MORAL SELF-REFLECTION AND LEADERS’ VIRTUOUS BEHAVIORS

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ABSTRACT OF THE DISSERTATION

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Self-reflection, defined as the extent to which a person inspects and evaluates his/her thoughts, feelings, and behaviors, has been considered as part of self-consciousness in philosophy and the psychological self-regulation literature. I seek to extend the knowledge on self-reflection and behavioral ethics by adding an explicit moral component to self-reflection and by examining its effect on the leaders’ virtuous behavior. Building on the conceptions of moral self-reflection in Confucian and Western psychological research, I propose that moral self-reflection consists of self-introspection on the morality of intentions, habits, and the adherence to community norms. I further propose that moral self-reflection increases the leaders’ humble behaviors and ethical leadership but inhibits abusive supervision by providing other-oriented cognition (leader other-benefiting accountability) and moral emotions (guilt proneness). I use a mixed design of qualitative and quantitative studies for testing the theoretical model, which consists of 1) professional
and manager interviews to generate items of moral self-reflection, 2) exploratory and confirmatory factor analyses to validate the moral self-reflection measure, and 3) a field study of managers and their subordinates.
TABLE OF CONTENTS

CHAPTER 1 .......................................................................................................................... 1
INTRODUCTION ............................................................................................................... 1

CHAPTER 2 .......................................................................................................................... 11
LITERATURE REVIEW ...................................................................................................... 11
Review of Self-reflection Literature ................................................................................ 11
Conception of Moral Self-Reflection .............................................................................. 17
Comparing Moral Self-Reflection with Other Similar Constructs ............................. 23

CHAPTER 3 .......................................................................................................................... 27
THEORY AND HYPOTHESES ......................................................................................... 27
Moral Self-Reflection and Leader Humble behaviors ..................................................... 27
Moral Self-Reflection and Ethical Leadership ................................................................. 30
Moral Self-Reflection and Abusive Supervision ............................................................. 31
Mediators: Moral Cognition and Moral Emotion Proneness ....................................... 34
The Interaction of Moral Cognition and Emotion Proneness in Leader Virtuous
Behaviors ...................................................................................................................... 39

CHAPTER 4 .......................................................................................................................... 43
METHOD ............................................................................................................................... 43
Study 1: Moral Self-Reflection Interview ....................................................................... 44
Study 2: Moral Self-Reflection Development Study ....................................................... 47
Study 3 Moral Self-Reflection Validation Study ............................................................. 52
Study 4: Model Test Study ............................................................................................... 59

CHAPTER 5 .......................................................................................................................... 72
DISCUSSION ......................................................................................................................... 72
Theoretical Contribution ............................................................................................... 76
Limitations and Future Directions ............................................................................... 79
Managerial Implication ................................................................................................. 82
REFERENCE ......................................................................................................................... 84

APPENDIX ............................................................................................................................ 102
A. MANAGER SELF-REFLECTION INTERVIEW QUESTIONS AND
RESPONSE SUMMARY ...................................................................................................... 102
B. SURVEY ITEMS AND INSTRUCTIONS .................................................................... 109
C. FIGURE 1 .......................................................................................................................... 118
FIGURE 2 .......................................................................................................................... 119
FIGURE 3 .......................................................................................................................... 120
FIGURE 4 .......................................................................................................................... 121
FIGURE 5 .......................................................................................................................... 122
FIGURE 6 .......................................................................................................................... 122
D. TABLE 1 .................................................................................................................. 123
TABLE 2 .................................................................................................................... 127
TABLE 3 .................................................................................................................... 128
TABLE 4 .................................................................................................................... 129
TABLE 5 .................................................................................................................... 130
TABLE 6 .................................................................................................................... 131
TABLE 7 .................................................................................................................... 132
TABLE 8 .................................................................................................................... 133
CHAPTER 1

INTRODUCTION

Throughout history, scholars have written about why ethics is fundamental to effective leadership (Ciulla, 2014; 2018). In recent years, researchers have been rediscovering this truth. Numerous scandals by senior business leaders have demonstrated why ethics should not be excluded from how we think about an organization’s success. Ethical values are central to several leadership constructs and theories such as ethical leadership, servant leadership, and authentic leadership. Ethics is also a fundamental part of positive leadership (Bass & Steidlmeier, 1999; Hoch et al., 201; Hoch, Bommer, Dulebohn, & Wu, 2018). Leadership based on moral values is necessary and beneficial not only for society but also for the developing and sustaining organizations (Lemoine et al., 2019; Padilla, Hogan, & Kaiser, 2007). These are just a few reasons why researchers now pay more attention to leaders’ ethical performance and why the literature on theories such as positive leadership, authentic leadership, ethical leadership, and servant leadership has grown. However, as we know, unethical behaviors are not easy to predict or regulate as effectiveness issues related to knowledge and skills that have clear standards and formal evaluating systems. Although leaders’ unethical behaviors have more influence than their employee’s ethics (Woods & West, 2010), leaders have less oversight than their employees. This is why leaders must be able to regulate their own moral behavior. Hence, this study will examine whether a
leader’s ethical behavior can be improved by self-reflection about morality.

Reflection is developed from the Latin word “reflexió”, which means “a bending or turning back” (Andrews, Freund, Lewis, & Short, 1879). Self-reflection is a metacognitive action when the self is the object of reflection and is different from the reflexivity that describes the individual’s awareness and sensitivity to environmental conditions (Suddaby, Viale, & Gendron, 2016). Self-reflection has been an important idea for a long time in both Western philosophy and psychology and Eastern Confucianism. In the West, self-reflection initially emerged with the philosophical notion of “self-awareness”, the ability to identify one’s self apart from others and to be aware of internal feelings and thoughts (Duval & Wicklund, 1972). Psychologists heightened this philosophical idea of self-awareness as the foundation of self-consciousness. Self-consciousness is a general disposition of a “consistent tendency of persons to direct attention inward or outward, while self-awareness is a state resulted by either transient situational variables or chronic disposition, or both)” (Fenigstein, Scheier, & Buss, 1975: 522). Initially, self-reflection was introduced as one of the three components of self-consciousness: private self-consciousness, public self-consciousness, and social anxiety (Trapnell & Campbell, 1999). Because self-consciousness originated as a dispositional analog of self-awareness (Fenigstein et al., 1975, Trapnell & Campbell, 1999), self-reflection, as a kind of private-focus self-consciousness, served as a consistent attention to one’s inner thoughts and feelings. Adopting the construct
emphasizing self-focus, researchers studied self-reflection as a factor that is related to
general personalities, such as the big five personality traits and one’s psychological well-
being (e.g., happiness and depression). In addition to its inclusion in the discussions
about well-being, self-reflection has also been applied by psychologists to practical
performance through self-regulation. Self-regulation emerged from Bandura’s social
cognitive theory, which shared with self-reflection a similar theoretical foundation
developed from self-consciousness and emphasized that human beings are capable of being
the owner of themselves, being aware of their feelings, thoughts, and of controlling their
behaviors (Bandura, 1991). Focusing on self-regulation, scholars discussed the effects of
purposeful self-reflection as a monitor in task attainment (e.g., problem-solving and skill
learning) (Grant, Franklin & Langford, 2002; Luik, Taimalu, Kalk, & Täht, 2014; Roberts
& Stark, 2008; Zimmerman, 2002).

Even though self-reflection has attracted considerable attention by researchers and is
a topic on which significant knowledge has been accumulated, there are still unknown areas
that need to be studied. First, self-reflection facilitates a self-focus interest and considers
impacts on one’s own self. However, its application to self-regulation implies people
control their behaviors to achieve expected effects not only on themselves but also on
others. People have several different regulation goals but the regulatory mechanisms for
all goals are not activated at the same time (Bandura, 1991). It is meaningful to construct
self-reflection as a tool for serving other-focus motives. The existing construct of self-reflection and the corresponding measurements do not match the research need to extend the understanding of the externalized effects of self-reflection on relational issues.

Second, moral contents, which are recognized as an important aspect of self-regulation in addition to goal achievement (Bandura, 1991; 2001), receive little attention by researchers in self-reflection psychology. The importance of moral aspects in self-reflection is justified by social cognitive theory and the ethical decision-making literature. People have motivations and capabilities to engage in moral self-reflection because human beings use moral regulation to realize their role as moral agents and can consciously observe and evaluate their moral behaviors (Bandura, 2010). Reynolds (2008) recognized the existence of chronic attentiveness to moral issues as a stable trait. Beyond the personality perspective, scholars interested in the ethical decision-making process suggested that self-reflection on moral values, virtues, and traits plays an important role in developing moral awareness (Crossan, 2013). Meanwhile, the moral contents of self-reflection are highlighted in Confucian theories. In Confucian theories, self-reflection is endowed significantly, if not totally, with moral concern. The Confucian notion of self-reflection is considered as both a virtue embodying and exemplifying moral character and an essential process for developing and cultivating it (Cheng, 2000). For example, one of the Confucian disciples stated the following: “Every day, I do self-reflection on three
aspects: in transacting business for others, I may not have been faithful; whether, in interactions with friends, I may not have been sincere; whether I may not have mastered and practiced the instructions of my teacher” (Confucius, Book 1: 1.4). “When we see men of worth, we should think of equaling them; when we see men of a contrary character, we should turn inwards and examine ourselves” (Confucius, Book 4: 4.17). Accordingly, to achieve stronger moral character, moral contents are essential in self-reflection. Combining the importance of moral self-reflection in social cognitive theory and the Confucian literature, I am inspired to explore the moral aspect of self-reflection and identify the mechanisms through which self-reflection influences ethical behaviors.

In sum, applying self-reflection to task attainment, researchers recognized the effects of self-reflection on self-regulation, but there is still a lack of knowledge regarding the moral aspects of self-reflection as well as its regulatory mechanisms that explain how the reflection influences the behaviors. Given the numerous moral scandals of top managers, ranging from the violation of professional norms to sexual assaults, it is necessary to examine self-reflection in the context of moral aspects and to examine the effects of self-reflection on virtuous and unvirtuous behaviors in the workplace, especially the behavior of leaders. To fill in the gap, this study aims to propose a new construct of moral self-reflection, which refers to the extent to which people inspect and evaluate their intentions, behavioral habits, and norm adherence in relation to morality. The three dimensions include
the people’s consideration of their motives and actual practice in relation to pro-sociality and their attention to generally accepted visible or invisible standards in communities. I propose that this new approach to self-reflection has advantages in anticipating virtuous behaviors and in explaining the rationale of effects combining cognitive and emotional processes.

I was first drawn to study the impact of moral self-reflection on the leaders’ behaviors rather than subordinates’ because the leaders’ virtuous and unvirtuous behaviors influence a broad range of stakeholders and yet are less constrained by a monitoring system, which is usually controlled by the leaders themselves. For a long history, the Eastern and Western theories were different in recognizing positive leadership. The Confucian notion of ideal leaders often emphasizes excellence in personal virtues and the contribution to community or societal development. The Confucian philosopher Xun Zi directly pointed out that the goodness of management is approached by moral cultivation centered on self-reflection (Peng, Chen, & Yang, 2008). In contrast, Western scholars identified transformational leadership as the dominant theory in positive leadership. Transformational leadership does not exclude moral-value–based leadership but they are distinguished from each other by their relative concern or primary focus on followers’ benefits (Avolio, Gardner, Walumbwa, Luthans, & May, 2004; Stone, Russell, & Patterson, 2003). Sometimes leaders’ behaviors that are affirmed by transformational leadership may violate moral values and may be
recognized as unvirtuous actions, for example abusive treatment of subordinates as a means of motivation (Bass & Steidlmeier, 1999).

Prompted by scandals in organizations controlled by transformational leaders, Western management theory increasingly includes moral justification in research of positive management. This change is reflected in the literature as scholars’ interest in morality-related leadership has grown significantly in recent years (Lemoine, Hartnell, & Leroy, 2019). Researchers recognize that followers’ benefits should be included in organizations’ success strategies, and the leadership forms focusing on ethical/moral values (e.g., ethical leadership, servant leadership, authentic leadership) are an important part of positive leadership (Bass & Steidlmeier, 1999; Hoch et al., 2018). Moral-value–based leadership is necessary and beneficial not only to society but also to the long-term existence and development of organizations (Lemoine et al., 2019; Padilla, Hogan, & Kaiser, 2007).

This study covers analysis of positive and negative forms of leadership in relation to morality and virtues, and chooses humble leadership, ethical leadership, and abusive supervision as three representors because they include leaders’ positive and negative performance in morality and in their role of management holding other-oriented values. Given the significant role of moral leaders in establishing long-term development of organizations and difficulty of improving leaders’ virtuous performance by external management, this paper aims to answer questions concerning the identification of the
effects caused by the leaders’ moral self-reflection on their virtuous and unvirtuous behaviors in the organizational context and how these relationships are mediated by cognitive and emotional processes and enhanced by environmental factors.

To develop and validate a moral self-reflection scale and to test the theoretical model, I design a series of studies. First, I conducted interviews with Chinese managers and professionals to gain a general understanding based on the interviewees’ real experience, of the moral contents of self-reflection and of how moral self-reflection contributes to moral regulation. Second, I developed a new measurement of moral self-reflection by deductive item generation from the theoretical literature and conducted an exploratory factor analysis to reveal effective items and the factor structure. Third, I performed a confirmatory factor analysis as well as validity tests to finalize the scale of moral self-reflection. Last, I conducted a field study to test the theoretical model of moral self-reflection.

The aim of this research is to contribute to theories in three aspects. First, I propose to advance the self-reflection literature by identifying the moral contents of reflection. The previous research on self-reflection emphasized self-focused consciousness but didn’t provide specific reflection contents (i.e., Trapnell & Campbell, 1999). Through a moral lens, this study specifies what people reflect on. Second, this research advances knowledge on behavior ethics by illustrating a regulatory model of virtuous behaviors, which are
centered with moral self-reflection. Different from studies on virtue ethics (Solomon, 1992) or a general moral decision-making process (Jones, 1991; Treviño, 1986; Rest, 1986), this study develops a dual-process moral regulatory mechanism including a cognition path and an emotion path. Third, this study contributes to leadership theory and research regarding humble leader behaviors, ethical leadership and abusive supervision. For the antecedents of abusive supervision, the previous literature focused on facilitating mechanisms, such as social learning, identity threat, and self-regulation impairment (Tepper, Simon & Park, 2017), but restraining factors received little attention. This study extends the discussion of abusive supervision by introducing the leaders’ self-reflection as a restraining factor. Furthermore, leader humility is less connected with self-regulation. Regarding the behavioral aspect of humility (Owens & Hekman, 2016) and ethical leadership (Brown & Treviño, 2006), based on social cognitive theory, I propose that in addition to dispositional traits, moral self-reflection is an influential factor regulating humble behaviors and promoting influential ethical role modeling and management.

In the following chapters, I first review the literature of self-reflection including a theoretical and empirical accumulation. Then, I develop the new construct of moral self-reflection by using a three-dimensional structure and compare it with existing constructs that appear to be similar. On this basis, I further build a theoretical framework and hypotheses regarding the effects of moral self-reflection in an organizational context. Last,
in four studies, I demonstrate a plan for developing the new measurement and for examining the influence mechanism.
CHAPTER 2

LITERATURE REVIEW

The research objectives of this dissertation are to extend the research on self-reflection by articulating its moral contents, to examine the influence of moral self-reflection on the leaders’ virtuous behaviors, and to unfold the process of self-regulation by means of the leaders’ accountability and moral emotions.

In this chapter, I provide a review of self-reflection studies in previous theoretical and empirical research across the Western and Eastern literatures and highlight the need for and the possibility of the development of a construct for moral self-reflection. Last, I discriminate moral self-reflection from other existing accepted constructs.

Review of Self-Reflection Literature

In the psychological field, for self-reflection research, there are three main streams, which offer somewhat different conceptions of self-reflection. The first stream examines how an individual difference in self-focus affects psychological well-being. The second stream emphasizes how self-reflections on feelings, thoughts and behavior in the pursuit of task goals affect goal attainment. The last stream pays attention to the moral aspects of self-reflection and examines the effects of moral self-reflection on moral decision-making and the cultivation of moral character. However, compared to the first two streams, the construct of self-reflection on moral aspects of one’s thoughts, feelings, and behaviors is
underdeveloped. In the following, I elaborate the theoretical and empirical research in each stream.

The first stream directly follows the emergence of self-consciousness and defines self-reflection as the dispositional private focus on the inner self in contrast to the public self (Fenigstein, Scheier, & Buss, 1975). Scholars first made efforts to explain the self-attractive paradox, which refers to the contradiction between the theoretical benefits of self-focus (e.g., increased self-knowledge and ability of psychological adjustment) (Farber, 1989; Nasby, 1989; Hixon & Swann, 1993) and the empirical findings that leading to depression and anxiety, self-focus generates negative effects (Ingram, 1990; Fejfar & Hoyle, 2000). Trapnell and Campbell (1999) ascribed the paradox to the ambiguity of the motivations of self-reflection and distinguished intellectual self-attentiveness that is motivated by epistemic curiosity from neurotic self-attentiveness that is motivated by neurotic concerns such as anxiety. Accordingly, the authors conceived on the basis of motives two different types of self-reflection and developed corresponding measures to study their respective antecedents and consequences. Self-reflection with intellectual motives is related to openness to experience and is labeled as self-reflection, while self-reflection with neurotic motives is labeled as self-rumination that is correlated to neuroticism (Trapnell & Campbell, 1999). The different motives influence the people’s needs for information for reflection and their feelings after reflection. Elliott & Coker
(2008), Takano and Tanno (2009), Harrington and Loffredo (2010), and Simsek (2013) found empirical evidence in different countries supporting the claim that negative affects result from self-rumination instead of intellectual self-reflection. Joireman (2004) also followed Trapnell and Campbel (1999)’s idea of self-reflection and rumination, and studied the difference in proneness of moral emotions between intellectual self-reflection that is motivated by epistemic curiosity and results in pleasurable and intrinsic interest in thinking on self and neurotic self-rumination that refers to the attentiveness self-motivated by distress and results in recurrent thinking of threats, losses, and injustices to the self. He suggested that intellectual self-reflection facilitates self-evaluation focusing on unethical behaviors that induce a proneness to guilt but self-rumination blames unethical behaviors on people themselves and results in a proneness to shame that further gives rise to personal depression. Guilt and shame are both recognized as moral emotions and restrain unethical behaviors (Tangney, Stuewig & Mashek, 2007). Brebels, De Cremer, Sedikides, and Van Hiel (2013) found self-reflection and self-rumination influence people’s focus on procedural justice, which means perceived fairness of procedures manipulating the allocation of outcomes, by fostering different information preferences. They claimed that self-reflection motivated by curiosity decreases people’s needs for procedural justice because they prefer self-information that is novel, unique, or with alternative perceptions of self for reflection and are willing to maintain a sense of self-uncertainty, which may be
attenuated by high procedural fairness. In contrast, self-rumination increases people’s needs for procedural fairness because self-rumination is activated by anxiety and related to high self-uncertainty, which calls for procedural fairness to reduce these unpleasant feelings, as high procedural fairness facilitates the ruminator’s identification with stable, settled and predictable conditions. The authors found support in two studies that the perceived importance of procedural justice is decreased by self-reflection and increased by self-rumination.

In addition to providing knowledge on self-reflection in the context of applied positive psychology, researchers further extended the discussion of self-reflection in manifesting purposeful self-regulation (Grant, 2001). Scholars developed an alternative approach for examining self-reflection motivated by metacognition for task attainment: this type of self-reflection is called problem-focus self-reflection (Grant, 2001; Lazarus & Folkman, 1984). Under this approach, self-reflection is still self-focused, but the goal has changed. Adopting the problem-focused self-reflection by Lazarus and Folkman (1984), Grant et al. (2002) defined self-reflection as the extent to which people inspect and evaluate their feelings, thoughts, and behaviors during the process of achieving a specific goal and applied self-reflection as a monitoring tool functioning in the goal completing cycle.

The second stream based on problem-focus self-reflection extends the discussion of self-reflection related to goal attainment or task performance through self-regulation. In
this stream, self-reflection works as a tool to monitor the deviation of the actual self-state from expected goals (Grant et al., 2002; Zimmerman, 2002). Grant et al. (2002) proposed the positive effects of self-reflection on self-insight and on ensuring the timely correction to achieve expected goals. By comparing perceived performance with some standards or models and exploring the causes of discrepancies, Zimmerman (2002) claimed that self-reflection facilitates self-regulation. Scholars empirically confirmed the positive effects of self-reflection on problem solving by manipulating and comparing learning processes with or without self-reflection. Daudelin (1997) argued that learning is a process creating a guide for future behaviors from past or current events and that self-reflection brings past personal experience or outsider events inside the mind and makes connections to the current decision-making process by articulating problems, developing possibilities, formulating theories to explain the situations, and building reactions. The results of the experiment employing 48 managers from a Fortune 500 corporation supported the argument that self-reflection significantly facilitates the amount of learning recorded (Daudelin, 1997). The research of self-reflection by teams also verifies the effects of problem-focus self-reflection. Although team self-reflection is conducted by the teams instead of by individuals, it still represents activities of introspection on the inner self for a unit. By improving the awareness of current performance and strategies, identifying discrepancies with goals, and promoting changes, team self-reflection significantly improves team performance in a
changing environment (Widmer, Schippers & West, 2009; Schippers, West & Dawson, 2012).

The third stream discusses self-reflection in relation to moral issues. The thick descriptions in Confucianism studies (Cheng 2000; Fu & Wang, 2016) establish the role of moral self-reflection in self-cultivation. Hu Hong, the Confucian philosopher in the Song Dynasty, claimed that moral self-reflection allows people to “keep alive a moral conscience”. As purposeful routine activities, moral self-reflection is assumed to imply high moral identity that indicates one’s commitment or recognized importance to being a moral person (Aquino & Reed, 2002) and even considered a virtue by itself (Cheng 2000). Accordingly, similar to the role of problem-focus self-reflection in goal attainment regulation, moral self-reflection is supposed to be the center of moral regulation.

However, compared with the application of problem-focus self-reflection in the research in goal achievement regulation, the application of moral self-reflection as a representation of another important aspect of self-regulation still lacks a corresponding construct. Consequently, we have only limited knowledge about how moral self-reflection influences moral self-regulation and ethical behavior, although some sporadic studies in behavioral ethics identified the positive effects of moral self-reflection on ethical behaviors. Crossan and colleagues (2013) made a significant contribution by incorporating self-reflection in a moral decision-making model and suggested that self-reflection facilitates
the development of decisions that are morally correct. Reynolds’ (2008) research of reflective moral attentiveness found some people pay more attention to moral issues in their life than do others and that these people would be more likely to be influenced by moral education or other kinds of intervention from external environments. Since Reynolds’ concept focuses on chronic moral attentiveness that indicates people perceive and consider their experiences in a lens of morality for long standing, his research leaves open opportunities for studying the regulatory function of moral self-reflection acts.

The three streams of self-reflection literature discussed above described parts of self-reflection on morality per se but lack a specific construct comprehensively covering all the characteristics of moral self-reflection. Therefore, it’s necessary to develop a construct to advance the understanding of moral self-reflection and to predict its influence on ethical behaviors

**Conception of Moral Self-Reflection**

Moral self-reflection refers to the extent to which people inspect and evaluate their thoughts, feelings, and behaviors in relation to morality. The meaning of morality is always a focus of debate across the ethics research related to philosophy and psychology (Cohen, Panter, Turan, Morse, & Kim, 2014; Haidt, 2007; Kohlberg, 1969). A generally accepted argument is that by regulating social relationships and facilitating group living, morality is a set of standards evaluating right and wrong (Cohen & Morse, 2014; Hogan, 1973;
Janoff-Bulman & Carnes, 2013). Here, I specify morality as prosocial intentions that are other-benefiting motives, habits that are performing and realizing other-benefiting desire in actual interactions, and adherence to norms that are following standards that are set to protect others’ interest and improve group living. The new approach is expected to advance knowledge on self-reflection in two aspects. First, I acknowledge the moral contents of self-reflection and specify three dimensions of morality. Second, moral self-reflection is related to moral goals instead of to task goals.

Combining the Western and Eastern literature of morality, I suggest it is reasonable to identify the contents of moral reflection into three dimensions: prosocial intentions, prosocial behavioral habits, and adherence to norms.

The moral contents of self-reflection indicate a transformation of motives from self-concern to other-concern; that is, although moral self-reflection comprises the review of one’s own thoughts and behaviors, it’s is concerned with how these thoughts and behaviors impact others, as morality itself deals with issues about social relationships rather than one’s own task achievement (Cohen & Morse, 2014; Hogan, 1973; Rai & Fiske, 2011). Prosociality, the desire to expend efforts to benefit other people (Grant, 2008: 49), is also recognized by scholars in moral psychology as a part of morality (Cohen & Morse, 2014; Rai & Fiske, 2011). People’s prosociality is expressed as prosocial motivation, prosocial behaviors, and prosocial impacts in organizations (Bolino & Grant, 2016). Prosocial
motivation is concerned with people’s desire, and Grant (2008) specified the existence of prosocial desire in the workplace in four aspects: (1) benefiting others, (2) helping others, (3) having a positive impact on others, and (4) being good for others. Prosocial behaviors refer to in-role or extra-role acts benefiting others’ welfare (Brief & Motowidlo, 1986; Organ, 1997). A prosocial impact denotes a realized positive influence on others’ living through the actor’s work (Grant, 2007). Moreover, in addition to prosocial motivations, behaviors and impact, the adherence to norms is also a part of morality reflecting an other-concern. Norms are a set of community-accepted standards, such as professional standards, laws, and obligation of positions. In other words, norms facilitate interpersonal relationships because they reflect shared contracts for members to follow to maintain the effective functioning of communities (Kohlberg, 1969). According to Kohlberg (1969), moral development includes three levels (preconventional, conventional, principled) of cognition showing people’s maturity in making a judgment and ranging from those judgments based on personal, physical or hedonistic consequences of action to those based on universal human values facilitating community and social living. Although in judging right and wrong, the three levels indicate different reasoning logic, for instance, avoiding punishment, appearing good to people close to you, and contributing to the well-being of the society, pro-sociality underlies all levels whether in terms of invisible rules or visible norms (Trevino, 1986). I propose the consideration of adhering to norms is the third
dimension of reflection contents.

In addition to the psychological literature, I also advocate drawing on Confucian thoughts to validate the contents of morality because Confucian self-reflection directly rests on the moral domain. Similar to Western psychological theories, Confucianism recognizes the interpersonal basis in defining morality. Confucian morality claims rest on the metaphysical assumption that humankind exists and prospers as communities and that human beings are distinctive from non-human animals in having natural inclinations to be concerned for the wellbeing of others (Lam, 2003; Wada, 2014). Additionally, the commonly known five Confucian virtues (benevolence, righteousness, propriety, fidelity, and wisdom) are all directly and indirectly related to the pro-social tendency as well as the adherence to norms. Benevolence (ren, 仁, also translated as kindheartedness, humaneness or even humanity) is the center of the five virtues (Koehn, 2001; Legge 1970: Book Yan Yuan 12; Legge 2011: Book Li Lou II 56; Li 1994). Propriety (li, 礼) comprises respectful attitudes and behaviors toward family members, superiors, peers, friends, and others in general by following socialized ethical norms and is seen as the external manifestation of benevolence for maintaining social order and harmony (Koehn, 2001; Legge 1970: Book Ba Yi 3; Book Yan Yuan 11; Legge 2011: Book Li Lou II). Righteousness (yi, 义) means conducting oneself in social and business interactions according to principles of benevolence and propriety, as opposed to selfish and materialistic gains (Legge 1970: Book
Li Ren 10 and 16; Legge 2011: Book Gao Zi I 10). Fidelity (xin, 信) means being sincere and trustworthy with others and conscientious with duties and commitments. Wisdom (zhi, 智) refers to the ability to make moral decisions and handle moral dilemmas in delicate and complex situations (Legge 2011: Book Gao Zi I 6). Obviously, benevolence establishes the pro-social tendency of the Confucian morality; righteousness emphasizes the pro-social tendency in choice between others’ interest and self well-being; fidelity refers to being responsible for duties and commitments; propriety guides people to manifest benevolence in practice by adhering to specific norms; last, wisdom deals with moral awareness and cognitive development in practical decisions. In conclusion, Confucian morality represented by five virtues also includes a pro-social tendency and an adherence to norms. In addition, a reflection on behaviors is also acknowledged as important as a reflection on intentions.

The argument about behavioral habits as an aspect of morality is not only discussed in Confucian theories but can also be found in Aristotelian ethics. Although Aristotelian ethics used rationality to describe the key to moral virtues, it also suggested that human sociability lays the foundation for virtues and that rationality reflects people’s understanding of the idea that individuals are not socially isolated or self-sufficient; self-development occurs in challenging but supportive institutional environments. Such rationality is not a talent or just a thought in mind but acquired and realized by practice.
Aristotle emphasized the difficulty of acquiring moral virtues because unlike intellectual (scientific) virtues that could be acquired through formal education, moral virtues expressing rationality (e.g., justice, humanity and temperance) have to be behaviorally exercised and integrated into complex conditions including those related to identifying with whom, when, and where these virtues are to be employed (Aristotle 1999). Although people could learn virtues through role models and social structures, they cannot be virtuous unless they consciously act on virtues in a regular way. Behavioral habits expressing moral virtues are effective ways to approach and realize morality. Thus, reflection on behavioral habits is an important part to evaluate one’s performance in relation to morality.

In conclusion, by identifying the moral contents of self-reflection, this study contributes to enriching the knowledge on self-reflection with extended motives. Motives are important in constructing self-reflection. In the psychological research, mixed motives of self-reflection (i.e., curiosity and anxiety) resulted in contradictory outcomes. Separating the curiosity of self from the rumination on self contributes to the self-reflection construct in explaining the well-known self-adsorption paradox (Trapnell & Campbell, 1999). Similarly, I suggest that differentiating moral goals and task goals is important to improve the research on self-reflection in predicting regulatory responses after reflecting. Moral goals should be separated from task goals because interpersonal benefits are sometimes in
conflict with individual interests (Cohen & Morse, 2014). An explicit and insistent construct of self-reflection on moral aspects establishes the foundation to explore people’s cognitive and affective processes in moral regulation and to anticipate further ethical behaviors.

**Comparing Moral Self-Reflection with Other Similar Constructs**

To further establish the new construct, it is necessary to illustrate how moral self-reflection is different from related existing constructs that appear to be similar. In this part, examining their similarities and differences, I will compare moral self-reflection with (1) moral reasoning process/reflective decision-making, (2) moral attentiveness, and (3) mindfulness. I will not restate the difference between moral self-reflection and self-rumination, as this difference is explained in the development of the new construct.

**Comparison between the moral self-reflection and moral decision-making model.**

The moral decision-making model is a reasoning process describing the cognitive development of moral intentions and behaviors: this development consists of recognizing ethical problems, making judgments and establishing behavior intents (Rest, 1986; Dubinsky & Loken, 1989). The moral decision-making model is event-driven, while the target of moral self-reflection is the self. The moral decision-making model serves for producing decisions for specific ethical dilemmas, but moral self-reflection is used to evaluate one’s feelings, thoughts, and decisions during these events or just in daily life.
In the existing literature, self-reflection once was studied as one step in the process of the value-based model of moral decision-making (Crossan, 2013). In Crossan’s value-based model, reflection is a step used to expand the traditional decision-making model by adding a virtue ethical perspective, which implies that people differ in virtues, values and character strengths accumulated in previous experience prior to the current decision-making process. Although Crossan’s theory improves the research of moral decision-making from the theory only deals with decision development for a single event to continuing cycles by including reflection to connect the past and current decision-making processes with accumulated moral capabilities such as virtues, values and character strengths. However, self-reflection is still an event-based activity that serves for producing decisions in specific problems.

In this study, moral self-reflection is a cognitive trait including the routinized inspection of ones’ feelings, thoughts, and behaviors. This kind of rethinking assumes the existence of moral awareness and includes numerous cycles of a moral decision-making process rather than one step in a chain. In other words, inspection and evaluation in moral self-reflection are implemented by a moral decision-making process, although the target of the judgment is not an event but one’s own feelings, thoughts and behaviors.

In addition, moral self-reflection is different from reflexive moral judgment. Reflexive judgment refers to the intuitive aspect of reasoning, which leads to ethical
intentions or behaviors by drawing a conclusion from past experience (Reynolds, 2006). Obviously, moral self-reflection is not an intuitive process but a higher-order conscious reasoning proposed by Reynolds (2006). Additionally, moral self-reflection is not restricted to any specific instances but a trait tendency toward moral thinking and applied to one’s work and life.

**Comparison between moral self-reflection and moral reflective attentiveness.** Moral attentiveness refers to the chronic perception and consideration of moral elements in people’s life (Reynolds, 2008). Sample measurement items such as “I think about the morality of my actions almost every day” and “I like to think about ethics” (Reynolds, 2008: 1030) indicate that moral attentiveness distinguish people in their constant consideration of morality. However, unlike moral self-reflection, moral attentiveness does not spell out the content of morality and does not direct focused thinking on the self. The empirical evidence confirms the positive effects of moral attentiveness on the memory of the previous moral experience, moral awareness, and moral behaviors. People who engage more in moral self-reflection are assumed to have higher moral attentiveness, and moral self-reflection is proposed to further explain how such kind of attentiveness influences people’s performance in moral regulation and then directs behavioral consequences.

**Comparison between moral self-reflection and mindfulness.** Mindfulness refers to “an individual awareness of his/her present experience” (Ruedy & Schweitzer, 2010).
Mindfulness emphasizes the nonjudgmental focus to the present moment (Kabat-Zinn, 2003; Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007). In contrast, moral self-reflection is retrospection to past moments and involves the evaluation of right or wrong. They are also different in outcomes. Scholars emphasize psychological well-being as the consequence of mindfulness (Feldman et al., 2007), but moral self-reflection produces behavioral intentions to improve moral performance. Although, emotional results such as guilt and shame may happen after reflection, this study cares more about the behavioral tendency, for example, the tendency to withdraw from aggressive behaviors, to compensate damages on others, or I will never do that again led by these emotions. In addition, although both constructs are supposed to influence moral behaviors, mindfulness has positive effects by increasing the awareness to the moral aspects of the present moment (Ruedy & Schweitzer, 2010) but moral self-reflection is proposed to raise awareness of the previous deviation from morality and implies further potential self-correction.
CHAPTER 3

THEORY AND HYPOTHESES

In this chapter, I will develop my theory and hypotheses regarding the regulatory mechanisms of moral self-reflection, including a direct process and indirect cognitive and affective processes for the development of virtuous behaviors. Taking the social cognitive theory perspective, I suggest the engagement in moral self-reflection increases the leaders’ virtuous behaviors and decreases unvirtuous behaviors. In addition to directly influencing behavior, moral self-reflection also indirectly influences a leader’s virtuous behavior through the mediation of cognitive (other-benefiting accountability) and affective (moral emotion proneness) mechanisms. The two mediators also interact to enhance each other’s effect on ethical behaviors.

Figure 1 Theoretical Model of Moral Self-Reflection

Moral Self-Reflection and Leader Humble behaviors

Moral regulation covers regulation by morality from two aspects: prescriptive morality and proscriptive morality (Janoff-Bulman, Sheikh, & Hepp, 2009). The two aspects are the two faces of morality rather than mutually exclusive behavior that cannot be held by one person. Prescriptive morality refers to “should-do” goals, such as doing thing to benefit others, caring about others, and being honest, but proscriptive morality
refers to “not-to-harm” goals such as avoiding the occupying of the others’ contribution. Therefore, regulation through prescriptive morality means achievement of moral performance in “should-do” aspects and regulation through proscriptive morality requests the avoidance of unethical performance in “should-not-do” area. This study leads the discussion of the influential and positive role of moral self-reflection on both proscriptive and prescriptive moral regulations.

Of the various morally charged workplace behaviors, representing regulation goals covering the two faces of morality, three kinds of the leaders’ virtuous performance have received much research attention: (1) the managers’ humble behaviors (e.g., Owen & Hekman, 2012), (2) ethical leadership (e.g., Brown & Treviño, 2006) as a prescriptive regulation goal, and (3) abusive supervision (e.g., Zhang & Bednall, 2016) as a proscriptive regulation goal. These three performance examples represent the virtuous and unvirtuous behaviors of leaders. Situationists (e.g., Darley & Batson, 1973; Doris, 2002; 2005; Hartman, 2000) in moral psychology have long questioned the dispositional account, which predicts people’s virtuous behaviors by personalities (Doris, 2002; Harman, 2000). However, solid theoretical reasoning and substantial empirical evidence support the existence of stable personalities and their influence on virtuous behaviors (Alzola, 2008; 2015). Previous research on self-reflection examines the relationships between self-reflection and behavioral consequences by emphasizing inward interest and self-
consciousness implied by self-reflection rather than by the regulatory mechanisms revealing how self-reflection affects behaviors: this is because the existing self-reflection construction lacks specific contents reflecting detailed regulation goals. The discussion in this study rests on social cognitive theory, which argues that virtuous behaviors are determined by the combined influence of individual moral cognition, moral emotion, and the interaction between them (Bandura, 1986; 1991; Treviño, 1986).

Leader humble behavior is an umbrella construct covering the leaders’ virtuous actions in three aspects: admitting mistakes and limitations, modeling teachability, and spotlighting follower strengths and contributions (Ou, 2011; Owen & Hekman, 2012; Owens, Johnson, & Mitchell, 2013). These characteristics are positively related at the group level to top management team integration with joint decision making and shared visions, at the individual level with job satisfaction, and at the organization level with an empowering climate, learning orientation and an innovation culture (Ou, 2011; Ou, Waldman, & Peterson, 2018; Zhang, Ou, Tsui & Wang, 2017). Admitting the self’s mistakes and limitations is dependent on the level of self-awareness, which is related to the individual’s interest and engagement in self-introspection (Fenigstein et al., 1975; Grant et al., 2002). By inspecting and evaluating one’s thoughts and behaviors, moral self-reflection provides self-diagnostic information comparing actual performance with moral standards (Bandura, 1999; 2001). Empirical evidence shows that memories of engagement in
unvirtuous behaviors are impaired over time (Kouchaki & Gino, 2016). People who engage in moral self-reflection more frequently are expected to have a higher awareness of failures in moral regulation and be more accurate in their knowledge of the discrepancies between the actual situations and the virtuous performance. Therefore, contributing to humble behaviors, moral self-reflection facilitates the leaders’ recognition of their mistakes and limitations. Moreover, being teachable means being open to advice from others and paying attention to positive models. Moral self-reflection increases the awareness of self-limitations, inspires leaders to listen to the followers’ suggestion and to notice and credit the followers’ contributions.

In conclusion, I propose the following.

*Hypothesis 1: Moral self-reflection is positively related to humble leadership.*

**Moral Self-Reflection and Ethical Leadership**

I hypothesize ethical leadership as another positive behavioral outcome of moral self-reflection. Ethical leadership describes how ethical leaders behave in two aspects (Brown & Treviño, 2006): being a role model and an ethical manager. Role modeling means leaders themselves behave as positive moral models with virtuous characteristics (e.g., honest and trustworthy) and exercise principled and prosocial decision making. Second, being an influential ethical manager means that leaders communicate ethical norms with followers and stand against unethical behaviors (Brown, Treviño, & Harrison, 2005; Trevino &
Brown, 2004; Treviño, Brown, & Hartman, 2003). Researchers explored situational influences and individual characteristics as antecedents of ethical leadership. This study mainly focuses on individual factors positively related with ethical leadership. Moral self-reflection implies the leaders’ identity with moral values and moral regulation goals. Leaders who engage in moral self-reflection more frequently hold more solid and conscious prosocial concerns as action goals. As moral self-reflection then helps leaders to notice their intentions, habits and behaviors in comparison to prosocial values, leaders are more likely to make self-rectification after self-reflection. Therefore, moral self-reflection facilitates the leaders’ chances to be perceived as positive role models regarding morality. Furthermore, the reflection on morality shows that in addition to effectiveness, leaders employ moral concerns as performance evaluation standards; therefore, subordinates are more likely to perceive the leaders’ support for ethical norms. Moral self-reflection also facilitates the leaders’ attention to extra-role duties, such as improving the subordinates’ ethical conduct beyond in-role duties that are formally defined as responsibilities in the job description, and then helps leaders to demonstrate these moral values in their leadership work. I propose the following.

**Hypothesis 2: Moral self-reflection is positively related to ethical leadership.**

**Moral Self-Reflection and Abusive Supervision**

Moral self-reflection also decreases the leaders’ unvirtuous behaviors, for example,
Abusive supervision. Abusive supervision refers to the subordinates’ perception of the leaders’ chronic engagement in hostile verbal or nonverbal behaviors excluding contact (Tepper, 2007). Beyond the consequences that this behavior has on subordinates, researchers examined the antecedents of abusive supervision from the subordinates’ and the supervisors’ perspective, as well as the situational factors (Tepper, Moss, & Duffy, 2011; Harris, Harvey, & Kacmar, 2011; Zhang & Bednall, 2016). Regarding the supervisors’ perspective, leaders may engage in hostile behaviors for various reasons, for example, punishing subordinates for their poor performance, motivating subordinates by abusive ways, suppressing subordinates who are identified as a threat to themselves, or releasing the external pressure of work (Tepper et al., 2011). These reasons show a lack of moral concern by leaders in different aspects, such as the recognition of interaction issues related to morality, the selection of feedback or motivation ways, and the consideration of the results of a negative influence. Moral self-reflection enables the comprehensive inspection of the leaders’ thoughts and behaviors to prevent moral failures in these aspects. Reflection on intent asks leaders to take others’ benefits, for example, the subordinates’ development, into consideration in decision making; this type of action decreases the possibility of a leader identifying subordinates as a threat to themselves. Reflection on behaviors regulates leaders to interact with subordinates in the ways that protect or promote the subordinates’ welfare so that leaders are less likely to apply aggressive treatments as tools to stimulate
the subordinates’ working motivation. Reflection on prosocial impacts draws the leaders’ attention to the potential negative influence, such as decreased self-efficacy, compromised team dynamics, and negative virtuous role modeling, of their behavior on subordinates and groups. Therefore, frequent moral self-reflection helps to make leaders aware of and sensitive to the negative impact of aggressive behaviors so that leaders are more likely to withdraw from or avoid abusive supervision.

From the supervisor perspective, another rationale linking antecedents to abusive supervision is moral disengagement, the correction of which cognitively rebuilds the aggressive behavior into a right one (Bandura, 1996; 1999). Leaders can proactively reduce moral disengagement through moral self-reflection. Moral self-regulation is selectively activated in moral reasoning and in controlling behavior (Bandura, 1990). People who are trapped in moral disengagement commit immoral acts not because they have no moral standards but because they use techniques, such as diffusing responsibility, minimizing the negative consequences, and blaming and dehumanizing the victim, to sidestep moral reasoning and to justify their unethical behaviors (Bandura et al., 1996). When leaders silence the self-regulation of morality, they avoid self-sanctions (e.g., guilt, shame) for abusive behaviors by blaming subordinates for poor performance, defending their own reprehensible conduct with justification reasons, such as the need “to stimulate the followers’ motivation”, and palliatively comparing the stress or harms they received with
their conduct toward their followers. Moral self-reflection by a manager directs attention to himself or herself as the possible cause for what happens to the subordinates. Accordingly, leaders with more frequent moral self-reflection are more likely to take responsibility for their followers’ poor performance. In contrast, leaders who do less moral self-reflection would tend to blame the subordinate for the poor performance and would tend to engage in hostile and abusive behaviors toward subordinates. Moreover, leaders characterized with more moral self-reflection are also more likely to exhibit a pro-social tendency and social norms in treating subordinates well. Therefore, moral self-reflection decreases abusive supervision by restraining moral disengagement. I propose the following.

*Hypothesis 3: Moral self-reflection is negatively related to abusive supervision.*

**Mediators: Moral Cognition and Moral Emotion Proneness**

In the analysis above, I hypothesized the direct effect of moral self-reflection on the leaders’ behaviors. Below, I further explore the indirect effect between prosocial cognition and emotion proneness. Social cognitive theory assumes that people perform purposeful behaviors through cognitive and affective regulation processes (Bandura, 2001).

**Other-benefiting accountability.** Leader accountability refers to the ownership of good and poor performance, and other-benefiting accountability reflects the leaders’ other-oriented tendency in responsibility recognition, which means internal attribution of poor performance and external attribution of good performance (Wang, 2016). People are not
assumed to prefer the burdens of responsibility if they consider self-interest only (Bandura, 2001). Other-oriented ownership of responsibility not only indicates the self-attribution of poor performance but also the pro-social perception of one’s role and attitudes in interactions with others. Moral self-reflection facilitates other-benefiting accountability in two ways.

First, as illustrated in Hypothesis 3, moral self-reflection implies other-oriented values in evaluating self and others; therefore, high moral self-reflection results in biased high internal attribution, increasing the recognition of one’s limitations and mistakes. However, low moral self-reflection decreases the chance to be aware of one’s responsibility for failures and results in the external attribution of poor performance. Thus, leaders who more frequently do moral self-reflection are more likely to take ownership of poor performance. Second, moral self-reflection means reviewing and evaluating one’s own performance not merely with regard to tasks but also with regard to one’s pro-social desire, appropriate behavior and adherence to proper norms. As a result, leaders are more likely to frame their responsibilities beyond the job duties required by positions. These broader responsibilities include helping subordinates, protecting their benefits, and taking care of their feelings. Leaders with high moral self-reflection are supposed to commit to these broader responsibilities and should be more willing to credit subordinates for good performance and improve their experience in group-living. Accordingly, moral self-reflection should be
positively related to other-benefiting accountability.

With the self-attribution of poor performance and the other-attribution of good performance, leaders would be more likely to act humbly. In addition, leaders with high other-benefiting accountability are more likely to be perceived as ethical leaders because taking ownership of poor performance enables leaders to be perceived as responsible and trustworthy and crediting the subordinates’ contributions enables leaders to be perceived as attractive (Brown & Treviño, 2006). Moreover, other-benefiting accountability is proposed to be negatively correlated to abusive supervision because attributing failures to subordinates is one of the important factors causing leaders to engage in abusive behaviors to provide feedback or punishment for the subordinates’ performance (Tepper et al., 2017), but other-benefiting accountability constrains such cognition.

Based on the discussion above, I propose the following.

*Hypothesis 4a:* Leader other-benefiting accountability mediates the positive relationship between moral self-reflection and humble leadership.

*Hypothesis 4b:* Leader other-benefiting accountability mediates the positive relationship between moral self-reflection and ethical leadership.

*Hypothesis 4c:* Leader other-benefiting accountability mediates the negative relationship between moral self-reflection and abusive supervision.

**Guilt proneness.** Moral emotions are defined as “emotions that are linked to the
interests or welfare either of society as a whole or at least of persons rather than the judge or agent” (Haidt, 2003: 2). These emotions are characterized by disinterested elicitors and implied pro-social tendencies. In addition, moral emotions are more self-conscious than are emotions such as cheerfulness, quiescence, dejection, and agitation (Haidt, 2003; Idson, Liberman & Higgins, 2000). Unlike emotions such as anger or depression, which are triggered by external attribution of failures or wrong doings, moral emotion often results from moral failures recognized by self-appraisal (Higgins, 1987; Tracy & Robins, 2006; Tangney, Niedenthal, Covert & Barlow, 1998). Moral failures include unsatisfied performance in relation to not only proscriptive morality such as aggressions but also prescriptive morality such as benefiting others (Janoff-Bulman et al., 2009). People are different from each other in their proneness to experience certain moral emotions with moral failures (Tangney, Wagner, & Gramzow, 1992; Tangney & Dearing, 2002). The difference in moral emotion proneness is due to dispositional factors and intuitive judgments constructed from past experience of self-appraisal in similar situations (Tangney, 1990). Indicating anticipated emotions rather than actual feelings, guilt proneness is an example of moral emotion proneness and is defined as “the propensity to experience guilt across a range of personal transgressions” (Cohen, Wolf, Panter, & Insko, 2011: 947).

Moral self-reflection is positively related to guilt proneness for the following reasons. First, high guilt proneness means high sensitivity to moral dilemmas (Crossan, 2013).
Moral self-reflection inspires people to perceive interactions with others as moral issues and use moral standards to evaluate right or wrong. Enriching the scenarios in which people have opportunities to have guilt, frequent moral self-reflection cultivates people’s capabilities in recognizing moral dilemmas. Second, moral self-reflection activates people’s attention to their own responsibility in interpersonal actions. Inward inspection and evaluation with prosocial consideration promote the moral failures’ internal attribution that is the foundation of guilt. Therefore, people who do moral self-reflection more frequently would have experienced more guilt in the past. Accumulated actual experience of guilt by moral self-reflection awareness increases people’s capabilities to be aware of moral dilemmas and their sensitivity to potential guilt if they perform unethically in these dilemmas. Based on the above two reasons, I propose that moral self-reflection is positively related to guilt proneness.

Regarding the effects of guilt-proneness on leader behaviors, moral emotions are recognized as influential factors encouraging ethical behaviors and deterring unethical behaviors, and are contrary to general negative emotions that are more likely to foster aggressive actions (Tangney et al., 2007). Guilt-proneness is positively related to one’s ownership of responsibility for the others’ welfare and well-being in interpersonal living (Schaumberg & Flynn, 2012); this ownership of responsibility is in turn related positively to humble leadership and ethical leadership but negatively to abusive supervision. Leaders
with high guilt proneness are more likely to view interactions with subordinates as morally relevant and would apply moral standards to leadership behaviors. A high sensitivity to potential guilt as a sanction on aggressive behaviors also constrains them from abusive supervision. Therefore, I propose the following.

*Hypothesis 5a:* Guilt proneness mediates the positive relationship between moral self-reflection and humble leadership.

*Hypothesis 5b:* Guilt proneness mediates the positive relationship between moral self-reflection and ethical leadership.

*Hypothesis 5c:* Guilt proneness mediates the negative relationship between moral self-reflection and abusive supervision.

The Interaction of Moral Cognition and Emotion Proneness in Leader Virtuous Behaviors

A regulatory system simultaneously includes the cognitive process and the affective process (Carver & Scheier, 1998). The behavioral consequences are outcomes of the interaction between the two processes. In the above, I argued that leader other-benefiting accountability mediates relationships between moral self-reflection and leadership behaviors by producing the ownership of moral failures, whereas guilt proneness mediates this relationship by emotionally motivating promotive and corrective actions.

Other-benefiting accountability may not always lead to virtuous behaviors due to
various factors, which create the opportunity for emotional proneness to moderate the link between moral cognition and actual behaviors (Tangney et al., 2007). For example, other-benefiting accountability facilitates moral intentions, but actual behaviors are still influenced by situational conditions (e.g., ethical culture, peer competition pressure, event intensity) (Brown & Treviño, 2006; Jones, 1991). In this situation, guilt proneness may enhance the effects of other-benefiting accountability on virtuous behaviors. Guilt affects people’s moral behaviors by punishing the self with negative feelings regarding the performance of aggressive behaviors (Sheikh & Janoff-Bulman, 2010). When the moral evaluation promoted by other-benefiting accountability is influenced by negative environmental factors, for example, inactive or loose ethical management in organizations and low event intensity that decreases the risk of external sanctions, regardless of whether the leaders’ unvirtuous behaviors are monitored or not noticed by organizations, the guilt proneness that produces self-sanctions functions as a second punishment system preventing unvirtuous behaviors. Therefore, the relationships between leader other-benefiting accountability and humble behaviors, ethical leadership, and abusive supervision are reinforced by guilt proneness. In sum, I propose the following.

Hypothesis 6a: The positive relationship between leader other-benefiting accountability and humble leadership is strengthened by guilt proneness.

Hypothesis 6b: The positive relationship between leader other-benefiting
accountability and ethical leadership is strengthened by guilt proneness.

Hypothesis 6c: The negative relationship leader other-benefiting accountability and abusive supervision is strengthened by guilt proneness.

On the other hand, although guilt-proneness activates the awareness of moral dilemmas, such sensitivity may not result in actual virtuous behaviors. Meanwhile, leader other-benefiting accountability strengthens the positive effects of guilt proneness on humble leadership and ethical leadership and restrains its effects on abusive supervision. When guilt proneness provides the opportunity to recognize interactions with subordinates as moral issues rather than just transactional issues, other-benefiting accountability further strengthens the possibility of creating moral intentions in these moral issues by facilitating a moral evaluation with the ownership of poor performance and an appreciation of the subordinates’ contributions to good performance. In other words, other-benefiting accountability decreases failures in moral evaluation through the disengagement of responsibility during moral decision development so that the actual virtuous behaviors influenced by guilt proneness are promoted. Thus, due to the prosocial attribution provided by other-benefiting accountability, the effective moral decision development processes activated by guilt proneness are more likely to result in ethical behaviors. Accordingly, I propose the following.

Hypothesis 7a: The positive relationship between guilt proneness and humble
leadership is strengthened by leader other-benefiting accountability.

Hypothesis 7b: The positive relationship between guilt proneness and ethical leadership is strengthened by leader other-benefiting accountability.

Hypothesis 7c: The negative relationship between guilt proneness and abusive supervision is strengthened by leader other-benefiting accountability.
CHAPTER 4

METHOD

I conducted four studies to develop the measurement for moral self-reflection and to test the overall model. The process of scale construction followed the standard steps recommended by Hinkin (1998) and Wright, Quick, Hannah, & Blake Hargrove (2017). Through Study 1 to 3, based on multiple samples, I first obtained a general understanding of moral self-reflection by examining cases in the real workplace; then, I did an exploratory factor analysis based on the items drawn from theories and, last, examined the discriminant and convergent validity of the construct established by the first study. Employing the new scale of moral self-reflection and existing measurements of other variables, in Study 4, I tested the overall model to explore the cognitive and emotional effects and further behavioral consequences of moral self-reflection.

All the studies were conducted in China because self-reflection on morality is a traditional idea in Confucianism and has been generally learned and accepted by people in China for a long time. Moreover, I had more access to organizations in China than to those in the United States. Following Brislin’s (1980) process of the translation-back translation, I first translated the interview questions and survey items from the original English version into Chinese and then invited committee members who are also native speakers of Chinese and have a solid background in English to translate the contents back into English; last, I
revised all the statements by discussing discrepancies. I promised the participants confidentiality regarding their responses and in a content letter, described the purpose of the studies as well as the potential risks. The participants read and agreed with the letter on the cover page before the start of the interview and the surveys.

**Study 1: Moral Self-Reflection Interview**

Since self-reflection on morality lacks a construct or scale that is generally accepted, I designed a semi-structured interview to gain a general understanding of moral self-reflection with respect to its frequency, contents, and consequences in an organizational context.

**Participants and procedures.** The interview was assigned as a part of the qualitative research method course for graduate students in China. A total of 32 professionals and managers participated in the study. The 32 interviewees had at least 5 years of working experience. Of the interviewees, 26 were managers in their organizations, and 5 of them worked as employees. A total of 64% of the interviewees were from 31 to 40 years old, 67% were males, and 75% had a bachelor or above degree. With the agreement and confirmation of the interviewees, all the interviews were recorded. I participated in 21 interviews and collected the text records of the remaining 11 interviews that were conducted and in which the full text was recorded by graduate students who were taking a qualitative analysis course. After describing their basic background, the interviewees were asked to identify
their definition of self-reflection, their thoughts regarding reflecting, the frequency and triggers of their reflection, their feelings during the process, and one or two real stories with antecedents, processes, consequences, and feelings.

Based on the text records, I organized some key characteristics of self-reflection, especially the reflection on morality. By conducting a content analysis of these interviews, I obtained knowledge on whether people engaged in moral self-reflection, what specific contents they reflected on, and how self-reflection affected moral regulation. See Appendix A for details.

**Results.** The interviewees supported the existence and importance of self-reflection, indicated some important characteristics such as frequency and triggers, and identified moral concerns in their reflection activities. All participants engaged in self-reflection or suggested that managers and employees should not engage in self-reflection in today’s work environment. Regarding people’s diversity in moral self-reflection, the participants responded differently when they answered the frequency question. A total of 57% of the participants suggested that they did self-reflection weekly, and 32% said they reflected on themselves every day after working or before sleeping. By the interviewees’ description regarding their reasons for self-reflection and their real cases, I found the frequency of self-reflection is related to factors such as personality and work characteristics (e.g., daily review meeting, weekly work report, feedback cycle period), which were identified in the
interviewees’ answers as the reasons for reflection. The participants implied moral concern as a reason for self-reflection, expressing reasons related to prosocial tendency, such as the ability to “think in others’ shoes”, “think about whether my words made the colleague feel bad”, and “reflect if the colleague resigned because I ignored her difficulty in balancing family and career”. Some interviewees reflected on their aggressive behaviors only when they received negative feedback from others, but some reflected on the self as a routine. Furthermore, managers argued that their followers would be more likely to focus on problem-focus reflection but that people who are in management positions, such as their leaders or colleagues on the same level, would be more likely to engage in the consideration of moral aspects. This argument was supported in my small sample for this study. I found 5 out of 6 employees who are not responsible for management didn’t engage in self-reflection in relation to morality but that 19 of 26 managers recognized that their self-reflection was related to morality. Regarding the consequences of behaviors, in addition to the self-correction revealed in their own stories, the participants also perceived that employees who did more moral self-reflection were distinguished from those who did less because those that did more appeared to be more dedicated in their commitment to group benefits and performed better in cooperation with colleagues. Additionally, the interviewees mentioned the emotions of guilt and depression they experienced during reflecting and the relieved feelings they experienced after reflecting. Representative
answers are listed in Appendix A.

**Study 2: Moral Self-Reflection Development Study**

Based on the evidence provided in the theories in Chapter 1 and the interviewees’ responses in Study 1, I acknowledge the existence of moral contents in self-reflection as well as the importance of moral self-reflection in improving interpersonal interactions. Study 2 aimed to develop the scale items and explore the factor structure of moral self-reflection. Based on the definition of morality, I conducted a deductive method in the initial item collection (Hinkin, 1998). First, I identified the four-dimension structure of morality as in Chapter 2. Second, for the potential contents for reflection, I collected the specific moral characteristics used to identify the morality of thoughts or behaviors in the literature. Last, I developed 29 items by classifying these moral characteristics into manifestations reflected in each dimension. Then, to explore the factor structure with the 29 items, I did a survey with 200 undergraduate students.

**Item development.** The four dimensions comprehensively represent one’s prosocial tendency in intentions, habits, consequences of behaviors and adherence to norms. These dimensions can also be found in real stories provided by the interviewees in Study 1. In the interview content analysis, the four dimensions were mentioned in the interviewees’ cases in the context of considering the subordinates’ development when leaders assign tasks, always being respectful in interactions with coworkers, paying attention to colleagues’
depression after making comments on their performance, and insisting on releasing full
information in negotiations with clients.

To develop scale items, I identified various moral manifestations and classified them
into each dimension by drawing on moral characteristics in prosocial and moral identity
literatures (Grant, 2008; Aquino & Reed, 2002) and by capturing moral norms based on
Kohlberg (1969). Regarding details, for the dimensions of intentions, consequences, and
habits, I incorporated four aspects (benefiting others, helping others, having the positive
impact on others, and being good to others) from the pro-social motivation research by
Grant (2008), four aspects (caring, empathy, justice, honest) from the moral identity scale
(Aquino & Reed, 2002) and from the Confucian five virtues (Koehn, 2001): these four
aspects were related to a pro-social tendency but were not included in Grant’s four items.
I selected one aspect (respect) that was not included in Grant’s and Aquino & Reed’s work.

For the dimension of norm adherence, I applied Kohlberg (1969)’s system that included
the consideration of rules by people, such as employees, professionals, or members of
society.

Next, I designed items for the new scale by applying the nine aspects (benefiting
others, helping others, having the positive impact on others, being good to others, caring
for others, having empathy, extending justice to others, being honest, being respectful) to
describe one’s thinking in relation to the dimensions of intentions, habits, and
consequences and for the dimension of norm adherence, to Kohlberg’s norm system. A summary of items, their literature origins, and reason of deletion can be found in Table 1.

For example, regarding the characteristic of being good to others, for reflection on intention, I developed the item, “I reflect whether I have a strong motivation to do good for others through my work”; for reflection on habit, I developed the item, “I reflect if I have been doing good for others at work”, and for the reflection on consequences, I developed the item, “I reflect whether I have made a positive impact on others at work”.

However, as commonly used in language, the nine aspects were not appropriate for application to reflection in all three dimensions (intentions, habits, and consequences) in habitual expressions. I deleted certain aspects for each dimension, as in the usual context in which the aspects were discussed, they were not used to describe the specific dimension. For instance, being honest is a prosocial characteristic that is generally used to describe one’s behavioral habit other than one’s intention. We can say that someone exhibits honesty in negotiating with others but cannot say that someone talks with others because they are motivated by an honest concern. Therefore, the intention dimension includes the remaining eight items (have the motivation to do things that benefit others, am significantly oriented toward helping others, wanted to make positive impact, have strong motivation to do good for others, hold genuine intention to respect others, have others’ welfare in my heart, am fair-minded in competing, have empathy toward people who are less fortunate), and
honesty was excluded. Another example is the item concerning benefiting others: this item could be applied to evaluate one’s motive or to evaluate the consequence of behaviors other than one’s habitual behavior, which illustrates one’s regular way in practice. Thus, the habit dimension includes the remaining eight items (helping others, doing good for others, caring in interactions with others, treating others generously, respecting people, behaving with fairness, acting compassionately, and acting with honesty) and excludes the item concerning having a positive impact on others.

The consequence of behaviors includes four pro-social tendency items (benefited others, made a positive impact on others, enhanced others’ welfare, and made others feel comfortable) and excludes honesty, helping, caring, and justice, as these characteristics are not used to describe consequences of behaviors. In addition, considering some people take the proscriptive focus (not to harm) in moral regulation, I added four items describing outcomes without a pro-social tendency: (1) make others feel sad, (2) damage others’ good reputation, (3) hurt others’ legitimate interests, and (4) negatively affect others. I abstracted the four aspects from the 45-item scale of counterproductive workplace behavior by Fox and Spector (2002).

Last, regarding the dimension of adherence to norms, I summarized the norms mentioned in Kohlberg (1969) into five aspects: (1) follow professional standards, (2) adhere to the disciplines in organizations, (3) fulfill the duty of my roles, (4) perform social
civic obligations, and (5) always abide by the law. The full statements of the 29 items can be found in Appendix B, Survey Items and Instructions.

**Exploratory factor analysis (EFA).** Based on the 29 items, following Colquitt, Baer, Long, and Halvorsen-Ganepola (2014)’s justification regarding the use of undergraduates in a content validity test, I conducted an exploratory factor analysis with 200 students from a business school in China. The students were sophomores majoring in accounting and finance; a total of 63% of the students were female, and 37% were male. The students participated in a survey lasting approximately 10 minutes. After a brief instruction, they read 29 statements describing their reflection on different contents and using a 7-point Likert-type scale of frequency (1 = never, 7 = always), the students revealed in their responses the frequency in which they engaged in those kinds of reflection.

**Results.** Since the data followed a normal distribution, I employed the maximum likelihood approach and an oblique rotation that allowed correlations among the factors. Based on the standard that Eigen values should be larger than 1, EFA without a fixed number of factors revealed three factors: reflection on intentions, habits, and adherence to norms. The results of the EFA that demonstrated the existence of self-reflection on the three-dimensions of moral content are illustrated in Table 2. Only 16 items loaded in the three remaining factors, and the items regarding reflection on behavior consequences were deleted due to low factor loadings. In a certain factor, the 16 remaining items have loadings
larger than 0.4 without cross loadings and explained 68.54% of the variance. The first factor that evaluates one’s reflection on intentions included five items; a sample item is, “I reflect whether I have been unselfishly oriented toward helping others at work”. The second factor that evaluates one’s reflection on habits included six items, a sample of which is, “I reflect if I have been helping others through my work”. The third factor that describes reflection on adherence to norms included five items, and an item sample is, “I reflect if I follow professional standards”. As expected, each group of items represented a unique aspect of moral self-reflection. The first measured the frequency of reflection on moral intentions, the second represented the frequency of reflection on moral habits, and the last evaluated the frequency of reflection on norms. The three factors were averaged to create one overall scale with acceptable internal consistency (The Cronbach alpha = 0.916). The deleted items indicated that people didn’t regard “respect” and “fairness” as morality contents that were similar to other prosocial characteristics in this questionnaire. An examples of the deleted items regarding respect is, “I reflect on whether I have been respectful of people who disagree with me”, and a sample of the deleted items regarding fairness is, “I reflect if I am fair-minded in competing with others”.

**Study 3 Moral Self-Reflection Validation Study**

Study 3 included a confirmatory factor analysis targeted to refine moral self-reflection’s factor structure results from Study 2 and included a validity analysis by
comparing the construct in convergence as well as in differences with other existing variables. All variables used in the difference analysis in Study 3 were evaluated in the same survey by the same participants.

Participants and procedures. I employed a new sample for the factor confirmatory and validity test (DeVellis, 1991; Hinkin, 1998). This study employed 235 professionals with at least 2 years of work experience. I released the survey with the new scale of moral self-reflection and other variables in the form of a validity test on Sojump, which is a Chinese online research platform that is similar to Qualtrics and has been used by other researchers (e.g., Zhou, Wu, Zhang, & Xu, 2013). This platform provides a service by which surveys on diverse positions can be sent to respondents from varying industries and the results returned to the survey owner. Based on the answer to the attention test question, I deleted 10 samples because of careless responses that are recognized by providing same answers for all the questions and wrong answers to the attention test question, and kept 225 samples for the analysis. A total of 58.3% of the 225 participants were female, the majority (82.12%) of the respondents were 26 to 40 years old, and 84.26% of the participants had a bachelor’s degree. Except for moral self-reflection, all variables were evaluated with the existing scales. All measures were evaluated by a 7-point Likert scale. Moral self-reflection was evaluated by a frequency ranging from (1) never to (7) always. For all other variables, the collected responses ranged from (1) strongly disagree to (7) strongly agree (see
Appendix B).

**Confirmatory validity test.** As shown in Table 3, I assessed and compared different factor structures of the moral self-reflection construct by model goodness of fit indices (Bollen, 1989). Specifically, I defined a three-factor structure developed in Study 2 as the baseline model, four two-factor structure models by combining any of the two factors in the baseline model, a one-factor structure by loading all items together, and a second-order factor model with three original factors in the baseline model and moral self-reflection as a higher-order factor. Applying Hu and Bentler (1998)’s standards of indices and cut-off values, I evaluated model goodness by the root-mean-square error of approximation (RMSEA < 0.05), the comparative fit index (CFI > 0.90), and the standardized root mean square residual (SRMR < 0.08). The results showed that Model 0 (three-factor model) and Model 5 (one higher-order factor model) met the cut-off values and exhibited a similar fitness to the data. Model 5 was identified as the final structure and would be used in further hypothesis testing because I regarded moral self-reflection as an aggregated construct in theory development.

**Convergent validity test.** According to Podsakoff & MacKenzie (1994), I examined the convergent validity of moral self-reflection by testing the correlations between the new construct as well as three subfactors, with nomological variables that have existing measurements and that are expected to be related in theory. I selected moral identity, core
self-evaluation, humility, and moral disengagement as the comparison constructs, as they cover moral values, self-knowledge and cognitions as well as behaviors in moral issues (Cohen & Morse, 2014). Since self-reflection refers to one’s activities in self-activated introspecting and regulating (Bandura, 1991; Grant, 2008), I chose these constructs to validate moral self-reflection’s theoretical meaning by estimating its relationships with these constructs that were assumed to be correlated in theory.

The importance of morality to oneself is assumed as one of the antecedents to moral self-reflection (Bandura, 1991). Moral identity reflects one’s beliefs and attitudes to be a moral personal, and the existing scale estimates self-importance in moral identity (Aquino & Reed, 2002). I expect that people with high moral identity should engage in high moral self-reflection because they value morality as an important regulatory target and are more likely to examine previous performance to correct the discrepancies between their performance and the targeted performance.

Core self-evaluation, humility, and moral disengagement are recognized as potential consequences of moral self-reflection. Core self-evaluation indicates one’s traits regarding self-esteem, generalized self-efficacy, neuroticism, and the locus of control: for an individual, these four traits reflect the “basic, fundamental appraisal of one’s worthiness, effectiveness, and capability as a person” (Judge, Erez, Bono, & Thorese, 2005: P.304). Empirical evidence supports that neutral self-reflection, which means introspection beyond
ruminative motives or dysfunctional attitudes, effectively leads to positive self-evaluation and psychological well-being (Stein & Grant, 2014; Trapnell & Campbell, 1999). Therefore, moral self-reflection is proposed to be positively related with core self-evaluation. The relationship between humility and moral self-reflection has been thoroughly discussed in hypotheses development. In short, humility implies the recognition of one’s shortages but others’ advantages and contributions (Owens et al., 2013). High moral self-reflection provides more chances to align one’s unsatisfied thoughts or behaviors with prosocial concerns; therefore, in their interactions, people who more frequently engage in moral self-reflection are more likely to express attitudes reflecting greater humility. Unlike the two positively related constructs illustrated before, moral disengagement is assumed to be negatively related with moral self-reflection. Moral self-regulation does not always function effectively. Unlike moral self-reflection, moral disengagement indicates invalid moral regulation. Moral disengagement describes various reasoning ways people take to avoid their responsibilities and relive negative feelings regarding unethical behaviors (Bandura, 1999). Since moral self-reflection is an inward inspection and implies internal attribution in issues related to morality, moral disengagement is proposed to be decreased by engaging in moral self-reflection.

As expected, moral self-reflection as well as the three sub-factors has a significant positive relationship with moral identity, core self-evaluation, and humility but has a
negative relationship with moral disengagement. The results are illustrated in Table 4. Moral self-reflection and the three subfactors, namely, reflection on intention, reflection on habit, and reflection on adherence to norms, are positively related to moral identity, core self-evaluation, and humility, but negatively related to moral disengagement. Therefore, in the convergent validity analysis, the new construct reflects the appropriate theoretical meaning.

*Moral self-reflection.* I used the 16-item measurement developed from Study 2. The Cronbach’s alpha is .90.

*Moral identity.* For the internalization of moral identity, I used the five-item scale developed by Aquino & Reed (2002). Nine characteristics (caring, compassionate, fair, friendly, generous, helpful, hardworking, honest, and kind) were listed to describe a person. The participants were asked to visualize a person who had these characteristics and evaluate statements such as the following: “It would make me feel good to be a person who has these characteristics”. “Being someone who has these characteristics is an important part of who I am”. The Cronbach’s alpha is .71.

*Core self-evaluation.* The 12-item scale by Judge et al. (2003) was used to evaluate CSE. Some sample items are the following: “I am confident I get the success I deserve in life”. “When I try, I generally succeed”. “Overall, I am satisfied with myself”. The Cronbach’s alpha is .89.
Humility. I chose the 4-item scale by Zhang, Ou, Tsui & Wang (2017). A sample item is, “I show appreciation for the unique contributions of others”. The Cronbach’s alpha is .84.

Moral disengagement. I applied the 8-item scale by Moore, Detert, Klebe Treviño, Baker, & Mayer (2012). The sample items are the following: “Taking personal credit for ideas that are not your own is no big deal”. “People who are mistreated have usually done something to bring it on themselves”. The Cronbach’s alpha is .72.

Discriminant validity test. To examine the distinctiveness of the moral self-reflection construct, I tested how moral self-reflection differed from other constructs, including mindfulness, reflective moral attentiveness, general self-reflection, and self-rumination. I chose these constructs because they seemed to have a theoretical meaning similar to that of moral self-reflection in self-focused inspection or attentiveness to morality (Reynolds, 2008; Trapnell & Campbell, 1999). I expected to validate the necessity and importance of the new scale by distinguishing moral self-reflection from these similar constructs. For each concept, in Chapter 2, I have illustrated its similarity to and difference with moral self-reflection; therefore, here, I show the results of the empirical factor analysis. The measurements of the five constructs are as follows.

Mindfulness. I used the scale with 12 items by Feldman et al. (2007). An example of the items is, “It is easy for me to concentrate on what I am doing”. The Cronbach’s alpha is .72.
**Self-reflection.** I chose the 6-item scale in Grant et al. (2002). A sample item is, “I frequently take time to reflect on my thoughts”. The Cronbach’s alpha is .86.

**Self-rumination.** I used the scale with 12 items by Trapnell & Campbell (1999). A sample item is, “I spend a great deal of time thinking back over my embarrassing or disappointing moments”. The Cronbach’s alpha is .89.

**Moral reflective-attentiveness.** I selected the 5-item measurement developed by Reynolds (2008). Sample items are the following: “I regularly think about the ethical implications of my decisions”. “I like to think about ethics”. The Cronbach’s alpha is .90.

All five factors were included in the model analysis. The model with five distinguishing factors was defined as the baseline model and compared with other models created by combining any of the two factors (Bagozzi et al., 1991). As presented in Table 5, the baseline model with five factors generated satisfactory fitness indices (CFT = 0.94, TLI = 0.92, RMSEA = 0.05, SRMR = 0.06), and the model goodness was significantly better than other models. The results confirmed that moral self-reflection should not be combined with other constructs that seem to be similar in theory and supported the discriminant validity of the moral self-reflection construct.

**Study 4: Model Test Study**

**Participants and procedures.** To examine the overall model, I invited 202 sample groups including 808 respondents: in the sample, there were 202 managers and 3
subordinates for each manager. The 202 sample groups were from 38 organizations located in Zhejiang Province and comprised members of diverse industries such as manufacturing, communication, transportation, and service industry. The original sample size comprised 236 groups, but 34 were deleted because of carelessness in answering questions. To decrease the respondents’ concern in answering sensitive questions about unethical thoughts or behaviors, I used an anonymous way in releasing and collecting hard-copy surveys. Every sample group (including one leader and three subordinates) was marked by a specific ID, and I paired leaders with subordinates by this ID rather than by any actual personal information.

To avoid common source risk, data were collected by multiple sources in three waves, which were separated by a one week break after each wave (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In short, the independent variable, mediators, and dependent variables were respectively evaluated at three time points by self-reporting or other-rating. In addition to the common source concern, I chose to evaluate leader behaviors, such as humility, by subordinates because of the potential for a social desirability bias (Ou, 2011).

At time 1, the leaders reported their moral self-reflection frequency, which is the independent variable. One week after the return of Survey 1, the respondents evaluated the mediators, including the leaders’ other-benefiting accountability that was rated by the subordinates and the guilt proneness that was rated by the leaders themselves. At time 3,
the subordinates were asked to report perceived leader behaviors including humble leadership, ethical leadership, and abusive supervision, which were used as the dependent variables.

The within-organization variance was considered in the analysis. The leaders represented different levels of management positions, such as general managers, department managers and executives. A total of 67% of the leaders were male, and 63.3% had a college degree or above. On average, the leaders were 35.6 years old (S.D. = 8.30) with 18.57 years of working experience (S.D. = 8.39) and had worked for their current organizations for 13.03 years (S.D. = 8.37). The subordinates were on average 27 years old (S.D. = 6.10), 45% were male, and 76.3% had a college degree or above. The variance in the leaders’ gender, age, education, work experience and tenure and the teams’ average age, education, and gender composition were recorded and controlled in the hypothesis test.

Measures (See Appendix B for details). All items were rated on a 7-point Likert scale. Moral self-reflection was evaluated by frequency ranging from (1) never to (7) always. Guilt proneness was evaluated by possibility ranging from (1) very unlikely to (7) very likely. For all other variables, responses from (1) strongly disagree to (7) strongly agree were collected.

Moral self-reflection. I drew the new scale developed in Study 1 but considering the length of survey, I decided to shorten the scale to 9 items by selecting 3 items with a
maximum factor loading for each dimension. The 9 items are shown in Table “Model Test Survey” in Appendix B. The confirmatory factor analysis supported that the structure still showed satisfactory goodness in model fit by the 9-item scale (Chi-square = 25.21, CFI = 0.998, TLI = 0.998, RMSEA = 0.02, and SRMR = 0.04). Sample items are the following: “I reflect whether I wanted to make a positive impact on others through my work”. “I reflect whether I have been helping others through my work”. The Cronbach’s alpha is .82.

**Leader other-benefiting accountability.** I selected Wang’s (2016) 8-item scale. An example item is, “My manager looks to himself/herself first when his/her team’s results are disappointing.” The Cronbach’s alpha is .87.

**Guilt proneness.** I used the 8-item scale by Cohen et al. (2011). A sample item is, “You lie to people, but they never find out about it. What is the likelihood that you would feel terrible about the lies you told?” The Cronbach’s alpha is .71.

**Humble leadership.** Humble leadership was measured by the 9-item scale by Owen & Mitchell (2013). A sample item is, “My manager admits when he or she does not know how to do something.” The Cronbach’s alpha is .92.

**Ethical leadership.** I employed the 10-item scale developed by Brown, Treviño & Harrison (2005). A sample item is, “My manager has the best interests of employees in mind.” The Cronbach’s alpha is .95.

**Abusive supervision.** I chose the 10-item scale shortened by Mitchell & Ambrose
(2007) and based on the 15-item scale developed by Tepper (2000). An example item is, “My manager ridicules me.” The Cronbach’s alpha is .94.

**Control variables.** In addition to the leader and team characteristics described above, the control variables also included social desirability and ethical culture. The aim of controlling social desirability was to reduce the common source risk for the independent variable and one of the mediators (Podsakoff et al., 2003) and to account for the respondents’ differences in the tendency in self-reporting items to provide answers based on social preference. Additionally, I controlled ethical culture because it reflected environmental variance, which was recognized as a factor interacting with individual factors and determining ethical behaviors (Cullen, Victor & Bronson, 1993; Treviño, Butterfield, & McCabe, 1998).

**Social desirability.** I evaluated moral identity by the 10 items by Steenkamp, De Jong, & Baumgartner (2010). A sample item is, “I never conceal my mistakes”. The Cronbach’s alpha is .89.

**Ethical culture.** The 10-item scale by Treviño, Butterfield, & McCabe (1998) was used to evaluate ethical culture. Sample items are the following: “Management in this organization disciplines unethical behavior when it occurs”. “The top managers of this organization represent high ethical standards”. The Cronbach’s alpha is .93.

**Analysis.**
Discriminant validity of constructs. Prior to model analysis, to examine whether these constructs were distinct from each other, I did a confirmatory factor analysis on six key variables involved in the hypotheses. Initially, based on the constructs’ theoretical structure, I created 3 parcels for moral self-reflection (9 items) (Chapter 4), 3 parcels for 9 items of humble leadership (Owen & Mitchell, 2013), 2 parcels for 10 items of ethical leadership (Brown et al., 2005), and 2 parcels for 10 items of abusive supervision (Mitchell & Ambrose, 2007). Then, I compared the baseline model, which was defined with six distinct factors (moral self-reflection, leader other-benefiting accountability, guilt proneness, humble leadership, ethical leadership, and abusive supervision), with alternative models created by combining (1) all six factors as in Model 1, (2) five factors except moral self-reflection as in Model 2, (3) two mediators (other-benefiting accountability and guilt proneness) and three dependent variables (ethical leadership, humility, and abusive supervision) as in Model 3, and (4) any two factors including factors strongly correlated (e.g., moral self-reflection and humility, moral self-reflection and ethical leadership) in Table 8 (Ou, 2011), as in Model 4 to 8. As shown in Table 7, the baseline model that distinguished six factors better fitted the data, as their original structures fitted the data reasonably well with goodness indices, such as Chi-square = 489.98, CFI = 0.93, TLI = 0.92, RMSEA = 0.06, and SRMR = 0.06, which were significantly different than those in the alternative models from Model 1 to 8 by Satorra-
Bentler chi-square test (Satorra & Bentler, 1988). Therefore, the confirmatory factor analysis supported the distinctiveness of the constructs in my model.

**Aggregation statistics.** To unify all variables on the same level, I aggregated the subordinates’ perception of leader other-benefiting accountability, humble leadership, ethical leadership, and abusive supervision to a leader level. The results in Table 6 provided high within-group agreement. Referencing standards by Bliese (2000), the median $R_{wg(j)}$s for leader other-benefiting accountability (0.90), humble leadership (0.94), ethical leadership (0.93), and abusive supervision (0.96) were all above .90 and significant in the F-test, and ICC (1) also showed high values, which supported that it was reasonable in statistics to aggregate original responses by subordinates to a leader level.

**Hypothesis testing**

I used Mplus 7.4 to perform single-level path analysis for hypotheses testing. I conducted a single-level analysis and then tested the robustness with the organizations’ variance by clustering company IDs (Asparouhov & Muthen, 2006). As the results were consistent in the robust test, the organization variance does not influence the results indicated by the single-level test. The processes and the results of the single-level analysis were as follows. First, I tested the direct and indirect effects of moral self-reflection on the leaders’ unvirtuous behaviors without moderating relationships. Second, I centered moderators as well as control variables and examined the moderating effects by adding an interaction term to the model. I also replicated all tests excluding controlling variables, and
there was no change in the significant levels of path coefficients, supporting the results’ robustness.

Table 8 illustrates the means, standard deviations and correlations of the variables in this study. Figure 2 presents the path coefficients and significance levels in the model. At first, for the direct effects, the relationships between moral self-reflection and (1) humble leadership \((B = 0.06, S.E. = 0.05, p = 0.26)\), (2) ethical leadership \((B = 0.09, S.E. = 0.05, p = 0.08)\), and (3) abusive supervision \((B = -0.11, S.E. = 0.08, p = 0.15)\) were insignificant, although the positive effect on ethical leadership was marginally significant \((B = 0.09, S.E. = 0.05, p = 0.08)\). I also tested the direct relationships by excluding mediators (other-benefiting accountability and guilt proneness) from the path analysis and identifying them as control variables, and the relationships are still insignificant between moral self-reflection and (1) humble leadership \((B = 0.05, S.E. = 0.04, p = 0.26)\), (2) ethical leadership \((B = 0.08, S.E. = 0.05, p = 0.095)\), and (3) abusive supervision \((B = -0.09, S.E. = 0.06, p = 0.15)\). Thus, Hypotheses 1 to 3 were not supported, which means moral self-reflection failed to directly anticipate the leaders’ virtuous/unvirtuous behaviors. Then I analyzed the indirect effects through other-benefiting accountability and guilt proneness.

For mediating effects proposed in Hypothesis 4a/4b/4c and 5a/5b/5c, I used moral self-reflection to predict other-benefiting accountability and guilt proneness, which are two factors that were used to further predict humble leadership, ethical leadership, and abusive
supervision. The model showed a satisfactory goodness-in-fit of the data (CFI = 1.00, TLI = 1.00, RMSEA = 0.00, SRMR = 0.00). The results indicated that moral self-reflection was positively related to other-benefiting accountability ($B = 0.21, S.E. = 0.06, p < 0.01$) and guilt proneness ($B = 0.24, S.E. = 0.07, p < 0.01$), but only other-benefiting accountability was positively related to humble leadership ($B = 0.81, S.E. = 0.05, p < 0.01$) and ethical leadership ($B = 0.84, S.E. = 0.04, p < 0.01$) and negatively related to abusive supervision ($B = -0.41, S.E. = 0.08, p < 0.01$). According to the bootstrapping confidence intervals, the indirect relationship from moral self-reflection to humble leadership that is mediated by other-benefiting accountability ($B = 0.17, S.E. = 0.05, p < 0.01$) is significant without 0 in the 95% CIs (0.08 to 0.26). The indirect relationship from moral self-reflection to ethical leadership mediated by other-benefiting accountability ($B = 0.18, S.E. = 0.05, p < 0.01$) is significant without 0 in the 95% CIs (0.08 to 0.30). The indirect relationship from moral self-reflection to abusive supervision mediated by other-benefiting accountability ($B = -0.09, S.E. = 0.05, p < 0.01$) is significant without 0 in the 95% CIs (-.14 to -.16).

Therefore, Hypothesis 4a, 4b, and 4c were supported. Other-benefiting accountability mediates the relationships between moral self-reflection and the following: humble leadership, ethical leadership, and abusive supervision.

However, guilt proneness was insignificantly related to humility, ethical leadership, or abusive supervision because the bootstrapping confidence intervals shows the 95% CIs
include 0 in all three indirect relationships. Thus, Hypothesis 5a, 5b, and 5c were not supported. In other words, moral self-reflection improves the leaders’ ethical performance by producing high moral cognition in the workplace rather than by stimulating moral emotions.

Furthermore, to confirm the indirect regulation functioning mechanism mediated by other-benefiting accountability, I conducted an analysis following the three-step procedure by Baron & Kenny (1986). A regression analysis first revealed that moral self-reflection was positively related with other-benefiting accountability ($B = 0.26, S.E. = 0.07, p < 0.01$) as well as with the dependent variable of humble leadership ($B = -0.18, S.E. = 0.07, p < 0.01$), ethical leadership ($B = 0.21, S.E. = 0.06, p < 0.01$), and abusive supervision ($B = 0.21, S.E. = 0.06, p < 0.01$). Then, I found other-benefiting accountability was positively related to humble leadership ($B = 0.86, S.E. = 0.04, p < 0.01$) and ethical leadership ($B = 0.88, S.E. = 0.04, p < 0.01$) but negatively related to abusive supervision ($B = -0.42, S.E. = 0.07, p < 0.01$). Last, when moral self-reflection, other-benefiting accountability, and three variables representing unethical performance were included together in the model, as seen in the results in the path analysis above, the relationships between moral self-reflection and the three unvirtuous behaviors became insignificant, but the effect of other-benefiting accountability remained significant. Thus, evidence here further supported the full mediating effect of other-benefiting accountability in Hypothesis 4a, 4b, and 4c.
Last, I tested the moderating effects. With the centering of other-benefiting accountability and guilt proneness as well as control variables, I performed a new path analysis with an added term representing other-benefiting accountability and guilt proneness’ interaction on their original effects on humble leadership, ethical leadership, and abusive supervision. The results showed an accepted fitness in the data (CFI = 0.997, TLI = 0.894, RMSEA = 0.07, SRMR = 0.02) for the overall model with the added moderating interactions. In conclusion, all hypotheses about moderating effects were not supported. Nevertheless, by further exploring the simple slopes of the interaction, the unexpected findings were still valuable in uncovering the moral self-regulation mechanisms and the results are shown in Figure 3-6.

The interaction of other-benefiting accountability and guilt proneness significantly weakened the negative effects from other-benefiting accountability and guilt proneness on abusive supervision ($B = 0.29, S.E. = 0.08, p < 0.01$). As seen in Figure 4, when leaders had a lower other-benefiting accountability, guilt proneness was negatively correlated with abusive supervision ($B = -0.22, S.E. = 0.07, p < 0.01$), but when leaders had a higher other-benefiting accountability, guilt proneness was positively related to abusive supervision ($B = 0.20, S.E. = 0.08, p = 0.01$). Furthermore, other-benefiting accountability’s influence on constraining abusive supervision was stronger under lower guilt proneness ($B = -0.62, S.E. = 0.09, p < 0.01$) than under higher guilt proneness ($B = -0.27, S.E. = 0.09, p < 0.01$), as
shown in Figure 6.

The interaction of other-benefiting accountability and guilt proneness marginally weakened their positive effects on ethical leadership ($B = -0.14, S.E. = 0.08, p = 0.09$). In Figure 3, when leaders had lower other-benefiting accountability, guilt proneness was positively and significantly correlated with ethical leadership ($B = 0.14, S.E. = 0.08, p = 0.07$), but when leaders had higher other-benefiting accountability, guilt proneness was negatively related to ethical leadership ($B = -0.07, S.E. = 0.07, p = 0.36$), although the moderating effect indicated by this slope was insignificant. In Figure 5, other-benefiting accountability’s influence in facilitating ethical leadership was stronger under lower guilt proneness ($B = 0.93, S.E. = 0.07, p < 0.01$) than under higher guilt proneness ($B = 0.76, S.E. = 0.06, p < 0.01$).

The interaction of other-benefiting accountability and guilt proneness insignificantly affected the relationships with humble leadership. However, in addition to the insignificant moderating effects on the relationships to humble leadership, the significant influence of the interaction on the relationships to ethical leadership and abusive supervision was also reversed, as expected. The dual regulating paths may not function in parallel with each other. The positive or negative relationships between other-benefiting accountability and ethical leadership and abusive supervision cannot be enhanced by guilt proneness. However, when guilt proneness is at a lower level, the cognitive regulating mechanism has
stronger effects in facilitating ethical leadership and constraining abusive supervision.
Therefore, I inferred that moral emotion proneness may control the affective regulation mechanism that exists independently with the cognitive regulation mechanism related to moral self-reflection and works as an alternative system. Future research may examine this argument. More detailed explanations are discussed in the next chapter.
CHAPTER 5

DISCUSSION

My dissertation has focused on self-reflection in relation to moral issues. First, I developed a new moral self-reflection construct, which supplements the previous research of self-reflection by acknowledging morality as reflection contents and by identifying detailed dimensions. Second, based on behavioral ethics theory, social cognitive theory, and self-regulation theory, I framed a theoretical model explicating through producing pro-social cognition and emotion, the effects of moral self-reflection on the leaders’ ethical and unvirtuous behaviors. This study has significant research and practice implications, especially in the modern era of ethical misconduct in organizations but also has some limitations that need to be addressed in future research.

Summary of Results

*Moral self-reflection as a new construct.* This study developed a scale evaluating people’s traits regarding the inspection of their moral thoughts and behaviors. The exploratory factor analysis and confirmatory factor analysis supported the validity of the scale in expressing the theoretical meaning of the moral self-reflection concept and its relationship with as well as its difference from existing constructs. The three subfactors, namely, reflection on intention, habit, and adherence to norms, clarify three aspects of moral contents in reflection: the results show that these three subfactors have significantly
positive correlations with each other and that it’s reasonable to aggregate three factors into one overall moral self-reflection construct for further empirical research.

**Outcomes of moral self-reflection.** This study further found that moral self-reflection results in positive behavioral outcomes in workplace proscriptive and prescriptive regulation. Hypotheses 1 to 3 that proposed the direct influence of moral self-reflection on behavioral outcomes were not supported. Therefore, moral self-reflection’s influence on behavioral outcomes does not function in a direct way but follows a sequential path with indirect processes so we should pay attention to uncover the mediators that cause the realization of the indirect influence.

The proposed dual paths with cognitive and affective moral regulating processes are partially supported. Hypothesis 4a, 4b, and 4c that proposed the indirect influence through other-benefiting accountability were supported. Other-benefiting accountability connects moral self-reflection with increased humble and ethical leadership and decreased abusive supervision. In other words, leaders who more frequently reflect on themselves in the context of morality are more likely to hold the other-benefiting attribution tendency and then are more likely to exhibit more humble behaviors toward subordinates, show a higher level of ethical leadership, and engage less in abusive behaviors toward subordinates. In contrast, Hypotheses 5a, 5b, and 5c that claimed the indirect influence through guilt proneness were not supported. The reasons could be because actual emotional experience
rather than the propensity to experience moral emotions should have been used in the analysis, as experienced moral emotions are actually produced by moral self-reflection and closely related to specific further behavioral intentions. To test the mediation effect of other-benefiting accountability controlling for guilt proneness, I tested the indirect influence excluding guilt proneness, which was regarded as a control variable in this test. The conclusions were the same as the previous tests with some minor changes in indexes. The model showed a satisfactory goodness-in-fit of the data (CFI = 1.00, TLI = 1.00, RMSEA = 0.00, SRMR = 0.00). The indirect relationship from moral self-reflection to humble leadership is significant with $B = 0.16, S.E. = 0.05$, and $p < 0.01$. The indirect relationship from moral self-reflection to ethical leadership is significant with $B = 0.16, S.E. = 0.05$, $p < 0.01$. The indirect relationship from moral self-reflection to abusive supervision is significant with $B = -0.08, S.E. = 0.03, p < 0.01$.

Furthermore, all hypotheses about moderating effects (6a/b/c, 7a/b/c) were not supported. To understand the unexpected moderating effects, I provide the following explanations. Considering the low correlation ($0.16, p < 0.05$) between other-benefiting accountability and guilt proneness reported in Table 8, these unexpected moderating effects and unexpected insignificantly mediating effects through moral emotions may imply that the original dual regulating mechanisms (cognitional and emotional) did not reflect the actual processes. First, although moral emotion proneness is positively correlated with
moral self-reflection, it isn’t a mediator connecting self-reflection and moral behaviors. Second, regarding guilt-proneness as a factor existing independently with a moral self-regulating mechanism activated by self-reflection, guilt proneness may be a trait parallel to moral self-reflection and could lead to the activation of a substituting mechanism for the regulation of one’s virtuous behaviors independently with the cognitive regulating mechanism mediated by other-benefiting accountability. My explanation is based on the dual-process theory of moral judgement, which means that people may not make every ethical decision through a delicate cognition development process but also may make decisions through automatic emotional responses (Greene, 2009; Greene et al., 2004). Greene and his collaborators (2004, 2008) suggested that brain areas representing emotional or cognitive activities showed different active levels when people faced moral issues that were different in complexity. Different areas of our brain serve for different reasoning ways directing moral judgments. The rational decision development led by cognitive analysis of utilitarian values may in conflict with the decision-making processes led by “personal” moral values that regulate one’s behaviors through anticipating emotional sanctions such as guilt. Greene’s project (2004) shows that in more complex impersonal dilemmas (e.g., the trolley dilemma), the brain area serving for cognition processes increased activity, but for easy personal moral judgements (e.g., infanticide) the brain area serving for emotion processes increased activity. Therefore, the cognition mechanism and
the emotion mechanism following moral self-reflection may play competitive roles. Applying this idea to my project, when moral issues only relate to leader themselves or limited subordinates, the leaders’ behaviors are more likely to be influenced by their guilt-proneness. However, when moral issues involve more team members or other stakeholders, the cognitive regulating mechanism activated by moral self-reflection will play the main role. Since management always involve complex relationships, leaders are more likely to face impersonal moral dilemmas rather than personal moral problems. When I discuss the effects of moral self-reflection on leadership, it’s not strange to see that the cognition mechanism is significant but the emotion mechanism is not, and they even constrain each other’s influence on behaviors. The difference of impersonal and personal moral issues in management and how it influences leaders’ regulation mechanisms provide valuable opportunities for the future research.

Another potential explanation is that I used an inappropriate measurement for moral emotions because guilt-proneness may not reflect actual personal feelings after moral-reflection but may reflect an established personality and an emotional tendency. A possible solution to test this explanation is to ask participants to report their daily feelings or to design an experiment to record the participants’ immediate feelings after reflecting activities.

Theoretical Contribution
This research contributes to theories in self-reflection, moral regulation, and leadership. First, this research advances the self-reflection literature by introducing the other-focused motive and detailed moral concern as a reflection content. First, in previous research, self-reflection is motivated by self-focused curiosity or anxiety (Trapnell & Campbell, 1999), but moral self-reflection is motivated by the other-focused concern that aims to improve interpersonal living rather than for self-clarification or achievement. By drawing the ideas from Confucian theory and social cognitive theory, I use theoretical evidence to support the existence and importance of self-reflection for morality motivated by other-focused concern. Second, by specifying prosocial intention, habit, and adherence to norms as three aspects of moral reflection contents, this study provides new self-reflection contents, which are related to workplace moral regulation in addition to effectiveness, innovation, other performance goals (e.g., Grant et al., 2002; Schippers et al., 2015) and personal well-being (e.g., Harrington & Loffredo, 2010); these concepts have been explored in previous research. Furthermore, the results of scale development provide a tool to evaluate self-reflection on morality and which can improve the explanation power of self-reflection on moral behavioral consequences. This study also calls for further improvement in measurement by including moral concerns in other reasonable ways, such as in proscriptive and prescriptive moral goals.

Second, this research improves the knowledge of ethics-related leadership, for
instance, humble leader leadership, ethical leadership, abusive supervision, authentic leadership, and servant leadership, by introducing moral self-reflection that has been an uncovered antecedent in previous research. For abusive supervision, a large amount of research has concentrated on the situational factors and the subordinates’ personal factors, while Tepper (2007) called for researchers’ attention to the leaders’ individual factors. This study extends knowledge on the leaders’ proactive efforts in restraining abusive supervision and identifies the role of moral self-reflection as an impactful trait. Similarly, researchers have identified situational factors (e.g., religious conversion, humble mentors, and near-death experiences) as well as individual differences in dispositions (e.g., narcissism, Machiavellianism, self-esteem and emotional intelligence) that predict humility (Morris, Brotheridge & Urbanski, 2005); additionally, for humble leadership and ethical leadership, researchers have also identified situational influences, such as role modeling and ethical context, and dispositional individual characteristics, such as big five, Machiavellianism, and locus of control, as antecedents of ethical leadership (Brown et al., 2005). Moral self-reflection in this study supplements the knowledge, previously limited to situational factors, subordinates’ personalities or the leaders’ dispositions, of the antecedents of humble leadership and ethical leadership.

Furthermore, this study promotes ambitious follow-up research on the regulating process by introducing other-benefiting accountability as a cognitive mechanism and guilt-
proneness as an emotional mechanism. This study inspires researchers to regard ethics-related leadership as having dynamic characteristics and to explore proactive regulating ways to improve ethical performance. Unlike the general moral decision-making process that explains ethical decisions by dispositional and situational accounts (Cohen et al., 2014; Trevino, 1986; Rest, 1986), this study centralizes the role of proactively developing the moral issues’ prosocial cognition and emotions in producing virtuous behaviors and the importance of one self’s ownership of proactive and conscious reflection activities.

**Limitations and Future Directions**

Although this research significantly contributes to existing theories, there are three main limitations and some future research opportunities. Regarding the limitations, first, this research does not involve an experiment to provide strong evidence of the causal relationships in the theoretical model of moral self-reflection. Although the field study is divided into two time points, an experiment in a theoretical model that manipulates the whole process from moral self-reflection to observed behaviors might improve the confidence in arguing the mediating and moderating effects. Second, the role of moral emotion in moral self-regulation needs more analysis. Unsupported hypotheses about an affective regulation mechanism calls for future research to use alternative measurements of moral emotions to clarify the different effects of actual emotions produced by self-reflection and dispositional moral emotion proneness. Third, the measurement of humble
leadership could be improved. In this study, I used a general scale that evaluated humility by assessing virtuous behaviors, but after I finished data collecting, a new scale directly focusing on moral humility was developed. The new scale would be more accurate in reflecting the leaders’ ethical performance.

Last, I also noticed some opportunities for future research. First, the difference of the regulatory focuses among people is a potential area that may improve the knowledge of moral self-reflection. People with different moral regulatory focuses may pay less or more attention to prescriptive morality (to help) and proscriptive morality (not to harm) (Janoff-Bulman et al., 2009). In addition, such focuses are related to different moral emotions. The failures in prescriptive regulation would be more likely to lead to guilt, while the failures in proscriptive regulation would be more likely to induce shame (Sheikh & Janoff-Bulman, 2010). Furthermore, the strength of emotions may also be varied due to the different regulatory strategies, in which the failures of proscriptive regulation may engender stronger feelings of loss (Higgins, Shah, & Friedman, 1997). Therefore, this research could be improved by taking the regulatory focus as a moderator that extends knowledge on the indirect path through moral emotions in the model.

Second, the antecedents of moral self-reflection are worth further exploration. Apart from the consequences, a full understanding of moral self-reflection calls for knowledge of its causes. Further research can make efforts to figure out the antecedents of moral self-
reflection from both the dispositional perspective and the situational perspective. The dispositional perspective may uncover the personal trait that relates to people’s differences in moral self-reflection, and the situational perspective may help us to find potential triggers other than the relatively stable personal characteristics that activate moral self-reflection as an immediate action.

Third, beside the trait perspective, moral self-reflection could be studied as a process with detailed cognitive steps. By exploring how moral self-reflection is processed for specific issues, researchers would have valuable research opportunities in anticipating emotional and cognitive outcomes of reflection and explaining how people differ from each other in reflecting activities such as selecting moral evaluation standards, producing behavioral intents, and stimulating emotions. Researcher could also relate different dispositional or contingent situational triggers with these characteristics of moral self-reflection process in different interpersonal issues.

Last but not least, the relationship between the cognitive and affective regulating mechanisms also need to be addressed, especially the role of emotions in the regulation process. Future research should figure out whether moral emotion is a supplemental factor to the cognitive regulation mechanism or an alternative regulation mechanism that works when the cognitive path is disengaged, as I discussed in the last chapter. Furthermore, the cognitive mechanism might be the unique process in the regulation activated by moral self-
reflection. From this perspective, scholars could analyze whether guilt proneness negatively moderates the influence of other-benefiting accountability either by constraining efficient information processing (Isen & Means, 1983) of the cognitive development or by other ways. For example, previous research showed that pleasant emotions facilitate people’s performance in rational thinking for complex tasks without feeling threatened and increase willingness to solve interpersonal dilemmas through concession and collaboration (Lyubomirsky, King, & Diener, 2005). Therefore, negative feelings such as guilt may weaken the relationships between other-benefiting accountability and virtuous performance.

**Managerial Implication**

I contend that the results in this research regarding the influence of moral self-reflection on the leaders’ virtuous behaviors has important and timely relevance to today’s business environment and leader self-regulation. High-profile moral violations by prominent organizations and individuals ranging from politicians, business executives, and scientists have prompted the call for reflections at the individual, organizational, and institutional or even societal levels. Training managers to be aware of moral self-reflection and fostering their habitual engagement in moral self-reflection would significantly decrease the ethical risks of leaders and improve their ownership of poor performance. Companies should explore effective way to activate the managers’ moral self-reflection.
Potential ways could be through rewarding moral models, providing the manager with information regarding the subordinates’ feelings on interpersonal interactions with managers, and adding moral concerns, such as benefiting group members in self-improvement, increasing in-group trustworthy, and enhancing long-term relationships with clients, to the evaluation of task performance. These methods may trigger the managers’ moral self-reflection and facilitate routinized engagement.
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APPENDIX

A. MANAGER SELF-REFLECTION INTERVIEW QUESTIONS AND
RESPONSE SUMMARY

Moral Self-reflection Interview

Opening Paragraph

Thanks for your participation. I’m Mengying Xie, a student in Rutgers University. Currently I’m working on research about self-reflection. As you know, self-reflection has a long history in Confucianism. For example, the famous Confucianist, Zenzi, once said, “I reflect on my self three times a day”. I’m interested to know the role of self-reflection for individuals today.

Part 1: Initial Questions
1. Could you tell me about your general background?
2. Could you tell me about what you do (your role) in your company?
3. Could you tell me about the circumstances of your work (supervisors, subordinates, other stakeholders, climate)?

Part 2: Self-reflection Questions
a. Actual experience
1. What does “self-reflection” mean in your own understanding?
2. Could you give me some examples of your self-reflection experience (pay attention to process, aspects, causes, feelings, consequences)?
3. Generally, when you do self-reflection and how frequently? Any triggers?

b. Emotions and consequences
4. When you self-reflect, do you experience certain feelings? What are they and how long does the emotion last?
5. Could you illustrate that with examples? (Attention to positive versus negative events that stimulate feelings, types of emotions)
6. How are you affected by the feelings and the whole specific self-reflection episodes (on thoughts and behaviors)? Examples?

c. Self-reflection and morality
7. What are implications or meanings of self-reflection for you?
8. Have you heard of the saying “I reflect on myself three times a day” in The Analects of Confucius? [If you do], what do you think this saying means?
9. How do you think about the practice of Confucian self-reflection in current society or organizational context?
10. What relationship do you think is between self-reflection and self-cultivation? (Is self-reflection necessary for a person’s xiuyang?)
11. People say, self-reflection is the necessary path toward junzi (or a moral person). What do you think?

**Part 3: Short survey**

1. How often do you do self-reflection? (Check one of the following)
   A. Daily
   B. Weekly
   C. Monthly
   D. Yearly
2. What are the typical emotions after your self-reflection? Please check any one that applies)
   A. Guilt
   B. Shame
   C. Empathy
   D. Depressed
   E. Pride
   F. Others________
3. To what extent do you agree with the following statements?
   A. Strongly disagree
   B. Disagree
   C. Neither Agree or Disagree
   D. Agree
   E. Strongly agree
   (1) People who do more self-reflection are more moral.
   (2) You always face to moral dilemma in your life.
   (3) Managers and employees should engage in self-reflection in today’s work environment

**Part 4: Background information**

1. Your age:
   □<20 □21-25 □26-30 □31-35
2. Gender: □ Male □ Female
3. Please select your education level:
   □ PhD □ Master
   □ University degree □ High school degree and below
4. How long have you been in work: ___________ years
5. What is your current position:

Moral Self-Reflection Interview Response Summary

Short Survey
1. How often do you do self-reflection?

   - Daily: 32%
   - Weekly: 57%
   - Monthly: 11%
   - Yearly: 0%

2. What are the typical emotions after your self-reflection?
   (Participants were asked to select any option that applies so one person may provide multiple feelings here.)

   - Pride: 17
   - Empathy: 8
   - Shame: 6
   - Guilt: 12
   - Others (relieved; inspired): 21
3. To what extent do you agree with the following statements?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither Agree or Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) People who do more self-reflection are more moral.</td>
<td>0</td>
<td>13%</td>
<td>44%</td>
<td>34%</td>
<td>9%</td>
</tr>
<tr>
<td>b) You always face to moral dilemma in your life.</td>
<td>0</td>
<td>19%</td>
<td>41%</td>
<td>34%</td>
<td>6%</td>
</tr>
<tr>
<td>c) Managers and employees should engage in self-reflection in today’s work environment.</td>
<td>0</td>
<td>0</td>
<td>19%</td>
<td>50%</td>
<td>31%</td>
</tr>
</tbody>
</table>

**Topic 1: Frequency and contents of self-reflection**

- **Conclusion**
  1) Frequency: daily, weekly, monthly, or triggered by feedback. The pie chart above showed the results of the frequency question in the short survey.
  2) Contents: task performance (100%), target setting (19%), work process (44%), interactions with others (63%).
  3) Determinations of frequency and contents:
     a) Personality: routinized reflection frequency is diverse but stable as one’s own habit. The attentiveness to task performance generally exists but to morality varies among interviewees.
     b) Work characteristics (e.g., task contents, company requests, the feedback cycle).

- **Quotations**
  1. I reflected on myself every day before going to bed to conclude today’s gain and loss and plan what I should do tomorrow or in the next work stage.
  2. I have a custom to have a walk in the park on weekends and I always take a review on important events in this week. I asked myself what I have done in this week,
  3. As an investment manager, I replay all my activities in stock trading today and take a team meeting with my analysts to collect their reflecting thoughts. It’s necessary to keep such process because we face visible gains and losses in cash and are always under supervision of investors.
  4. According to the company policy, I need to make a work plan every week with conclusion of work performance last week so I always use this chance as self-reflection.
5. I don’t have a regular reflection plan but I will engage in introspecting and correcting when I get critique by my leader or complaints by subordinates or clients.

6. Of course, I do not only care about the influence of my behaviors on the attainment of my working tasks, but also the concern with the influence on my interpersonal relationships.

7. Although I think my decision meets the benefits of the parent organization, I still feel sorry to depress the manager of one of the branches.

8. As a manager, in addition to set targets and assign tasks to subordinates, an important work content for me is to communicate with others to monitor subordinates’ work progress, understand higher level leaders’ requests and report project development, take knowledge of clients’ needs, and deal with conflicts among these people. Therefore, I have to pay attention to their feelings and reflect on my performance in interactions to improve my relationships with them.

**Topic 2: What is moral self-reflection**

- Conclusion: morality is generally understood as intentions and behaviors in helping others, thinking in others’ shoes, caring others, and respecting norms in communities.

- Quotations
  1. “I think moral self-reflection means to think about others’ positions.”
  3. “I define moral self-reflection as an inspection of my behaviors’ impact on others’ feelings and interests.”

**Topic 3: The subjects of moral self-reflection**

- Conclusion
  1) 19 in 26 managers recognized their reflection on morality, which is mainly about expressed prosocial interactions with subordinates and higher-level leaders.
  2) 9 managers suggested moral self-reflection is considered more important for managers especially higher-level managers who have decision making authority other than the general staff.
  3) 5 in 6 general staff suggested that they didn’t reflect themselves in relation to morality but only consider about task performance.

- Quotations
1. I don’t think the juniors or the general staff are necessary to think much about the morality in their work because they have less freedom in decision making but are only requested to fill in the position duties.

2. I have to say, the reflection on morality is more likely to appear to top managers. The employees seem to be more focused on task performance more.

3. The influence of moral self-reflection by employees are insignificant, but the meaning of moral self-reflection by the management may result in significant strategy design, which leads to the social reputation of the organization.

4. I don’t think about my previous work with a moral perspective. I’m so tired after daily work and I don’t think my concern about fairness or unethical behaviors can change my leader’s attitudes or the general ethical climate in the company.

**Topic 4: feelings and cognitions resulted by self-reflection and further behavioral consequences.**

- **Emotions**
  1) Self-reflection as a regular routine: neutral;
  2) Self-reflection triggered by negative feedback: relieved from negative feelings (e.g., guilt, depressed, angry) to neutral or positive emotions (e.g., relaxed, inspired).

- **Cognitions**
  1) Recognize one’s own responsibility in failures in interpersonal;
  2) Tend to avoid similar mistakes in the future and improve communication skills with prosocial consideration;
  3) Tend to supplement the previous harm on others.

- **Quotations**
  1. I once lost a co-worker as well as a friend to me who joined the company at the same time with me. The reason is that we have different ideas of the future strategy of the company. I did nothing wrong but stuck to my own ideas. However, I felt sorry for my friend when I recalled the experience. Later in my work, I take more activities to make communication with colleagues to improve understanding to each other. A long time later, I reconnected with the previous co-worker, expressed my apology for his resignation. After then, I felt released and my relationship with this friend back to be normal.

  After a presentation talking about the status of entrepreneurship by students, I was inspired by the passion of these students and concerned about the difficulty they experienced in building their business. I thought about the strategy of my company and felt shame that I struggled lots of business that is insignificant for my company but important for the survival of students’ start-ups. After then, I
adjusted the strategy of my company and help the growth of students’ start-ups by yielding and even introducing more business opportunities to them.

2. After an altercation on a task between my boss and me, I felt angry about the misunderstanding by my boss. But when I reflected on the whole process of the development of the conflict, I realized that I should also take responsibility because I didn’t consider my boss’s difficulty to balance the benefits of managers and didn’t provide enough respect to his authority in the process of dealing the conflict among managers. I felt guilty to account all responsibilities on my boss and expressed my idea with impolite words. Later, in dealing with similar situations, I pay more attention to balance my own interests with the benefits of other managers and my boss, and I also take more care about the words in communication with my boss as well as other colleagues.
B. SURVEY ITEMS AND INSTRUCTIONS

Study 2. Moral Self-Reflection Scale Development Survey for EFA

Instruction: There’s a well-known quotation in the Analects, “I daily reflect on myself on three points”. It is common for people to inspect and rethink about issues happened in your life. The following statements describe people’s consideration of their thoughts, feelings and behaviors at work. Please read and indicate how frequently you engage in (1=never, 7=always) following statements based on your daily life. Options are not different in right or wrong. The point is how these statements reflect your actual thoughts. The evaluation scale is as following.

1 (never); 2 (very rarely); 3 (rarely); 4 (sometimes); 5 (frequently); 6 (very frequently); 7 (always)

<table>
<thead>
<tr>
<th>I reflect:</th>
</tr>
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<tbody>
<tr>
<td>1... whether I have the motivation to do things that benefit others at work.</td>
</tr>
<tr>
<td>2... whether I have been generously oriented in helping others at work.</td>
</tr>
<tr>
<td>3... if I have wanted to make positive impact on others through my work.</td>
</tr>
<tr>
<td>4... if I have strong motivation to do good for others through my work.</td>
</tr>
<tr>
<td>5... if I hold genuine intention to respect others who disagree with me.</td>
</tr>
<tr>
<td>6... if I have others' welfare in my heart.</td>
</tr>
<tr>
<td>7... if I am fair-minded in competing with others.</td>
</tr>
<tr>
<td>8... I reflect if I have empathy toward people who are less fortunate.</td>
</tr>
<tr>
<td>9... if I have been helping others through my work.</td>
</tr>
<tr>
<td>10... if I have been doing good for others at work.</td>
</tr>
<tr>
<td>11... whether I have been caring in my interaction with others.</td>
</tr>
<tr>
<td>12... if I have been treating others generously.</td>
</tr>
<tr>
<td>13... if I have been respecting people who disagree with me.</td>
</tr>
<tr>
<td>14... whether I have behaved in fairness in competing with others.</td>
</tr>
<tr>
<td>15... whether I have acted compassionately to people who are less fortunate.</td>
</tr>
<tr>
<td>16... if I have acted with honesty in interacting with others.</td>
</tr>
<tr>
<td>17... whether I have benefited others at work.</td>
</tr>
<tr>
<td>18... whether I have made positive impact on others at work.</td>
</tr>
<tr>
<td>19... if my action has enhanced others’ welfare.</td>
</tr>
<tr>
<td>20... if my behavior made others feel comfortable.</td>
</tr>
<tr>
<td>21... whether my behavior has made others feel sad.</td>
</tr>
<tr>
<td>22... if I might have damaged others’ good reputation.</td>
</tr>
<tr>
<td>23... if I might have hurt others’ legitimate interests.</td>
</tr>
<tr>
<td>24… whether my behaviors have negatively affected others.</td>
</tr>
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<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>25… if I follow the professional standards.</td>
</tr>
<tr>
<td>26… if I adhere to disciplines in organizations.</td>
</tr>
<tr>
<td>27… if I fill in the duty of my roles.</td>
</tr>
<tr>
<td>28… if I perform social civic obligations.</td>
</tr>
<tr>
<td>29… if I’m always law abiding.</td>
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### Study 3. Moral Self-Reflection Scale Validation Survey for CFA

**All items are self-rated**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
<th>Items</th>
</tr>
</thead>
</table>
| **1 (never); 2 (very rarely); 3 (rarely); 4 (sometimes); 5 (frequently); 6 (very frequently); 7 (always)** | Moral self-reflection (16 items) | I reflect:  
1… whether I have the motivation to do things that benefit others at work.  
2… whether I have been generously oriented in helping others at work.  
3… if I have wanted to make positive impact on others through my work.  
4… if I have strong motivation to do good for others through my work.  
5… if I have others' welfare in my heart.  
6… if I have been treating others generously.  
7… if I have been helping others through my work.  
8… if I have been doing good for others at work.  
9… whether I have been caring in my interaction with others.  
10… whether I have acted compassionately to people who are less fortunate.  
11… if I have acted with honesty in interacting with others.  
12… if I follow the professional standards.  
13… if I adhere to disciplines in organizations.  
14… if I fill in the duty of my roles.  
15… if I perform social civic obligations.  
16… if I’m always law abiding. |
| **1 (strong disagree); 2 (disagree); 3 (slightly disagree); 4 (neither agree or disagree); 5 (slightly agree); 6 (agree); 7 (strongly agree)** | Big Five (10 items) | I see my self as:  
1. Extraverted, enthusiastic.  
2. Critical, quarrelsome.  
3. Dependable, self-disciplined.  
4. Anxious, easily upset.  
5. Open to new experiences, complex.  
6. Reserved, quiet.  
7. Sympathetic, warm.  
8. Disorganized, careless.  
<p>| | The General Self-Reflection (6 items) | 1. I don't often think about my thoughts. |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>2.</td>
<td>I rarely spend time in self-reflection.</td>
</tr>
<tr>
<td>3.</td>
<td>I frequently examine my feelings.</td>
</tr>
<tr>
<td>4.</td>
<td>I don't really think about why I behave in the way that I do.</td>
</tr>
<tr>
<td>5.</td>
<td>I frequently take time to reflect on my thoughts.</td>
</tr>
<tr>
<td>6.</td>
<td>I often think about the way I feel about things.</td>
</tr>
</tbody>
</table>

**Self-Rumination (12 items)**

1. I tend to “ruminate” or dwell over things that happen to me for a really long time afterward.
2. Often I’m playing back over in my mind recent things I’ve said or done.
3. I always seem to be rehashing in my mind recent things I’ve said or done.
4. Long after an argument or disagree is over with, my thoughts keep going back to what happened.
5. I don’t waste time rethinking things that are over and done with.
6. I often find myself reevaluating something I’ve done.
7. I often reflect on episodes in my life that I should no longer concern myself with.
8. I spend a great deal of time thinking back over my embarrassing or disappointing moments.
9. I never ruminate or dwell on myself for very long.
10. It is easy for me to put unwanted thoughts out of my mind.
11. Sometimes it is hard for me to shut off thoughts about myself.
12. My attention is often focused on aspects of my self I wish I’d stop thinking about

**Moral Identity (5 items)**

1. It would make me feel good to be a person who has these characteristics.
2. Being someone who has these characteristics is an important part of who I am.
3. I would be ashamed to be a person who has these characteristics.
4. Having these characteristics is not really important to me.
5. I strongly desire to have these characteristics.

**Core Self-Evaluation (12 items)**

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.

<table>
<thead>
<tr>
<th>Humility (9 items)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I admit it when I do not know how to do something.</td>
</tr>
<tr>
<td>2. I show appreciation for the unique contributions of others.</td>
</tr>
<tr>
<td>3. I’m open to the ideas of others.</td>
</tr>
<tr>
<td>4. I’m open to the advice from others.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reflective Moral Attentiveness (5 items)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I regularly think about the ethical implications of my decisions.</td>
</tr>
<tr>
<td>2. I think about the morality of my actions almost every day.</td>
</tr>
<tr>
<td>3. I often find myself pondering about ethical issues.</td>
</tr>
<tr>
<td>4. I often reflect on the moral aspects of my decisions.</td>
</tr>
<tr>
<td>5. I like to think about ethics.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Moral Disengagement (8 items)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is okay to spread rumors to defend those you care about.</td>
</tr>
<tr>
<td>2. Taking something without the owner’s permission is okay as long as you’re just borrowing it.</td>
</tr>
<tr>
<td>3. Considering the ways people grossly misrepresent themselves, it’s hardly a sin to inflate your own credentials a bit.</td>
</tr>
<tr>
<td>4. People shouldn’t be held accountable for doing questionable things when they were just doing what an authority figure told them to do.</td>
</tr>
<tr>
<td>5. People can’t be blamed for doing things that are technically wrong when all their friends are doing it too.</td>
</tr>
<tr>
<td>6. Taking personal credit for ideas that were not your own is no big deal.</td>
</tr>
<tr>
<td>7. Some people have to be treated roughly because they lack feelings that can be hurt.</td>
</tr>
<tr>
<td>8. People who get mistreated have usually done something to bring it on themselves.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mindfulness (12 items)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is easy for me to concentrate on what I am doing.</td>
</tr>
<tr>
<td>2. I am preoccupied by the future.</td>
</tr>
<tr>
<td>3. I can tolerate emotional pain.</td>
</tr>
<tr>
<td>4. I can accept things I cannot change.</td>
</tr>
<tr>
<td>5. I can usually describe how I feel at the moment in considerable detail.</td>
</tr>
<tr>
<td>6. I am easily distracted.</td>
</tr>
<tr>
<td>7. I am preoccupied by the past.</td>
</tr>
<tr>
<td>8. It’s easy for me to keep track of my thoughts and feelings.</td>
</tr>
<tr>
<td>9. I try to notice my thoughts without judging them.</td>
</tr>
<tr>
<td>10. I am able to accept the thoughts and feelings I have.</td>
</tr>
<tr>
<td>11. I am able to focus on the present moment.</td>
</tr>
<tr>
<td>12. I am able to pay close attention to one thing for a long period of time.</td>
</tr>
</tbody>
</table>
## Model Test Survey

<table>
<thead>
<tr>
<th>Time 1</th>
<th>Leader rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 (never); 2 (very rarely); 3 (rarely); 4 (sometimes); 5 (frequently); 6 (very frequently); 7 (always)</td>
</tr>
</tbody>
</table>

**Moral self-reflection (16 items)**

- I reflect:
  1. ... whether I have been generously oriented in helping others at work.
  2. ... if I have wanted to make positive impact on others through my work.
  3. ... if I have strong motivation to do good for others through my work.
  4. ... if I have been helping others through my work.
  5. ... if I have been doing good for others at work.
  6. ... whether I have acted compassionately to people who are less fortunate.
  7. ... if I follow the professional standards.
  8. ... if I adhere to disciplines in organizations.
  9. ... if I fill in the duty of my roles.

**Ethical Culture (10 items)**

1. Management in this organization disciplines unethical behavior when it occurs.
2. Penalties for unethical behavior are strictly enforced in this organization.
3. Unethical behavior is punished in this organization.
4. Top managers of this organization regularly show that they care about ethics.
5. People of integrity are rewarded in this organization.
6. Top managers of this organization regularly show that they care about ethics.
7. Top managers of this organization are models of unethical behavior.
8. Ethical behavior is the norm in this organization.
9. Top managers of this organization guide decision-making in an ethical direction.
10. Ethical behavior is rewarded in this organization.

**Social desirability (10 items)**

1. I sometimes tell lies if I have to.
2. I never cover up my mistakes.
3. I always obey laws, even if I am unlikely to get caught.
4. I have said something bad about a friend behind his or her back.
5. When I hear people talking privately, I avoid listening.
6. I have received too much change from a salesperson without telling him or her.
7. When I was young, I sometimes stole things.
8. I have done things that I don’t tell other people about.
9. I never take things that don’t belong to me.
10. I don’t gossip about other people’s business.

**Part 1: Leader rating**

1 (very unlikely); 2 (unlikely); 3 (slightly unlikely); 4 (about 50% likely); 5 (slightly likely); 6 (likely); 7 (very likely)

**Guilt proneness (16 items)**

1. After realizing you have received too much change at a store, you decide to keep it because the salesclerk doesn't notice. What is the likelihood that you would feel uncomfortable about keeping the money?
2. You are privately informed that you are the only one in your group that did not make the honor society because you skipped too many days of school. What is the likelihood that this would lead you to become more responsible about attending school?
3. You reveal a friend’s secret, though your friend never finds out. What is the likelihood that your failure to keep the secret would lead you to exert extra effort to keep secrets in the future?
4. You secretly commit a felony. What is the likelihood that you would feel remorse about breaking the law?
5. You strongly defend a point of view in a discussion, and though nobody was aware of it, you realize that you were wrong. What is the likelihood that this would make you think more carefully before you speak?
6. At a coworker’s housewarming party, you spill red wine on their new cream-colored carpet. You cover the stain with a chair so that nobody notices your mess. What is the likelihood that you would feel that the way you acted was pathetic?
7. While discussing a heated subject with friends, you suddenly realize you are shouting though nobody seems to notice. What is the likelihood that you would try to act more considerately toward your friends?
8. You lie to people but they never find out about it. What is the likelihood that you would feel terrible about the lies you told?

**Part 2: Follower rating**

1 (strong disagree); 2 (disagree); 3 (slightly disagree); 4 (neither agree or disagree); 5 (slightly agree); 6 (agree); 7 (strongly agree)

**Leader other-benefiting accountability (8 items)**
1. My manager looks to himself/herself first when his/her team’s results are disappointing.
2. When performance in this team does not go favorably, he/she holds him or herself to account, for example, by receiving disciplinary actions.
3. When performance in this team does not go favorably, my manager identifies him/herself as the reason.
4. My manager apologizes to constituents (e.g., superiors, followers or customers) for his/her team’s mistakes.
5. When performance in this team goes well, my manager identifies others (e.g., his/her subordinates) rather than him/her as the reason.
6. My manager ensures that his/her subordinates get recognized for good team performance.
7. When performance in this team goes well, my manager ensures that his/her subordinates rather than he/she receives recognition or rewards.
8. My manager makes sure that his/her subordinates get recognized if they contribute to good team performance.

<table>
<thead>
<tr>
<th>Time 3</th>
<th>Follower rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 (very unlikely); 2 (unlikely); 3 (slightly unlikely); 4 (about 50% likely); 5 (slightly likely); 6 (likely); 7 (very likely)</td>
</tr>
</tbody>
</table>

**Humble Leadership (9 items)**
My manager:
1. Actively seeks feedback, even if it is critical.
2. Admits it when he or she does not know how to do something.
3. Acknowledges when others have more knowledge and skills.
4. Takes notice of others' strengths.
5. Often compliments others on their strengths.
6. Shows appreciation for the unique contributions of others.
7. Is willing to learn from others.
8. Is open to the ideas of others.
9. Is open to the advice from others.

**Ethical leadership (10 items)**
My manager:
1. Listens to what employees have to say
2. Disciplines employees who violate ethical standards
3. Conducts his/her personal life in an ethical manner
4. Has the best interests of employees in mind
5. Makes fair and balanced decisions
6. Can be trusted
7. Discusses business ethics or values with employees
8. Sets an example of how to do things the right way in terms of ethics
9. Defines success not just by results by also the way that they are obtained
10. When making decisions, asks “what is the right thing to do?”

1 (never); 2 (very rarely); 3 (rarely); 4 (sometimes); 5 (frequently); 6 (very frequently); 7 (always)

**Abusive Supervision (10 items)**

My manager:
1. Ridicules me.
2. Tells me my thoughts or feelings are stupid.
3. Reminds me of my past mistakes and failures.
4. Doesn’t give me credit for jobs requiring a lot of effort.
5. Expresses anger at me when he/she is mad for another reason.
6. Make negative comments about me to others.
7. Is rude to me.
8. Puts me down in front of others.
9. Does not allow me to interact with my coworkers.
10. Lies to me.
C. FIGURE 1

Theoretical Model of Moral Self-Reflection

![Diagram of Theoretical Model of Moral Self-Reflection]

- Guilt-proneness
  - H1+ to Leader other-benefiting accountability
  - H2+ to Moral Self-reflection
  - H4+ to Abusive supervision
- Moral Self-reflection
  - H3- to Guilt-proneness
- Leader other-benefiting accountability
  - H4a+ to Humble leadership
  - H4b+ to Ethical leadership
- Humble leadership
  - H4c+ to Guilt-proneness
- Ethical leadership
  - H5a+ to Guilt-proneness
  - H5b+ to Abusive supervision
FIGURE 2

Structural Equation Modeling Results

Note. N = 202, Unstandardized coefficients are shown, and solid line indicates significant path and dashed line indicates non-significant path. †p < .1, *p < .05, **p < .01.

Figure 2. Structural equation modeling results for the moderated mediation model. Solid line indicates significant path, and dashed line indicates non-significant path.

Note. N = 202, Unstandardized coefficients are shown, and solid line indicates significant path and dashed line indicates non-significant path. †p < .1, *p < .05, **p < .01.
FIGURE 3
Simple Slope of Moderating Effect of Leader Other-benefiting Accountability, DV=Ethical Leadership

\[ .07 (p = .36) \]

\[ .14^\dagger (p = .07) \]

\[^\dagger p < .1, \,* p < .05, \,** p < .01.\]
FIGURE 4
Simple Slope of Moderating Effect of Guilt Proneness, DV=Abusive Supervision

* $p < .05$, ** $p < .01$. 
FIGURE 5
Simple Slope of Moderating Effect of Guilt Proneness, DV=Ethical Leadership

\[ *p < .05, \quad ** p < .01. \]

FIGURE 6
Simple Slope of Moderating Effect of Guilt Proneness, DV=Abusive Supervision

\[ *p < .05, \quad ** p < .01. \]
<table>
<thead>
<tr>
<th>Dimension</th>
<th>Item: I reflect if I...at work/through my work</th>
<th>Literature source</th>
<th>Morality in literature</th>
<th>Selected or not (Y/N)</th>
<th>Deletion reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>have the motivation to do things that benefit others</td>
<td>Grant (2008)</td>
<td>Benefiting others</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>have been generously oriented in helping others</td>
<td>Grant (2008)</td>
<td>Helping others</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>have wanted to make positive impact on others</td>
<td>Grant (2008)</td>
<td>Having the positive impact on others</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>have strong motivation to do good for others</td>
<td></td>
<td>Be good for others</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>have others' welfare in my heart</td>
<td></td>
<td>Caring</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>have empathy toward people who are less fortunate</td>
<td>Aquino &amp; Reed (2002)</td>
<td>empathy</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>am fair-minded in competing with others.</td>
<td></td>
<td>Justice</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>NA</td>
<td></td>
<td>Honest</td>
<td>N</td>
<td>Not an intention</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>hold genuine intention to respect others</td>
<td>Koehn (2001)</td>
<td>Respect</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Habit</td>
<td>Have been treating others generously</td>
<td>Benefiting others</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
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<td>-------</td>
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<td>------------------</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>have been helping others</td>
<td>Helping others</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NA</td>
<td>Having the positive impact on others</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>have been doing good for others</td>
<td>Be good for others</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>have been caring in my interaction with others</td>
<td>Caring</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>have acted compassionately to people who are less fortunate</td>
<td>Empathy</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>have behaved in fairness in competing with others</td>
<td>Justice</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>have acted with honesty in interacting with others</td>
<td>Honest</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>have been respecting people who disagree with me</td>
<td>Respect</td>
<td>Y</td>
<td></td>
<td></td>
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<tr>
<td>Consequence</td>
<td>have benefited others</td>
<td>Benefiting others</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>have enhanced others’ welfare</td>
<td>Helping others</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>have made positive impact on others</td>
<td>Having the positive impact on others</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------</td>
<td>--------------------------------------</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>have made others feel comfortable</td>
<td>Be good for others</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Caring</td>
<td></td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>empathy</td>
<td></td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Justice</td>
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<td></td>
<td>Honest</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respect</td>
<td></td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hurt other’s feelings</td>
<td></td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Damage other’s reputation</td>
<td></td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hurt others’ legitimate interests</td>
<td></td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Negatively impact</td>
<td></td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>follow the professional standards</td>
<td>Rules of professionals</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>adhere to disciplines in organizations</td>
<td>Rules of employees</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>fill in the duty of</td>
<td>Rules of</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>my roles</td>
<td>society members</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------</td>
<td>----------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>perform social civic obligations</td>
<td>Rules of society members</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>am always law abiding</td>
<td>Rules of society members</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 2
Study 2 Results: EFA Factor Loadings

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. (I reflect) whether I have the motivation to do things that benefit others at work.</td>
<td>.909</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. …whether I have been generously oriented in helping others at work.</td>
<td>.796</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3… if I have wanted to make positive impact on others through my work.</td>
<td>.758</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4… if I have strong motivation to do good for others through my work.</td>
<td>.720</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5… if I have others' welfare in my heart.</td>
<td>.572</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6… if I have been treating others generously.</td>
<td></td>
<td></td>
<td>.714</td>
</tr>
<tr>
<td>7… if I have been helping others through my work.</td>
<td></td>
<td></td>
<td>.690</td>
</tr>
<tr>
<td>8… if I have been doing good for others at work.</td>
<td></td>
<td></td>
<td>.736</td>
</tr>
<tr>
<td>9… whether I have been caring in my interaction with others.</td>
<td></td>
<td></td>
<td>.815</td>
</tr>
<tr>
<td>10… whether I have acted compassionately to people who are less fortunate.</td>
<td></td>
<td></td>
<td>.586</td>
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<tr>
<td>11… if I have acted with honesty in interacting with others.</td>
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<td>.530</td>
</tr>
<tr>
<td>12… if I follow the professional standards.</td>
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<td></td>
<td>.879</td>
</tr>
<tr>
<td>13… if I adhere to disciplines in organizations.</td>
<td></td>
<td></td>
<td>.850</td>
</tr>
<tr>
<td>14… if I fill in the duty of my roles.</td>
<td></td>
<td></td>
<td>.756</td>
</tr>
<tr>
<td>15… if I perform social civic obligations.</td>
<td></td>
<td></td>
<td>.798</td>
</tr>
<tr>
<td>16… if I’m always law abiding.</td>
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<td></td>
<td>.654</td>
</tr>
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Factor Correlation Matrix

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
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<td>.305</td>
<td>.680</td>
</tr>
<tr>
<td>2</td>
<td>.305</td>
<td>1.000</td>
<td>.396</td>
</tr>
<tr>
<td>3</td>
<td>.680</td>
<td>.396</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Note. N = 200.
TABLE 3

Study 3 Results: Confirmatory Factor Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>$\Delta\chi^2$</th>
<th>RMSEA</th>
<th>CFI</th>
<th>TLI</th>
<th>SRMR</th>
<th>df</th>
<th>$\Delta df$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 0: (Baseline model): 3-factor model</td>
<td>155.26**</td>
<td></td>
<td>.05</td>
<td>.95</td>
<td>.95</td>
<td>.06</td>
<td>101</td>
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<tr>
<td>Model 1: one factor model</td>
<td>311.73**</td>
<td>117.45**</td>
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<td>.83</td>
<td>.80</td>
<td>.09</td>
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<td>Model 2: 2-factor model: combine MSR-intention and MSR-behavior</td>
<td>175.20**</td>
<td>19.94**</td>
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<td>.94</td>
<td>.93</td>
<td>.06</td>
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<tr>
<td>Model 3: 2-factor model: combine MSR-intention and MSR-norm</td>
<td>310.34**</td>
<td>155.08</td>
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<td>.83</td>
<td>.80</td>
<td>.09</td>
<td>103</td>
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<td>Model 4: 2-factor model: combine MSR-norm and MSR-behavior</td>
<td>280.69**</td>
<td>125.43**</td>
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<td>Model 5: MSR as a higher-order factor (same as Model 0)</td>
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<td>.95</td>
<td>.06</td>
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Note. N = 225. The measurement model was based on self-report measure. RMSEA = root-mean-square error of approximation. CFI = comparative fit index. TLI = Tucker-Lewis Index. $\Delta\chi^2$ = change in chi square between the alternative model and the baseline model.

**$p < 0.01$. list what are your 3-factor, 2-factor, and tell us what is MSR if you use abbreviations in your table.
TABLE 4

Study 3 Results: Convergent Validity with Moral Identity, Core self-evaluation (CSE), Humility, and Moral Disengagement

<table>
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<tr>
<th></th>
<th>Moral Identity</th>
<th>CSE</th>
<th>Humility</th>
<th>Moral Disengagement</th>
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<td>MSR</td>
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<td>-.274**</td>
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<td>MSR_habit</td>
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<td>.424**</td>
<td>.290**</td>
<td>-.329**</td>
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<td>.489**</td>
<td>.216**</td>
<td>.155*</td>
<td>-.188**</td>
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</table>

Note. N = 225. **p< 0.01. *p< 0.05.
TABLE 5

Study 3 Results: Discriminant Validity with Mindfulness, Self-reflection, Self-rumination, Moral Reflective-attentiveness)

<table>
<thead>
<tr>
<th>Model</th>
<th>RMSEA</th>
<th>CFI</th>
<th>TLI</th>
<th>SRMR</th>
<th>χ²</th>
<th>Δχ²</th>
<th>df</th>
<th>Δdf</th>
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</thead>
<tbody>
<tr>
<td>Model 0 (Baseline model): 5-factor model</td>
<td>.05</td>
<td>.94</td>
<td>.92</td>
<td>.06</td>
<td>1029.31**</td>
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<td>655</td>
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<td>.43</td>
<td>.40</td>
<td>.16</td>
<td>2481.69**</td>
<td>1452.38**</td>
<td>665</td>
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<td>.06</td>
<td>.83</td>
<td>.82</td>
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<td>1198.55**</td>
<td>169.24**</td>
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<td>1198.55**</td>
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<td>Model 4: 4-factor model combining MSR and self-rumination</td>
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<td>.80</td>
<td>.79</td>
<td>.11</td>
<td>1284.34**</td>
<td>547.57**</td>
<td>659</td>
<td>4</td>
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<td>.83</td>
<td>.82</td>
<td>.09</td>
<td>1193.81**</td>
<td>345.99**</td>
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Note. N = 225. **p < 0.01. *p < 0.05.
### TABLE 6

Rwg and ICCs for Subordinate-rated Variables

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<th>Mean</th>
<th>SD</th>
<th>F ratio</th>
<th>p-value</th>
<th>ICC(1)</th>
<th>ICC(2)</th>
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<td>0.40</td>
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<td>accountability</td>
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<tr>
<td>Humility</td>
<td>0.94</td>
<td>0.14</td>
<td>1.94</td>
<td>0.000</td>
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<td>0.48</td>
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<td>0.17</td>
<td>1.90</td>
<td>0.000</td>
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<td>2.34</td>
<td>0.000</td>
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</table>

N = 202.
**TABLE 7**

Moral Self-reflection Discriminant Validity with Other Constructs in Hypothesis Testing

<table>
<thead>
<tr>
<th>Model</th>
<th>RMSEA</th>
<th>CFI</th>
<th>TLI</th>
<th>SRMR</th>
<th>χ²</th>
<th>Δχ²</th>
<th>df</th>
<th>Δdf</th>
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</thead>
<tbody>
<tr>
<td>Model 0 (Baseline model): 6-factor model</td>
<td>.06</td>
<td>.93</td>
<td>.92</td>
<td>.06</td>
<td>489.98**</td>
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<td>284</td>
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<tr>
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<td>1213.62**</td>
<td>728.07**</td>
<td>1080</td>
<td>796</td>
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<td>Model 2: 2-factor model: MSR, combining all other variables</td>
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<td>1147.71**</td>
<td>662.60**</td>
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<tr>
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<td>.90</td>
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<td>583.94**</td>
<td>93.96**</td>
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<td>.91</td>
<td>.90</td>
<td>.07</td>
<td>561.04**</td>
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<td>.91</td>
<td>.90</td>
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<td>.90</td>
<td>.07</td>
<td>578.06**</td>
<td>88.08**</td>
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# Table 8: Means, Standard Deviations, and Intercorrelations of Study Variables

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