creative behaviors at work.

Third, Carmeli & Schaubroeck (2007) used normative reference group theory to explain the effect of leaders’ expectations and behaviors on followers’ engagement in the creativity process. Collectivists are affected by in-group attitudes and behaviors (Wagner, 1995). They take leaders’ and coworkers’ actions as references to evaluate how they should behave. Leaders and group members’ demand of innovative work become putative sources for collectivists to display creative behaviors. When leaders showcase their creative performance, they can positively affect collectivist’s effort in creativity, and creates a spontaneous effect on the creative involvement.

Fourth, Kark & Carmeli (2009) explored the linkage between the feeling of vitality at work and creative work involvement. Vitality is a positive affect emotion, which makes people try to reenact and enhance the circumstances they perceive as promoting their vital energy (Kark & Carmeli, 2009). Vitality is associated with the feeling of relaxed, pleased and satisfied. It affects the level of resources individuals invest in an activity. When employees have enough confidence and belief in their importance at work, this positive mood induces their significant contribution to creativity. This finding is even more applicable to the case of collectivists. Collectivists have a strong psychological attachment to their community (Moorman & Blakely, 1995; Wagner, 1995; Triandis & Suh, 2002). Emotional support receives a great emphasis in such groups. If leaders are able to initiate collectivists’ feeling
of vitality, they will be energetic to seek ideas, perform creatively and engage in thought-provoking processes (Kark & Carmeli, 2009).

Finally, Zhang and Bartol (2010) stated that empowering leadership, which involves sharing the power to followers, has a positive effect on followers’ creativity thanks to followers’ motivation enhancement. Experiencing this leadership style, followers participate in the decision-making process. The empowerment increases their level of self-efficacy, vitality and task meaningfulness. They actively coordinate the tasks, examine problems from multiple perspectives, and use different sources to find solutions (Wilson & Shalley, 2004; Zhang and Bartol, 2010; Pieterse et al., 2010). Also, supportive leadership, which provides support, assistance, and consideration to followers, can stimulate employee’s creative behaviors (Zhang & Bartol, 2010). Given the nature of creativity, such contexts are essential for employees, especially for collectivists who value support and encouragement, to explore diverse possibilities, and then, generate practical innovations.

Transformational leadership embraces all the characteristics described above to engage collectivists in the creative process at work. It is a critical factor for change implementation and innovation adoption (Hater & Bass, 1988; Dvir et al., 2002; Kark & Sharmi, 2003; Northouse, 2006). Four main dimensions of transformational leadership - idealized influence, inspirational motivation, intellectual stimulation and individualized consideration - indicate the ability of leaders to influence followers in a positive way, motivate them to reach the goals, inspire them to challenge business-as-usual, and care about followers’ well-being. Transformational leaders encourage employees to take risks, explore new ideas, and open to intellectual challenges. Many researchers found strong effects of transformation leadership on both individual and organizational level of creative performance (Howell & Avolio, 1993; Jung, 2001; Jung et al., 2003; Gumusluoglu & Ilsev, 2009; Pieterse et al., 2010). Transformational leadership also enhances individual psychological empowerment (Gumusluoglu & Ilsev, 2009) and engages collectivists in helping behaviors such as seeking creative alternatives and bringing benefits for in-group members.

Transformational leaders know how to guide followers to achieve the collective goals regarding creativity. Through leaders’ support, collectivists sense their leaders’ effort, energy, and passion, and take them as a normative reference for their behaviors (Smith et al., 1983). Also, transformational leaders induce trust, loyalty and satisfaction from
followers (Podsakoff et al., 1990). They communicate high expectations to followers in a wise way, which stimulates their extra-job and discretionary behaviors. Furthermore, based on De Cremer et al. (2009), employee’s motivation and behavior are mostly affected by the leaders, who sacrifice their self-interest for the sake of the group, strive for the group’s welfare and generally fulfill their moral duties. Transformational leadership includes such attributes. It involves articulating a vision associated with the group development and motivating followers to go beyond their self-interest to bring benefits for the larger entity. It also incorporates prosocial impact in the mission and enables followers to find the significance of their tasks. By showing concern for followers’ needs, making sure followers have a common sense of mission and purpose, and providing intellectual stimulation, transformational leaders encourage followers to display the similar ‘group-serving behaviors’ (Grant, 2012), and think outside the box (Howell & Avolio, 1993; Jung, 2001; Jung et al., 2003; Gumusluoglu & Ilsev, 2009; Pieterse et al., 2010). Taken together, transformational leaders enhance the engagement of collectivists in the idea exploration and creative process because they are able to induce collectivists’ feeling of vitality, act as a role model of creativity, and foster the positive working environment. Those above research suggested the contexts conducive to the positive effect of psychological collectivism on creative work involvement when transformational leaders bolster the group interaction effect on collectivists. Therefore, it is likely that transformational leadership strengthens this positive relationship.

Hypothesis 3a: Transformational leadership positively moderates the positive relationship between psychological collectivism and creative work involvement.

On the other hand, transactional leadership is grounded on the exchange relationship between leaders and followers (Bryant, 2003; Bass et al., 2003; Eagly et al., 2003; Judge & Piccolo, 2004; Northouse, 2006). Transactional leaders are result-oriented. They negotiate carefully the outcomes with followers and give clear task instructions. In return, followers receive rewards and benefits upon work accomplishment. Previous research suggested that ‘motivational interventions such as evaluation or reward systems may negatively affect individual motivation toward a creative task’. Followers pay strong attention to performance requirements and the task boundary, thus, take safe ways to complete the work rather than try new ideas with unpredicted outcomes (Woodman et al., 1993). Also, when the monetary reward is given to employees, creativity might actually be reduced.
(Pieterse et al., 2010). Transactional leadership emphasizes more on in-role performance and less on individual intrinsic motivations. The leaders set clear expectations and take achievement as a mean to involve employees in the work; hence, the motivating factor does not lie in the task itself but rather on the outcomes. Followers perceive these leadership behaviors as controlling style, and strictly follow leader’s instructions, which deviates them from creative behaviors.

Similarly, according to Gagné & Deci (2005), tangible rewards, deadlines, and evaluations will diminish employee’s motivation and undermine creativity. Being externally regulated, individuals act with the intention to obtain the expected outcomes. Thus, their focus shifts to task accomplishment rather than to the creative process. Moreover, in a tight-control working-environment resulted from transactional leadership style, employees have a propensity to conform to the rules. Following the instructions is an appropriate way to work; therefore, people want to avoid risks and creative behavior is discouraged (Chua et al., 2014).

The fact is that high psychological collectivism is not always conductive of creative work involvement. Transactional leadership style does not embrace the characteristics that stimulates collectivist’s creative behaviors, such as developing an judgment-free environment, serving as a model of creativity, and inducing employee’s feeling of vitality, but rather emphasize on individual assessment. Individuals with a high level of psychological collectivism will follow transactional leaders’ instructions if they perceive it essential (Carmeli & Schaubroeck, 2007). They also concern the influence of their behaviors on group’s outcomes (Meglino & Korsgaard, 2004; Ellemers et al., 2004; Adler & Chen, 2011). Thus, when goals are clearly set and performance are explicitly measured, collectivists will choose the safe way to meet transactional leaders’ expectations rather than taking risks. As such, I propose that:

Hypothesis 3b: Transactional leadership negatively moderates the effect of psychological collectivism on creative work involvement.

Laissez-faire leadership is called non-factor leadership - a destructive leadership resulted in negative group performances (Bass et al., 2003; Eagly et al., 2003; Judge & Piccolo, 2004; Northouse, 2006). Leaders’ behaviors and expectations play important roles in shaping collectivist’s behaviors, as collectivists are receptive to leader’s influence (Shin & Zhou, 2003; Carmeli & Schaubroeck, 2007). Laissez-faire leaders provide little or no support to
followers. They do not emphasize on prosocial impact and act with a collective attitude. Thus, collectivists hardly know leaders’ expectations and respect the hierarchical order. They may feel separated or demotivated, and disregard activities associated with the group interaction, reliance, and contribution. Even though working in-group, collectivists are not influenced by the group interdependence. In contrast, that group context induces collectivist’s preference for individual work. They avoid performing discretionary behaviors and become more self-focused. Indeed, this environment restrains collectivist’s capability to seek new ideas and engage in the creative work. It is possible that laissez-faire leaders have a negative influence on collectivist’s creative behaviors since the leaders show no responsibility toward groups, neglect team spirit, and act as a bad normative reference.

Hypothesis 3c: Laissez-faire leadership negatively moderates the relationship between psychological collectivism and creative work involvement.

Although prosocial motivation mediates the psychological collectivism-creative work involvement relationship, in this research, the interaction effect of leadership with only psychological collectivism on creative work involvement is examined for two reasons. First, the high level of creative work involvement among highly collective individuals is partially explained by prosocial motivation. There should be other mechanisms accountable for this relationship. Leadership might significantly moderate the effect of psychological collectivism on creative work involvement, but not necessarily interacts with prosocial motivation to affect creative work involvement. This thesis objective is to explore the moderating role of leadership style in the psychological collectivism-creative work involvement relationship. Therefore, it is more consistent and appropriate to focus on how leadership style combining with individuals’ collective mindset can influence their creative behaviors at work. Second, in this study, leadership is likely to affect the psychological collectivism-creative work involvement relationship only, as this connection depends on the context, while the others two: psychological collectivism-prosocial motivation and prosocial motivation-creative work involvement are independent of context (i.e. leadership styles). The positive relationship between psychological collectivism and prosocial motivation is not conditional on external forces. When a personality triggers prosocial motivation, it is the process happening within individuals, between two intertwined attributes, and, leadership cannot intervene. If individuals who are group-
oriented (prefer to work in groups, prioritize group goals and group interest over individual interest, rely on other members, and conform to group norms) are more likely to help others; this propensity still exists regardless of the leadership style they experience. In other words, leaders behaviors, such as providing support, communicating high expectation, setting rewards or over-empowering, have no impact on collectivists’ desire to bring benefits for others. Similarly, the relationship between prosocial motivation and creative work involvement is direct and unlikely to be moderated by leadership style. Since prosocially motivated individuals themselves want to act for the sake of the whole group, they are willing to seek alternative solutions and useful ideas. Their motivation and goals are clearly predefined. It is impossible for leaders to intervene and make them less or more engaged in creative activities. With everything considered, my model should incorporate the moderating effect of leadership on only the psychological collectivism-creative work involvement relationship.

The hypotheses of this research are integrated in the model below:

![Figure 2: The research model](image-url)
3. Methodology
This chapter specifies the research methodology. First, the rationale for using quantitative approach is elaborated. Second, research subjects, sample and data collection procedure are justified. The last part focuses on the measurement for each construct.

3.1. Rationale for the method
In his book, Creswell (2013) mentioned three main research approaches: quantitative, qualitative and mixed methods. According to him, the quantitative method is suitable to the research, which examines the relationship among measurable constructs. It is aimed at testing the hypotheses, and providing the empirical findings that embrace the objectivity. Appropriate statistical procedures are necessary to analyze the numbered data. Findings of a quantitative research should be generalizable and replicable. On the other hand, the qualitative approach is much involved in observing the phenomenon, or exploring the meaning to social and human problems. Through emerging questions and specific procedures, data is collected in the participant settings. Data interpretation depends on researchers’ expertise and perspective, hence, embraces more subjectivity.

This thesis objective is to examine the relationships among different constructs, and provide empirical findings that reflect the actual effects. Therefore, quantitative approach is appropriate. The mix of two methods is not utilized as this study does not use a ‘distinct research design involving philosophical assumptions and theoretical frameworks’; or need both qualitative and quantitative data for a complete understanding of the research problem (Creswell, 2013).

Accordingly, survey is a useful research instrument to explore the relationships among variables. Survey research ‘provides a quantitative or numeric description of trends, attitudes or opinions of a population by studying a sample of that population’ (Creswell 2013, p.13). It is suitable to both cross-sectional and longitudinal studies. The following part will elaborate the research setting and subjects according to the quantitative survey method.

3.2. Setting, subjects and procedure
This thesis investigates the effect of psychological collectivism on creative work involvement, and the role of leadership and prosocial motivation in this relationship. They refer to the work-related phenomenon; therefore, the studied subjects should be
organizational members; and hence, the respondents are individuals working in organizations.

I used the web-based survey to collect data. The survey link was created by Google Form and spread via social networking sites such as Facebook or LinkedIn. This research did not target specific organizations, thus, the questionnaires were distributed to different networks and business groups to ensure the generalizability. To sort out the appropriate responses of participants who are organizational members, I made a question “Are you working in an organization at the moment?” People working either full-time or part-time are eligible. The data from individuals who answered ‘yes’ are valid for this research. In total, there were 167 valid responses.

Each individual may have several jobs at the same time. To ensure the consistency in their answers, I asked them to choose one job to respond to the questionnaire. Similarly, each individual has several leaders; individuals should know whom they refer to. I required them to choose a leader they directly report to during their work and assess his/her leadership behaviors. This requirement also helps increase the validity and reliability of this research, since the leader who predisposed to have the most influence on individual’s behaviors would reflect the better moderating effect of leadership style. In addition, to reduce the risk of multiple responses per person, I requested participants to fill in the survey only once and leave their email address.

The data collected in this research is cross-sectional as all the variables’ measurement items were assessed at the same point of time. Subjects of the study - personality, motivation and the degree of efforts expended - are elements that individuals understand themselves the most. They can give the most reliable evaluation. Therefore, the source of data is single subjective self-report. Leadership is measured as perceived leadership, which is distinct for each employee, thus, individual is also the best respondent.

Common method variance is defined as the ‘variance that is attributable to the measurement method rather than to the constructs the measures represent’ (Podsakoff et al., 2003). It is a potential source of measurement error, which further leads to the invalid research findings. Common method variance is possibly resulted from the single subjective self-report source of data, time and location of measurement, the emotional state of respondents, negatively worded items, the expectation of researchers, and item complexity and ambiguity. With an attempt to reduce the bias caused by the single self-report source
of data, time and location of measurement, and emotional state of respondents, I created a temporal separation of the predictor and the criterion by putting their items in two different survey pages; and by placing the measurement items of the variables in different scales closed to each other. Also, to increase the validity of research, I protected the participant’s anonymity and reduce their evaluation apprehension. The questionnaire was web-based while respondents were not asked to provide their personal details. Moreover, in the survey’s description, I emphasized they will be treated anonymously; the data is for the research purpose only; the information needed is neither sensitive nor confidential; and encouraged them to give the sincerest responses. The topic was also hidden. All of them help reduce participant’ evaluation apprehension so that they are less likely to provide the answers they think the researcher expected them to do.

To make sure that common bias does not strongly affect the research findings using cross-sectional data, I used Harman one-factor test. I loaded all the indicators of all variables into exploratory factor analysis and constrained the factor extracted to 1 (Podsakoff et al., 2003). The result revealed that common method bias is not a serious problem in this research because no single factor explained more than 30 percent of the total variance in the variables.

3.3. Measures

All the measures in this research have been developed by earlier researchers. Some minor modifications on the measurement items were made to suit the context and research purpose. A pilot study is not necessary in this case.

The measurement sets achieved a relatively high reliability based on their Cronbach alpha values. Reliability of a measure indicates the extent to which it is free from random error; there is a ‘similarity of results provided by independent but comparable measures of the same constructs’ (Churchill 1992, p.78). One measure is reliable if the items are measuring the same underlying attitude (Churchill, 1992). They are intercorrelated and share the adequate amount of common core. Cronbach alpha coefficient is used to determine this internal consistency (Churchill, 1992; Nick & Graham, 2005; Hult et al., 2008). High Cronbach alpha (>0.7) indicates a high reliability of the set of items, or ‘high proportion of a scale’s total variance that is attributable to a common source’ (Nick & Graham, 2005; Hair et al., 2010). Cronbach alpha for each construct will be reported afterward.
In addition, all of the measures in this research were built and tested by previous studies. The measurement items (based on their face meaning) reflect the construct they measure. To multidimensional constructs, there were specific items dedicated to assess each respective dimension. Therefore, the content validity which is ‘the adequacy with which the domain of the characteristics is captured by the measure’ (Churchill, 1992, p.76) is likely to be met.

Psychological collectivism

As stated in the theoretical background part, Jackson et al. (2006) developed a highly reliable and valid measure of psychological collectivism. Psychological collectivism was measured by 15 items representing 5 dimensions: preference, reliance, concern, norm acceptance, and goal priority. The sample item is “I preferred to work in those groups rather than working alone”. To make sure each item reflects the nature of a personality, I added the words “in general” to each sentence, and changed the phrase “those groups” to “the group” to indicate the general group-orientation. The sample items are “In general, I prefer to work in the group rather than working alone” (Preference) or “In general, I feel comfortable counting on group members to do their part” (Reliance). The measurement scale for this construct is 5-point Likert. Respondents were asked to indicate the extent to which they agree with those 15 statements (1=Strong disagree; 5=Strongly agree) (α=0.91).

Creative work involvement

The measure of creative work involvement was taken from Carmeli & Schaubroeck’s (2007) study, which is developed from Tierney et al.’s (1999) 9-item measure. The measure showed a high reliability and validity, and well described the concept of creative work involvement in this research. The sample items are “I demonstrated originality in my work”; “I solved problems that had caused others difficulty” and “I generated novel, but operable work-related ideas”. Respondents were requested to rate the items on the 7-point Likert scale (1=strongly disagree; 7=strongly agree) (α=0.91).

Prosocial motivation

Among the studies on prosocial motivation, Grant’s (2008) research suits this thesis well both in terms of context and conceptualization of prosocial motivation. Therefore, this thesis used prosocial motivation’s measurement items in Grant’s (2008) article. The
introductory question is “Why are you motivated to do your work?”. Respondents then indicated the extent to which they agree with the four statements on the 7-point Likert scale (α=0.91). The sample items are “Because I care about benefiting others through my work” and “Because I want to help others through my work”.

Perceived leadership style

Participants were asked to choose the leader, whom they directly report to during the work, to respond to the items regarding leadership styles. Respondents will rate the frequency by which those leadership behaviors happen on a 5-point scale (0=Not at all; 1= Once in a while; 2=Sometimes; 3=Fairly often; 4= Frequently, if not always). I kept the original measurement scale from Bass & Avolio’s (1992, 1995) research without changing it into the 5-point Likert scale because it was used in many other studies, and this scale does not affect the research results using Structural Equation Modelling method.

Transformational leadership

The measurement items of transformational leadership were taken from Bass & Avolio’s (1995) study, quoted in Northouse (2006). Form 5X-short was used, in which each attribute of transformational leadership was measured by 1 item. In total, respondents will rate 5 items of this leadership style (α=0.79). For examples, “Your leader goes beyond self-interest for the good of the group” (Idealized influence – attribute) and “Your leader talks optimistically about the future” (Inspirational Motivation).

Transactional leadership

Two dimensions of transactional leadership, including contingent reward and management-by-exception, were measured by 6 items (3 items for each) (α=0.75) (Bass & Avolio, 1992, quoted in Northouse, 2004). Some words were modified in order to fit the research purpose. The subject ‘I’ was changed to “your leader”. Particularly, “Your leader tells others what to do if they want to be rewarded for their work” (Contingent reward) and “Your leader is satisfied when others meet agreed-upon standards” (Management-by-exception).

Laissez-faire

I measured laissez-faire by a 3-item scale adapted from Bass & Avolio’s (1992) research (α=0.69). I replaced the word “I” by the phrases “your leader” to suit the research purpose. The sample item is “Whatever others want to do is OK with your leader”.

All the constructs were measured by averaging the item scores. The interaction effects were calculated by multiplying the standardized value of psychological collectivism with the standardized value of each leadership style.

**Control variables**

*Tenure.* According to Gilson & Shalley (2004), individual characteristics, particularly, knowledge and experience they gained on their field of work, will account for the difference in their creativity. Other researchers also suggested that tenure affects individual’s level of engagement in the creative work (Kark & Carmeli, 2009; Carmeli & Schaubroeck, 2007; Tierney et al., 1999). Their familiarity with the task rewards them necessary skills and confidence to perform creative behaviors, which influences their degree of effort and time on the creative work. However, according to some research, task familiarity can also result in habitual performance. If employees have worked for a long time on that job, they would stick to their daily routines. Therefore, the moderate amount of tenure is desirable for employees to explore new ways of working (Gilson & Shalley, 2004).

Respondents indicated the number of years they work on the current task. After that, I categorized the data into three groups: low level of tenure (≤ 3 years); moderate level of tenure (4-7 years) and high level of tenure (≥ 8 years). The moderate amount of tenure group was taken as the reference for analysis.

*Age and gender.* Prior research suggested that age and gender have the effect on creative work involvement (Tierney et al.’s, 1999; Carmeli & Schaubroeck’s, 2007; Atwater & Carmeli, 2009; Kark & Carmeli, 2009). Therefore, those variables are controlled to rule out the possible explanations. Respondents were asked to provide their year of birth. The year of data collection is 2015. Age of respondents was calculated afterward. I created a dummy variable, in which female is codified as “1”.

*Organizational type.* Organizational type also has an influence on creative work involvement (Atwater & Carmeli, 2009). Different types of organization require different levels of creativity, and hence, employees are exposed to different levels of creative work. In this research, four categories of organizations are examined (i.e. company/business; non-profit organization; public organization and others). I used four dummy variables to represent these four organizational types. Due to the fiercer competition, company/business demands the higher level of innovation than non-profit government or
public organization does, thus, the business category was taken as the reference for analysis.

*Job type.* Since the respondents of this research either work part-time or full-time, which may cause the variation in creative work involvement between groups; job type is also controlled. A dummy variable in which value 1 is equivalent to the full-time job was created.
4. Data analysis and Results

This research used structural equation modelling (SEM) by AMOS 23.0.0 with maximum likelihood estimates to test the hypothesis. SEM offers numerous advantages compared to other general linear modelling applications (Lei & Wu, 2007). It can help study the relationships among latent constructs, which are measured by other observed variables (indicators) in different scales (Hair et al., 2010); and test the most complicated model including various endogenous and exogenous variables. It can also be applied to analyze cross-sectional and longitudinal data. More remarkably, it provides the assessment of the degree to which the theoretical model fits the data, and of the validity and reliability of all constructs’ measure. SEM becomes the appropriate choice for this thesis because (1) the relationships in this study are assumed to be linear; (2) the data collected is cross-sectional; (3) measurement properties of constructs need exploring by confirmatory factor analysis to see how well the measure represents the construct; and (4) the hypothesized model includes both the mediator and moderator, which makes it more effective to apply SEM.

Regarding the sample, out of 167 respondents, 65.9 percent of the sample are female; and 34.1 percent of them are male. Age ranges from 20 to 42; and 83.2 percent of the sample are people from 20 to 28 years old. Whereas, 27.5 percent of respondents are at the age of 24, making 24 years old become the mode. In addition, 76.6 percent of respondents work full-time, and 23.4 percent of them work part-time. Task tenure ranges from 1 to 9 years with 81.4 percent of participants having a short amount of task tenure (1-3 years), 17.4 percent of them having a moderate amount of tenure, and 1.2 percent of them having a long amount of tenure. Organizational type was distributed as follows: company/business (67.1%), NGO (4.8%), public organization (17.4%) and others (10.8%).

Table 1 demonstrated the correlations among variables in this study. As expected, psychological collectivism and prosocial motivation has significant (p<0.01) and positive correlations (r=0.46; r=0.41) with creative work involvement. Prosocial motivation also significantly (p<0.01) and positively (r=0.47) correlates with psychological collectivism. Out of control variables, age has a significant (p<0.01) and positive correlation (r=0.24) with creative work involvement.
### Table 1: Mean, standard deviation and correlations for all the variables

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>s.d</th>
<th>Creative work involvement</th>
<th>Age</th>
<th>Gender</th>
<th>Job type</th>
<th>NGO</th>
<th>Public</th>
<th>Others</th>
<th>Short tenure</th>
<th>Long tenure</th>
<th>Psychological collectivism</th>
<th>Prosocial motivation</th>
<th>Transformational</th>
<th>Transactional</th>
<th>Laissez-faire</th>
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<td>Creativity</td>
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<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Age</td>
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<td>3.65</td>
<td>.24**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
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<td>-0.03</td>
<td>1.00</td>
<td></td>
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<td>0.01</td>
<td>0.16*</td>
<td>-0.14</td>
<td>1.00</td>
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<tr>
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<td>0.08</td>
<td>0.14</td>
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<td>1.00</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td>Others</td>
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<td>1.00</td>
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<td>-0.06</td>
<td>-0.34**</td>
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<td>0.11</td>
<td>0.14</td>
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<td>0.17*</td>
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<td>0.46**</td>
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<td>Transformational</td>
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<td>0.40**</td>
<td>0.07</td>
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<td>0.07</td>
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<td>0.00</td>
<td>0.04</td>
<td>0.09</td>
<td></td>
<td>0.49**</td>
<td>0.28**</td>
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<td>-0.02</td>
<td>-0.02</td>
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<td></td>
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<td></td>
<td>0.31**</td>
<td>0.10</td>
<td>0.15</td>
<td>0.35**</td>
</tr>
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</table>

n=167

"**p<0.01; *p<0.05 (2-tailed)
4.1. CFA measurement model

First-order measurement model

The first measurement model includes all the variables measured by multiple indicators at first-order. As indicated in the output, the first-order measurement model has the goodness-of-fit statistics as follows:

- Chi-square = 1814.05; degree of freedom = 804, p<0.001. It does not indicate that the observed covariance matrix matches the estimated covariance matrix variance. However, for a more appropriate assessment of model fit, other fit indices need examining.

- Normed chi-square = 2.26, which belongs to the recommended interval (1;3) (Hair et al., 2010)

- Root mean squared error of approximation: RMSEA = 0.087. The threshold of an acceptable fit for this index is 0.08 (Hair et al., 2010)

- Incremental fit: CFI= 0.75. This value should be greater than 0.9 to demonstrate a good model fit (Hair et al., 2010)

Overall, the initial first-order measurement model does not reflect a good fit. To evaluate further the model’s goodness, measurement properties of all constructs are examined using Composite Reliability (CR) and Average Variance Extracted (AVE) indicators. Table 2 provides the results regarding Cronbach alpha, CR and AVE of each construct.

<table>
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<th>α</th>
<th>CR</th>
<th>AVE</th>
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<td>Psychological collectivism</td>
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<td>0.92</td>
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<td>Laissez-faire</td>
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<td>0.69</td>
<td>0.43</td>
</tr>
<tr>
<td>Creative work involvement</td>
<td>0.91</td>
<td>0.91</td>
<td>0.53</td>
</tr>
</tbody>
</table>

Composite reliability (CR) is a useful tool to check the reliability of a measure at construct level and free from the number-of-item effect (Fornell & Larcker, 1981; Nick & Graham, 2005). High CR (threshold: > 0.7) indicated the high shared-variance in the measure for the latent variable. Based on the table 2, almost all constructs’ CR and Cronbach alpha coefficient is high (>0.7). Only laissez-faire leadership construct has CR and alpha approaching 0.7; however, it still shows acceptable reliability. Based on those indicators
and above theory, I can conclude that the items used to measure each construct share the adequate amount of common core, and indicate the high extent to which the measure is free from random error.

Average variance extracted (AVE) is a good indicator of convergent validity (Hult et al., 2008), which is used to identify whether the measure performs as expected (Fornell & Larcker, 1981). It reflects the extent to which the proportion of variance in an unobserved variable is explained by the indicators. According to the table 2, creative work involvement and prosocial motivation have a good convergent validity (AVE > 0.5). Their measurement items actually measure the expected right thing (Churchill, 1992). Others construct show a worse validity, which means the variance of the construct was not well captured by the items.

In conclusion, the first-order measurement model does not show a good model fit and validity of the constructs. Further improvement should be conducted to achieve a better model. Given the theoretical foundation of psychological collectivism and leadership styles that each construct was constituted by different dimensions, I performed the second-order confirmatory factor analysis in which psychological is measured by 5 dimensions (3 indicators per dimension) and transactional leadership is measured by 2 dimensions (3 indicators per dimension). The analysis is shown in the next part.

**Second-order measurement model**

The initial second-order measurement model results indicated a better fit than the first-order measurement model (Chi-square = 1448.56, df = 797, p<0.001; Chi-square/df=1.82; RMSEA = 0.07; CFI = 0.84). However, to improve the model fit and validity of the constructs, I delete the items that have a low loading value on the construct (<0.5) and covary some error terms of the same construct. Specifically, one item of transactional leadership was eliminated, which is “As long as things are working, you leader does not try to change anything” (Management-by-exception).

The modified second-order measurement model has an acceptable goodness-of-fit (Chi-square = 1212.51, df = 746, p<0.001; Chi-square/df=1.63; RMSEA = 0.06; CFI = 0.88). Table 3 displays standardized loadings, new Cronbach alpha, CR and AVE for each construct. All the loading estimates are statistically significant at 1% level.
Table 3: Standardized loadings, CR and AVE of each construct

<table>
<thead>
<tr>
<th></th>
<th>Psychological collectivism</th>
<th>Prosocial motivation</th>
<th>Transformational leadership</th>
<th>Transactional leadership</th>
<th>Laissez-faire</th>
<th>Creative work involvement</th>
</tr>
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<tbody>
<tr>
<td>Preference</td>
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<td></td>
<td></td>
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<tr>
<td>Reliance</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>Concern</td>
<td>.956</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norm acceptance</td>
<td>.814</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Goal priority</td>
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<td></td>
<td></td>
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<tr>
<td>@2A</td>
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<tr>
<td>@2B</td>
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<tr>
<td>@2C</td>
<td></td>
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<tr>
<td>@2D</td>
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<tr>
<td>@3A</td>
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<td>@3C</td>
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<td>@3D</td>
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<td>@3E</td>
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<tr>
<td>Contingent reward</td>
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<td>MBE</td>
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<td>.774</td>
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<td></td>
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<td>.806</td>
</tr>
<tr>
<td>@6G</td>
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<td></td>
<td></td>
<td></td>
<td>.681</td>
</tr>
<tr>
<td>@6H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.603</td>
</tr>
<tr>
<td>@6I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.739</td>
</tr>
<tr>
<td>α</td>
<td>0.913</td>
<td>0.913</td>
<td>0.785</td>
<td>0.805</td>
<td>0.693</td>
<td>0.909</td>
</tr>
<tr>
<td>AVE</td>
<td>0.586</td>
<td>0.726</td>
<td>0.428</td>
<td>0.726</td>
<td>0.430</td>
<td>0.526</td>
</tr>
<tr>
<td>CR</td>
<td>0.874</td>
<td>0.914</td>
<td>0.785</td>
<td>0.841</td>
<td>0.692</td>
<td>0.908</td>
</tr>
</tbody>
</table>

All the constructs received Cronbach alpha value and CR greater than 0.7, except for laissez-faire. However, its alpha and CR are approaching 0.7, which still indicates an acceptable reliability. Besides, only AVE of transformational leadership and laissez-faire are smaller than, but not too far from, 0.5. In general, the model achieved a good fit and these constructs had a relatively good reliability and validity, which helps generate reliable and valid research findings for this thesis. Therefore, this second-order measurement model serves as a basis to form the structural models afterward.
4.2. Structural model

Three structural models were developed to test the hypotheses. The first model (model 1) included an exogenous variable (psychological collectivism), an endogenous variable (creative work involvement) and other control variables. This model achieved a relatively good fit (Chi-square =620.92, df =444, p<0.001; chi-square/df=1.4; RMSEA =0.05; CFI =0.93). The second model (model 2) examined the effect of dependent variable (psychological collectivism), mediator (prosocial motivation) and all control variables on creative work involvement. Model 2’s results also indicated a good model fit (Chi-square =863.65, df =572, p<0.001; Chi-square/df=1.51; RMSEA =0.055; CFI =0.91). On the other hand, model 3 (full model) examines the main effect, the mediating effect, interaction effects of each leadership style with psychological collectivism, and effects of control variables on creative work involvement. The results suggested that the hypothesized model achieved an acceptable fit (Chi-square=1268.15; df =792, p<0.001; Chi-square/df=1.60; RMSEA =0.06; CFI =0.88). Table 4 displays the unstandardized regression weight of each effect in three models.

Table 4: The results of structural models

<table>
<thead>
<tr>
<th>Effects</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate (β)</td>
<td>p-value</td>
<td>Estimate (β)</td>
</tr>
<tr>
<td>eCWI</td>
<td>0.86</td>
<td>***</td>
<td>0.81</td>
</tr>
<tr>
<td>CWI &lt;--- PC</td>
<td>1.33</td>
<td>***</td>
<td>1.02</td>
</tr>
<tr>
<td>CWI &lt;--- Age</td>
<td>0.07</td>
<td>0.01</td>
<td>0.06</td>
</tr>
<tr>
<td>CWI &lt;--- Gender</td>
<td>-0.02</td>
<td>0.90</td>
<td>-0.04</td>
</tr>
<tr>
<td>CWI &lt;--- Job type</td>
<td>-0.12</td>
<td>0.52</td>
<td>-0.06</td>
</tr>
<tr>
<td>CWI &lt;--- NGO</td>
<td>-0.44</td>
<td>0.24</td>
<td>-0.55</td>
</tr>
<tr>
<td>CWI &lt;--- Public</td>
<td>0.02</td>
<td>0.93</td>
<td>-0.09</td>
</tr>
<tr>
<td>CWI &lt;--- Others</td>
<td>0.32</td>
<td>0.21</td>
<td>0.30</td>
</tr>
<tr>
<td>CWI &lt;--- Short tenure</td>
<td>0.28</td>
<td>0.19</td>
<td>0.27</td>
</tr>
<tr>
<td>CWI &lt;--- Long tenure</td>
<td>0.22</td>
<td>0.77</td>
<td>0.00</td>
</tr>
<tr>
<td>PM &lt;--- PC</td>
<td>1.40</td>
<td>***</td>
<td>1.41</td>
</tr>
<tr>
<td>CWI &lt;--- PM</td>
<td>0.23</td>
<td>0.01</td>
<td>0.23</td>
</tr>
<tr>
<td>ePM</td>
<td>1.04</td>
<td>***</td>
<td>1.05</td>
</tr>
<tr>
<td>CWI &lt;--- Transformational</td>
<td>0.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CWI &lt;--- Transactional</td>
<td>-0.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CWI &lt;--- Laissez-faire</td>
<td>-0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CWI &lt;--- PCxtransformational</td>
<td>0.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CWI &lt;--- PCxtransactional</td>
<td>-0.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CWI &lt;--- PCxlaissez-faire</td>
<td>0.12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CWI: Creative work involvement; PC: Psychological collectivism; NGO: Non-profit government organization; PM: Prosocial motivation; e: error term

***: p<0.001
Out of control variable, age has a significant ($p<0.01$) and positive relationship ($\beta=0.06$) with creative work involvement. Accordingly, the employee’s engagement in the creative process at work increases by age. In addition, non-profit governmental organization group has a negative estimate ($\beta=-0.6$) at 10% level of significance in the relationship with creative work involvement. That means employees in non-profit governmental organization are less likely to involve in the creative process at work than employees working in a business/company.

Regarding the main effect, all three models confirmed the positive ($\beta=0.80$ in model 3) and significant effect ($p<0.001$) of psychological collectivism on creative work involvement. This finding is consistent with my prediction; thus, hypothesis 1 is supported.

To test the hypothesis regarding the mediating effect, I performed two-step analysis and followed the procedure outlined by Baron and Kenny (1986). Model 1 suggested that without mediator, psychological collectivism has a positive ($\beta=1.33$) and significant relationship ($p<0.001$) with creative work involvement. The first condition is met. Model 2 indicated that psychological collectivism is positively ($\beta=1.4$) associated with prosocial motivation at 0.1% level of significance; and prosocial motivation has a positive ($\beta=0.23$) effect on creative work involvement at 1% level of significance. As such, both the second and third condition of a mediating effect are met. The direct effect of psychological collectivism on creative work involvement is still positive ($\beta=1.02$) and significant ($p<0.001$) in model 2 with the mediator; however, the regression weight reduces from 1.33 in model 1 to 1.02 in model 2 (23.31%). Therefore, prosocial motivation partially mediates the relationship between psychological collectivism and creative work involvement, resulted in the confirmation of the hypothesis 2.

In model 3 (full model), both the interaction effects of transformational leadership and laissez-faire with psychological collectivism on creative work involvement are not significant ($p=0.44$; $p=0.17$). Consequently, hypothesis 3a and 3c are not supported. Nevertheless, the interaction effect between transactional leadership and psychological collectivism on creative work involvement is negative at 10% level of significance, leading to the marginally support of hypothesis 3b. A simple slope analysis indicates that the relationship between psychological collectivism and creative work involvement is stronger for those who are low in perceived transactional leadership than those who are high in perceived transactional leadership (Figure 3).
Figure 3: The moderating effect of transactional leadership on psychological collectivism-creative work involvement relationship

Figure 4 illustrates the hypothesized model with results:

***p<0.001; **p<0.01; *p<0.1

Figure 4: The hypothesized model with results
5. Discussion

The main goal of this thesis was to examine the effect of psychological collectivism on creative work involvement, and the role of leadership style as well as prosocial motivation in this relationship. The results suggested that as predicted, psychological collectivism is positively related to creative work involvement. The positive relationship between psychological collectivism and prosocial motivation, and between prosocial motivation and creative work involvement were also confirmed. Individuals with the high level of psychological collectivism are more motivated to bring the benefits for others, and individuals who are willing to act for the sake of others are more likely to explore new ideas and participate in the creativity process. In addition, my results proved that prosocial motivation partially mediates this relationship. One of the mechanisms explains the positive effect of psychological collectivism on creative work involvement is through prosocial motivation. Collectivists are more likely to engage in the creative process at work because of their willingness to help others and to bring the benefits for the whole group. Finally, among three different leadership styles, only transactional leadership showed a marginally negative moderating effect on the psychological collectivism-creative work involvement relationship, other leadership styles did not have the significant moderating effects.

Validation of results

The data for all dependent and independent variables in this research were collected at the same point of time, which may raise some issues regarding the invalid causal relationships. Nonetheless, all the findings in this research are theoretically supported and the reverse causal relationship is unlikely to occur.

First, as supported by the theory, the antecedents of creative work involvement are personal factors and situation factors (Shin & Zhou, 2003). Many researchers provided the empirical findings of those antecedents. For examples, intrinsic motivation, cognitive style (Tierney et al., 1999), perceived normative expectation, normative reference group (Carmeli & Schaubroeck, 2007), psychological safe (Kark & Carmeli, 2009), leader-member exchange (Atwater & Carmeli, 2009), transformational leadership (Shin & Zhou, 2003), creative team environment (Gilson & Shalley, 2004; Gilson et al., 2005), and task design (Gilson & Shalley, 2004) all have the positive influence on creative work involvement. In this research, psychological collectivism, prosocial motivation and
leadership belong to the categories of personal factors and situational factors described above. As suggested by the results, these factors have the effects on creative work involvement. Therefore, there was a consistent linkage between the research findings and the theoretical foundation.

Moreover, as indicated by many researchers, through a cognitive process, a personality trait can trigger a behavior (Ellemers et al., 2004; Adler & Chen, 2011; Hampson, 2012). Psychological collectivism can play a part in shaping individual’s level of creative work involvement. This was confirmed in their positive relationship. Although there was no time lag in the data collection process so that an obvious causal relationship between them was observed, the results still fit the theoretical background. The theoretical support combining with the empirical findings prove that the positive relationship between psychological collectivism and creative work involvement does exist.

Second, it is not likely for creative work involvement – a behavior – to cause psychological collectivism – a personality. Personality is defined as ‘an individual’s characteristic pattern of thought, emotion and behavior, together with the psychological mechanisms – hidden or not – behind those patterns’ (Triandis & Suh 2002, p.136). A personality is an input, what is predefined. It cannot be rooted externally or depend on the context. On the other hand, creative work involvement is a behavioral response; it in itself reflects the nature of an output. In the process of personality and behavior, creative work involvement plays a role as an outcome. Thus, the extent to which individuals engage time and effort in finding creative ideas at work cannot result in the individual’s distinct level of psychological collectivism.

Although some research supported that behaviors reflect the personality (attitude, intention), and serve as a mean to interpret a personality, they did not confirm behavior “cause” personality (Bentler & Speckart, 1981). Creative work involvement is not considered as a behavior that reflects the nature of psychological collectivism; it is perceived as an outcome resulted from psychological collectivism. Therefore, the reverse causal relationship is unlikely to occur. Taken together, the positive effect of psychological collectivism on creative work involvement in this research is valid.
Research discussion and contribution

The relationship between psychological collectivism and creative work involvement has been unclear and debated. Some supported that collectivists would be more willing to explore new ideas; while others stated that collectivists are less creative, which potentially leads to the lower level of creative work involvement. My results could help resolve the debate by confirming that this relationship is positive, but it is context-dependent, and indicate the circumstances when either the positive or the negative relationship is more likely to occur. When collectivists are motivated to bring the benefits for the whole group, emotionally attached to their entity, psychologically safe to express ideas, or strongly dependent on group members for task accomplishment, they will take initiate to unleash their creativity. On the other hand, when individual performance is assessed and group homogeneity is prioritized, collectivists would stay within their boundary. Although there were some arguments supporting the negative effect of collectivism on creative work involvement, their positive relationship in this research suggested the predominance of the group context in workplace – where collectivists significantly interact with group members, and hence, pay more attention to group interest than their self-interest.

Firstly, the findings indicated that individuals who are willing to work in groups, accept group norms, and prioritize group interests have a stronger tendency to engage in the creative process at work (i.e. try to find new ideas and take risks). This is consistent with the social identity theory that the perception of belonging to a group will trigger individual’s psychological attachment to that group; hence, affect individual’s motivational process and behaviors (Ellemers et al, 2004; Adler & Chen, 2011).

Furthermore, the positive effect of psychological collectivism on creative work involvement supports the previous empirical findings of the positive relationships between task interdependence, psychological safety, and creative work involvement. One of the dimensions of psychological collectivism is reliance, which means trust, respect and interdependence among group members (Jackson et al., 2006). Those characteristics are common in the context of task interdependence. Based on the previous research, task interdependence promotes creative activities through resource exchange and communication (Kazanjian et al., 2000; Gilson & Shalley, 2004). My finding further confirmed this argument by emphasizing the influence of group interaction on collectivist’s creative behaviors. Besides, this research also supports that individual’s
strong sense of belongings and psychological safety are necessary for them to actively express new ideas and take risks. The positive working environment is a critical element to stimulate these attributes. It is important for employees to feel comfortable at the workplace so that their behaviors are less inhibited by their fear of judgment and failure (Kark & Carmeli, 2009).

Secondly, the positive linkage between psychological collectivism and prosocial motivation validates the argument that collectivist’s driver of effort is the needs of others. Collectivists’ emotions and cognition are other-focused (Triandis, 1995). Others’ expectations are taken into account when they make decisions. The fulfillment of people’s needs is their source of joy and accomplishment. This is also consistent with Batson et al.’s (2011) opinion on the close link between prosocial motivation and collectivism. Group-oriented individuals are motivated to enhance other members’ well-beings. They view group welfare as their priority and try to help others to avoid the feeling of guilt and shame.

In addition, there was no conflict between this research findings and the previous studies on the role of employee’s motivation in the creativity process. Individual’s desire to benefit others drives them to solve problems and contribute new ideas. Motivation is a prerequisite for an individual to expend resources, time, and effort on solution seeking (Zhang & Bartol, 2010). Prosocially motivated individuals have a strong concern for others’ interests, leading to their effort-expended decision on creative behaviors (De Dreu, 2006). The finding is also congruent with the construal level theory. People perceive their future selves and others’ behaviors as high-level construal situations. When a circumstance is considered high-level construal, individuals have to utilize their creativity and problem-solving ability. Consequently, those who act for the sake of others make a greater effort in idea generation (Polman & Emich, 2011). Besides, the positive relationship between prosocial motivation and creative work involvement does not challenge the findings from Nauta et al.’s (2002) and Penner et al.’s (2005) research that orientation toward the common goal of the whole group is a good driver of coordination and problem-solving activities.

Prosocial motivation partially mediates the relationship between psychological collectivism and creative work involvement. One of the mechanisms that explains collectivists’ engagement in creative process at work is their motivation to help others.
Psychological collectivism enhances individual’s prosocial motivation. In turn, prosocial motivation encourages them to work creatively. Those relationships partly contribute to the positive effect of psychological collectivism and creative work involvement.

Finally, transactional leadership as predicted negatively moderates the psychological collectivism - creative work involvement relationship. The relationship between psychological collectivism and creative work involvement will be stronger for those who have the lower level of perceived transactional leadership. Transactional leaders build the context that induces the negative effect of psychological collectivism on creative work involvement. Since they are strongly result-oriented; they set clear rules, standards and requirements for the works, and use rewards (e.g. money, commission, promotion) as a mean to call for followers’ attention. Collectivist’s perceptions and behaviors toward work completion are affected by these leadership behaviors, especially those who concern their behaviors’ influences, and respect the social hierarchical order. They would focus on the outcomes while prefer the safe way to complete the work. This finding also provides an evidence for the negative effect of psychological collectivism on creative work involvement.

Collectivists will pursue creativity if they have no fear of judgment, and receive support from group members. Nonetheless, in case each individual is evaluated separately or creative ideas are not appreciated, they will strictly follow the instructions, and maintain the group harmony to avoid negative consequences for themselves. Transactional leaders induce the context that stimulates collectivists’ attention on their self-performance. These leaders do not emphasize on creativity; instead, they provide clear instructions and goal refinements for the tasks, which leads to collectivists’ propensity to stay within their boundary. Transactional leaders, different from transformational leaders who value group interaction and inspiration, would highlight disciplines, individual assessment and rewards upon accomplishment. Therefore, they make collectivists less likely to engage in the creative process at work.
This thesis makes five key contributions to the academic research.

First, it enriches the literature of collectivism by conceptualizing collectivism at psychological level and examining its outcome (i.e. creative work involvement). Although there is a huge literature of collectivism, most researchers study collectivism at cultural level (Jackson et al., 2006). Taking into consideration some drawbacks of this approach to study individual personality and organizational behavior, Jackson et al. (2006) proposed the concept of psychological collectivism from the individual-difference-based view, and developed a set of measurement with a high validity and reliability. Psychological collectivism describes an individual who prefers working in the group, relies on others member to complete the task, shows concern for group interest beyond their own self-interest, accepts and conforms to the group’s rules, and prioritizes the group goals. The level of psychological collectivism is distinct for each individual and is measured by five dimensions: preference, reliance, concern, norm acceptance and goal priority. This study contributes to this research stream and validates their measurement of psychological collectivism.

Moreover, this thesis provides empirical findings regarding the effect of psychological collectivism on individual’s behaviors at the workplace, and resolves the debate on this relationship. There were a few empirical researches about the outcomes of psychological collectivism, such as citizenship behavior (Moorman & Blakely, 1995; Dyne et al., 2000; Jackson et al., 2006), counterproductive behaviour, withdrawal behaviour, task performance (Jackson et al., 2006), employee propensity to take charge (Love & Dustin, 2014), e-collaboration tool using (Turel & Connely, 2011), job satisfaction (Hui & Yee, 1999), coordination in group (Wagner, 1995) and team performance (Dierdorff et al., 2011). This study filled in the research gap by adding another outcome (i.e. creative work involvement). More importantly, this research confirmed that when employees work for collective interests, their group-oriented mindset positively affects their degree of effort and resources spent on seeking new ideas. In the other cases, a high level of collectivism may hinder creative activities.

Second, this study explicates the connection among the concepts: psychological collectivism, prosocial motivation, and creative work involvement. The results proved that psychological collectivism is positively related to prosocial motivation, which builds the theoretical argument for a connection between psychological collectivism and prosocial
motivation. This linkage also supports the prior research about collectivists’ motivation to benefit others (Meglino & Korsgaard, 2004), and helps enrich the literature of this relationship. Furthermore, it confirmed one of the antecedents of prosocial motivation is individual personality (De Dreu, 2006), since psychological collectivism is considered as a personality.

This research also offers the first empirical test regarding the positive influence of prosocial motivation on creative work involvement, suggesting another predictor of creative work involvement. As mentioned in the prior research, antecedents of creative work involvement are intrinsic motivation, cognitive style (Tierney et al., 1999), normative expectations, normative reference (Carmeli & Schaubroeck, 2007), psychological safety and vitality (Kark & Carmeli, 2009), leader-member exchange (Atwater & Carmeli, 2009), creative team environment, and task design (Gilson & Shalley, 2004; Gilson et al., 2005). This study adds another to that list. Individuals who motivate to increase the welfare of others will be more likely to carry out creative activities at work. It is important for employees to think beyond their self-interest in order to bring about innovative ideas and novel solutions.

Third, this research helps address the question how a high level of psychological collectivism can result in a high level of engagement in the creativity process at work. No prior research examined the psychological collectivism – creative work involvement relationship, and its mechanisms. This study contributes to the literature by proposing the partial mediating effect of prosocial motivation on the studied relationship. One of the mechanisms through which psychological collectivism influences creative work involvement is their motivation to help others. The reason why collectivists take risks and step out their comfort zone is their motivation to bring benefits for others. Employees who prefer working in group, rely on other members, conform to the norm, and prioritize the group goals and group interest will take their driver of effort as the group welfare, thus, are willing to think of alternative solutions and practical ideas. Because prosocial motivation does not fully mediate the relationship, other mechanisms to explain for this relationship should be examined.

Fourth, this study builds and tests the model that uniquely integrates psychological collectivism and different leadership styles, emphasizing the context-dependence of these relationships. It is proved that psychological collectivism has a positive effect on creative
work involvement. However, this positive effect depends on context as stated in the previous parts. In this research, leadership style is chosen as the contextual factor. A number of researchers discussed the role of leadership in influencing employee’s behaviors; nevertheless, no research examines the importance of proper leadership styles in the psychological collectivism-creative work involvement relationship. This thesis explored how three leadership styles (i.e. transformational leadership, transactional leadership and laissez-faire) yield different outcomes as the role of moderator in that relationship. Transformational leadership was expected to support the group-specific context in which collectivists are strongly influenced by the group interaction and orientation toward the common goals. On the other hand, transactional leadership and laissez-faire were predicted to negatively affect collectivists’ attempt to take risks and try new ideas. They help form the individual-centered context, when collectivists become more self-focused, fulfill their immediate self-interest and meet performance requirements. Although my results confirm only the interaction effect of transactional leadership on the psychological collectivism-creative work involvement relationship, the other assumptions still open up space for future research regarding the contextual dependence of this relationship.

Finally, this research shows the moderating effect of leadership styles on the psychological collectivism-creative work involvement relationship. Transactional leadership negatively moderates this relationship. Transactional leadership style involves clear instructions and goal refinement. Leaders motivate employees by rewards and compensations upon task accomplishment, which undermines followers’ willingness for creative activities. Strict performance control makes employees secure their self-interest and engage in safe methods to finish the tasks. Despite transformational leadership and laissez-faires did not have significant moderating effects on that relationship, this study still contributes to the academic research by exploring one of the moderators of the psychological collectivism-creative work involvement relationship, which has not been studied before.

**Managerial implications**

Given the importance of creativity in addressing complex challenges faced by organizations, engaging employees in the creative process at work is critical. Finding the predictor of creative work involvement, the mechanism and the neutralizers/enhancers of this relationship is vital to practitioners.
The results suggested that individuals who prefer to work in groups, conform to the rules, and prioritize group goals would be more willing to carry out creative activities. Managers and leaders should take this into account when they assign the tasks or select group members for the projects demanding creativity involvement. A group of such employees will facilitate the creativity process to achieve the expected outcomes. Indeed, being aware of this relationship may support human resources allocation and enhance work efficiency.

In addition, by showing prosocial motivation as a partial mediator, this research recommends that managers and leaders need to consider the mechanism by which psychological collectivism is related to creative work involvement. By doing so, leaders/managers are better able to unleash employee’s creativity. Leaders, who understand that prosocial motivation - the willingness to help others – plays a role in employee’s decisions on creative work involvement, could explain the importance of creative work involvement in the outcomes for the whole groups. Ultimately, they might encourage employee’s creativity behaviors.

Moreover, in collectivist groups, if leaders or managers are able to know which member has a significant influence on the others’ thoughts and behaviors, they should adopt a suitable communication strategy to direct that individual’s behaviors, and help obtain a greater level of employee’s creative work involvement within groups.

The results also recommend that taking individual differences in training and exercising suitable leadership is necessary. Perceived transactional leadership style negatively moderates the relationship between psychological collectivism and creative work involvement. That means to encourage collectivist’s creative behaviors, leaders should not behave in a manner that is typically perceived as transactional leadership style. For example, setting strict standards or using monetary rewards as motivators for the tasks requiring creativity is not recommended to lead highly collective employees. Organizations should also conduct a suitable training program for leaders about this effect.

**Limitations and future research**

First, this study uses the cross-section data to test the hypothesis, which is a disadvantage for examining a relationship. In fact, it takes time for psychological collectivism to have an effect on creative work involvement. Research using the cross-sectional data may face with a potentiality of invalid causal relationships. Although these relationships were theoretically supported, and the reverse relationship is unlikely to be valid; longitudinal
data is still more appropriate. By having time a lag in the data collection of the criterion variable, the causal effect is better justified. Another risk associated with cross-sectional data is common method bias. There might be some bias in the findings as employees were solely respondents, and answered the questions at the same time. Despite Harman single factor test indicated that common method bias is not a serious problem in this research; longitudinal data is necessary to alleviate this risk thanks to the separation of time and location. Future research may address this shortcoming by conducting the longitudinal study with a time lag of at least one month.

Second, this research measured leadership as the perceived leadership style, which is distinct for each individual. In order for better practical implications, future research should perform an appropriate procedure to measure the actual leadership style, and examine its moderating effect.

Third, age of the respondents for my survey ranged from 20 to 42. Age has a positive relationship with creative work involvement, but the finding is valid only in this research and may not be generalized to others research that target the different range. Furthermore, although I attempted to spread survey to different groups with diverse backgrounds, a big proportion of the respondents were Vietnamese, which might cause bias in the results.

Forth, this research model integrated several control variables. One of the most relevant control variables - the number of years employees spent with the same leader - was neglected. The longer the leader tenure is, the higher level of creative work involvement employees might have. This variable should be included into the model in future research.

Fifth, the measures of leadership style in this study have some limitations. The measurement items of laissez-faire leadership style were not strongly intercorrelated and shared the adequate amount of common core (α <0.7). Also, the proportion of variance in transformational leadership and laissez-faire were not significantly explained by their indicators (AVE <0.5). Future research should use a more reliable and valid set of leadership measurement, which is specifically developed for research purpose by Bass & Avolio.

Finally, this study investigated the mediating role of prosocial motivation and the moderating role of leadership style on the relationship between psychological collectivism and creative work involvement. To enrich the literature of psychological collectivism and
creative work involvement, researchers could explore other mediating and moderating variables.
6. Conclusion

This thesis was aimed at exploring the relationship between psychological collectivism and creative work involvement, then examining the mediating effect of prosocial motivation and the moderating effect of different leadership styles. Psychological collectivism in this research is conceptualized as a personality trait, which reflects an individual’s level of group work preference, group interdependence, goal commitment, group-interest priority and norm conformity (Jackson et al., 2006). Results from analyzing the cross-sectional data of 167 respondents showed that psychological collectivism has a positive effect on individual’s willingness to spend time and resources on the creative process at work. The results helped resolve the debate that collectivists can be either more engaged in exploring new ideas or less involved in creativity activities by confirming this relationship depends on specific contexts, but the positive sign is dominant. When the group interaction is strong and collectivists are encouraged to exchange resources, find new ideas and solve problems for the sake of the whole group, they are more likely to carry out creative activities. On the other hand, when collectivists prioritize their immediate self-interest and act according to standards to maintain the group harmony, taking risks is not their priority. The positive psychological collectivism-creative work involvement relationship is partly explained by the prosocial motivation – the individual desire to benefit others (Grant, 2008). Psychological collectivism is positively related to prosocial motivation, and prosocial motivation positively affects creative work involvement. The reason why highly collective employees are more likely to try new approaches and explore novel solutions is their motivation to bring welfare for others. This research also suggested that perceived transactional leadership negatively moderates the relationship between psychological collectivism and creative work involvement. This relationship is stronger for those who have the lower level of perceived transactional leadership, and weaker for those who have the higher level of perceived transactional leadership. Transactional leaders strongly emphasize on rewards, and set clear standards for completing the tasks; hence, make collectivists prioritize their immediate self-interest, and less likely to think outside the box.

This research makes some key contributions to the academic research. It builds the unique model that integrates psychological collectivism, creative work involvement, prosocial motivation and leadership, which was neglected before. It also confirmed the positive effect of psychological collectivism on creative work involvement and addressed the
question of how this positive relationship exists. More importantly, it proved that this relationship depends on the context, and leadership is one of the contextual factors. Some specific leadership styles can negatively moderate the psychological collectivism-creative work involvement relationship. Although facing several limitations regarding the cross-sectional data and common method bias, this research still indicated new findings that contribute to the literature of collectivism from the individual-difference-based view.
APPENDIX

Measurement items for all the variables

1. Psychological collectivism (Jackson et al., 2006)
   1=strongly disagree; 5=strongly agree
   Preference:
   1A. In general, I prefer to work in groups rather than working alone
   1B. In general, working in groups is better than working alone
   1C. In general, I want to work with groups as opposed to working alone
   Reliance
   1D. In general, I feel comfortable counting on group members to do their part.
   1E. In general, I am not bothered by the need to rely on group members.
   1F. In general, I feel comfortable trusting group members to handle their tasks.
   Concern
   1G. In general, the health of groups is important to me.
   1H. In general, I care about the well-being of groups.
   1I. In general, I am concerned about the needs of groups.
   Norm acceptance
   1J. In general, I follow the norms of groups.
   1K. In general, I follow the procedures used by groups.
   1L. In general, I accept the rules of groups.
   Goal priority
   1M. In general, I care more about the goals of groups than my own goals
   1N. In general, I emphasize the goals of groups more than my individual goals.
   1O. In general, group goals are more important to me than my personal goals.

2. Prosocial motivation (Grant, 2008)
   Why are you motivated to do your work? 7-point Likert scales: 1 (disagree strongly) to 7 (agree strongly).
   2A. Because I care about benefiting others through my work
   2B. Because I want to help others through my work
   2C. Because I want to have positive impact on others
   2D. Because it is important to me to do good for others through my work

Leadership styles
   0=Not at all, 1= Once in a while; 2 = Sometimes; 3= Fairly often; 4= Frequently, if not always
3. Transformational leadership (Bass & Avolio, 1995): Form 5X-short
3A. Idealized influence (Attribute): Your leader goes beyond self-interest for the good of the group
3B. Idealized influence (Behaviors): Your leader considers the moral and ethical consequences of decisions.
3C. Inspirational motivation: Your leader talks optimistically about the future.
3D. Intellectual stimulation: Your leader reexamines critical assumptions to questions whether they are appropriate.
3E. *Individualized consideration:* Your leader helps others to develop their strengths.

4. **Transactional leadership (Bass & Avolio, 1992):**
   *Contingent reward:*
   4A. Your leader tells others what to do if they want to be rewarded for their work
   4B. Your leader provides recognition/rewards when others reach their goals.
   4C. Your leader calls attention to what others can get for what they accomplish.
   *Management-by-exception*
   4D. Your leader is satisfied when others meet agreed-upon standards.
   4F. Your leader tells others the standards they have to know to carry out their work.

5. **Laissez-faire leadership (Bass & Avolio, 1992):**
   5A. Your leader is content to let others continue working in the same way as always
   5B. Whatever others want to do is OK with your leader.
   5C. Your leader asks no more of others than what is absolutely essential.

6. **Creative work involvement (Carmeli & Schaubroeck, 2007; Tierney et al., 1999)**
   *1=strongly disagree; 7=strongly agree*
   6A. I demonstrated originality in my work
   6B. I took risks in terms of producing new ideas in doing my job
   6C. I found new uses for existing methods or equipment
   6D. I solved problems that had caused others difficulty
   6E. I tried out new ideas and approaches to problems
   6F. I identified opportunities for new products/processes
   6G. I generated novel, but operable work-related ideas
   6H. I generated ideas revolutionary to our field
   6I. I served as a good role model for creativity
REFERENCES


