

2013-07-24

# Relationships Between Core Self-evaluation, Perception of Group Potency, and Job Performance: The Critical Role of Individual Cultural Orientations

Xiu, Luyao

---

Xiu, L. (2013). Relationships Between Core Self-evaluation, Perception of Group Potency, and Job Performance: The Critical Role of Individual Cultural Orientations (Master's thesis, University of Calgary, Calgary, Canada). Retrieved from <https://prism.ucalgary.ca>. doi:10.11575/PRISM/27606  
<http://hdl.handle.net/11023/846>

*Downloaded from PRISM Repository, University of Calgary*

UNIVERSITY OF CALGARY

Relationships Between Core Self-evaluation, Perception of Group Potency, and Job Performance:  
The Critical Role of Individual Cultural Orientations

by

Luyao Xiu

A THESIS  
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES  
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE  
DEGREE OF MASTER IN SCIENCE

DEPARTMENT OF PSYCHOLOGY

CALGARY, ALBERTA  
JULY, 2013

© Luyao Xiu 2013

## Abstract

Core self-evaluation (CSE), and perception of group potency (PGP) have been repeatedly shown to be important individual difference variables for performance across a range of contexts.

However, there is little attention given to the possibility that these relations may be moderated by individual cultural orientations. In the current study, I addressed this gap by adding two individual cultural orientations: (1) individualism and (2) collectivism, and examining their influences on relationships involving CSE, PGP, and job performance. Specifically, I developed the argument that CSE and PGP should be valid predictors of an employee's job performance.

Furthermore, CSE and PGP are most relevant to job performance when the employee is high on either individualism (former) or collectivism (latter). Using a field sample of 167 Chinese employees, I found empirical support for these propositions. Results indicated that CSE as an internal evaluation was positively related to an employee's job performance, but this evaluation was more predictive of job performance when the employee was *individualistic*. PGP as an external evaluation was positively related to an employee's job performance, however, this evaluation was more predictive of job performance when the employee was *collectivistic*.

Implications for maximizing the prediction of job performance with CSE and PGP were discussed.

## Acknowledgments

I would like to express my deepest gratitude to my supervisors: Dr. Kibeom Lee and Dr. Thomas O'Neill, for their ongoing guidance and support throughout my thesis process. I am sincerely grateful for their useful comments, remarks and engagement. In addition, I also admire the patience and time that Kibeom and Tom invest in their students.

I would like to extend my gratitude to the members of my committee: Dr. Theresa Kline, Dr. John Ellard and Dr. Julie Rowney, for the time that they have invested in my thesis, as well as for their insightful suggestions and input.

I would also like to thank my fellow students. In my daily work I have been blessed with a friendly and cheerful group of fellow students, they are always willing to help and give their best suggestions.

Last but not least, I would like to thank my families, they are always there cheering me up and supporting me with their best wishes. I will be grateful forever for your love.

## Table of Contents

Abstract.....	ii
Acknowledgments.....	iii
List of Tables.....	vi
List of Figures.....	vii
CHAPTER ONE: INTRODUCTION.....	1
Core self-evaluation (CSE).....	3
Relationships involving CSE, its facets, and job performance.....	4
Perception of group potency (PGP).....	8
Relationship between PGP and job performance.....	9
Cultural orientations: Individualism and collectivism.....	12
Individualism and collectivism as moderators of the CSE-job performance relation ....	13
Individualism and collectivism as moderators of the PGP-job performance relation ....	15
CHAPTER TWO: METHOD.....	18
Participants.....	18
Procedure.....	19
Measures.....	20
Core self-evaluation (CSE).....	21
Perception of group potency (PGP).....	21
Individualism and collectivism orientation questionnaires.....	21
Job Performance.....	21
Control Variables.....	22
Analyses.....	22
CSE and PGP as predictors of employees' job performance.....	22
The moderating roles of individualism and collectivism.....	23
CHAPTER THREE: RESULTS.....	24
Pre-Analysis.....	24
Descriptive and correlations.....	24
Moderated Multiple Regression Analyses.....	25
Supplement.....	27
CHAPTER FOUR: DISCUSSION.....	28
Implications.....	30
Practice.....	30
Research.....	31
Limitations.....	33
Conclusion.....	34
References.....	36
Appendix A: Core self-evaluation.....	57
Appendix B: Perception of group potency.....	60

Appendix C: Individualism Scale .....	63
Appendix D: Collectivism Scale.....	66
Appendix E: Relative Percentile Method (RPM) Rating Form .....	69

## List of Tables

Table 1: Description of Grouping Information.....	48
Table 2: Means, Standard Deviation and Zero-Order Correlations.....	49
Table 3: Moderated Multiple Regression Result for CSE and Individualism.....	50
Table 4: Moderated Multiple Regression Result for CSE and Collectivism.....	51
Table 5: Moderated Multiple Regression Result for PGP and Collectivism.....	52
Table 6: Moderated Multiple Regression Result for PGP and Individualism.....	53

## List of Figures

Figure 1: Summary of Hypotheses.....	3
Figure 2: Interaction between Core Self-evaluations and Individualism.....	54
Figure 3: Interaction between Core Self-evaluations and Collectivism.....	55
Figure 4: Interaction between Perception of Group Potency and Collectivism.....	56



## CHAPTER ONE: INTRODUCTION

The present research seeks to examine the relationships between employees' evaluations and job performance. Employees' evaluations, in the context of the current study, refer to employees' inward and outward assessments. The current study investigated core self-evaluation (CSE) to represent employees' inward self-assessments of themselves. In addition, perception of group potency (PGP) was used to represent employees' outward assessments of their groups' and group members' abilities to perform. The objective of the present study was to investigate the relationships involving these two evaluations and job performance as well as how employees' differences in individualism and collectivism moderate these two relationships.

Core self-evaluation (CSE) refers to inward self-assessment that reflects how an employee perceives his or her self-worth, competence, and capability (Judge, Locke, & Durham, 1997). CSE has been theorized to influence employees' job performance (Erez & Judge, 2001; Judge, Erez, Bono, & Thoresen, 2003; Kacmar, Collins, Harris, & Judge, 2009). In other words, employees who have high self-worth, feel effective, and are confident in their capabilities are more likely to have good performance at work settings. Accordingly, in this study, I posit that CSE will be a robust predictor of job performance.

Beyond the evaluations about selves, however, employees have evaluations about their surroundings. In the case of the present study, the surroundings of interest involve employees' coworkers and working group. This perception of group potency (PGP) was defined by DeRue, Hollenbeck, Ilgen, and Feltz (2010) as "an individual team member's own perception regarding

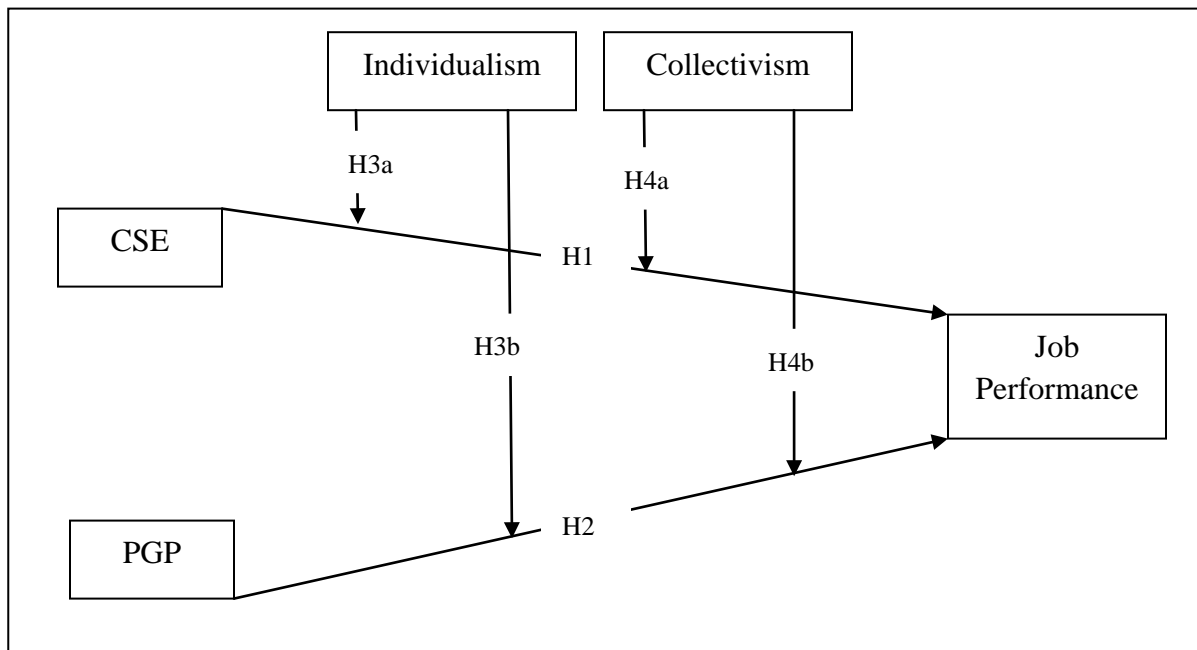
his or her team's capability to perform effectively" (p.4). As Bandura (1982) suggested, "perceived collective efficacy will influence what people choose to do for the group, how much effort they put into it, and their staying power when group efforts fail to produce results" (p. 143). Therefore, PGP is also expected to be a strong predictor of job performance.

In addition, I investigated two cultural variables, known as individualism and collectivism, which would appear to be particularly relevant to CSE and PGP. Individualism describes a cultural value orientation towards giving priority to personal goals over the goals of collectives and feeling independence from group members. On the other hand, collectivism describes a cultural value orientation towards subordinating personal goals to collective goals and emphasizing collective harmony and cooperation (Hofstede, 1980; Hui & Triandis, 1986; Triandis, 1989). It should be noted that individualism and collectivism are separate constructs rather than opposite ends of a bipolar continuum (Kagitcibasi & Berry, 1989; Oyserman, 1993; Singelis, Triandis, Bhawuk, & Gelfand, 1996). Taking these cultural values into account is important because the effects of CSE and PGP on job performance may depend on cultural orientations. More specifically, in this research I posit that CSE may be a stronger predictor of job performance for employees who are more individualistic whereas PGP may provide stronger prediction for employees who are more collectivistic. Thus, in order to maximize the prediction of job performance with CSE and PGP, there might be a need to take into account the individual differences in individualism and collectivism.

A summary of my hypotheses was shown in Figure 1. In the following sections, therefore, I will describe the relationships involving the two evaluation variables (i.e., CSE and PGP) and

job performance as well as the proposed moderating effects of individual cultural orientations (i.e., individualism and collectivism).

Figure1 Summary of Hypotheses



### Core self-evaluation (CSE)

Organizational research is replete with studies relating dispositional factors to specific job performance (Barrick & Mount, 1991; Hough & Ones, 2001; Ones, Dilchert, Viswesvaran, & Judge, 2007). One criticism of this dispositional approach, however, is the proliferation of research on individual traits without integrative theories (Chang, Ferris, Jonson, Rosen, & Tan, 2012). In order to address this shortcoming, Judge and colleagues (1997) proposed the core self-evaluation (CSE) construct. As defined by Judge, Erez, and Thoresen (2003), “CSE is a basic, fundamental, appraisal of one’s worthiness, effectiveness, and capability as a person” (p. 304). In other words, CSE involves fundamental assessments that employees make about their own competences and capabilities (Judge, Bono, Erez, & Locke, 2005). Judge and colleagues

(2005) proposed that CSE is a higher-order trait represented by four well-known individual difference variables: self-esteem (the value one places on his or her self), generalized self-efficacy (the belief in one's own competence, the appraisal of one's own ability to perform across situations), internal locus of control (the belief that one can control his or her own life, as opposed to external forces), and emotional stability (the tendency to be confident, secure, and steady).

### **Relationships involving CSE, its facets, and job performance**

As mentioned previously, a substantial amount of research has indicated that there exists a positive relationship between employees' CSE and job performance (Erez & Judge, 2001; Judge, Erez, Bono, & Thoresen, 2003; Kacmar, Collins, Harris, & Judge, 2009). There is strong meta-analytic evidence suggesting that all four dimensions of CSE are positively related to job performance: self-esteem,  $\rho = .26$ , generalized self-efficacy,  $\rho = .23$ , internal locus of control,  $\rho = .22$ , and emotional stability,  $\rho = .19$  (Judge & Bono, 2001). Thus, it appears that employees who have high self-worth, feel competent, and are confident in their capabilities are more likely to perform well on their job. In the following section, I will separately describe the research on CSE as well as its four factors, and discuss the ways in which CSE and its factors influence job performance.

Self-esteem was considered to be the most fundamental manifestation of CSE. An empirical study by Alessandri (2012) indicated that an employee's self-esteem was significantly associated with his or her job performance rating which was obtained from the combination of manager's evaluation and objective data ( $r = .24$ ). With respect to a qualitative review by

Brockner (1979), in several situations, self-esteem was positively correlated with job performance. His research indicated that self-esteem influences performance in such a way that low self-esteem employees are more likely to withdraw from challenging assignments, have less confidence, experience more anxiety-provoking and make more errors, which in turn decrease their performance. Kammeyer-Mueller, Judge, and Piccolo (2008) found that self-esteem was a valid predictor for employees' occupational prestige and income seven years later ( $r = .17$  and  $.20$ , respectively), which indicated that self-esteem also has a long term positive influence on job performance.

Generalized self-efficacy was viewed as an indicator of positive CSE. There was a substantial number of empirical studies showing that generalized self-efficacy was positively related to employees' job performance (Olayiwola, 2011; Raub & Liao, 2012). Self-efficacy is an important motivational structure, it influences employees' choices, goals, persistence, and problem solving (Bandura, 1986; Gist & Mitchell, 1992). Raub and Liao (2012) conducted a field study of 900 frontline service employees and their supervisors in 74 establishment of hotel chain located in different countries. According to their results, generalized self-efficacy was a valid predictor of employees' proactive customer service performance. In addition, employees who have high self-efficacy are more likely to exert effort on tasks and set higher goals (Phillips & Gully, 1997), which ultimately influences their job performance.

Internal locus of control is the extent to which employees believe that the situation is controlled by their own actions instead of by external forces. Employees who are high on internal locus of control are more likely to believe that their own behaviors, capacities, or attributes

determine the rewards they obtain (Rotter, 1966), which leads to higher intention and motivation to improve performance. An external locus of control has been proposed to be related to passivity and learned helplessness (Rotter, 1992). Chen and Silverthorne (2008) examined the relationships between locus of control and work related behaviors. Their findings indicated that employees with higher internal locus of control are more likely to have higher levels of self-reported job performance. Majumder, MacDonald, and Greever (1977) investigated the relations among locus of control and several organizational variables including supervisor's rating of performance. Their sample was composed of 90 rehabilitation counselors working for a state vocational rehabilitation program, internal locus of control was found to be positively related to performance ( $r = .40$ ).

Emotional stability is also an important component of CSE. Early reviews of the criterion validity of various personality instruments showed that emotional stability appears to be a predictor with a null or very small validity for predicting job performance (Guion & Gottier, 1965; Ghiselli, 1973). The meta-analysis of Barrick and Mount (1991) examined the relations of the Big Five personality traits to three job performance criteria (job proficiency, training, and personnel data) for five different occupational groups (professional, police, managers, sales and skilled/semi-skilled). Results demonstrated that most correlations for emotional stability were relative low. However, Salgado's (1997) meta-analysis found a positive relationship between emotional stability and job performance. The results of the study showed emotional stability is a valid predictor of the three performance criteria (rating, training, & personnel) with true validity ranging from .12 to .27. Through a longitudinal study, Judge, Higgins, Thoresen, and Barrick

(1999) also provided evidence showing emotional stability is capable of predicting people's career success even over a span of fifty years.

Considerable attention has also been given to investigate the relationship between overall CSE and job performance (Chang et al., 2011; Erez & Judge, 2001; Judge, Erez, Bono, & Thoresen, 2003; Kacmar, Collins, Harris, & Judge, 2009). In summary, it can be concluded that overall CSE may influence job performance in the following three ways. First, CSE appears to influence job performance through its impact on motivation (Judge, Erez, & Bono, 1998). In a field study of insurance agents, CSE was found to be positively related to sales motivation ( $r = .32$ ; Erez & Judge, 2001). As motivation is a predictor of job performance (Erez & Judge, 2001), it is not surprising that employees who are high on CSE tend to exhibit better job performance. In addition, employees who obtain high CSE may be also motivated to set higher goals, which in turn, according to the goal setting theory (Latham, Daghighi, & Locke, 1997), leads to better performance. Second, CSE appears to influence how people overcome difficult situations. Research has shown that employees with positive self-concepts are more inclined to take active steps and strategies to improve their performance in negative situations such as response to negative feedback (Bono & Colbert, 2005). Judge and Kammeyer-Mueller (2011) highlighted that "individuals who have a positive view of themselves are also likely to be more secure in the face of criticism, and therefore will be able to use such feedback effectively." (p. 334). Third, CSE may influence job performance rating by cultivating good interpersonal relationships with supervisors. As suggested by Bono and Judge (2003), it is possible that employees with high levels of CSE were perceived by their supervisors to be more likable and

more pleasant. Such positive perceptions, in turn, should lead to positive evaluations of job performance.

Given the above research investigating CSE and job performance, it is clear that these findings provide a strong theoretical rationale for a significant correlation between CSE and job performance. Thus I made my first hypothesis:

*Hypothesis 1: CSE will be positively related to employees' job performance.*

As discussed previously, CSE has theoretical and empirical implications for job performance. Beyond this inward assessment, employees also have outward assessment towards other people. Virtually every person belongs to a group (e.g., working group, family, neighbourhood), and therefore they have interactions with their group members. Accordingly, in the current study I seek to examine whether employees' evaluations about their working group and group members can influence their job performance.

### **Perception of group potency (PGP)**

Collective efficacy was first proposed by Bandura (1986, 1997) as an extension of self-efficacy theory. Research has considered such efficacy belief at group level (e.g., Hecht, Allen, Klammer, & Kelly, 2002; O'Neill & Allen, 2012; Tasa, Taggar, & Seijts, 2007), and assessed it either through group discussion or using the mean score of group members' appraisal of group's capability (Bandura, 1997; Gibson, Randel, & Earley, 2000). However, it is possible that this potency belief can vary meaningfully across the members of the same group (DeRue, Hollenbeck, Ilgen, & Geltz, 2010; Neubert, Taggar, & Cady, 2006)). In other words, it is not expected that employees' collective efficacy will be completely shared, thus, there is a basis for



examining this efficacy belief at individual level. In the context of the current study, such individual level of collective efficacy belief was defined as perception of group potency (PGP). PGP refers to “an individual team member's own perception regarding his or her team's capability to perform effectively” (DeRue et al., 2010). The study of Jung and Sosik (2003) examined the level of analysis of group potency and found during initial group activities, group potency varied substantially across group members within a group, and therefore, it is meaningful to assess this potency at individual level (e.g., PGP). Neubert and colleagues (2006) also found notable findings involving PGP and sales behavior in call centers.

In summary, although group members’ PGP may exhibit similarities by virtue of being embedded in a common group environment, significant variation across group members has been found. This is important because it can provide a fine-grained insight of such efficacy belief and it also makes it possible to study the individual differences of such efficacy belief within a group. Group members appear to have their own perceptions of effectiveness and capability of their group, and such unique perceptions may have important implications for their job performance. In the following section, therefore, I will describe some of the findings involving PGP and discuss the ways in which PGP influences job performance.

### **Relationship between PGP and job performance**

Past research on PGP has suggested that this construct is likely to be positively related to job performance. Earley (1993) found that PGP had a significant influence on employees' task performance among Chinese participants. A study by Jex and Gudanowski (1992) reported that high levels of PGP were associated with low levels of job-related stressors, including ambiguity,

situational constraints, work load, as well as decreased levels of psychological strains, including frustration and anxiety. In extending the work of Jex and Gudanowski (1992), results of Zellars, Hochwarter, Perrewe, Miles, and Kiewitz's (2001) field study indicated that PGP significantly influenced some job-related outcomes (e.g., job satisfaction, turnover intention, and exhaustion) beyond self-efficacy. In addition, the study of Somech and Drach-Zahavy (2000) also found that classroom teachers' PGP was positively related to sharing and cooperative behaviors in work settings. Given that the outcome variables associated with PGP are expected to relate to employees' job performance, it is reasonable to suggest that PGP should positively influence employees' work behaviors.

According to the previous research, PGP will influence employees' job performance through the following ways. First, PGP can influence what people choose to do in a group and how much effort they put into tasks as well as how they respond to gaps between current and desired levels of performance (Bandura, 1982). In other words, if employees believe in their group and group members' capabilities to perform the jobs successfully, they are more likely to contribute their own effort to their group and they are more likely to sustain their effort until they achieve their collective goals. In a similar vein, PGP may influence employees' job behavior through improving their motivation. According to a dominant paradigm in research on work motivation, effort and performance result from employees' efficacy anticipation (Mitchell, 1974; Vroom, 1967). Chen and Kanfer (2006) suggested that the extent to which employees believe their group has the capability to produce results or attain goals may affect the degree to which they themselves will be motivated to demonstrate their own abilities. As employees have higher

motivations, they will be more likely to work toward collective goals (Zaccaro, Blair, Peterson, & Zazanis, 1995), which will ultimately influence their job performance. In contrast, as noted by the authors, even competent employees are “unlikely to exert as much efforts on behalf of their team if they believe their team is incapable of handling challenging tasks” (p. 249).

PGP may also help employees to buffer their stress. PGP may buffer occupational stress and psychological strains when group members are dealing with new challenges or confronting difficulties (Cohen & Wills, 1985). As mentioned previously, high levels of PGP can help employees to decrease negative work related outcomes (Jex & Gudanowski, 1992; Zellars et al., 2001). Therefore, employees with high level of PGP will feel less stressful and be more efficacious to perform their job. PGP can also help employees to improve their performance by providing them with a positive working environment which is characterized by engagement, effectiveness, and cohesion (Gibson & Earley, 2007). Under such positive environment, it is reasonable to expect a high level of job performance.

Taken together, it is reasonable to surmise that employees' PGP should be considered to be a valid predictor of job performance. Based on this suggestion, I made my second hypothesis:

*Hypothesis 2: PGP will be positively related to employees' job performance.*

Above, I distinguished between two types of evaluations that employees hold about themselves as well as their groups and group members, and discussed how these evaluations influence employees' job performance. Below I will provide a brief review of the literature on individual cultural orientations and discuss how these variables might moderate the relations between CSE/PGP and job performance.

### **Cultural orientations: Individualism and collectivism**

Individualism and collectivism are two major cultural variables that are key to social relationships. It has been suggested that people who are high on individualism are more independent, they prefer to rely on themselves instead of seeking help from their group mates and they focus on autonomy, self-fulfillment and they put more emphasis on their personal goals than collective goals. (Hofstede, 1980, 1991; Hui & Triandis, 1986; Markus & Kitayama, 1991). In contrast, people who are high on collectivism are more dependent on each other, they prefer to seek to maintain harmony with other in-group members and avoid direct confrontation, and they place emphasis on the collective goals over the personal goals (Hofstede, 1980, 1991; Oyserman, Coon, & Kemmelmeier, 2002; Wagner, 1995; Wagner & Moth, 1986).

The cultural dimensions of individualism and collectivism have explained differences among cultures based on the assumption that people from the same culture are relatively homogeneous (Lee & Choi, 2005). Therefore, individualism and collectivism were conceptualized as culture or country-level variables in some research. However, there is growing research argued for exploring these constructs at the individual level because there is meaningful variance in these variables within a culture (Earley, 1989, 1993; Huang, 2005; Moorman & Blakely, 1996; Schwartz, 1994; Triandis & Singelis, 1998; Triandis & Suh, 2002). As suggested by Ho and Chiu (1994), it is likely that both individualism and collectivism operate in all societies and all cultures. Accordingly, in the current study, I investigated individual variations in individualism and collectivism within one culture (i.e., Chinese culture).

As mentioned previously, researchers have noted that individualism and collectivism are

likely to be separate dimensions rather than polar opposites of a single scale (Kagitcibasi & Berry, 1989; Oyserman, 1993; Singelis, Triandis, Bhawuk, & Gelfand, 1996). Extensive factor-analytic research has been conducted by researchers and results indicated that individualism and collectivism should be conceptualized as independent factors (Rhee, Uleman, & Lee, 1996; Triandis et al., 1986; Triandis & Gelfand, 1998). As suggested by Kashima (1987) and Kagitcibasi (1987), both cultural orientations can be seen in the same person with different target groups or toward different goals. Therefore, individualism and collectivism were measured by two separate scales instead of one single scale in the current research.

It has been well known that individualism and collectivism play important roles in social relationships in work organizations, and they serve to shape people's self-concepts, group-concepts and actions. Further, it is reasonable that such individual differences can moderate the relations of CSE and PGP to job performance. In the following sections, I will discuss how individual differences in individualism and collectivism are expected to influence the relations between CSE/PGP and job performance.

### **Individualism and collectivism as moderators of the CSE-job performance relation**

Beyond the hypothesized positive relationship between CSE and job performance, there is reason to believe that the validity of CSE in predicting job performance might be stronger for employees high on individualism. As mentioned previously, employees who score high on individualism emphasize their independence from other group members and they have an orientation towards prioritizing personal goals over the goals of the collective (Hofstede, 1980; Hui & Triandis, 1986; Triandis, 1989). For individualists, the "self" is considered as a separate

entity, distinct from larger collectives, and an “I” identity is emphasized over a “we” identity (Hui & Triandis, 1986). Because an individualist’s self-concept is most heavily tied to individual-based evaluations and information (Markus & Kitayama, 1991), it is reasonable to suggest that CSE should be most predictive of job performance when the employee is high, rather than low, on individualism. Employees high on individualism tend to be focused on the self and perceptions of personal abilities (Triandis, 1989). For instance, they prefer individual-focused feedback (rather than group-focused; Earley, Gibson, & Chen, 1999), and they may resist movements to team-based work structures because they prefer to rely on themselves (Kirkman & Shapiro, 1997). Accordingly, I expect that the internal and self focus of individualistic employees should lead to a strong relationship between their CSE and job performance. For employees low on individualism, however, CSE may be less predictive of job performance.

Unlike people who are high on individualism, recall that those who are high on collectivism view the “self” as being inseparable from larger entities and they place more value on a “we” identity. For employees who are high on collectivism, their self-concept is heavily tied to group actions and outcomes (Markus & Kitayama, 1991), and they are rewarded for joint contributions to group accomplishments (Earley & Gibson, 1998). Employees high on collectivism attend more to group-based feedback and information (Earley et al., 1999), and they are more cooperative in group settings (Earley & Gibson, 1998; Wagner, 1995). Collectivists’ motivation for performing well, therefore, may rely less on their evaluations of themselves and more on their perceptions of the group. Accordingly, I expected that CSE would be less predictive of job performance when the employee is high on collectivism than when he or she is low on

collectivism.

I predicted that individualism and collectivism will moderate the CSE-job performance relation according to the following patterns:

*H3a: The relationship between CSE and job performance will be stronger for employees who are high on individualism than for employees who are low on individualism.*

*H3b: The relationship between CSE and job performance will be weaker for employees who are high on collectivism than for employees who are low on collectivism.*

### **Individualism and collectivism as moderators of the PGP-job performance relation**

Similar to the theories involving individualism and collectivism as moderators of the CSE-job performance relation, individualism and collectivism are expected to moderate the PGP-job performance relation. The pattern of moderation, however, should be the opposite. That is, the relation between PGP and job performance will be stronger for employees who are high on collectivism than for those who are low on collectivism, and such a relation will be weaker for employees who are high on individualism than for those who are low on individualism.

Individualism and collectivism may partly determine employees' use of information. For employees who are high on collectivism, because they define their identities with reference to the group rather than as individuals (Earley & Gibson, 1998; Triandis, 1989), they will tend to use group information and will be influenced more by the group context than employees who are low on collectivism. This orientation toward the group is likely to influence people's attitudes and

behaviors (Hui et al., 1991). It has been indicated that employees high on collectivism are more likely to share material and non-material resources and outcomes (Hui & Triandis, 1986) with their group members, and they view group membership as more long-term and permanent than do employees low on collectivism (Earley & Gibson, 1998). Moreover, research suggested efficacy cognitions of more collectivistic persons are likely to be group oriented (Earley, 1994). Earley examined the effect of job training on efficacy and job performance, results demonstrated that employees' cultural orientations influence their use of training information. For collectivistic people, group-level training (e.g., training intervention was focused on how employees' unit might perform better as a group) was more effective in enhancing their efficacy expectations than was training based on individual level cues (e.g., training intervention was focused on how one might improve job performance). Therefore, it is reasonable to suggest that for employees high on collectivism, perceptions of group capability and efficiency are more important for predicting their job performance. Accordingly, PGP should be a stronger predictor of work behavior for employees who are high on collectivism than for employees who are low on collectivism.

Regarding the employees who are high on individualism, they would tend not to be focused on the group and group's capabilities, because they are motivated by their internal perceptions such as CSE. Individualism has been found to be strongly correlated with a self-focused desire for career advance (Finkelstein, 2010). For employees high on individualism, group level information is less useful for performance and goals toward group may even result in social loafing (Matsui, Kakuyama, & Onglatco, 1987). Compared to employees low on



individualism, employees who are high on individualism derive their sense of self based on their self evaluations of personal achievements (Wagner & Moch, 1986; Markus & Kitayama, 1991). Such self-orientation, therefore, will result in less focus on the group context.

Thus, it would be expected that collectivism will moderate the relation between PGP and job performance such that relation should be stronger when collectivism is high. In addition, individualism might be expected to moderate the relation between PGP and job performance such that relation will be stronger when individualism is low.

*H4a: The relationship between PGP and job performance is stronger for employees who are high on collectivism than for employees who are low on collectivism.*

*H4b: The relationship between PGP and job performance is weaker for employees who are high on individualism than for employees who are low on individualism.*

## CHAPTER TWO: METHOD

### Participants

Participants were recruited from FAW-Volkswagen automobile manufacturer based in Changchun, China. A total of 260 workers were invited to participate, of which 207 workers agreed to participate in the current study by completing the questionnaire (79% response rate). Job performance ratings for workers were obtained from their immediate supervisors. The final sample consisted of 167 responses including workers' self-reports and supervisors' performance ratings. The average age of workers are 40.88 years ( $SD = 10.27$ ), with 72.0% being male. These workers had worked for their current organization for a mean of 19.20 years ( $SD = 11.4$ ). The average age of supervisors are 39.40 years ( $SD = 4.90$ ), with 60% being male. These supervisors had worked for their current organization for a mean of 10.10 years ( $SD = 5.65$ ).

The 167 workers and their 10 supervisors came from 10 groups. The number of participants in each group is shown in Table 1. The participants in Groups 1, 2, 3, 4, 7, 8, and 9 worked in an automobile assembly line in which various parts of vehicles were assembled. Specifically, Workers in Groups 1 and 2 worked in a tire assembly station, workers in Group 3 and 4 worked in a side door assembly station, and workers in Group 7, 8, and 9 worked in an engine assembly station. Workers in Group 5, 6, and 10 provided technical support to make sure that the whole assembly line functions properly (e.g., fixing electronic, water cycle, etc.). Their jobs need a high level of cooperation, if one group member has a bad performance, it will slow down the proceeding of the whole group, thus all the workers in the same group knew each other quite well and they can provide accurate evaluations of their group and group members. Each group

needs to work dayshifts and night shifts. In the current case, all the workers and their supervisors need to work 12 day shifts and 12 night shifts every month. Their day or night shifts were rearranged every week. Supervisors and their subordinates always worked on the same shift rotation.

## **Procedure**

The following principles were followed strictly during my data selection: (1) Participants can refuse to participate in the study and they can withdraw from this study at any time they want. (2) Participants return the completed questionnaires directly to me through a research mailbox I provided. (3) Participants' responses are used strictly for research purpose and their responses are not released to their supervisors, department, and organization. (4) Participants are contacted only by the company internal mail system, and not contacted by any other means to solicit their responses. (5) Participants' responses are kept confidential.

Workers were sent a survey packet via the internal company mail system. The survey packet included a cover letter outlining the study, together with the questionnaire to be completed and a return envelope. In the cover letter, workers were told that their participation in this study is completely voluntary and that they are able to withdraw at anytime for any reasons. After finishing their survey, the workers were instructed to put the completed survey into the return envelope and seal the envelope. A mailbox designed for the current research was provided and employees were instructed to put their completed survey into the mailbox. Placing the mailbox at the main office might have had a positive effect on the response rate, which was quite high (79%) in the current study, by serving as a reminder of the study.

Workers were asked to provide their employee IDs, which were used to identify their immediate supervisors. Once all the workers were matched to their supervisors, a list of workers who completed the questionnaires was constructed for each supervisor. Survey packets included the cover letter, workers list, the Relative Percentile Method (RPM) rating form (see below), and return envelope were sent to relevant supervisors via internal mailing system. In the cover letter, supervisors were also told that their participation in this study is completely voluntary and that they are able to withdraw at anytime for any reasons. After completing the rating form, supervisors were instructed to put the completed form into envelope, seal it, and return it to the researcher through research mailbox mentioned previously.

## **Measures**

All measures for workers were combined to form one questionnaire of 97 items. I translated the English version of scales into Chinese. The Chinese version was then back translated into English by a bilingual translator using Brislin's (1986) model of translation. The focus of the translation was to maintain conceptual rather than literal meaning. My supervisors then compared the back-translated version to the original version. According to the comments and feedback from my supervisors, I revised several ambiguous items in the Chinese version, and another bilingual translator was asked to translate the revised Chinese scale back into English. After my supervisors and I compared the back translated and original version of the scales, the Chinese version of questionnaire was finalized. This translating process enabled the retention of functional equivalency between the Chinese and English versions of the questionnaire used in the current study.

### **Core self-evaluation (CSE)**

The 12-item CSE scale was taken from Judge, Erez, Bono, and Thereson (2003).

Cronbach's alpha was .82. A sample item from scale was "When I try, I generally succeed", see Appendix A.

### **Perception of group potency (PGP)**

Eight items were adapted from Riggs and Knight (1994) and Salanova, Llorens, Cifre, Martinez, and Schaufeli (2003) to measure PGP. Cronbach's alpha was .86. The scale was slightly adapted for use at the individual level. For instance, instead of "*Our group as a whole is very effective*" the wording was changed to "*I think my group as a whole is very effective*". Items were presented at Appendix B.

### **Individualism and collectivism orientation questionnaires**

Individualism and collectivism were assessed using items of the Horizontal and Vertical Individualism and Collectivism scales (Singelis, Triandis, Bhawuk, & Triandis, 1996). For the purpose of the present study, the horizontal and vertical individualism sub-scales were combined to form an overall individualism scale. Cronbach's alpha was .90. Items were presented at Appendix C. Similarly, the horizontal and vertical collectivism sub-scales were combined to form an overall collectivism scale. Cronbach's alpha was .85. Items were presented at Appendix D.

### **Job Performance**

Ratings of job performance were provided by supervisors using the Relative Percentile Method (RPM), which asks the supervisors to rate all of their subordinates on a single scale

ranging from 0 to 100 (see Goffin, Jelley, Powell, & Johnston, 2009). Supervisors were presented with a RPM form and a list of their workers whose job performance were needed to be rated. The supervisors were asked to consider how the worker's job performance compared to other workers in the similar position in the company, and then mark an appropriate point along the scale (see Appendix E). The RPM has been demonstrated to produce higher levels of criterion validity than do conventional methods involving absolute ratings, and the accuracy of RPM has been supported in a growing body of research (Gellatly, Paunonen, Meyer, Jackson, & Goffin, 1991; Goffin, Gellatly, Paunonen, Jackson, & Meyer, 1996; Wagner & Goffin, 1997).

### **Control Variables**

Several control variables were included to rule out alternative explanations of the results. Past research has found that age, gender, organization tenure and education level can influence job performance (Roth, Purvis, Bobko, & Philip, 2012; Schmidt, Hunter, & Outerbridge, 1986; Waldman & Avolio, 1986; Wise, 1975). Therefore, I controlled these demographic variables: age, gender (1=male, 2=female), organization tenure (years), and education level (1= less than high school completed, 2=high school, 3=undergraduate, 4=graduate) in the current study because I was interested in whether my predictors would hold over and above these findings from past research.

### **Analyses**

#### **CSE and PGP as predictors of employees' job performance**

In order to test the hypotheses of whether CSE and PGP are positively related to job performance as well as the relationships for all study variables, correlations were conducted.

### **The moderating roles of individualism and collectivism**

In order to test the hypotheses of individualism and collectivism as moderators of the relations involving CSE, PGP and job performance, a total of four moderated multiple regression analyses were conducted. (All the predictor variables were centered.). For example, to test the hypothesis the moderating effect of individualism on the relationship between CSE and job performance, in the first step of regression model, the control variables were entered, including age, gender, organization tenure, and education level. Then, in the second step, CSE and individualism were entered. Finally, in the third step, interaction terms (CSE  $\times$  individualism) were entered. Three additional analyses were repeated with the other combinations of the variables, namely CSE  $\times$  collectivism, PGP  $\times$  collectivism, and PGP  $\times$  individualism. Significant interactions were then plotted.

## CHAPTER THREE: RESULTS

### **Pre-Analysis**

Multivariate outlier analysis was conducted using Mahalanobis distance with  $p < .001$ , derived from leverage scores and one case was flagged as a multivariate outlier. Thus I further checked the responses of this case. Although this participant had a relative low score on collectivism ( $M = 2.14$ ), I was not able to find any strong reasons to indicate the responses of this participant were inaccurate. Therefore, I decided to keep this case for the subsequent analyses.

### **Descriptive and correlations**

I first examined some group-level statistics for PGP and job performance ratings (Table 1). The  $R_{wg}$  values for PGP ranged from .89 to .96, which suggested that workers in the same group had a fairly high level of agreement on PGP. However, ICC(1) for PGP was only .03, which suggests only 3% of the variance in PGP was accounted for by group membership (see Bliese, 1998; Hofmann, 2002 for further details about ICC). Therefore, it is meaningful to examine PGP at individual level. In addition, the ICC(1) value for job performance was close to zero, which indicated that no variance could be attributed to the rater effect.

Means, standard deviations, Cronbach  $\alpha$ s and correlations for all study variables were reported in Table 2, which showed that all internal consistency reliabilities were satisfactory (all  $\alpha > .80$ ). The correlations between the independent variables and job performance all supported the findings of previous research: CSE and PGP were found to be positively associated with



supervisor rating of job performance ( $r = .35$  and  $.34$  respectively, both  $p < .01$ ), thus the first and second hypotheses were supported. In addition, the correlation involving individualism and collectivism was moderate ( $r = -.36$ ,  $p < .01$ ) but not large, indicating that these scales appear to measure separate construct.

### **Moderated Multiple Regression Analyses**

Moderated multiple regression analyses were conducted. Results were shown in Table 3-6. All the control variables did not contribute significantly to the prediction of job performance, all control variables were found to be unrelated to job performance: age ( $\beta = -.05$ ), gender ( $\beta = .09$ ), organization tenure ( $\beta = .23$ ), education ( $\beta = .08$ ).

The results of Table 3 indicated the moderator role of individualism on the relationship between CSE and job performance. It was found that both CSE and individualism explained a significant amount of variance in job performance above and beyond the control variables. Results indicated that CSE ( $\beta = .46$ ,  $p < .01$ ) was positively associated with job performance ratings, while individualism ( $\beta = -.20$ ,  $p < .05$ ) was negatively associated with job performance. In addition, the interaction between CSE and individualism was significant ( $\beta = .46$ ,  $p < .01$ ). As shown in Figure 2, the relationship between CSE and job performance was stronger for employees who are higher on individualism than for employees who are lower on individualism and thus, Hypothesis 3a was supported.

The results of Table 4 indicated the moderator role of collectivism on the relationship between CSE and job performance. It was found that only CSE explained a significant amount of

variance in job performance above and beyond the control variables. Results indicated that CSE ( $\beta = .39, p < .01$ ) was positively associated with job performance ratings, while collectivism was not significantly associated with job performance. In addition, the interaction between CSE and collectivism was significant ( $\beta = -.24, p < .01$ ). As shown in Figure 3, the relationship between CSE and job performance was weaker for employees who are higher on collectivism than for employees who are lower on collectivism and thus, Hypothesis 3b was supported.

The results of Table 5 indicated the moderator role of collectivism on the relationship between PGP and job performance. It was found that only PGP explained a significant amount of variance in job performance above and beyond the control variables. Results indicated that PGP ( $\beta = .32, p < .01$ ) was positively associated with job performance ratings, while collectivism was not significantly associated with job performance. In addition, the interaction between PGP and collectivism was significant ( $\beta = .22, p < .01$ ). As shown in Figure 4, the relationship between PGP and job performance was stronger for people who are higher on collectivism than for people who are lower on collectivism and thus, Hypothesis 4a was supported.

The results of Table 6 indicated the moderator role of individualism on the relationship between PGP and job performance. It was found that only PGP explained a significant amount of variance in job performance above and beyond the control variables. Results indicated that PGP ( $\beta = .34, p < .01$ ) was positively associated with job performance ratings, while individualism was not significantly associated with job performance. In addition, the interaction between PGP and individualism was not significant, and thus, Hypothesis 4b which stated that the relationship between PGP and job performance is weaker for employees who are high on individualism than

those who are low on individualism was not supported.

### **Supplement**

HLM is useful in analyzing data that are hierarchically organized at more than one level. One of its applications is to assess the influence of predictors at both the individual level and group level on an individual level outcome (Gavin & Hofmann, 2002). According to Bryk and Raudenbush (1992), there is no reason to conduct a HLM analysis if between-group variances in group-level variables are very small. As mentioned above, the ICC(1) values for both PGP and job performance ratings obtained in the present research were very small (ICCs = .03 and .00, respectively), suggesting that these group-level variables in the current study can be treated as individual (lower) level variables. As expected, conducting HLM analyses revealed the identical pattern of results and therefore is not reported here. .

## CHAPTER FOUR: DISCUSSION

The results of the present study provided comprehensive evidence on relationships between evaluations and job performance, the findings both supported and expanded upon the existing literature. Consist with previous research (Earley, 1993; Erez & Judge, 2001; Judge & Bono, 2001; Earley, 1993; Zellars et al., 2001), both CSE and PGP were found to be robust predictors of supervisor's rating of job performance. Furthermore, results also indicated that the predictabilities of these predictors were moderated by two individual cultural orientations (e.g., individualism, collectivism).

CSE is a fundamental, bottom-line evaluation that people make about themselves. To date research on CSE has largely been done within industrial-organizational psychology. As discussed previously, CSE was theorized to be represented by four personality traits-self-esteem, generalized self-efficacy, internal locus of control, and emotional stability (Judge et al., 2005). In the current study, I examined the overall CSE instead of investigating each of four traits separately. According to the results of the present study, overall CSE was positively correlated with employees' job performance. Accordingly, CSE as employees' inward and internal assessment can influence supervisor's rating of external behaviors. In the present study, individual level evaluation of group and group members' capabilities was investigated as PGP. Similar with CSE, employees' PGP was positively associated with supervisor's evaluation of job performance. Another finding of these two evaluations was employees' CSE and PGP were not correlated with each other, they were two different constructs. These findings could be

interpreted to mean that employees' inward assessments toward their selves were not necessarily related with their outward assessments toward their working group, but both of the assessments could significantly predict their working behaviors.

In the current study, I also posited that the predictive power of CSE and PGP would be moderated by cultural orientations. Specifically, CSE could be a stronger predictor of job performance for employees that are high on individualism, whereas PGP could be a stronger predictor for employees that high on collectivism. Results of the field study supported these hypotheses as there were significant interactions involving CSE and individualism, CSE and collectivism, and PGP and collectivism. Thus, maximizing the predictive power of CSE might require a consideration of the employees' individualism, whereas maximizing the predictive power of PGP might appear to require a consideration of the employees' collectivism. In addition, among those employees high on collectivism, the relationship between CSE and job performance was found to be weaker.

Interestingly, there was no significant interaction between PGP and individualism. This is notable for two reasons. First, individualism and collectivism are occasionally treated as opposing ends of the same construct (Hofstede, 1980; Hui & Triandis, 1989), yet treating them separately seems to offer the potential for fine-grained insight. Second, individualists are high sensitive to their internal assessments toward themselves. Accordingly, individualism is apparently not relevant for PGP, which could be interpreted to mean that when employees are high on individualism their perceptions and outward evaluations of their group are less important for their own job performance.

In addition to forecasting behavior, this is theoretically important because the focus and direction of employees' evaluations (inward versus outward) have the strongest impact on job performance when there is an appropriate match in cultural orientation (individualism versus collectivism). Given that past research has tended to consider evaluations (CSE, PGP) in isolation from cultural orientations, the novel findings reported here suggested that an integrated perspective is needed, as CSE, an inward-focused evaluation, seems to be more important for those who are highly individualistic than those who are not individualistic, PGP, an outward-focused evaluation, seems to be more important for those who are highly collectivistic than for those who are not collectivistic.

## **Implications**

### **Practice**

There are several practical implications of these findings. First, the results of the present study suggested that CSE and PGP can be directly applied toward understanding and predicting workplace behaviors, thus seeking applicants who are high in CSE or PGP would be advantageous for organizations. During selection procedures, two evaluations (CSE and PGP) can be considered as valid predictors of job performance. Second, in order to maximize the predictability of evaluations on job performance, an employee's cultural orientation should be taken into consideration. Managers could forecast an employee's future job performance by obtaining the appropriate evaluation depending on the employee's cultural orientation. For example, if the employee scores high on individualism, obtaining information about his or her CSE would maximize the predictability of job performance. Third, as both evaluations have been

found to be related to job performance through motivation (Erez & Judge, 2001; Mitchell, 1974), managers could emphasize building the either CSE or PGP to increase organization's and employees' productivity. Managers can create work environment that trigger the positive characteristics associate with high CSE and PGP. For instance, if an employee was found to be primarily individualistic, the manager could facilitate building CSE through increasing self-esteem, self-efficacy, internal locus of control or emotional stability. Self-esteem and emotional stability could be strengthened through workshops or trainings that reinforce positive attitudes about an employee's ability on the job. Feelings of self-efficacy could be nurtured through specific task training to ensure the skills needed to complete the task are learned. Internal locus of control could be promoted through increasing job autonomy or more collaborative decision-making. Conversely, if an employee was found to be primarily collectivistic, the manager could emphasize the competency and ability of the group to perform specific tasks to increase his or her PGP. For instance, programs that train appropriate team work behaviors could be one way to increase an employee's PGP.

## **Research**

Considering the findings of this current study, it is apparent that there is a need for an integrative theory involving cultural orientations, and evaluations. Past research has focused on investigating the effects of evaluations in isolation from other variables. Results of the present study, however, indicated that individualism and collectivism have pervasive moderating effects on the relations between evaluations and job performance, and therefore suggested that studying evaluations and job performance in the presence of cultural variables may prove fruitful. As such,

there is a need to develop an integrative theory that considers the effects of these cultural variables.

Additionally, as discussed previously, the assumption that individualism and collectivism are two distinct poles at the opposite ends of one dimension may be insufficient as it overlooks the subtypes of individualistic and collectivistic values that can overlap (Schwartz, 1990).

Therefore, future research should consider individualism and collectivism separately, as it can yield more insight into understanding cultural orientations.

What's more, from a theoretical perspective, more studies should examine some of the variables (e.g., collective efficacy, individualism, collectivism) at individual level. As mentioned previously, most of the extant research measured collective efficacy at group level and individualism/collectivism at cultural level. According to the results of the present study, it is meaningful to consider these variables as individual level constructs and examine individual differences within a group and a culture.

Last, the present study used RPM instead of absolute rating of job performance. According to social comparison theory (Festinger, 1954), it should be more efficacious for job performance ratings if the raters can compare an employee to other employees instead of using typical absolute rating standards. As suggested by Goffin, Jelley, Powell and Johnston (2009), the central tenet of social comparison theory is “when objective evaluation is precluded, evaluation takes place through comparison that use other people as reference points.” (p. 252). RPM required that ratings should be based on comparative information and the instructions of RPM emphasized ratings should be made relative to the average employee in the organization. Such method has



been found to yield generally stronger relations with relevant criteria than did conventional absolute rating method (Goffin & Jelley, 2009; Goffin & Olson, 2011; Goffin, Olson, & Haynes, 2007; Henemans, 1986). For instance, Goffin and colleagues (2007) reported 4 studies measured respondents' attitude, their results consistently indicated that attitude measured by relative scales yielded better criterion validity than did measured by absolute Likert scales. Henemans's (1986) meta-analysis used various measures of performance as criteria (e.g., sale volume, quantity and production), and found mean correlated criterion-validity was .66 for relative formats and only .21 for absolute formats. Goffin and Jelley (2009) also found relative ratings of performance predicted criterion variance beyond that predicted by the absolute rating. Furthermore, the RPM allows for rating employees at the same time, thereby encouraging a social comparative mindset. This improves on conventional methods of providing ratings of ratees in a (serial) one-at-a-time fashion that do not promote social comparisons but rather emphasize absolute judgments. Finally, unlike research finding strong rater effects, it seems that the use of the RPM involving first ranking direct reports, followed by writing in a percentile, likely led to low rater main effects (as evidenced by a low ICC). Accordingly, a promising future study research direction would involve considering the use of relative rating method within organizations.

## **Limitations**

The study sample could be viewed as a limitation as it was conducted in another culture. Conducting the study in another culture could be an issue as one culture could be systematically different than another. However, this was addressed in the current study, as there is no comparison or generalization of these findings to other cultures. Additionally, as all the data were

collected at the individual level, there was still variance between employees of the same culture.

Furthermore, because the study was conducted in China, the measures and scales were translated into Chinese. Translating materials from one language to another could potentially be problematic as the exact meaning of the items could be influenced during the translation process. However, the present study addressed this issue by using Brislin's (1986) model of translation, which involved translating the materials into the target language, and then translating the materials back into the original language to determine if the items of the measures were conceptually equal. This ensured that the meaning of items was not lost during the translation process.

## **Conclusion**

In the current study I examined the relationships involving CSE, PGP and job performance as well as the moderate effects of cultural orientations, specifically individualism and collectivism, on the relationship between evaluations and job performance. From the field study, I found that CSE, an inward evaluation, predicted employees' job performance. In addition, such predictability was high on employees who were high on individualism. PGP, an outward evaluation, was found to be a valid predictor of job performance. Such predictability was maximized when employees were high on collectivism. Thus, it appears that both inward and outward evaluations can positive influence employees' external job behaviors. Furthermore, individualism and collectivism separately affected the predictive power of the evaluations, and, that an integrative theory is needed to better understand the effects of cultural orientations on

evaluations and job performance.

## References

- Alessandri, G., Vecchione, M., Tisak, J., Deiana, G., Caria, S., & Caprara, G. V. (2011). The utility of positive orientation in predicting job performance and organizational citizenship behaviors. *Applied Psychology: An International Review*, 61(4), 669-698.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122-147.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, 4, 359-373.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: W. H. Freeman.
- Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44, 1-26.
- Bliese, P. D. (1998). Group size, ICC values, and group-level correlations: A simulation. *Organizational Research Methods*, 1, 355-373.
- Brockner, J. (1979). The effects of self-esteem, success-failure, and self consciousness on task performance. *Journal of Personality and Social Psychology*, 37, 1732-1741.
- Bono, J. E., & Colbert, A. E. (2005). Understanding responses to multi-source feedback: The role of core self-evaluations. *Personnel Psychology*, 58, 171-203.
- Bono, J. E., & Judge, T. A. (2003). Core self-evaluations: A review of the trait and its role in job satisfaction and job performance. *European Journal of Personality*, 17, 5-18.
- Brislin, R. W. (1986). The wording and translation of research instruments. *Field methods in cross-cultural research*. 137-164.

- Bryk, A. S., & Raudenbush, S. W. (1992). *Hierarchical linear models*. Newbury Park, CA:Sage.
- Buss, A. H. (1989). Personality as traits. *American Psychologist*, 44, 1378–1388.
- Chang, C., Ferris, D. L., Johnson, R. E., Rosen, C. C., & Tan, J. A. (2012). Core self-evaluations: A review and evaluation of the literature. *Journal of Management*, 38(1), 81-128.
- Chen, G., & Kanfer, R. (2006). Toward a systems theory of motivated behavior in work teams. *Research in Organizational Behavior*, 27, 223-267.
- Chen, J., & Silverthorne, C. (2008). The impact of locus of control on job stress, job performance and job satisfaction in Taiwan. *Leadership & Organization Development Journal*, 29, 572-582.
- Cohen, S., & Wills, T. S. (1985). Stress social support, and the buffering hypotheses. *Psychological Bulletin*, 98, 310-357.
- DeRue, D. S., Hollenbeck, J., Ilgen, D., & Feltz, D. (2010). Efficacy dispersion in teams: Moving beyond agreement and aggregation. *Personnel Psychology*, 63, 1-40.
- Earley, P. C. (1989). Social loafing and collectivism: A comparison of United State and People's Republic of China. *Administrative Sciences Quarterly*, 34, 565-581.
- Earley, P. C. (1993). East meets west meets mideast: Further explorations of collectivistic and individualistic work groups. *Academy of Management Journal*, 36, 319-348.
- Earley, P. C. (1994). The employee and collective self: An assessment of self-efficacy and training across cultures. *Administrative Science Quarterly*, 39, 89-117.
- Earley, P. C., & Gibson, C. B. (1998). Taking stock in our progress on individualism and

- collectivism: 100 years of solidarity and community. *Journal of Management*, 24, 265-304.
- Earley, P. C., Gibson, C. B., & Chen, C. C. (1999). "How did I do?" Versus "How did we do?" Culture contrasts of performance feedback use and self-efficacy. *Journal of Cross Cultural Psychology*, 30, 594-619.
- Erez, A., & Judge, T. A. (2001). Relationship of core self-evaluations to goal setting, motivation, and performance. *Journal of Applied Psychology*, 86, 1270-1279.
- Finkelstein, M. A. (2012). individualism/collectivism and organizational citizenship behavior: An integrative framework. *Social Behavior and Personality*, 40(10), 1633-1644.
- Festinger, Leon.(1954). A theory of social comparison processes. *Human Relations*. 7, 117-140
- Gavin, M. B., & Hofmann, D. A. (2002). Using hierarchical linear modeling to investigate the moderating influence of leadership climate. *The leadership Quarterly*, 13, 15-33.
- Ghiselli, E. E. (1973). The validity of aptitude tests in personnel selection. *Personnel Psychology*, 20, 461-477.
- Gibson, C. B., & Earley, P. C. (2007). Collective cognition in action: Accumulation, interaction, examination, and accommodation in the development of group efficacy beliefs in the workplace. *Academy of Management Review*, 32, 438-458.
- Gibson, C. B., Randel, A., & Earley, P. C. (2000). Understanding group efficacy: An empirical test of multiple assessment methods. *Group & Organization Management*, 25, 67-97.
- Gist, M. E., & Mitchell, T. R. (1992). Self-efficacy: A theoretical analysis of determinants and malleability. *Academy of Management Review*, 17, 183-21.

- Goffin, R. D., Gellatly, I. R., Paunonen, S. V., Jackson, D. N., & Meyer, J. P. (1996). Criterion validation of two approaches to performance appraisal: The behavioral observation scale and the relative percentile method. *Journal of Business and Psychology, 11*, 23–33.
- Goffin, R. D., Jelley, R. B., Powell, D. M., & Johnston, N. G. (2009). Taking advantage of social comparisons in performance appraisal: The Relative Percentile Method. *Human Resource Management, 48*, 261–268.
- Goffin, R. D., & Olson, J. M. (2011). Is it all relative? Comparative judgments and the possible improvement of self-ratings and ratings of others. *Perspectives on Psychological Science, 6*, 48–60.
- Guion, R. M., & Gottier, R. E. (1965). Validity of personality measures in personnel selection. *Personnel Psychology, 18*, 135–164.
- Hecht, T. D., Allen, N. J., Klammer, J. D., & Kelly, E. C. (2002). Group beliefs, ability, and performance: The potency of group potency. *Group Dynamics: Theory, Research, and Practice, 6*, 143–152.
- Hofstede, G. (1980). Culture's consequences: International differences in work-related values. *Beverly Hills, CA: Sage*
- Hofstede, G. (1991). Cultures and organizations: Software of the mind: Intercultural cooperation and its impact for survival. *New York, NY: McGraw-Hill*.
- Hofmann, D. A. (2002). Issues in multilevel research: Theory development, measurement, and analysis. In S. G. Rogelberg (Ed.), *Handbook of research methods in industrial and organizational psychology* (pp. 247–274). Oxford, UK: Blackwell Publishing.

- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). Culture, leadership, and organizations: The GLOBE study of 62 societies. *Thousand Oaks, CA: Sage.*
- Hough, L. M., & Ones, D. S. (2001). The structure, measurement, validity, and use of personality variables in industrial, work, and organizational psychology. In N. R. Anderson, D. S. Ones, H. K. Sinangil, & C. Viswesvaran (Eds.), *International handbook of work and organizational psychology*, 233–377.
- Huang, H. (2005). A cross culture test of the spiral of silence. *International Journal of Public Opinion Research*, 17, 234-245.
- Hui, C. H., & Triandis, H. C. (1986). individualism-collectivism: A study of cross-cultural researchers. *Journal of Cross-Cultural Psychology*, 17, 222–248.
- Ho, D. Y., & Chiu, C. (1994). Component ideas of individualism, collectivism, and social organization: An application in the study of Chinese culture. *Individualism and Collectivism: Theory, Method, and Applications*, 137-156.
- Hwang, A., & Francesco, A. M. (2010). The influence of individualism-collectivism and power distance on use of feedback channels and consequences for learning. *Academy of Management Learning & Education*. 9(2), 243-257.
- Jex, S. M., & Gudanowski, D. M. (1992). Efficacy beliefs and work stress: An exploratory study. *Journal of Organizational Behavior*, 13, 509-517.
- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits: self-esteem, generalized self-efficacy, locus of control, and emotional stability with job satisfaction and



- job performance: A meta-analysis. *Journal of Applied Psychology*, 86, 80-92.
- Judge, T. A., Bono, J. E., Erez, A., & Locke, E. A. (2005). Core self-evaluations and job and life satisfaction: The role of self-concordance and goal attainment. *Journal of Applied Psychology*, 90, 257-268.
- Judge, T. A., Erez, A., & Bono, J. E. (1998). The power of being positive: The relation between positive self-concept and job performance. *Human Performance*, 11, 167-187.
- Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2003). Are measures of self-esteem, neuroticism, locus of control, and generalized self-efficacy indicators of a common core construct? *Journal of Personality and Social Psychology*, 83, 693-710.
- Judge, T. A., Higgins, C., Thoresen, C. J., & Barrick, M. R. (1999). The Big Five personality traits, general mental ability, and career success across the life span. *Personnel Psychology*, 52, 621-652.
- Judge, T. A., & Kammeyer-Mueller, J. D. (2011). Implications of core self-evaluations for a changing organizational context. *Human Resource Management Review*, 21(4), 331-341.
- Judge, T. A., Locke, E. A., & Durham, C. C. (1997). The dispositional causes of job satisfaction: A core evaluations approach. *Research in Organizational Behavior*, 19, 151-188.
- Jung, D. I., & Sosik, J. J. (2003). Group potency and collective efficacy: Examining their predictive validity, level of analysis, and effects of performance feedback on future group performance. *Group & Organization Management*, 28, 366-391.
- Kacmar, K. M., Collins, B. J., Harris, K. J., & Judge, T. A. (2009). Core self-evaluations and job performance: The role of the perceived work environment. *Journal of Applied Psychology*.

94(6), 1572-1580.

Kagitcibasi, C. (1987). Growth and progress in cross-cultural psychology. Growth and progress in cross-cultural psychology. 410 pp. Berwyn, PA, US: Swets North America; US.

Kagitcibasi, C., & Berry, J. W. (1989). Cross-cultural psychology: Current research and trends. *Annual review of psychology*, 40, 493-531.

Kammeyer-Mueller, J. D., Judge, T. A., & Piccolo, R. F. (2008). Self-esteem and extrinsic career status: Test of a dynamic model. *Applied Psychology: An international review*, 57, 204-224.

Kashima, Y. (1987). Conceptions of person: Implications in individualism/collectivism research. *Growth and progress in cross-cultural psychology*, 104-112.

Kirkman, B. L., & Shapiro, D. L. (2001). The impact of team members' cultural values on productivity, cooperation, and empowerment in self-managing work teams. *Journal of Cross-Cultural Psychology*. 32(5), 597-617.

Latham, G. P., Daghighi, S. & Locke, E. A. (1997). Implications of goal-setting theory for faculty motivation. Teaching well and liking it: Motivating faculty to teach effectively. 125-142

Latham, G. P., Ganegoda, D. B. & Locke, E. A. (2011) Goal-setting: A state theory, but related to traits. *The Wiley-Blackwell handbook of employee differences*, 579-587.

Lee, W. N., & Choi, S. M. (2005). The role of horizontal and vertical individualism and collectivism in online consumers' responses toward persuasive communication on the Web. *Journal of Computer-Mediated Communication*, 11, 317-336.

Majumder, R. K., MacDonald, A. P., & Greever, K. B. (1997). A study of Rehabilitation

- counselors: Locus of control and attitudes toward the poor. *Journal of Counseling Psychology*, 24, 137-141.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224-253.
- Mitchell, T. R. (1974). Expectancy models of job satisfaction, occupational preference and effort: A theoretical, methodological, and empirical appraisal. *Psychological Bulletin*, 81(12), 1053-1077.
- Moorman, R. H., & Blakely, G. L. (1995). individualism-collectivism as an employee difference predictor of organizational citizenship behavior. *Journal of Organizational Behavior*, 16, 127-142.
- Neubert, M., Taggar, S., & Cady, S. (2006). The role of conscientiousness and extraversion in affecting the relationship between perceptions of group potency and volunteer group member selling behavior: An interactionist perspective. *Human Relations*, 59, 1235-1260.
- Ones, D. S., Dilchert, S., Viswesvaran, C., & Judge, T. A. (2007). In support of personality assessment in organizational settings. *Personnel Psychology*, 60, 995-1027.
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 3-72.
- Phillips, J. M., & Gully, S. M. (1997). Role of goal orientation, ability, need for achievement, and locus of control in the self-efficacy and goal-setting process. *Journal of Applied Psychology*, 82, 792-802.

- Raub, S., & Liao, H. (2012). Doing the right thing without being told: Joint effects of initiative climate and general self-efficacy on employee proactive customer service performance. *Journal of Applied Psychology*, 97(3), 651-667.
- Rhee, E., Uleman, J. S., & Lee, H. K. (1996). Variations in collectivism and individualism by ingroup and culture: Confirmatory factor analysis. *Journal of Personality and Social Psychology*, 71(5), 1037-1054.
- Riggs, M. L. (1989). The development of self-efficacy and outcome scales for general applications. Paper presented at Society of Industrial and Organizational Psychology Convention, Boston, MA.
- Riggs, M. L., & Knight, P. A. (1994). The impact of perceived group success-failure on motivational beliefs and attitudes: A causal model. *Journal of Applied Psychology*, 79, 755-766.
- Roth, P. L., Purvis, K. L., Bobko, P. (2012). A meta-analysis of gender group differences for measures of job performance in field studies. *Journal of Management*, 38, 719-739.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 1-28.
- Rotter, J. B. (1992). Cognates of personal control: Locus of control, self-efficacy, and explanatory style": Comment. *Applied & Preventive Psychology*, 1, 127-129.
- Salanova, M., Llorens, S., Cifre, E., Martinez, I. M., & Schaufeli, W. B. (2003). Perceived collective efficacy, subjective well-being and task performance among electronic work groups: An experimental study. *Small Group Research*, 34, 43-73.

Salgado, J. F. (1997). The five factor model of personality and job performance in the European Community. *Journal of Applied Psychology*, 82, 30-43.

Schmidt, F. L., Hunter, J. E., & Outerbridge, A. N. (1986). Impact of job experience and ability on job knowledge, work sample performance, and supervisory ratings of job performance. *Journal of Applied Psychology*, 71, 432-439.

Schwartz, S. H. (1990). Individualism-collectivism: Critique and proposed refinements. *Journal of Cross-cultural Psychology*, 2, 139-157.

Singelis, T. M., Triandis, H. C., Bhawuk, D., & Gelfand, M. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-Cultural Research*, 29, 204-275.

Somech, A., & Drach-Zahavy, A. (2000). Understanding extra-role behavior in schools: The relationships between job satisfaction, sense of efficacy and teachers' extra-role behavior. *Teaching and Teacher Education*, 16, 649-659.

Tasa, K., Taggar, S., & Seijts, G. H. (2007). The development of collective efficacy in teams: A multilevel and longitudinal perspective. *Journal of Applied Psychology*, 33, 44-56.

Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review*, 96, 506-520.

Triandis, H. C., Bontempo, R., Betancourt, H., Bond, M., Leung, K., Brenes, A., Georgas, J., Hui, C. H., Marin, G., Setiadi, B., Sinha, J. B. P., Verma, J., Spangenberg, J., Touzard, H., & Montmollin, G. (1986). The measurement of the etic aspects of individualism and collectivism across cultures. *Australian Journal of Psychology*. 38(3), 257-267.

- Triandis, H. C., & Singelis, T. M. (1998). Training to recognize employee differences in collectivism and individualism within culture. *International Journal of Intercultural Relations*. 22(1), 35-47.
- Triandis, H. C., & Suh, E. M. (2002). Cultural influences on personality. *Annual Review of Psychology*. 53(1), 133-160.
- Olayiwola, I. O. (2011). Self-efficacy as predictor of job performance of public secondary school teachers in Osun state. *IFE Psychologia: An International Journal*, 19(1), 441-445.
- O'Neill, T. A., & Allen, N. J. (2012). Personality and the prediction of team performance. *European Journal of Personality*, 25, 31-42.
- Oyserman, D. (1993). The lens of personhood: Viewing the self and others in a multicultural society. *Journal of Personality and Social Psychology*, 65, 993-1009.
- Wise, D.(1975). Academic achievement and job performance. *American Economic Association*, 65, 350-366.
- Wanger, J. A. (1995). Studies of individualism-collectivism: effect on cooperation in groups. *Academic of Management Journal*, 38, 152-172.
- Wagner, S. H., Goffin, R. D. (1997). Differences in accuracy of absolute and comparative performance appraisal methods. *Organizational Behavior and Human Decision Processes*, 70(2), 95-103.
- Wagner, J. A & Moch, M. K. (1986). individualism-collectivism: Concept and measure. *Group & Organization Studies*, 280-304.
- Zaccaro, S. J., Blair, V., Peterson, C., & Zazanis, M. (1995). Collective efficacy, self efficacy,

adaptation, and adjustment. New York: Plenum, 305-328.

Zellars, K. L., Hochwarter, W. A., Perrewé, P. L., Miles, A. K., & Kiewitz, C. (2011). Beyond self-efficacy: Interactive effects of role conflict and perceived collective efficacy. *Journal of Managerial Issues*. 13(4), 483-499.

Table 1 Description of Grouping Information

Group Number	Number of Participants In Each Group	Mean Value of PGP	R <sub>wg</sub> of PGP	Mean Value of JP
1	9	4.14	0.95	70.22
2	14	3.93	0.89	59.13
3	15	3.75	0.91	62.49
4	18	3.64	0.92	58.72
5	18	3.59	0.94	50.28
6	15	3.4	0.94	51.67
7	24	3.7	0.93	52.71
8	12	3.89	0.96	45.00
9	20	3.77	0.96	54.25
10	12	3.75	0.96	52.50

*Note.* N=167. PGP=Perception of group potency, JP=Job performance



Table 2 Means, Standard Deviation and Zero-Order Correlations

	M	SD	1	2	3	4	5	6	7	8
1. Age	40.89	10.28								
2. Gender	1.28	.45	-.34**							
3. Work Tenure	19.21	11.36	.93**	-.31**						
4. Education	2.58	.71	-.37**	.22**	-.43**					
5. CSE	3.56	.54	-.23**	.08	-.22**	.00	(.82)			
6. PGE	3.73	.56	-.01	.09	.01	.08	-.09	(.86)		
7. IND	3.47	.63	-.18**	.03	-.20*	.06	.31**	-.25**	(.90)	
8. COL	3.64	.52	.05	-.06	.08	-.14	.13	.42**	-.36**	(.86)
9. JP	55.54	26.25	.12	.05	.12	.01	.35**	.34**	0.10	.17*

*Note.* N=167. Numbers in parentheses along the diagonal indicate internal consistency reliabilities. CSE=Core self-evaluation, PGP=Perception of group potency, IND=Individualism, COL=Collectivism, JP= Job performance, Gender (1=Male, 2=Female), Education level (1= less than high school completed, 2=high school, 3=undergraduate, 4=graduate). \*  $p < .05$ , \*\*  $p < .01$ .

Table 3 Moderated Multiple Regression Result for CSE and Individualism

Variables	Job Performance		
	Model 1	Model 2	Model 3
1. Control			
Age	-.05	.05	.02
Gender	.09	.07	.04
Organization	.23	.20	.20
Education	.08	.09	.09
2. Main Effect			
CSE		.46**	.38**
IND		-.20*	-.22*
3. Interaction			
CSE*IND			.31**
$R^2$	.03	.22**	.31**
$\Delta R^2$	.03	.19**	.09**

*Note.* N=167. CSE = Core self-evaluation, PGP = Perception of group potency, IND = Individualism, COL = collectivism, JP= Job performance. \* $p < .05$ , \*\* $p < .01$ .

Table 4 Moderated Multiple Regression Result for CSE and Collectivism

Variables	Job Performance		
	Model 1	Model 2	Model 3
1. Control			
Age	-.05	.03	.08
Gender	.09	.08	.08
Organization	.23	.26	.21
Education	.08	.13	.14
2. Main Effect			
CSE		.39**	.38**
COL		.12	.15*
3. Interaction			
CSE*COL			-.24**
$R^2$	.03	.20**	.25**
$\Delta R^2$	.03	.17**	.05**

*Note.* N=167. CSE = Core self-evaluation, PGP = Perception of group potency, IND = Individualism, COL = collectivism, JP= Job performance. \*  $p < .05$ , \*\*  $p < .01$ .

Table 5 Moderated Multiple Regression Result for PGP and Collectivism

Variables	Job Performance		
	Model 1	Model 2	Model 3
1. Control			
Age	-.05	.07	.02
Gender	.09	.06	.07
Organization	.23	.09	.14
Education	.08	.05	.03
2. Main Effect			
PGP		.32**	.29**
COL		.03	.07
3. Interaction			
PGP*COL			.22**
$R^2$	.03	.14**	.18**
$\Delta R^2$	.03	.11**	.04**

*Note.* N=167. CSE = Core self-evaluation, PGP = Perception of group potency, IND = Individualism, COL = collectivism, JP= Job performance. \*  $p < .05$ , \*\*  $p < .01$ .

Table 6 Moderated Multiple Regression Result for PGP and Individualism

Variables	Job Performance		
	Model 1	Model 2	Model 3
1. Control			
Age	-.05	.07	.08
Gender	.09	.06	.06
Organization	.23	.10	.11
Education	.08	.05	.04
2. Main Effect			
PGP		.34 <sup>**</sup>	.32 <sup>**</sup>
IND		.01	.03
3. Interaction			
PGP*IND			-.12
$R^2$	.03	.14 <sup>**</sup>	.15
$\Delta R^2$	.03	.11 <sup>**</sup>	.01

*Note.* N=167. CSE = Core self-evaluation, PGP = Perception of group potency, IND = Individualism, COL = collectivism, JP= Job performance. \* $p < .05$ , \*\* $p < .01$ .

Figure 2 Interaction Between Core Self-evaluation and Individualism

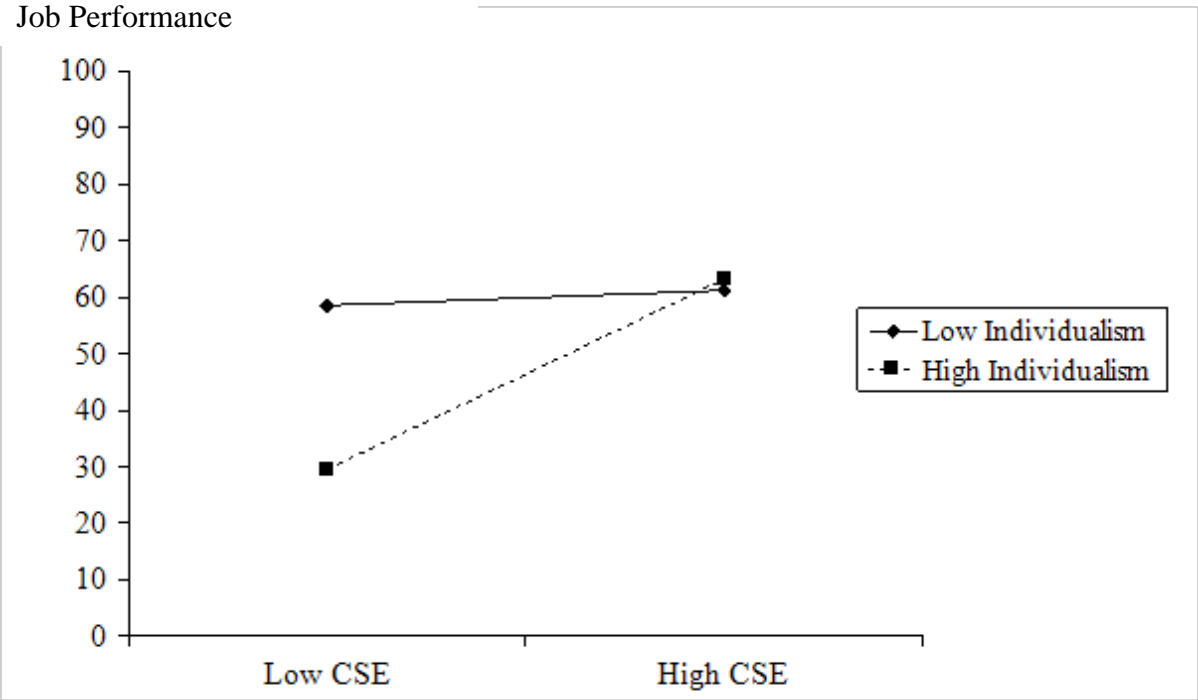


Figure 3 Interaction Between Core Self-evaluation and Collectivism

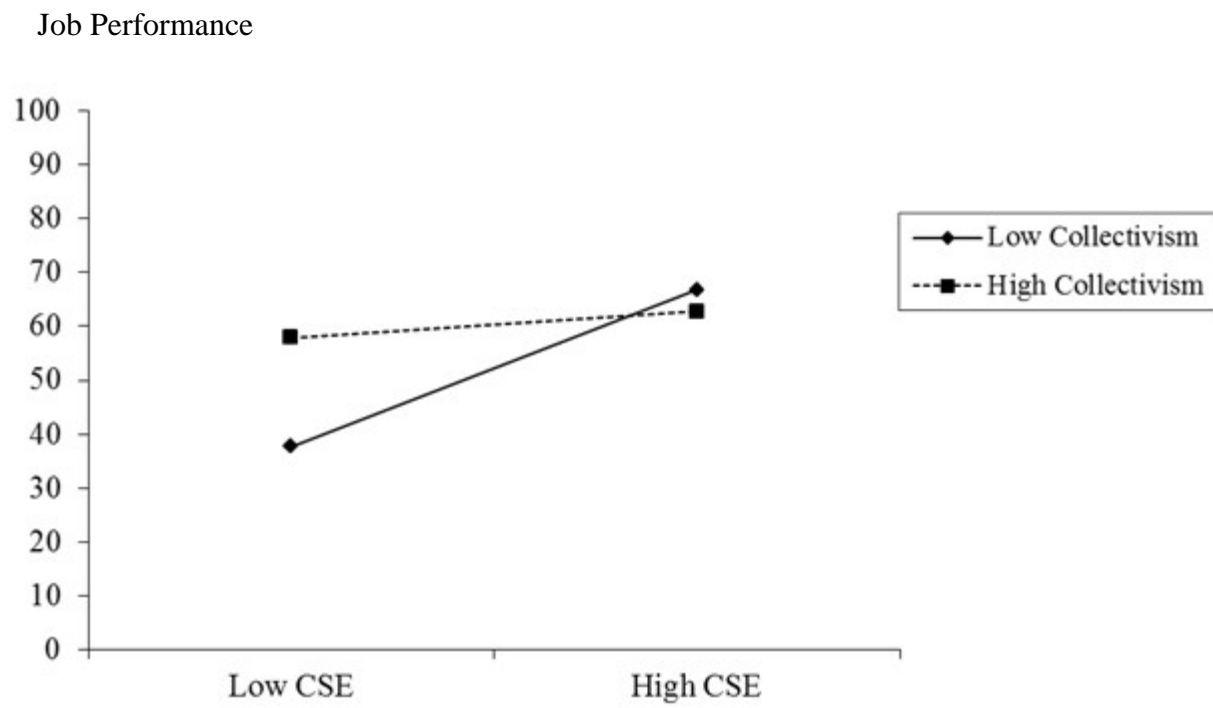
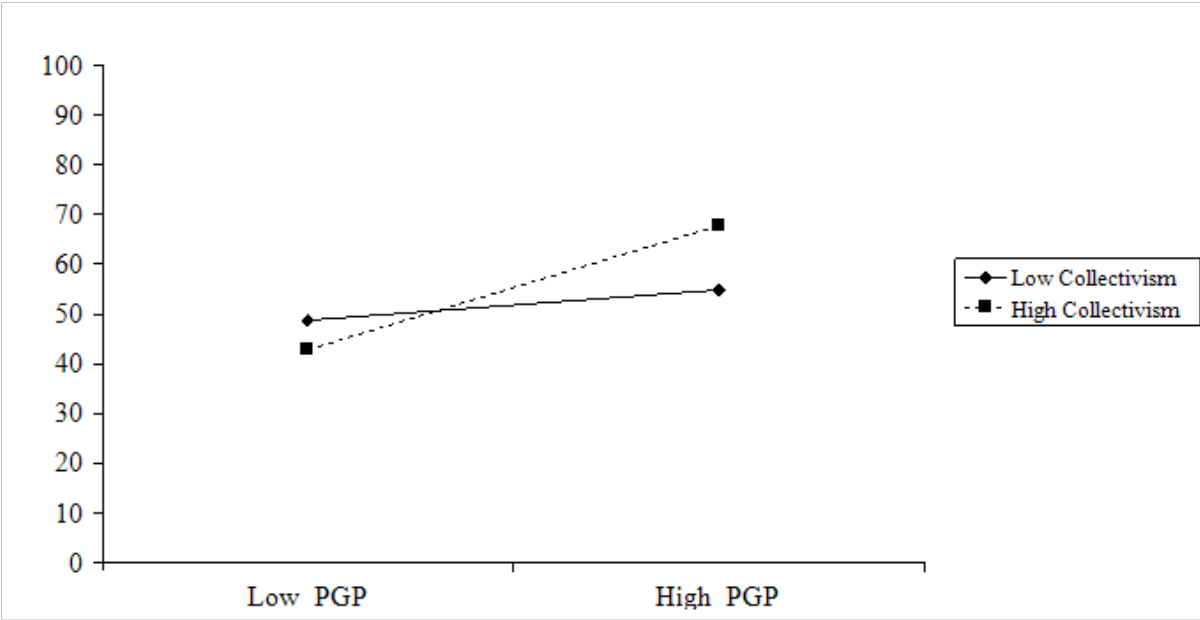


Figure 4 Interaction Between Perception of Group Potency and Collectivism

Job Performance





## **Appendix A: Core self-evaluation**

### **Appendix A1: Core self-evaluation (English Version)**

1. \_\_\_\_ I am confident I get the success I deserve in life.
2. \_\_\_\_ Sometimes I feel depressed.
3. \_\_\_\_ When I try, I generally succeed.
4. \_\_\_\_ Sometimes when I fail I feel worthless.
5. \_\_\_\_ I complete tasks successfully.
6. \_\_\_\_ Sometimes, I do not feel in control of my work.
7. \_\_\_\_ Overall, I am satisfied with myself.
8. \_\_\_\_ I am filled with doubts about my competence.
9. \_\_\_\_ I determine what will happen in my life.
10. \_\_\_\_ I do not feel in control of my success in my career.
11. \_\_\_\_ I am capable of coping with most of my problems.
12. \_\_\_\_ There are times when things look pretty bleak and hopeless to me.

Appendix A2: Core self-evaluation (Back Translation Version)

- 1.I feel confident that I can get the success I deserve in my life.
- 2.Sometimes I feel depressed.
- 3.When I tried, I always succeed.
- 4.Sometimes I feel worthless if I failed.
- 5.I can finish my job successfully.
- 6.Sometimes I feel my work is out of control.
- 7.Overall, I am satisfied with myself.
- 8.I doubt about my competence.
- 9.I can decide what will happen in my life.
- 10.I feel I can't control my success in my career.
- 11.I am able to deal with most of my problems.
- 12.There are times when things look very bleak and hopeless to me.

## 附录 A3: 自我核心量表(中文版)

- 1.\_\_\_\_我能得到我生活中应得的成功, 对此我感到很有信心。
- 2.\_\_\_\_有时候, 我感到压抑。
- 3.\_\_\_\_只要我努力做得事情, 一般都能成功。
- 4.\_\_\_\_当我失败的时候我感到自己一文不值。
- 5.\_\_\_\_我能成功的完成任务。
- 6.\_\_\_\_有时, 我对自己的工作感到失控。
- 7.\_\_\_\_总的来说, 我对自己很满意。
- 8.\_\_\_\_我很怀疑自己的能力。
- 9.\_\_\_\_我自己能够决定我将来会发生什么事情。
- 10\_\_\_\_我感到自己无法控制那些与我事业相关的成功或失败。
- 11.\_\_\_\_我能应对遇到的大多数难题。
- 12.\_\_\_\_很多时候我感到自己没有希望或前途暗淡。

## **Appendix B: Perception of group potency**

### **Appendix B1: Perception of group potency (English Version)**

- 1.\_\_\_\_ I think my group as a whole is very effective.
- 2.\_\_\_\_ In my opinion, some members of my group can do their job well.
- 3.\_\_\_\_ I feel confident about the collective capability of my group to perform the tasks very well.
- 4.\_\_\_\_ I believe, my group is able to solve difficult tasks if it invests the necessary effort.
- 5.\_\_\_\_ I feel confident that my group will be able to manage effectively unexpected troubles.
- 6.\_\_\_\_ I think my group as a whole is totally competent to perform the tasks.
- 7.\_\_\_\_ I feel confident that my group as a whole is able to allocate and integrate available resources to perform the task well.
- 8.\_\_\_\_ I believe my group as a whole knows how to transform members' abilities into group capabilities to do the tasks well.

Appendix B2: Perception of group potency (Back Translation Version)

1. I think my group as a whole is very effective.
2. I think some of my group members can finish their job well.
3. I am confident about the collective ability of my group to finish the job well.
4. I believe my group can solve the difficulties if it puts enough efforts on it.
5. I am confident about my group's ability of managing the unexpected troubles.
6. My group as a whole is totally competent to perform the job.
7. I am confident that my group as a whole can allocate and integrate the available resources to perform the job well.
8. I believe my group as a whole knows how to transform group members' capabilities into group's capabilities to finish the tasks well.

## 附录 B3： 集体效能感量表（中文版）

- 1.\_\_\_\_我的团队整体工作很有效。
- 2.\_\_\_\_我的团队中的一些同事能很好的完成他们的工作。
- 3.\_\_\_\_我对我的团队完成工作的能力很有信心。
- 4.\_\_\_\_我相信，如果我的团队付出必要的努力，我的团队能够克服困难的任務。
- 5.\_\_\_\_我对于我的团队整体有效的管理意外事件感到很有信心。
- 6.\_\_\_\_我的团队整体完全有能力完成工作。
- 7.\_\_\_\_我对我的团队能够分配和正和现有资源以完成任务很有信心。
- 8.\_\_\_\_我相信我的团队整体上知道如何将成员的能力转化成团队的能力以完成工作。

## **Appendix C: Individualism Scale**

### **Appendix C1: Individualism Scale (English Version)**

- 1 \_\_\_\_ It annoy me when other people perform better than I do.
- 2 \_\_\_\_ Competition is the law of the nature.
- 3 \_\_\_\_ When another person does better than I do, I get tense and frustrated.
- 4 \_\_\_\_ Without competition, it is not possible to have a good society.
- 5 \_\_\_\_ Winning is everything.
- 6 \_\_\_\_ It is important to me that I perform better than others on a task.
- 7 \_\_\_\_ I enjoy working in situations involving competition with others.
- 8 \_\_\_\_ Some people emphasize winning; I am not the one of them.
- 9 \_\_\_\_ I often do "my own thing".
- 10 \_\_\_\_ Being a unique employee is important to me.
- 11 \_\_\_\_ I'd rather depend on myself than on others.
- 12 \_\_\_\_ I rely on myself most of the time; I rarely rely on others.
- 13 \_\_\_\_ My personal identity, independent from others, is very important to me.
- 14 \_\_\_\_ I am a unique person, separate from others.
- 15 \_\_\_\_ I enjoy being unique and different from others.

Appendix C2: Individualism Scale (Back Translation Version)

- 1 I feel annoying when other people perform better than me.
- 2 Competition is the law of the nature.
- 3 I will feel intense and frustrated when other people perform better than me.
- 4 It is impossible to have a good society without competition.
- 5 Win is everything.
- 6 It is important for me to have better job performance than others.
- 7 I enjoy working under the competition environment.
- 8 I am not one of the people who emphasize winning.
- 9 I always do my own thing.
- 10 It is important for me to be an unique people.
- 11 I would rely on myself rather than rely on other people.
- 12 Most of time, I rely on myself. I seldom rely on others.
- 13 It is important to me that my characteristic is different from others.
- 14 I am a unique people, I am different from others.
- 15 I enjoy being unique and different from others.



## 附录 C3: 个人主义量表 (中文版)

- 1\_\_\_\_当其他人表现的比我好时, 我感到很烦躁。
- 2\_\_\_\_竞争是自然法则。
- 3\_\_\_\_当其他人做的比我好时, 我会变得很紧张, 感到受挫。
- 4\_\_\_\_没有竞争就不可能有一个好的社会。
- 5\_\_\_\_ 胜利就是一切。
- 6\_\_\_\_在一项任务上, 我表现的比他人好对我来说很重要。
- 7\_\_\_\_我很享受在竞争的环境下工作。
- 8\_\_\_\_一些人看重胜利, 我不是其中一员。
- 9\_\_\_\_我经常“做自己的事”。
- 10\_\_\_\_做一个独特的人对我来说很重要。
- 11\_\_\_\_我宁愿依靠自己也不依靠别人。
- 12\_\_\_\_大多数时间, 我依靠自己; 我很少依靠他人。
- 13\_\_\_\_我个人的特征与他人不同, 这对我很重要。
- 14\_\_\_\_我是一个独特的人, 我与他人不同。
- 15\_\_\_\_我很享受自己是独特的, 与众不同的。

## **Appendix D: Collectivism Scale**

### **Appendix D1: Collectivism Scale (English Version)**

- 1 \_\_\_\_ I would do what would please my family, even if I detested that activity.
- 2 \_\_\_\_ I usually sacrifice my self-interest for the benefit of my group.
- 3 \_\_\_\_ Aging parents should be live with their children in their home.
- 4 \_\_\_\_ I would sacrifice an activity that I enjoy very much if my family did not approve of it.
- 5 \_\_\_\_ Children should be taught to place duty before pleasure.
- 6 \_\_\_\_ It is important to me I respect the decisions made by my group.
- 7 \_\_\_\_ Self-sacrifice is a virtue.
- 8 \_\_\_\_ It annoys me if I have to sacrifice activities that I enjoy to help others.
- 9 \_\_\_\_ The well-being of my coworkers/ follow students is important to me.
- 10 \_\_\_\_ if a coworker/fellow students is given a prize/award, I would feel proud.
- 11 \_\_\_\_ If a relative were in financial difficulty, I would help within my means.
- 12 \_\_\_\_ It is important to me to maintain harmony within my group.
- 13 \_\_\_\_ I like sharing things with others.
- 14 \_\_\_\_ It is important to consult close friends and get their ideas before making a decision.

Appendix D2: Collectivism Scale (Back Translation Version)

- 1 Even though I hate the activity, I will do everything to make my family happy.
- 2 For the benefits of my team, I always sacrifice my own benefits.
- 3 It is reasonable that the old parents should live with their children.
- 4 I will sacrifice an activity that I enjoy, if my family disagree with that.
- 5 Children should be taught to place duty before pleasure.
- 6 It is important for me to respect my team's decision.
- 7 It is a virtue to self-sacrifice.
- 8 I will feel annoying if I have to sacrifice my interest activities to help other people.
- 9 The wellbeing of my colleague/coworker is very important for me.
- 10 I will feel proud if one of my fellow earn a price.
- 11 I will help my relative within my ability if he or she confronts some financial difficulties.
- 12 It is important for me to keep harmony with my team.
- 13 I like share things with others.
- 14 It is important to consult my good friends and ask their opinions before making any decisions.

## 附录 D3: 集体主义量表 (中文版)

- 1\_\_\_\_ 我会做一切可以让我的家庭高兴的事, 尽管我厌恶那项活动。
- 2\_\_\_\_ 为了我的团队的利益, 我经常牺牲自己的利益。
- 3\_\_\_\_ 年龄大的父母应该与他们的子女同住。
- 4\_\_\_\_ 如果我的家庭不赞成, 我会放弃一项我很喜爱的活动。
- 5\_\_\_\_ 孩子应被教育成在享乐前懂得负起责任。
- 6\_\_\_\_ 我尊重我的团队的决定对我来说很重要。
- 7\_\_\_\_ 自我牺牲是一种美德。
- 8\_\_\_\_ 如果帮助别人需要放弃或牺牲我喜爱的活动, 我会感到很烦躁。
- 9\_\_\_\_ 我同事的健康幸福对我来说很重要。
- 10\_\_\_\_ 如果我的一个同事或同学得到了一个奖项, 我会感到很自豪。
- 11\_\_\_\_ 如果一个亲戚出现了财政危机, 我会在我能力范围内帮助他。
- 12\_\_\_\_ 与我的团队维持和谐对我来说很重要。
- 13\_\_\_\_ 我喜欢与他人分享事情。
- 14\_\_\_\_ 在做决定前咨询要好的朋友, 得到他们的意见很重要。



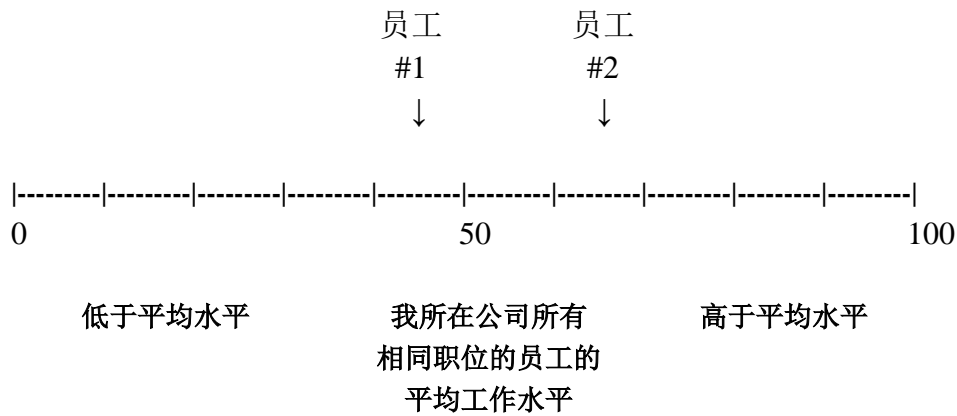


附录 E2: 工作表现评价量表-相对百分比法(中文版)  
指导和范例

以下的工作表现评比是将您的下属与所有在贵公司处在相同位置的员工进行比较。您下属员工的工作表现将被测评为:没有任何工作效率至工作很有效。

您下属的工作表现将被评为低于平均水平或高于平均水平。若某一下属员工的工作水平等同于平均水平,这意味着这名员工将获得50%,即有50%的处于同等职位的员工的工作表现没有他/她出色。如果一名员工获得100%,这意味着与同等职位的员工相比,这名员工有着做出色的表现。如果一名员工获得0%,这意味这在贵公司, 搜有处在相等职位的员工的工作表现都比这位员工要出色。

例如:



员工\_\_#1\_\_: 比\_\_45%\_\_的处在相同职位的员工工作表  
现要出色

员工\_\_#2\_\_: 比\_\_65%\_\_的处在相同职位的员工工作表  
现要出色

在这个例子中, 员工#1的工作表现低于平均水平, 只比45%处在相同职位员工的工作表现要出色。与员工#1相比, 员工#2有着更好的工作表现, 员工#2的工作表现高于平均水平。比65%处在相同职位的员工表现要出色。

