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THE INTERACTIVE MODEL OF GREEN HRM PRACTICES AND
LINE MANAGER'S ETHICAL LEADERSHIP:
EMPLOYEE INTENTIONS FOR GREEN BEHAVIOR AND ATTITUDES TOWARD
THE ORGANIZATION

By

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ABSTRACT OF THE THESIS

The Interactive Model of Green HRM Practices and Line Manager's Ethical Leadership:

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Green human resource management (green HRM) research has recently emerged as sustainability-targeted HRM to promote employee's pro-environmental behavior and serve the strategic goals of corporate environmental sustainability. In this study, I examine the effects of commitment-eliciting and compliance-achieving green HRM practices under the line managers' ethical leadership from employees' perspective. Specifically, I test the two-way effects of commitment-eliciting and compliance-achieving green HRM practices on employees' green behavior intentions, trust in the organization, and organizational cynicism. Further, I suggest the roles of line managers' ethical leadership to facilitate the interaction between the two orientations of green HRM practices. Conducting a scenario-based video vignette experiment with 417 undergraduate students from two U.S. universities, I find that commitment-eliciting green HRM practices have direct effects on the employee outcomes. However, neither the two-way nor three-way effects of green HRM practices and line managers' ethical leadership are significant. Meanwhile, the results from supplemental analyses reveal that the compliance-achieving green HRM practices per se have direct effects on employees'

green behavior intentions and trust in an organization. Moreover, the line manager's ethical leadership strengthens a negative relationship between commitment-eliciting green HRM practices and organizational cynicism. Despite its findings and limitations, this study has implications for commitment-eliciting and compliance-achieving HRM orientations in a green HRM context, as well as suggesting how an ethical line manager may enact the two orientations of green HRM among employees and address the strategic goals of environmental sustainability.

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Chapter 1: Introduction

1.1. Motivation and Purpose

Over the past three decades, the topic of corporate environmental sustainability has emerged, and the impact of industrial development and business activity on the natural environment has gradually gained attention in organizational studies (e.g., Bansal & Song, 2016). Under increasing pressure from multiple stakeholders regarding environmental issues, organizations are increasingly acknowledging their role in promoting environmental sustainability (Guerci, Longoni, & Luzzini, 2016; Jackson, Renwick, Jabbour, & Muller-Camen, 2011).

Green human resource management (HRM) has recently been emerged from strategic human resource management (SHRM) research and suggests sustainability-targeted HRM to help organizations proactively adopt and implement environmental management practices (see review by Ren, Tang, & Jackson, 2017). Green HRM research proposes HRM practices that would address environmental concerns (e.g., Jabbour & Jabbour, 2016) and accomplish firms' strategic goals of environmental sustainability (e.g., Gholami, Rezaei, Saman, Sharif, & Zakuan, 2016; Jackson & Seo, 2010) by engaging employees, leaders and teams in pro-environmental attitudes and behaviors during business activities (e.g., O'Donohue & Torugsa, 2016).

Despite its potential roles in environmental sustainability, green HRM research remains unexplored today. For example, a majority of its nascent conceptualizations have

rooted from the knowledge of commitment-oriented HRM in SHRM literature (e.g., Ren et al., 2017; Tang, Chen, Jiang, Paillé, & Jia, 2018). Meanwhile, there has been a recent discussion in SHRM research regarding the *compliance* approach of HRM, which standardizes and enforces rules and procedures to enhance organizational efficiency and effectiveness (e.g., Su, Wright, & Ulrich, 2018). Notably, this discussion has considered a possibility of combining these two approaches in HRM practices and delivering even greater organizational effectiveness (e.g., Hauff, Alewell, & Hansen, 2014; Su et al., 2018).

In this study, I elaborate on this discussion of green HRM to suggest that companies may design and implement green HRM practices using the commitment and compliance approaches. For instance, firms may adopt green HRM practices using the commitment approach (e.g., paying incentives for pro-environmental behavior at work) to motivate employees to engage in *voluntary* green behaviors (e.g., Kim, Kim, Han, Jackson, & Ployhart, 2017). At the same time, firms may also enforce compliance-oriented practices (e.g., being disadvantaged in overall performance evaluations) to induce employees to engage in *required* green behaviors (Norton, Parker, Zacher, & Ashkanasy, 2015). Existing SHRM research has long discovered abundant evidence that HRM practices induce positive employee outcomes from using the commitment approach and adverse outcomes from using the control approach (e.g., Arthur 1992, 1994; Nishii, Lepak, & Schneider, 2008). However, I pay attention to the unique context of green HRM that firms “require not only compliance with formal rules, but also employee engagement with and acceptance of voluntary initiatives” (Ren et al., 2017). Assuming that both voluntary and required green behaviors of employees contribute to the firm’s

environmental goals (Norton et al., 2015), I argue that using green HRM practices that combine the two approaches will induce employee green behaviors.

Since employees are the main actors of environmental management practices (e.g., De Roeck & Farooq, 2018; Rupp & Mallory, 2015), I examine employees' reactions to green HRM practices. Doing so, I address recent calls in green HRM research to "investigate how employees understand and make sense of organizations' motivations, as such attributions are likely to influence how employees respond to green HRM policies and practices." (Ren et al., 2017). The extant literature is silent about the potential effects of employees' attributions concerning HRM practices on their attitudes and behaviors, while SHRM research has increasingly paid attention (e.g., Nishii et al., 2008).

To fill this notable gap, I draw on attribution theory (Lange & Washburn, 2012; Martinko, 2006) and Corporate Social Responsibility (CSR) motive model (Jones & Rupp, 2014) to develop a model of employee attributions about commitment- and compliance-oriented green HRM practices. Attribution theory asserts that individuals examine organizational events with subjective interpretations, which in turn drive subsequent behavioral outcomes (Martinko, 2006). Existing CSR research suggests that employees tend to make judgments of why their companies engage in CSR-related activities, and these attributional inferences influence employees' job attitudes and behaviors (e.g., Vlachos, Panagopoulos, & Rapp, 2013).

More specifically, the CSR motive model (Jones & Rupp, 2014) proposes a conceptual framework that employees react with three types of CSR motives to engage in CSR-related behavior. These motives are the extent to which the firms hold *care-based*

(i.e., the degree to which the organization authentically considers environmental and social issues), *self-based* (i.e., the degree to which the organization is concerned with its benefits regarding the outcomes of CSR practices), and *relationship-based* (i.e., the degree to which the organization pursues mutual benefit in the employee–employer relationship) concerns when implementing CSR practices. Using the lens of social exchange theory (Blau, 1964), this model suggests the cognitive process involved when employees evaluate firms’ actual CSR motives based on their attributional inferences about the employee-employer relationship. Hence, I build on this model to argue that employees will make attributions to the firms’ three motives when organizations implement green HRM practices.

Furthermore, attribution theory in existing CSR research suggests that employees’ attributions to CSR practices deliver positive or negative outcomes (see review by Gond, Akremi, Swaen, & Babu, 2017). Recognizing the firm’s CSR motives as authentic environmental or social initiatives, employees are more induced to intrinsically engage in CSR activities (e.g., Vlachos et al., 2013). However, employees may tend to be substantially cynical or suspicious of their company attributing its intentions to self-interested motives (Lange & Washburn, 2012). Although many companies today externally claim that they commit to environmental concerns, some of them might not engage in actual actions or may even exploit the natural environment (i.e., *greenwashing*, Lange & Washburn, 2012). Since HRM practices evoke attributional inferences of the firm’s strategic orientation (Nishii et al., 2008), I use perspectives from attribution theory in the CSR literature to argue that green HRM practices trigger employees’ green behavior intentions, organizational cynicism, and trust in the organization.

The central thesis of my model is that the combination of commitment- and compliance-oriented green HRM practices may induce different green behavior intentions and attitudes toward the organization. For example, employees may conclude from commitment and compliance-oriented practices that their company is seriously committed to environmental sustainability, resulting in enhanced green behavior intentions. However, they may question the firm's true motives if it also implements compliance HRM practices. Employees' sense of being controlled or enforced may dilute the effects of commitment-oriented practices on their attitudes.

To this end, I pay attention to the role of line managers to address this tension between the two approaches of green HRM practices. For successful implementation of HRM practices, a handful of recent SHRM scholars have pointed to the role of line managers to effectively and accurately communicate such practices to employees as intended (Purcell & Hutchinson, 2007; Sikora & Ferris, 2014; see also the special issues edited by Leroy, Segers, Van Dierendonck, & Den Hartog, 2018). Since employees tend to generalize their perceptions about the supervisors to the organizations- but not the other way- the leadership styles of line managers affect employees' reactions to the organization (Choi, Kim, Han, Ryu, Park, & Kwon, 2018; Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002). Building on the social exchange perspective of the CSR motive model, I intend to suggest that line managers may also influence the employees' evaluations of their company's relationship with employees.

Based on attribution theory, CSR research suggests that employees make attributional inferences of firms' CSR motives based on how their managers communicate the implemented practices through their leadership behaviors (Ren & Guo,

2011; Vlachos et al., 2013). In this study, I build on the ethical leadership perspective (e.g., Brown & Treviño, 2006) to examine how ethical leadership behaviors may enable the combination of commitment and compliance orientations of green HRM. Doing so, I investigate whether line manager's ethical leadership behaviors moderate the combined effects of commitment-eliciting and compliance-achieving green HRM practices on employees' green behavior intentions and attitudes toward the organization.

1.2. Intended Contributions of the Study

This study has been developed to make three key contributions to the SHRM, leadership, and CSR literatures. First, it extends the green HRM and broader SHRM literature by revealing not only the effects of commitment-based HRM practices but also those of compliance-based HRM practices. The existing SHRM literature provides empirical evidence of the negative effects that can flow from control-oriented HRM to influence employees' attitudes and behaviors (e.g., Arthur, 1992; 1994). However, I suggest combining both approaches to optimize employees' intentions to engage in future green behavior at work. A handful of recent SHRM studies has suggested potentially significant impacts of such a combination (e.g., Patel et al., 2013; Su et al., 2018), but they have examined the outcomes at the organizational level only, without examining the individual-level processes that might explain the observed effects. Hence, the present study contributes to the existing SHRM research by examining how employees react to the green HRM practices through their attributions to the organization's motives.

Second, this study is intended to advance the green HRM and ethical leadership literatures by revealing that the line manager's ethical leadership is a boundary condition for the successful implementation of green HRM practices. As mentioned earlier, in

green HRM research, there has been a recent call for research that investigates the moderating role of a line manager's leadership (Ren et al., 2017)—a topic that SHRM research has increasingly investigated over the last decade (e.g., Purcell & Hutchinson, 2007; Leroy et al., 2018). In a similar vein, ethical leadership research has been investigating interactions with CSR-related management practices (e.g., Hansen, Dunford, Alge, & Jackson, 2016; Ogunfowora, 2014; De Roeck & Farooq, 2018), although such CSR-related practices are not specifically HRM-related. This study suggests that the interactive effects of HRM and ethical leadership are similar to those observed in the leadership literature. In particular, theorizing the role of a line manager's ethical leadership to enable and enact the combination of commitment-eliciting and compliance-achieving green HRM practices is intended to be a unique contribution.

Furthermore, I build on attribution theory in CSR research and empirically examine the causal relationship between the implementation of green HRM practices and employee reactions using an experimental design. A handful of CSR researchers have expressed an urgent need to improve understanding of internal communication of CSR practices among key stakeholders (Du, Bhattacharya, & Sen, 2010; Vlachos et al., 2013). This study is intended to not only examine the roles of green HRM practices but also to suggest how line managers can play a role in influencing employees' attributions. Doing so, I contribute to the CSR motive model with a deeper understanding of employee reactions to organizational environmental practices and line managers' leadership behaviors.

Lastly, I address theoretical and practical implications about the implementation of green HRM practices. When organizations implement green HRM practices,

employees may be not only induced to engage in green behaviors but also evaluate the employee-employer relationship and thus influence general job attitudes. Furthermore, the ethical leadership of line managers may influence employees' attributions and subsequent outcomes. For example, as suggested by social exchange theory, managers' ethical leadership may influence whether employees provide more (or less) of their commitment to the organization. It could also be considered from a practical perspective that the role of line managers may not only be limited to deliver the intended HRM practices but also to engage in exemplary behaviors aligned with organizational strategic focus. The top management may not only need to develop green HRM practices to induce employee engagement but also to consider leadership training of the managers to align their behaviors with the company's environmental initiative.

1.3. Chapter Outline

First, in Chapter 2 of this study, I provide an overview of extant research and theories on SHRM, green HRM, and ethical leadership. Then, I provide definitions of key study variables and theoretical backgrounds in Chapter 3. In Chapter 4, I propose my hypotheses: that commitment-eliciting green HRM practices promote employees' green behavior intentions and trust in the organization while alleviating their organizational cynicism, depending on the high and low compliance-achieving green HRM practices and the ethical leadership of a line manager.

In this study, I examine a conceptual model of interactive effects by empirically testing 417 undergraduate student samples in two U.S. management schools. The detailed information regarding the sample, procedure, experimental study design, material development, measures, and analytical strategy is provided in Chapter 5. Then, I report

the results of confirmatory factor analysis, descriptive statistics, correlations, hypotheses testing, and supplemental analyses in Chapter 6. Lastly, in Chapter 7, I discuss the limitations of this study, offer a summary of the key findings, and discuss the theoretical and practical implications. In the appendices, I provide the scenario scripts for the video vignette experiment and a copy of the survey questionnaires, a copy of the Institutional Review Board (IRB) approval letter, and the tables, figures, and references.

Chapter 2: Literature Review

2.1. Extant Research on Green and Strategic HRM

2.1.1. The emergence of green HRM. While the SHRM literature continuously tracks the path toward the organization's competitive advantage and thus financial sustainability, management scholars have been increasingly interested in the growing concerns of environmental sustainability and how organizations cannot only respond in terms of their responsibility but also proactively regard such concerns as an opportunity for competitive advantage (e.g., Russo & Fouts, 1997; Voegtlin & Greenwood, 2016).

The concept of green HRM has emerged over the last few decades at the intersection between the SHRM and environmental management literature after Wehrmeyer (1996) initially proposed “greening people” in the context of HRM and environmental management (Jackson et al., 2011). Hart (1995) also built a theoretical background for both the environmental and social domains that utilized the resource-based view and suggested that environmental and social responsibility leads to greater organizational capability and resources, which in turn lead to sustained competitive advantage (McWilliams, Siegel, & Wright, 2006).

Over the past decade, the green HRM literature has more broadly explored the impacts of environment-targeted HRM practices in organizations. For example, Marcus and Fremeth (2009) suggested that environmental objectives should be assessed by an organization's performance management and evaluation systems such that it is not only

an employee's job performance that is appraised and tied to reward systems but also their environmental performance. Highlighting the attraction-selection-attrition model in green HRM, Gully and colleagues (2013) also argued that organizations with environmental policies would promote its reputation to the job applicants who follow and fit similar personal value. It has been found that potentially high-performing job candidates are attracted to organizations with pro-environmental images (Backhaus, Stone, & Heiner, 2002; Behrend, Baker, & Thompson, 2009) and that in the U.K. and Japan, organizations with good environmental brands attracted a significantly greater proportion of highly talented employees than those without such brands (Bansal & Roth, 2000).

Moreover, according to Bansal and Roth (2000), a pro-environmental approach in employee job training raises environmental awareness among employees (Bansal & Roth, 2000), deepens their core skills through better knowledge of the environmental consequences of their job, and thus builds unique expertise (Roy & Thérin, 2008). Wagner (2011) also examined the effect of including environmental training in job training in German companies and found that it had a positive relationship with employee job satisfaction and retention.

2.1.2. Traditional orientations of SHRM: Commitment vs. control. Existing SHRM research has conventionally suggests HRM approaches as commitment and control orientations (e.g., Arthur 1994; Nishii et al., 2008; Patel et al., 2013). While green HRM research has recently emerged as targeted HRM for environmental sustainability, the majority of its existing conceptualizations has adopted a commitment-oriented HRM approach from SHRM research (e.g., Renwick, Redman, & Maguire, 2013).

Arthur (1992, 1994) was among the early researchers who proposed and

examined commitment- or control-focused HRM systems. According to his definition, a commitment-focused approach “shapes desired employee attitudes and behaviors by forging psychological links between organizational and employee goals,” while a control-focused approach “reduces direct labor costs or improves efficiency” of human resources by “enforcing employee compliance with specific procedures.”

According to Arthur (1992, 1994), the commitment-focused HRM system encourages employees to participate in business problem-solving processes and decision making, as well as training and social activities to induce employees’ commitment. Meanwhile, control-focused HRM system primarily focuses on “cost reduction” strategies which require relatively less skill training but enhance the efficiency of the firm’s existing talents. It requires a very high level of controlling and monitoring employees to enforce compliance with rules and procedures. The extant SHRM research suggests that commitment-focused HRM practices predict higher organizational effectiveness and more positive employee outcomes than control-focused practices do (e.g., Nishii et al., 2008).

2.1.3. Recent discussion: Commitment and compliance. Recently, SHRM scholars have further discussed about the potential *interactions* between the two orientations. For example, Hauff and colleagues (2014) initially attempted to empirically determine which orientation among “purely high commitment,” “purely high control,” “high but regulated commitment,” and “long-term oriented control” would predict the most effective organizational outcomes. Interestingly, their findings could not determine whether “purely high commitment” or “high but regulated commitment” could best predict organizational effectiveness, leading them to conclude that there is “no one best

way.” (Hauff et al., 2014, p. 439).

Recently, Su and colleagues (2018) suggested a more comprehensive typology of employee governance approaches on two dimensions—*commitment-eliciting* and *compliance-achieving*—and highlighted that compliance-achieving could also benefit organizational performance when employees adopt and observe work rules, procedures, and regulations. Unlike control orientation of HRM practices, they suggested that a compliance-achieving approach may complement a commitment-eliciting approach.

To examine these two approaches in green HRM contexts, I adopt the conceptual framework of commitment-eliciting and compliance-achieving HRM (Su et al., 2018) in this study. Doing so, I argue that using both commitment-eliciting and compliance-achieving green HRM may have direct and interactive effects on employee outcomes. Recent green HRM research has increasingly discussed the employee perspective, and my proposition of using two HRM approaches broadens the understanding of how employees’ attitudes and behaviors can be shaped differently under these approaches.

2.1.4. Green HRM from an employee perspective. As discussed earlier, green HRM research originally emerged from an organizational perspective to accomplish an organization’s strategic goals for environmental sustainability. However, recent research now pays attention to the employee reactions to green HRM as key potential proxies for improved environmental sustainability (see review by Ren et al., 2017). Employee perceptions are now regarded as a potential driver for organizations to induce employees’ environmental commitment and engagement (Remmen & Lorentzen, 2000; Berry & Rondinelli, 1998). From their evidence regarding 400 Canadian companies, Buysse and Verbeke (2003) also found that the more a company identified itself as a proactive

environmental player, the greater the emphasis it placed on the role of employees to engage in pro-environmental behaviors at work. Meanwhile, Kitazawa and Sarkis (2000) proposed encouraging employees' psychological empowerment through managerial support, so that the employees would become willing and committed to pro-environmental behaviors. Interestingly, Ramus and Steger (2000) reported empirical findings showing that employees with pro-environmental attitudes would not only contribute to a firm's environmental performance but also its innovative outcomes over time.

These few studies emphasize the importance of understanding the implementation of green HRM practices from an employee perspective. As key internal stakeholders, employees perceive and make attributions to firms' motives for implementing such practices. Depending on how the practices are communicated and delivered to them, HRM practices may positively or negatively influence their job attitudes and behaviors (e.g., McShane & Cunningham, 2012; Nishii et al., 2008). Hence, I build on the existing knowledge concerning employee attributions about HRM to examine how employees might react to commitment-enhancing or compliance-achieving green HRM practices.

2.2. Extant Research on Ethical Leadership

2.2.1. Definition of ethical leadership. Above and beyond the influence of using the best management practices, the ethical behavior of high-level leaders should influence employees' attitudes and behaviors across all levels of an organization (Brown, Treviño, & Harrison, 2005; Den Hartog, 2015). The most widely accepted definition of ethical leadership was offered by Brown and colleagues (2005) as "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships,

and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making.” According to their elaboration, an ethical leader emphasizes the ethical aspect of leadership with his or her moral traits and ethical behaviors as observed by the followers. Brown and Treviño (2006) further argued that ethical leaders promote an ethical climate among the followers.

2.2.2. The emergence of ethical leadership research. Early conceptualizations of ethical leadership depicted an ethical leader as one who would strive to preserve accepted beliefs and appropriate judgments for the benefit of followers, organizations, and other external stakeholders rather than out of self-interest (e.g., Kanungo, 2001). Doing so, an ethical leader dampens the tension between altruism and self-interest.

As noted earlier, Mayer and colleagues (2009) paid close attention to the leader-follower relationships in ethical leadership from a social exchange perspective, which explained how followers rather than leaders would desire to reciprocate when perceiving fair treatment and concerns from leaders. Other researchers have also highlighted the role of ethical leaders in creating an ethical climate (e.g., Dickson, Smith, Grojean, & Ehrhart, 2001) and encouraging followers to engage in ethical and socially responsible behaviors (e.g., De Hoogh & Den Hartog, 2008).

While the earlier ethical leadership research had initially emerged from a uni-dimensional construct (Brown et al., 2005), additional dimensions have been proposed by recent researchers. For example, Kalshoven and colleagues (2011) compiled previously proposed dimensions of ethical leadership and proposed that ethical leadership behavior is multi-dimensional and includes fairness, integrity, power-sharing, role clarification, people orientation, ethical guidance, and concern for environmental sustainability. From

this research, I found that an ethical leader who engages in these behaviors may be regarded as the right person to implement environmental management practices effectively, as employees perceive these general and environment-specific ethical behaviors.

2.2.3. Ethical leadership compared to other leadership styles. As attention to ethical leadership grows in the management literature, another key discussion has been how it is conceptually and empirically distinguished from other leadership styles, such as transformational, transactional, authentic, servant, or paternalistic leadership (Chen, Eberly, Chiang, Farh, & Cheng, 2014; Hoch, Bommer, Dulebohn, & Wu, 2018; Brown & Treviño, 2006). Briefly reviewing the similarities and differences between ethical and other leadership styles, I justify my focus on ethical leadership among other styles in this section, such that the ethical leadership may be the most suitable boundary condition for the most effective implementation of green HRM practices from an employee perspective.

Since Burns (1978) introduced transformational leadership and Bass (1985) expanded on it, most leadership research in organizational studies—other than transactional leadership—has been related to transformational leadership (Hoch et al., 2018). Much empirical evidence has strongly supported the effectiveness and impact of transformational leadership on followers' proactive attitudes and behaviors across all levels of organizations (e.g., Wang, Oh, Courtright, & Colbert, 2011; Judge & Piccolo, 2004).

Leadership researchers have noted that ethical leadership and transformational leadership are similar in that they are considerate to other people and consistent with

specific rules and principles (Brown & Treviño, 2006). However, ethical leaders emphasize fair process, moral values, and ethical behavior much more strongly than transformational leaders (Hoch et al., 2018). Conversely, ethical leaders do not engage in inspiring future-oriented visions and changes among followers to the same extent as transformational leaders.

Transactional leaders who value the exchange of contingent rewards could be overlapped with ethical leaders who reward and punish to motivate or enforce anticipated follower behaviors. However, ethical leaders are distinguished from transactional leaders in that they focus on followers' awareness and behavioral outcomes beyond their performance (Den Hartog, 2015; Bass, 1985).

Furthermore, authentic leadership has been defined as those who are genuine, reliable, and consistent in their own beliefs when shaping followers' positive values and behaviors (Illies, Morgeson, & Nahrgang, 2005; Luthans & Avolio, 2003). Hoch and colleagues (2018) regarded it not as a style but as a shared concept or virtue expressed in other leadership styles such as transformational, spiritual, or ethical leadership. In other words, authentic leaders could be authentic but not ethical or transformational; conversely, ethical or transformational leaders may be authentic in the consistency of their beliefs and behaviors.

A servant or paternalistic leadership style is another type discussed recently. The servant leaders naturally aspire to consciously help others in an ethical, practical, and meaningful way through listening, healing, awareness, and persuasion. (Greenleaf, 1977; Keith, 2008; Spears, 2010). However, they hardly punish the unruly followers, unlike ethical leaders. Based on the fatherly authoritarianism, benevolence, and morality found

in paternalistic cultures, paternalistic leaders strictly emphasize integrity and moral values, shaping followers' norms and behaviors through their sincere obedience to a role model (Chen et al., 2014). However, they are distinct from ethical leaders who emphasize interactive power-sharing between leader and follower; paternalistic leaders pursue top-down, one-way leadership (Den Hartog, 2015).

2.2.4. Ethical leadership and environmental management. Although ethical leadership research has been attentive to the direct effects of leaders, I noted that their roles of communicating and implementing environmental management practices warrant more attention. A recent study proposed that CSR practices and line managers' ethical leadership may simultaneously influence employee attitudes (Christensen, Mackey, & Whetten, 2014). Based on this proposition, De Roeck and Farooq (2018) examined and further proposed that the interaction between a line manager who employs ethical leadership and an organization's environmental management practices can heighten the level of organizational identification among employees. Building on cue consistency theory (Maheswaran & Chaiken 1991; Slovic 1966), they argued that employees might perceive cues from their leader and organization. Doing so, employees assess whether these cues are consistent and congruent with the organization's environmental goals. The more congruent and consistent the cues are perceived to be by employees, the more positive their attitudes will be within the organization.

Recent SHRM research has also increasingly paid attention to the role of the line manager and his or her leadership style in effectively implementing HRM practices as intended (e.g., Leroy et al., 2018). Green HRM research has theoretically postulated that value-based leadership styles of line managers—such as ethical leadership—may

facilitate the implementation of green HRM practices in such a way that employees develop positive perceptions and attitudes toward the organization's sustainability goals (see Ren et al., 2017).

In this study, I build on the ethical leadership research to argue that a line manager's ethical leadership style may enact the successful implementation of green HRM practices from an employee perspective. This line of argument could also be related to recent discussions in the SHRM and leadership literature that incorporate HRM and leadership.

Chapter 3: Theoretical Backgrounds

To understand how employees' attributions concerning green HRM practices shape their reactions, I refer to attribution theory in CSR research (Martinko, 2006), and to understand how employees make attributions that shape their attitudes, I refer to the theoretical framework of CSR motives model (Jones & Rupp, 2014), which builds on attribution theory and social exchange theory (Blau, 1964) to understand how employees make attributions to employee-employer relationships. Below I provide an overview of each theory that provides a framework for the present study.

3.1. Attribution Theory in CSR Research

Attribution theory in CSR research suggests that employees will make cognitively causal attributions regarding the motives underlying an organization's CSR practices rather than paying attention to what each practice is (Vlachos, Theotokis, & Panagopoulos, 2010; Gilbert & Malone, 1995). Attribution theory suggests that employees will interpret and evaluate the practices they perceive as events, and their attitudes and behaviors are triggered by those interpretations (Martinko, 2006). Building on this theoretical perspective, I suggest that, when an organization adopts and implements green HRM practices, employees may similarly make causal attributions to those practices and respond with changes in their attitudes toward their organization.

3.2. Employee Attributions of Organization's CSR Motives

The CSR motives model suggests that employees make attributions about the organization's true motives (Jones & Rupp, 2014; Rupp & Mallory, 2015). Employees may have more positive attitudes when they attribute a genuinely thoughtful and authentic engagement with an environmental initiative to their organization. Furthermore, they may infer that the financial or instrumental interests are not the only or the top priority for the company, and thus that it would also value employees' welfare—not only that of the natural environment—and try to maintain a good relationship with them. Building on social exchange theory, the CSR motives model suggests that employees make attributions of three types: care-based (i.e., the degree to which their organization is perceived as authentic in their environmental initiatives); self-based (i.e., the degree to which the organization is concerned with its benefits regarding the outcomes of environmental management practices); and relationship-based (i.e., how much the organization values its relationship with employees and strives to benefit both employees and the organization).

Building on this theoretical framework of employee attributions, I argue that green HRM practices may influence employees' green behavior intentions through the care-based attribution. The CSR motives model explains how employees may engage in their work to pursue higher goals and meaningfulness through an organization's CSR practices (Rupp & Mallory, 2015). Furthermore, CSR research has suggested that employees' perceptions of CSR practices influence their work engagement and involvement (Glavas & Piderit, 2009). Hence, I posit that green HRM practices may allow employees to express their concerns and interests regarding environmental issues

when they attribute a true and consistent concern for the sustainability of the natural environment to the organization.

Moreover, the social exchange theory broadly suggests that employees tend to react positively to the organization when the mutual exchange of benefits between individuals or groups occurs (Blau, 1964). CSR scholars have proposed that employees tend to perceive a firm's CSR practice as a signal of pursuing the mutual benefits of employees and organizations, resulting in higher trust in the organization (Farooq, Payaud, Merunka, & Valette-Florence, 2014). Moreover, if employees acknowledge that CSR practices are directly beneficial to them beyond the natural environment, such effects of the social exchange process would be much stronger and employees would have more trust in the organization (Rupp & Malory, 2015). Building on this perspective, I propose that green HRM practices can influence employees' trust in organizations through their relationship-based employee attributions.

On the other hand, extant research in organizational behavior also suggests that employees can have "a negative attitude toward one's organization" (Abraham, 2000, p. 269) when the virtues of fairness and sincerity are absent due to an organization's focus on its interests, and hidden motives are suspected (Brown & Cregan, 2008). Skepticism is distinguished from organizational cynicism—skeptical employees are suspicious but remain hopeful of a positive future outcome (Reicher, Wanous, Austin, 1997), whereas employees with organizational cynicism are far less optimistic; organizational cynicism is a learned response to employees' past work experiences of frustration and the accumulation of negative feelings toward an organization (Brown & Cregan, 2008; Dean, Brandes, & Dharwadkar, 1998). In organizations, employees tend to build up their

expectations regarding their employer (e.g., for better employee treatment). However, if such expectations related to social exchange are violated, cynicism can be an immediate reaction among employees (Johnson & O’Leary-Kelly, 2003). To this end, I thus suggest that employees’ organizational cynicism can be influenced by green HRM practices through due to their attributions of organizational self-interest as the motive for implementing such practices.

3.3. Definitions of Key Study Variables

3.3.1. Commitment-eliciting green HRM practices. Reflecting the construct of commitment-focused HRM (Arthur 1992; 1994), commitment-eliciting green HRM can be characterized by the practices of facilitating rather than monitoring or supervising employees regarding their green behaviors in the workplace. Recent research regarding green HRM has often been approached from the so-called behavioral perspective of SHRM scholarship (e.g., Jackson & Seo, 2010; Renwick, Jabbour, Muller-Camen, Redman, & Wilkinson, 2015). From this perspective, Jackson and Seo (2010) suggested the following assumptions regarding green HRM: (1) that effective green HRM practices will contribute to organizational performance, and (2) that effective green HRM practices will align well with the business strategy. Moreover, Renwick and colleagues (Renwick et al., 2015) referred to the ability-motivation-opportunity framework (Appelbaum, 2000) and reviewed past green HRM studies regarding the different types of green HRM practices that develop the green abilities of employees, motivate their green behaviors, and facilitate them to find opportunities to engage in such behaviors.

Other past research examined the impact of recruiting employees with pro-environmental attitudes (Gully, Phillips, Castellano, Han, & Kim, 2013); the training and

development of environment-mindedness and environmental strategy for managers (Feasby & Wells, 2011; Ji, Huang, Liu, Zhu, & Cai, 2012) and pro-environmental behaviors of employees (Taylor, Osland, & Egri, 2012); and the executive assignment of a chief sustainability officer (Ones & Dilchert, 2013). It was suggested that these practices facilitated the cognitive and affective development of managers and employees such that they enacted green attitudes and behaviors during business activities and operations.

Green HRM researchers have also suggested embedding environmental goals and concerns in employees' performance appraisals (Anderton & Jack, 2011; Jackson, Ones, & Dilchert, 2012; Feasby & Wells, 2011) and tying them to incentives (Merriman & Sen, 2012; Taylor et al., 2012) to encourage them to undertake voluntary green behaviors at work. Scholars have also suggested involving managers in environmental management (Zibarras & Coan, 2015; Ones & Dilchert, 2013), encouraging employee engagement in green behaviors during daily operations by providing a flexible work-life balance (Andersson, Jackson, & Russell, 2013), and communicating the organization's pro-environmental identity (Ones & Dilchert, 2013). Taken together, I define commitment-eliciting green HRM practices as an organizations effort to promote employee autonomy and trust and to voluntarily engage in green behaviors in the workplace (Norton et al., 2015; Kim et al., 2017).

3.3.2. Compliance-achieving green HRM practices. In this study, I propose compliance-achieving green HRM by incorporating the compliance-achieving approach developed by Su and colleagues (2018) into an environmental sustainability context. Consistent with Su and colleagues' study, I define compliance-achieving green HRM

practices as the means used to monitor and control employees with standardized rules or procedures.

The goal of compliance-achieving green HRM practices is to strictly force employees to comply with given requirements, such as environmental management standards (EMS) or environmental regulations, in the workplace (e.g., Andersson et al., 2013; Renwick et al., 2013). Adopting the compliance-achieving approach to employee management practices (Su et al., 2018), I suggest that compliance-achieving green HRM practices include punishment for violating environmental rules and regulations, a strong emphasis on environmental rules and procedures at work, and close employee supervision and monitoring of environmental performance.

Despite their common goals to induce employee engagement in environmental sustainability, I suggest that the employee outcomes of compliance-achieving green HRM may be different from those of commitment-eliciting practices. It is notable that the conceptual distinction between voluntary and required green behaviors has been highlighted recently in organizational behavior research (Kim et al., 2017; Norton et al., 2015). In the present study, I suggest that the compliance approach may ultimately enforce *required* green behaviors (e.g., “*I have to...*”) while the commitment-eliciting green HRM would induce *voluntary* green behaviors (e.g., “*I want to...*”).

3.3.3. Line manager’s ethical leadership. Brown and colleagues (2005, p. 120) defined ethical leadership as the “demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making”. Based on a social cognition framework (Bandura, 1986), they further suggested

that employees observe the leader's ethical behaviors, become aware of its consequences, and thus learn about morality at work.

Ethical leadership scholars have continued to develop the definition of ethical leadership, suggesting multi-dimensional definitions that make ethical leadership the overarching construct for the various ethical behaviors that a line manager may practice. For example, Kalshoven and colleagues (2011) suggested seven dimensions of a line manager's ethical leadership behaviors: fairness, power-sharing, role clarification, people orientation, integrity, ethical guidance, and concern for environmental sustainability. I found this multi-dimensional construct of ethical leadership relevant to my study and see it as a key context for the implementation of green HRM practices whereby employees perceive and attribute those practices through the ethical and environmental-specific influences of a line manager with ethical leadership.

Adopting the multi-dimensional definition (Kalshoven et al., 2011), I define a line manager's ethical leadership as the demonstration and promotion of fairness, power-sharing, role clarification, people orientation, integrity, ethical guidance, and concern for environmental sustainability to followers through personal actions and interpersonal exchange. Doing so, I suggest that not only the environmental concerns of line managers but also the other dimensions of ethical leadership behavior may influence employee attributions

3.3.4. Green behavior intentions. Recent organization behavior research has defined green behavior intentions as the employees' will to set goals and motivate themselves to enact environmentally friendly behaviors (Norton, Zacher, Parker, & Ashkanasy, 2017). Previous research has found that green behavioral intentions

significantly predict actual green behavior at work (Bamberg & Möser, 2007; Holland, Aarts, & Langendam, 2006) and show a stronger relationship than those between general intentions and behavior in psychology (Webb & Sheehan, 2006; Norton et al., 2017).

In the present study, I adopt the existing definition of employees' green behavior intentions as a key employee outcome, wherein green HRM practices influence employees' future green behavior. However, I do not necessarily distinguish whether it is the intention of *voluntary* or *required* green behavior. Employee job performance includes both in-role and extra-role behaviors, and these two types of behaviors demonstrate different patterns of associations, antecedents, and unique contributions to overall job performance (Motowidlo & Van Scotter, 1994). Under this job performance-based approach, Norton and colleagues (2015) conceptualized voluntary green behavior as extra-role performance while required green behavior is in-role performance.

Since the motivational mechanisms are different for in-role and extra-role behaviors (Deci & Ryan, 2000; Gagné & Deci, 2005), I speculate that commitment-eliciting green HRM practices may induce voluntary green behaviors while compliance-achieving practices induce required green behaviors. In this study, I pay less attention to examining each association between green HRM orientations and green behavior outcomes, but rather focus on how employees make the attributions from those orientations and thus how their intentions are shaped regardless of whether they will *want to* or *have to* engage in green behaviors.

3.3.5. Trust in the organization. In the management literature, employees' trust in an organization has been conventionally regarded as one of the important drivers for positive employee–organization relationships (Cook & Wall, 1980). Trust refers to “one’s

expectation or beliefs about the likelihood that another's future actions will be beneficial, favorable, or at least not detrimental to one's interests" (Robinson, 1996, p. 576).

Employees' trust in an organization should promote a positive social exchange relationship between the employee and the organization (Xu, Loi, & Ngo, 2016; Blau, 1964; Chung & Jackson, 2011). It could also increase employees' organizational commitment (Cook & Wall, 1980), organizational tenure (Konovsky & Cropanzano, 1991), organizational citizenship behavior (Wong, Wong, & Ngo, 2012), and perception of organizational justice (Xu et al., 2016).

When an organization adopts and implements green HRM practices, employees have a certain degree of expectation or belief that the green HRM practices will be "beneficial, favorable, or at least not detrimental" to their interests within the organization (Robinson, 1996, p. 576). Such trust in the organization may lead them to engage in green behavior at work. I adopt the definition of trust in the organization mentioned above and examine the effects of green HRM practices on this key employee attitudinal outcome.

3.3.6. Organizational cynicism. This concept is defined as employees' "negative attitude toward an organization when principles of honesty, fairness, and sincerity are sacrificed to further the self-interests of the leadership, leading to actions based on hidden motives and deception" (Abraham, 2000, p. 269). It has also been defined as "an evaluative judgment that stems from an individual's employment experiences" (Cole, Bruch, & Vogel, 2006, p. 463). In this study, I incorporate these two definitions to examine the effect of employees' attributions to green HRM practices on their organizational cynicism.

Chapter 4: Hypotheses Development

4.1. Direct Effects of Commitment-Eliciting Green HRM on Employee Attitudes

4.1.1. Commitment-eliciting green HRM and green behavior intentions.

Green HRM has emerged as environment-targeted HRM to induce and support employees to proactively engage in green behaviors (e.g., Guerci, Montanari, Scapolan, & Epifanio, 2016; Renwick et al., 2015). Indeed, recent green HRM scholars have found evidence that commitment-oriented or commitment-eliciting green HRM practices influence employees to engage in green behaviors in the workplace (e.g., Paillé, Chen, Boiral, & Jin, 2014; Zibarras & Coan, 2015).

Based on the care-based employee attributions of CSR motives model (Jones & Rupp, 2014), I suggest that employees may instantly make attributions regarding the authenticity of an organization's concern for environmental sustainability when commitment-eliciting green HRM practices are implemented. Since these green HRM practices are specifically targeted to induce employees' commitment to environmental issues, employees may infer that their organization seriously considers the natural environment. This attribution may encourage employees to be more willing to express their interests and concerns about the environment and thus induce greater intentions to engage in future green behavior. Therefore, I propose that employee's green behavior intentions will be stronger when commitment-eliciting green HRM practices are implemented.

Hypothesis 1a: Commitment-eliciting green HRM practices will be positively associated with employees' green behavior intentions.

4.1.2. Commitment-eliciting green HRM on green behavior intentions.

In SHRM research, scholars have noted that high-commitment work practices, such as internal promotion or extensive training, deliver a sense of trust and value from an organization to its employees, which in turn boost employees' emotional attachment to the organization and their discretionary work efforts (Appelbaum et al., 2000; Lawler, 1992; MacDuffie, 1995). This commitment approach conveys an organizational goal to employees and stimulates employees' self-management and extra-role behaviors (Walton, 1985; Wood & Albanese, 1995). Existing research also demonstrated that employees' organizational citizenship behaviors, employees' discretionary efforts, and the degree of social exchange in the workplace could mediate the link between such management approaches and organizational performance (e.g., Appelbaum et al., 2000; Messersmith, Patel, Lepak, & Gould-Williams, 2011; Sun, Aryee, & Law, 2007).

Based on the relationship-based mechanism of an organization's CSR motive (Jones & Rupp, 2014) and social exchange theory (Blau, 1964), I suggest that employees may make attributions to commitment-eliciting green HRM practices through reference to the degree to which the organization values mutually beneficial relationships with employees. Existing CSR research suggests that commitment-oriented CSR practices may influence employees' trust in the organization through their attributions (e.g., De Roeck & Delobbe, 2012). Since commitment-eliciting green HRM practices are designed to induce employees' commitment (e.g., through rewards, promotions, or training opportunities), employees may find that their organization seriously considers not only

benefits to the natural environment or its self-interest but also the benefits for the employees (i.e., those that actually enact the environmentally sustainable practices). As social exchange theory suggests, employees with such attributions are likely to have higher trust in their organization. Therefore, I propose that employee's trust in the organization will be greater when commitment-eliciting green HRM practices are implemented.

Hypothesis 1b: Commitment-eliciting green HRM practices will be positively associated with employees' trust in the organization

4.1.3. Commitment-eliciting green HRM and organizational cynicism. As discussed earlier in my review, organizational cynicism is a negative attitude that employees can bear toward their organization when it pursues its self-interest. Although many corporations today engage in environmental sustainability and related management practices, some employers prioritize their own financial or instrumental benefits above those of employees or the natural environment (e.g., Ramus & Montiel, 2005). Since these employers may not invest or engage in environmental practices as announced, internal and external stakeholders (e.g., employees and customers, respectively) tend to evaluate the organization's motives for sustainability practices. If the organization is found to superficially communicate environmental issues or attempt to manipulate its external image, these stakeholders may perceive such inauthenticity as greenwashing, or the "superficial adherence to environmental sustainability practices" (Rupp & Mallory, 2015, p. 229). If employees attribute greenwashing or superficial motives related to self-interest to commitment-eliciting green HRM practices, their organizational cynicism may increase significantly.

Similarly, when commitment-eliciting green HRM practices are implemented, employees may try to evaluate whether the organization is only concerned about its self-interest and attribute an underlying organizational motive accordingly. However, since commitment-eliciting HRM approaches send signals to employees that an organization is eager to invest in and proactively motivate employees, employees may determine that the organization does not have self-interest as its top priority. Hence, I propose that employee's organizational cynicism will be lower when commitment-eliciting green HRM practices are implemented.

Hypothesis 1c: Commitment-eliciting green HRM practices will be negatively associated with employees' organizational cynicism.

4.2. Two-Way Effects: Commitment-Eliciting and Compliance-Achieving Green HRM

As discussed, I adopt an employee-centric approach to examine the interactive effects of compliance-achieving green HRM practices on the relationships between commitment-eliciting practices and employee outcomes. As reviewed earlier, recent discussions have increasingly suggested the potential combined influences of these two approaches on organizational effectiveness (e.g., Patel et al., 2013; Su et al., 2018). However, puzzles remain regarding how employees would react to the combination regarding their green behaviors and attitudes toward the organization.

To propose the combined implementation of commitment-eliciting and compliance-achieving green HRM practices, I refer to a recent typology of employee governance approaches in SHRM research (Su et al., 2018). On the two dimensions of commitment-eliciting and compliance-achieving orientations, the typology suggests four

approaches: *bonded* (i.e., high commitment and low compliance); *disciplined* (i.e., low commitment and high compliance); *unstructured* (i.e., low commitment and low compliance); and *hybrid* (i.e., high commitment and high compliance). In this section, I briefly review how to build on this typology and apply it to green HRM and then I hypothesize the two-way interactive of commitment-eliciting and compliance-achieving green HRM practices (see Table 1).

4.2.1. A typology of green HRM approaches. First, firms may adopt the *bonded* approach and design green HRM practices with high commitment-eliciting and low compliance-achieving orientations. In a green HRM system, those practices with low compliance-achieving orientation may not provide clear guidelines, rules, or procedures for employees to follow during their daily job routines. For example, employees with little knowledge or experience of how to incorporate sustainability within and outside their jobs may be relatively less motivated to engage in green behaviors voluntarily. Hence, this constraint may dilute the influence of high commitment-eliciting green HRM practices on employee outcomes.

Alternatively, green HRM practices may be designed for a *disciplined* approach with low commitment-eliciting and high compliance-achieving orientations. Extant SHRM research suggests negative employee outcomes associated with implementing control-oriented HRM practices (e.g., Nishii et al., 2008). However, a greater emphasis on a *compliance-achieving* orientation may bring several beneficial outcomes in a green HRM context. Because there are clearly defined rules and procedures regarding employees' green behaviors at work, green HRM under this approach may help environmentally incompetent employees by providing them with given rules to follow.

These fixed rules and procedures, on the other hand, may also limit employees' creative mindfulness, as their deliberate attempts to engage in such behaviors more creatively may be regarded as disobeying the given rules (e.g., Madjar, Greenberg, & Chen, 2011).

Employees' perception of organization-centric practices would limit their commitment to engage in proactive behaviors (e.g., voluntary green behavior) at work over time (Su et al., 2018). Therefore, the effects of high compliance-achieving and low commitment-eliciting green HRM practices on employee outcomes may offset each other.

While the bonded and disciplined approaches put greater emphasis on *either* commitment or compliance orientation, the hybrid approach suggests managing employees with both high commitment-eliciting and compliance-achieving orientations (Su et al., 2018). Su and colleagues (2018) defined this approach wherein an employer would encourage an employee's voluntarily committed behaviors through training, development, career opportunities, incentives, empowerment, and more while simultaneously implementing compliance-achieving HRM practices such as punishment, close monitoring, or other practices that enforce employee compliance. In a green HRM context, I argue that compliance-achieving green HRM practices may promote in-role (or required) green behaviors among employees through clearly defined rules and procedures related to each employee's job, while individual's extra-role (or voluntary) green behaviors are induced by commitment-eliciting practices (Norton et al., 2015).

For organizations to achieve strategic goals, both in-role and extra-role performances of employees are essential (Turnley, Bolino, Lester, & Bloodgood, 2003). HRM strategies also need to fit the organizational context, reflecting the strategic goals and surrounding environments (Schuler & Jackson, 1987). By simultaneously cultivating

employees' commitment to the natural environment and enhancing the efficiency of engaging in green behaviors, the hybrid approach of green HRM may support the organization's desire to emphasize environmental sustainability in business strategies and promote competitive advantages to win the market competitions. Regardless of their skill levels, employees enforced by environmental rules and regulations may become more efficient at complying with required green behaviors in daily recurring tasks, retain more knowledge concerning the utilization of resources, and develop greater environmental awareness. To this end, implementing both commitment-eliciting and compliance-achieving green HRM practices may enhance organizational agility to enhance environmental sustainability with both adaptability and efficiency optimized (Dyer & Shafer, 1999).

4.2.2. Consequences for green behavior intentions. Drawing from attribution theory, a handful of existing research paid attention to the attributional inferences that employees acknowledge from the CSR motives. From an employee perspective, Jones and Rupp (2014) presented the CSR motives model, suggesting that employees tend to determine the three types of CSR motives of an organization: care-based, self-based, and relationship-based motives. Moreover, Vlachos and colleagues (2013) suggested that employees tend to make intrinsic attributions to CSR-induced motives, evaluating the extent to which an organization is truthfully and selflessly caring and benevolent. At the same time, they proposed that employees also make extrinsic attributions to the CSR motives, determining how much an organization intends to utilize its CSR commitment as a promotional tool to achieve its business performance goals. Employees may be satisfied with organizational efforts that not only emphasize the firm's profit but fulfill a

variety of higher-order needs of both internal (e.g., employees) and external stakeholders (e.g., society and natural environment).

In the context of green HRM, I build on the attribution perspectives of extant CSR research to anticipate the interactive effects of commitment-eliciting and compliance-achieving green HRM practices on employee outcomes. While the commitment-eliciting green HRM practices intend to motivate employees to engage in voluntary green behaviors intrinsically, the compliance-achieving practices extrinsically motivate them by enforcing rules and regulations that address environmental concerns. Drawing from the CSR research of employee attributions, I argue that employees may make intrinsic attributions to the commitment-eliciting green HRM practices while attributing extrinsically to the compliance-achieving practices. In other words, employees may evaluate that their organizations' commitment-eliciting HRM practices to address environmental concerns as authentic (e.g., "my organization selflessly take care of environmental issues"), while compliance-achieving HRM practices may be viewed as contributing to its efficiency and effectiveness (e.g., "my organization tries to maximize its performance by enhancing efficiency through environmental management practices"). As a result, it is not only likely that employees may be intrinsically motivated to engage in extra-role or voluntary green behaviors by commitment-eliciting green HRM practices, but also that they can be extrinsically motivated to comply with required green behaviors by compliance-achieving practices.

Based on the employees' intrinsic and extrinsic attributions to green HRM practices, I argue that compliance-achieving green HRM practices will moderate the effect of commitment-eliciting green HRM practices on employees' intentions to future

green behaviors. I presume that employees will make intrinsic attributions to commitment-eliciting green HRM practices and extrinsic attributions to compliance-achieving green HRM practices when the two sets of HRM practices are implemented simultaneously. Since both commitment-eliciting and compliance-achieving green HRM practices may be interpreted as beneficial for the needs of the natural environment and the organization itself, employees are likely to intend to engage in more voluntary and required green behaviors in the future. Therefore, I propose:

Hypothesis 2a. Compliance-achieving green HRM practices will strengthen the positive relationship between commitment-eliciting green HRM practices and employee green behavior intentions.

4.2.3. Consequences for trust in the organization. The green HRM practices used in the hybrid approach may induce higher green behavior intentions based on employees' attributions to the organizations' *care-based* motive. However, employees may make different attributions to the firms' *relationship-based* motive (i.e., the degree to which it considers the employee–employer relationship and mutual benefits of green HRM practices). For example, employee attributions to the commitment-eliciting green HRM practices may trigger a sense of social exchange relationships with the organization that shares positive mutual benefits (Farooq et al., 2013). However, attributions to the compliance-achieving green HRM practices may dilute the employees' commitment with signals that the organization pursues its self-interests (e.g., Nishii et al., 2008).

Employees may acknowledge from commitment-eliciting and compliance-achieving green HRM practices that the organization is seriously committed to the environmental issues. However, I argue that the employee attributions to the relationship-based motive

are independent of those to the care-based motive.

Perceiving the compliance-achieving green HRM practices in combination with commitment-eliciting practices, employees may infer that the organization considers employee-employer relationship as less important than enforcement and employee monitoring. Indeed, the direct outcomes of compliance-achieving green HRM practices are mostly related to organizational efficiencies such as energy cost savings. Hence, employees may attribute to the organization's green HRM motive as double-minded, such that the benefits from compliance-achieving practices are less related to their welfare. The effect of social exchange between the employees and employers may be weakened, and the level of trust in the organization may plunge. From the employees' perspective, compliance-achieving green HRM practices may thus hinder the effect of commitment-eliciting green HRM practices that are originally intended to promote positive employee attributions of the organization's relationship-based motives.

Therefore, I propose:

Hypothesis 2b. Compliance-achieving green HRM practices will weaken the positive relationship between commitment-eliciting green HRM practices and employee trust in the organization.

4.2.4. Consequences for organizational cynicism. When a company engages in environmental or social initiatives, employees tend to retain attributional inferences with pervasive suspicions about its underlying motives (Berglind & Nakata, 2005). Since some companies today engage in greenwashing to enhance their self-interests (Lange & Washburn, 2012), employees may become more cynical as the gap widens over time between the words and actions their organization uses to promote environmental

sustainability (Gond et al., 2017). Based on the employee attributions of an organization's *self-based* CSR motive (Jones & Rupp, 2014), employees may evaluate compliance-achieving green HRM practices as instruments to promote its organizational efficiency, rather than directly improve employees' welfare. As the gap widens between the intended employee outcomes (i.e., voluntary and required green behaviors) of commitment-eliciting and compliance-achieving green HRM practices, employees may retain larger gaps of attributional inferences resulting in greater organizational cynicism (Gond et al., 2017). Since employees react with substantial cynicism to the conflicted motives behind the organization's practices (Lange & Washburn, 2012), I argue that the compliance-achieving green HRM practices will weaken the negative effects of commitment-eliciting green HRM practices on employees' organizational cynicism.

Hypothesis 2c. Compliance-achieving green HRM practices will weaken the negative relationship between commitment-eliciting green HRM practices and employee organizational cynicism in Hypothesis 1c.

4.3. Combined Effects of Green HRM and Line Manager's Ethical Leadership

As argued earlier, employees might react with negative attitudes to their organization implementing commitment-eliciting and compliance-achieving green HRM practices. To address this tension, I further pay attention to the role of line managers' ethical leadership as a key boundary condition to facilitate positive employee reactions to the green HRM practices.

Recent SHRM researchers have suggested that the line managers "shape employees' perceptions by interpreting and providing meaning regarding the intended messages of HRM practices" (Nishii & Paluch, 2018, p. 319). For successful

implementation, a line manager should articulate the intended meanings of HRM practices, act as a role model to reinforce expected behaviors, and assess followers' understanding of delivered HRM messages (e.g., Leroy et al., 2018). Organizational competitive advantage can be enhanced greatly by a line manager who can successfully interpret HRM practices and provide clear and convincing messages to inform employees' daily attitudes and behaviors at work (e.g., Leroy et al., 2018; Nishii & Paluch, 2018). In doing so, line managers' implementation behaviors may provide a desirable context for commitment-eliciting and compliance-achieving HRM practices to be interactively perceived and attributed by employees, leading to intended attitudes and behaviors. Therefore, I regard the line manager as a key entity that shapes the interactive effects of two types of green HRM approaches. More specifically, while Hypotheses 2a, 2b, and 2c suggest the moderating effects of compliance-achieving green HRM practices, I further suggest that the line manager's ethical leadership as another key moderator for enacting the interaction effects of green HRM practices (e.g., Ren et al., 2017; Leroy et al., 2018; De Roeck & Farooq, 2018).

By definition, ethical leadership is "normatively appropriate conduct" regarding organizational standards, which serves as a role model while imposing altruistic concerns about the welfare of others (Brown & Treviño, 2006, p. 595). In the ethical leadership literature, a line manager with ethical leadership was suggested as a role model for compliance with given rules while proactively ensuring the welfare of followers, society, and the environment (e.g., Kalshoven et al., 2011). I note that these are unique characteristics of ethical leadership that may effectively communicate, implement, and enact the effects of both compliance-achieving and commitment-eliciting green HRM

practices. Hence, although no existing research has determined a single best leadership style for enacting strategic or green HRM practices (e.g., Leroy et al., 2018), I propose that the interactions between commitment-eliciting and compliance-achieving green HRM practices will be influenced by the extent of a manager's ethical leadership.

4.3.1. High ethical leadership and interaction effects of green HRM. When their line manager is a highly ethical leader, employees are more likely to perceive and comprehend commitment-eliciting and compliance-achieving green HRM practices in a positive light as the organization intends. Incorporating the proposed HRM implementation behaviors of a line manager (Nishii & Paluch, 2018) with green HRM, I argue that a line manager with high ethical leadership can successfully articulate ethical standards and environmental rules, and exert influence as a role model for ethical and green behavior. Doing so, they may reinforce employees' green behavior while frequently assessing whether employees understand messages of green HRM as intended. As employees make attributions regarding organizational CSR motives from commitment-eliciting and compliance-achieving green HRM practices, I further posit that the line manager can successfully interpret what each HRM orientation truly means and how authentically their organization engages in environmental initiatives, pursues mutual benefits for employee–employer relationships, and puts the interests of others before its interests.

In Hypothesis 2a, I proposed that compliance-achieving green HRM practices will strengthen the positive relationship between commitment-eliciting green HRM practices and employees' green behavior intentions. Under the line manager's high ethical leadership, I suggest that the effects of commitment-eliciting green HRM practices on

employees' green behavior intentions will be stronger under high compliance-achieving green HRM practices than under low compliance-achieving green HRM practices.

Clearly and effectively communicating why their organization encourages and enforces employees through HRM practices, line managers influence employee attributions to the care-based motive of such environmental initiatives (Mallory & Rupp, 2014). The line managers' environmentally-specific leadership behaviors induce employees' passions for environmental issues at work (Robertson & Barling, 2013). Emphasizing fair treatment of employee commitment and compliance to the given rules and standards, line managers would signal employees more strongly to engage in future green behaviors (Voegtlin, 2016). In other words, their ethical leadership behaviors may facilitate employees' intrinsic attributions to the commitment-eliciting green HRM practices as well as extrinsic attributions to the compliance-achieving green HRM practices. Perceiving organizational care-based motives of green HRM practices through line managers' behaviors, employees may consider engaging in future green behavior more strongly.

In Hypothesis 2b, I suggested that compliance-achieving green HRM practices will weaken the positive relationship between commitment-eliciting green HRM practices and employees' trust in the organization. However, under a highly ethical line manager, I propose that the effects of commitment-eliciting green HRM practices on employees' trust in the organization will be stronger under high compliance-achieving green HRM practices than under low compliance-achieving green HRM practices. Under high compliance-achieving green HRM practices, employees may become frustrated by the enforcing practices, and thus infer that the organization does not value the mutual

benefits of social exchange between employees and employers as its primary motive for environmental sustainability. However, a line manager displaying high ethical leadership can intervene and alleviate employees' frustrations by sufficiently articulating the intended messages of compliance-achieving HRM practices and by role modeling green behaviors (e.g., Brown et al., 2005; Nishii & Paluch, 2018; Ogunfowora, 2014).

Moreover, employees may receive supplementary social support from the line manager and believe that the organization would ultimately pursue mutual benefits in the employee–employer relationship through two-way interpersonal communication and feedback between the highly ethical line manager and the following employees. As a result, employees may become assured that compliance-achieving HRM practices could be implemented by a highly ethical manager without losing focus on mutual benefits, thus reacting with greater trust in the organization under high-compliance green HRM practices.

Lastly, I proposed in Hypothesis 2c that compliance-achieving green HRM practices will strengthen the negative relationship between commitment-eliciting green HRM practices and employees' organizational cynicism. Under a line manager with high ethical leadership, I argue that the effects of commitment-eliciting green HRM practices on employees' organizational cynicism will be weaker under high compliance-achieving green HRM practices than under low compliance-achieving green HRM practices.

As discussed earlier, the benefits of high compliance-achieving green HRM practices tend to be more proximal to the organization (e.g., energy cost saving and efficient and productive operation) than to the employees. Hence, it is more likely that employees would evaluate compliance-achieving HRM orientations as exploitation of

employees for the organization's self-interest (e.g., Arthur, 1994; Su et al., 2018; Jones & Rupp, 2014). However, in a similar vein to the discussion above, a line manager who display ethical leadership may closely interact with employees and communicate interpersonally about how the organization does more than pursue its interests. As a key HRM sense-giver (e.g., Nishii & Paluch, 2018), a line manager may give employees the sense that compliance-achieving green HRM practices would not be implemented solely to pursue the organization's benefit.

Hence, along with other sustainability motives, the line manager will represent the organization and encourage employees to engage in this sustainability initiative together for the mutual benefit of internal and external stakeholders in the organization (Ren et al., 2017). With reference to organizational cynicism research (Dean et al., 1998), the high ethical leadership context will lessen the interactive effect of green HRM practices on organizational cynicism among employees. It will prevent employees from believing that the organization lacks integrity and pursues its self-interest by effectively implementing both commitment-eliciting and compliance-achieving green HRM practices consistent with an organization's authentic sustainability initiative.

4.3.2. Low ethical leadership and interaction effects of green HRM. In contrast, due to the discrepant behaviors of a line manager displaying low ethical leadership, employees may perceive a more significant conflict in the organization's intended HRM messages between the commitment-eliciting and compliance-achieving HRM practices. Even though an organization has developed effective green HRM practices, being confronted by low ethical leadership from a line manager could engender frustration among employees (e.g., Van Gils, Van Quaquebeke, Van Knippenberg, Van

Dijke, & De Cremer, 2015). In this context, I posit that employees would perceive a moral discrepancy between the strong signal of the environmental initiative from green HRM practices and the detrimental influence from low ethical leadership behaviors. For employees, the low ethical line manager will be perceived as unreliable and inauthentic and may neither faithfully communicate environmental rules nor act as a role model for green behavior. As a result, it would be harder for the intended messages of green HRM practices to be delivered as intended through the line manager to employees.

Furthermore, recent leadership research suggests that subordinates tend to find themselves powerless to fully and directly express their impressions of unethical managers face to face. Instead, their reactions are more likely to be attributed to the organization and accompanied by deviant attitudes and behaviors (Van Gils et al., 2015), since it will be safer to react indirectly to the organization than react face to face to the line manager (Mayer et al., 2009). As a result, low ethical leadership from a line manager would be a detrimental context for the effects of commitment-eliciting and compliance-achieving green HRM practices on employee attitudes toward the organization (Detert, Treviño, Burris & Andiappan, 2007).

In the context of low ethical leadership, I primarily argue that the effects of commitment-eliciting green HRM practices on employees' green behavior intentions will be weaker under high compliance-achieving green HRM practices than under low compliance-achieving green HRM practices. As discussed earlier in Hypothesis 2a, employees may acknowledge that the organization has strong motives for environmental initiatives when their line managers effectively communicate the green HRM practices and demonstrate the aligned behaviors with the firm's environmental initiatives.

However, under a low ethical line manager whose behaviors conflict with the organization's authentic goal of responsible environmental management, employees may make negative attributions to the organization's true intentions out of the perceived gap between the managers' leadership behaviors and organizational environmental practices.

Indeed, employees tend to generalize their perceptions about the supervisors to the organization, but not the other (Eisenberger et al., 2002). As a result, employees may attribute the low ethical leadership behaviors to the inauthenticity of the organization's green HRM practices. The low ethical leadership of line managers may degrade employee reactions to the implementations of commitment-eliciting and compliance-achieving green HRM practices. The employees may feel more frustrated, powerless, and less safe to express their concerns from the line manager (Van Gils et al., 2015) and under the compliance-achieving green HRM. Therefore, I propose that:

Hypothesis 3a: The moderation effect of compliance-achieving green HRM practices on the positive relationship between commitment-eliciting green HRM practices and employees' green behavior intentions will depend on the line manager's ethical leadership. For employees with a line manager of high ethical leadership, the effect of commitment-eliciting green HRM practices on employees' green behavior intentions will be stronger under high compliance-achieving green HRM practices than under low compliance-achieving green HRM practices. For employees with a line manager of low ethical leadership, the effect of commitment-eliciting green HRM practices on employees' green behavior intentions will be weaker under high compliance-achieving green HRM practices than under low compliance-achieving green HRM practices.

Second, I argue that the effect of commitment-eliciting green HRM practices on employees' trust in the organization will be weaker under high compliance-achieving green HRM practices than under low compliance-achieving green HRM practices in the low ethical leadership context. Similar to the impacts on green behavioral intentions, employees with a low ethical line manager may also evaluate that the manager will not reliably implement the high compliance-achieving green HRM practices for the mutual benefit of employees and the organization.

According to Carnevale (1988), employees observe the organizational contexts and decide whether to trust their organizations or not based on their cognitive assessment. In this process, a leader's behavior often has a substantial impact on such an evaluation (Dirks & Ferrin, 2002; Xu et al., 2016). Interestingly, employees' evaluation of trust in the organization is associated with their judgment of trust in the leaders, assuming that the leaders deliver cues from which employees can make inferences and generalizations regarding their experiences within the organization (Wayne, Shore, & Liden, 1997; Wong, Ngo, & Wong, 2003). Empirical findings have supported the arguments that the genuinely credible words and behaviors of an ethical leader tend to deliver a sense of trust to employees in their organization (Den Hartog & De Hoogh, 2009; Schoorman, Mayer, & Davis, 2007). Therefore, if a line manager is barely an ethical leader, it will be less likely that employees obtain sufficient cues regarding how the compliance-achieving green HRM practices can be implemented effectively and beneficially for employees. Taken together, these arguments suggest that in the low ethical leadership context, employees' trust in the organization would likely dampen the potentially positive interactive effect of commitment-eliciting and compliance-achieving green HRM.

Hypothesis 3b: The moderation effect of compliance-achieving green HRM practices on the positive relationship between commitment-eliciting green HRM practices and employees' trust in the organization will depend on the line manager's ethical leadership. For employees with a line manager of high ethical leadership, the effect of commitment-eliciting green HRM practices on employees' trust in the organization will be stronger under high compliance-achieving green HRM practices than under low compliance-achieving green HRM practices. For employees with a line manager of low ethical leadership, the effect of commitment-eliciting green HRM practices on employees' trust in the organization will be weaker under high compliance-achieving green HRM practices than under low compliance-achieving green HRM practices.

Lastly, I propose that the effect of commitment-eliciting green HRM practices on employees' organizational cynicism will be stronger under high compliance-achieving green HRM practices than under low compliance-achieving green HRM practices in the low ethical leadership context. Employees would not be able to capture any sense-giving from a low ethical line manager regarding the organization's intended messages when implementing compliance-achieving green HRM practices. Instead, when observing low ethical leadership from their line manager, employees do not only need to interpret the compliance-achieving HRM messages by themselves but also may become frustrated by the dissonance between the green HRM practices and low ethical leadership behaviors. These two cognitions would thus lead employees to make attributions to an organization's self-based sustainability motives and conclude that the high compliance-achieving practices are implemented solely for the benefit of the organization. Hence,

holding beliefs that the organization lacks integrity and only pursues its self-interest through compliance-achieving green HRM, employees would react with higher organizational cynicism.

By proposing the two contexts of high and low ethical leadership, I suggest that there is a three-way interaction between commitment-eliciting green HRM practices, compliance-achieving green HRM practices, and the line manager's ethical leadership:

Hypothesis 3c: The moderation effect of compliance-achieving green HRM practices on the negative relationship between commitment-eliciting green HRM practices and employees' organizational cynicism will depend on the line manager's ethical leadership. For employees with a line manager of high ethical leadership, the effect of commitment-eliciting green HRM practices on employees' organizational cynicism will be weaker under high compliance-achieving green HRM practices than under low compliance-achieving green HRM practices. For employees with a line manager of low ethical leadership, the effect of commitment-eliciting green HRM practices on employees' organizational cynicism will be stronger under high compliance-achieving green HRM practices than under low compliance-achieving green HRM practices.

Chapter 5: Methodology

5.1. Sample, Procedure, and Design

5.1.1. Sample. Five hundred seventy undergraduate students from two U.S. management schools volunteered to participate in the study experiment for extra credits in their management courses. Students were either juniors or seniors who might have a relatively higher awareness of organizational contexts than those at lower years. Participants were of any gender or ethnicity. I had no other exclusion criteria except that the participants were currently enrolled students between the age of 18-64 in a business-related major.

One of the two U.S. schools was located in the southern state and 118 students from this school participated. Among them, 115 students fully completed their participation (97.5% participation rate). Another 452 students were recruited in the northern state school. Among them, 326 students fully completed the experiment (72.1% participation rate). Among the 441 participants in total, 24 of them were dropped as outliers on study variables and the duration of participation time (i.e., how long they spent to complete the entire experiment). Finally, I analyzed the data of the remaining 417 students-100 students from the southern state school and 317 students from the northern school.

Among the 100 participants in the southern school, 36 were male, and 74 were female. For racial composition, 69 of them were White, 6 were Black, 10 were each

Asian and Hispanic, and 5 were other races. The average age was 21.31 ($SD = 2.08$). Meanwhile, among the 317 students in the northern school, 125 were male (39.4%), 192 were female (60.6%). For racial composition, 102 students were White, 15 were Black, 48 were Hispanic, 142 were Asian, and 10 were other races. The average age was 21.00 ($SD = 2.32$).

5.1.2. Procedure. To examine the hypotheses of this study, I conducted a scenario-based video vignette experiment consisting of a 2 (high vs. low commitment-eliciting Green HRM practices) by 2 (high vs. low compliance-achieving Green HRM practices) by 2 (high vs. low ethical leadership) between-subjects factorial design.

During the in-class session, students were invited to participate this online experiment. As soon as they visited the experiment webpage on their mobile devices or personal computers, Qualtrics randomly and evenly assigned each participant to one of the eight scenarios. Participants were instructed to watch a four-minute video vignette and respond to the study questions based on their reflections on the vignette.

5.1.3. Design. For this study, I used the experimental vignette methodology (EVM) (Aguinis & Bradley, 2014) for scenario manipulations. By its definition, EVM is “a short, carefully constructed description of a person, object, or situation, representing a systematic combination of characteristics” (Atzmüller & Steiner, 2010). This method incorporates manipulating scenarios not only in written format but in other types of media such as videos or images (Hughes & Huby, 2002). In management literature, the EVM has been widely used in a wide range of research topics such as leadership (e.g., De Cremer & Van Knippenberg, 2004), executive’s behavior (e.g., Powell, 2001), business

ethics (e.g., Hoyt, Price, & Poatsy, 2013), or organizational citizenship behavior (e.g., Podsakoff, Whiting, Podsakoff, & Mishra, 2011).

The EVM has been one of the most appropriate approaches to investigate the explicit, causal processes and outcomes in these topics. For example, Sauer (2011) adopted EVM and successfully examined the effects of leadership process on employee outcomes. He reported a significant interactive effect of leadership style and status on employee perceptions of leader effectiveness and team performance. Likewise, I utilized this method in this study to examine the interactive effects of green HRM practices and line managers' ethical leadership on the employee outcomes.

5.2. Materials

5.2.1. Development of scenarios. To develop and validate the scenarios in video vignettes, I followed the step-wise recommendations by Podsakoff, Podsakoff, MacKenzie, and Klinger (2013). First, a short instruction was developed for the study participants to acknowledge the experimental settings of a hypothetical company in the video vignette (see Appendix A):

"Imagine that you are an employee of the multinational company- Sonnet Electronics- and now it has been your third year since you joined the product management department at the headquarter (HQ) in California. Sonnet is one of the world's leading manufacturing companies in global markets across North America, Europe, and Asia. Last year, Sonnet Electronics decided to address its environmental sustainability and implement various management seriously. Now, you are invited to watch this internal company report from the HR department and be informed of the organization's circumstances around sustainable strategy. This four-minute video presents the objective assessment of management practices and the line manager's leadership for environmental issues. After watching the video, you will be asked to respond to a short list of questions to evaluate how you feel about this company as an employee."
All scenarios started with the common background information about the

hypothetical company (see Appendix A for full contents of the scenarios). To manipulate

the commitment-eliciting Green HRM practices, I adopted and modified the three items of commitment-oriented practices by Su and colleagues' (2018) with the most common sustainability practices listed from the annual CSR reports of multi-national corporations (e.g., Unilever, BASF, IBM, Marks & Spencer, Nestlé, Intel, and Alcoa). To distinguish between the high and low manipulating conditions, I characterized each commitment-eliciting green HRM practice with the monetary and temporal terms.

To manipulate compliance-achieving green HRM practices, I built on the three items of compliance-oriented practices by Su and colleagues (2018). I modified each item with the findings from the same CSR reports and the previous discussions of compliance-related practices in green HRM research (Guerci, Radaelli, Siletti, Cirella, & Shani, 2015; Renwick, Redman, & Maguire, 2008). Again, I distinguished between high- and low compliance-achieving green HRM practice conditions by low manipulating monetary and temporal values.

To manipulate ethical leadership of line managers, I referred to the recent ethical leadership research which successfully manipulated and demonstrated the effects of the managers' ethical leadership using scenario-based experiments (Van Gils et al., 2015). These scenarios had been built from the validated measure of ethical leadership developed by Brown and colleagues (2005). I adopted their scenario scripts for both high and low conditions and modified them to be environment-oriented in this study.

5.2.2. Validation of Video Vignettes. To ensure content validity, two subject matter experts from managerial positions reviewed the initial drafts of each scenario. They were also asked to rate the readability using the index by Coleman and Liao (1975), such as the length of the sentences or an average number of syllables per sentence. Based

on their feedback, I refined the scripts and asked another subject matter expert who worked as an HR director of a multinational corporation in South Korea. His feedback from another cultural background served as key sources of further revisions.

After the script revisions, I created the video vignettes for the eight scenarios. I developed each vignette with narrations in order to follow the recommendation by Podsakoff and colleagues (2013) to rule out the unexpected *actor effects* (e.g., attractiveness from the actor's appearance or voice). A native English speaker was recruited to record the readings of each scenario. As recommended by Podsakoff and colleagues (2013), I held the same narrator to record the entire vignettes at once under the same environment to rule out the narrator or environment effect from the video vignettes. Each video vignette was composed of the web-based archived clips which were edited to be of similar lengths.

Furthermore, Podsakoff and colleagues (2013) recommended that the affective tone and non-verbal expression of video vignettes should be neither overly positive nor negative. To do so, I kept the affective tone of each vignette to be neutral across high and low conditions of each manipulating factor. After creating the video vignettes, I asked the same subject matter experts again to review the extent to which the video manipulation coherently captured the intended constructs of independent variables. I revised the vignettes based on their feedback. The vignettes were refined to be the same lengths. The average length was 3 minutes and 50.9 seconds with 2.64 seconds of standard deviation. The shortest scenario was 3 minutes and 47 seconds, while the longest was 3 minutes and 55 seconds.

When participants read or watch a scenario composed of manipulated scripts or vignettes, they can be exposed to potential bias from order effects of a specific sequence of manipulating factors (Jackson & Dutton, 1988). To rule out these order effects, I developed two versions of each of the eight scenarios. For example, one version of the scenarios (e.g., Scenario A1) presented the two manipulating factors in Green HRM in prior to the line managers' ethical leadership. Meanwhile, another version (e.g., Scenario A2) presented the leadership factor first, followed by Green HRM factors (see Table 3 for the full sequences of the sixteen scenarios).

To finally validate the manipulating effects of video vignettes, Podsakoff and colleagues (2013) recommended a pilot experiment to examine the manipulation effects statistically. To follow their recommendation, I recruited 27 undergraduate students in the same northern state school and conducted the pilot experiment to check manipulations. I found the results from the independent sample T-test that both manipulations for commitment-eliciting and compliance-achieving green HRM practices were significantly effective (mean difference = 1.86, standard error = .53, $t(23) = 3.50$, $p < .01$; mean difference = 2.04, standard error = .57, $t(23) = 3.60$, $p < .001$, respectively). Meanwhile, since a manipulation of line manager's ethical leadership was found less effective (mean difference = 1.12, standard error = .67, $t(23) = 1.67$, $p = .10$), I refined the video vignette once more for a final review. As reported in the following chapters, the main results of this study successfully passed the manipulation checks.

5.3. Measures

As stated in procedure section, respondents were instantaneously asked to respond following test items. (see Appendix B for the full questionnaire).

5.3.1. Items for manipulation checks. For the manipulation check of ethical leadership, I adopted the single item scale to check manipulations of ethical leadership used by Van Gils and colleagues (2015). Participants were asked, “to what extent do you think this line manager is an ethical leader?” to check the manipulations of Green HRM practices, participants were further asked, “to what extent do you think Sonnet Electronics induces or encourages your commitment?”, and “to what extent do you think Sonnet Electronics strictly enforces your compliance to the rules and procedures?” All of these manipulation check items were measured by the seven-point Likert scale, ranging from “not at all” to “to a great extent”.

5.3.2. Green behavior intentions. Participants’ green behavioral intentions were measured using the ten items adopted and modified from the green behavior scale by Boiral and Paillé (2012). Since these original items were behavioral measures, I modified them as intention measure by asking the participants of how much they intend to engage in future green behavior at the hypothetical company in the video vignette. I asked them to rate statements on a seven-point Likert scale, ranging from “strongly disagree” to “strongly agree”. An example item is “working in Sonnet Electronics, I intend to voluntarily carry out environmental actions and initiatives in my daily work activities.” The modified items were reliable (Cronbach $\alpha = .94$).

5.3.3. Trust in the organization. To measure the employee’s perceived trust in the organization, I adopted six out of the seven items by Gabarro and Athos (1976). One item (i.e., “I am not sure I fully trust my employer”) was omitted since most of the participants lacked real work experiences at the large company. Participants were asked to rate each item using a seven-point Likert scale, ranging from “strongly disagree” to

“strongly agree”. An example item is “I believe Sonnet Electronics will be always honest and truthful.” Cronbach alpha was .93.

5.3.4. Organizational cynicism. Organizational cynicism was measured by seven items by Wilkerson, Evans, and Davis (2008). Participants were asked to rate their evaluation of the hypothetical organization using a seven-point Likert scale, ranging from “strongly disagree” to “strongly agree”. An example item is “this company is more interested in its goals and needs than in its employees’ welfare.” Cronbach alpha was .84.

5.3.5. Control variables. To ensure the validity of the study, I controlled for participants’ demographic information of their age, gender, racial ethnicity, political inclination, moral reflectiveness, and environmental awareness. I controlled for the participants’ political inclination since the social and environmental issues are often portrayed as one of the political or ideological discussions. Participants were asked a single-item question developed by Van Leeuwen and Park (2009) on a five-point scale.

Moreover, moral reflectiveness was controlled since prior research has shown that employees with higher moral reflectiveness tend to engage more in voluntary workplace green behavior (Kim et al., 2017). Hence, participants evaluated their moral reflectiveness on the five items developed by Reynolds (2008) using a seven-point Likert scale, ranging from “strongly disagree” to “strongly agree”. An example item is “I regularly think about the ethical implications of my decisions.” Alpha reliability was .90.

Lastly, I controlled for *environmental awareness* since prior research has suggested that employees with high level of environmental awareness tend to engage in workplace green behavior more frequently (e.g., Norton et al., 2017). To do so, I asked participants a simple question to evaluate how much they were aware of a recent

environmental issue. Since there was no existing measure of environmental awareness, I developed a question of “*which country is not a signatory of the Paris Climate Agreement since 2016?*”. Participants were asked to choose a country from (1) *the United States*, (2) *Japan*, (3) *Algeria*, and (4) *North Korea* (c.f. the answer is the United States). This issue was also one of the most searched debates in Google during the last U.S. presidential election campaigns. Thus, I assumed that the question would be moderately popular enough to measure one’s environmental awareness. Among the participants, 175 out of 417 (42.0%) responded correctly.

5.4. Analytic Strategy

For data analysis, I used SPSS 22 to conduct multivariate analysis of variance (MANOVA) to examine the study hypotheses. I also used M-Plus 8.0 (Muthén & Muthén, 2017) to conduct confirmatory factor analysis of dependent variables.

Chapter 6: Results

6.1. Manipulation Check

To ensure that my manipulation was effective, I conducted an independent-samples T-test for each manipulated factor. First, the manipulation of commitment-eliciting Green HRM practices was effective. Results from an independent-samples T-test indicated that the high ($M = 5.09, SD = 1.46$) and low ($M = 3.53, SD = 1.65$) conditions were significantly different, $t(415) = 10.27, p < .001$, and in the expected direction. Second, the manipulation of compliance-achieving Green HRM practices was also effective. Results from an independent-samples T-test indicated that the high ($M = 5.72, SD = .09$) and low ($M = 3.09, SD = 1.55$) conditions were significantly different, $t(415) = 18.67, p < .001$, and in the expected direction. Furthermore, the manipulation of line manager's ethical leadership was also effective. Results from an independent-samples T-test indicated that the high ($M = 5.15, SD = 1.22$) and low ($M = 2.64, SD = 1.53$) conditions were significantly different, $t(415) = 18.65, p < .001$, and in the expected direction. Thus, the manipulations were all effective.

6.2. Confirmatory Factor Analysis

Before examining descriptive statistics and main hypotheses, I conducted confirmatory factor analysis (CFA) on the three dependent variables to ensure that the three-factor model (e.g., green behavior intention, trust in the organization, and organizational cynicism) was warranted. In this analysis, I compared my proposed factor

model with four alternative measurement models. The alternative models included a two-factor model with trust in the organization and organizational cynicism combined, a two-factor model with green behavior intention and trust in the organization combined, a two-factor model with green behavior and organizational cynicism combined, and the one-factor model with all three constructs combined. In my proposed model, I formed parcels for three subscales of green behavior intention (i.e., eco-initiative, eco-civic engagement, and eco-helping behavior) since the original green behavior scale (Boiral & Paillé, 2012) theorized them as a three-dimensional construct.

As shown in Table 4, my proposed three-factor model reported superior fit ($\chi^2 = 866.59$, $df = 227$, CFI = .88, RMSEA = .08, SRMR = .06) compared to any of the alternative models. Indeed, results indicated that the three-factor model was significantly better than the one-factor solution with all constructs combined ($\Delta\chi^2(4, N = 417) = 728.35, p < .001$), or a two-factor solution with trust in the organization and organizational cynicism combined ($\Delta\chi^2(1, N = 417) = 90.44, p < .001$). It was also better than other two-factor solutions with green behavior intention and organizational cynicism combined ($\Delta\chi^2(1, N = 417) = 219.97, p < .001$), or with green behavior intention and trust in the organization combined ($\Delta\chi^2(1, N = 417) = 473.30, p < .001$).

Moreover, all factor loadings in my proposed model were statistically significant as shown in Table 5. In order to determine the first-order factor loadings of the 9-item engagement scale, I conducted a separate CFA of the green behavior construct, modeling the ten items as indicators of the three sub-factors, with engagement as a second-order latent variable. The factor loadings of green behavior intention in Table 5 were based on this CFA.

Meanwhile, two out of seven items for organizational cynicism were discovered to have low loadings (i.e., .16 and .19) as shown in Table 5, although both were statistically significant. To examine whether the three-factor solution would have a better fit with or without the two items, I have compared it with the original three-factor model with full item scale. As reported in Table 4, the three-factor model with reduced items ($\chi^2 = 697.50$, $df = 186$, CFI = .90, RMSEA = .08, SRMR = .05) had a significantly better fit than did the original three-factor model ($\Delta\chi^2(41, N = 417) = 171.98$, $p < .001$). However, I chose to adopt the original model with full item scale in this study for the following reasons. First, the two items of organizational cynicism were statistically significant in CFA, although their loading was low. Second, both models had an acceptable fit in terms of RMSEA (.08 for both) and SRMR (.06 for a model with full scale; .05 for a model with reduced items). Third, CFI for the original three-factor model (.90) was marginally accepted. Fourth, the reliability of the full item scale was also acceptable (Cronbach $\alpha = .84$). Therefore, although the three-factor model with reduced items indicated a better fit, I have adopted the three-factor solution with full scale items for the data analyses in this study.

6.3. Descriptive Statistics

Descriptive statistics with means, standard deviations, and correlations of this study are reported in Table 6. Bivariate correlations indicated that commitment-eliciting green HRM practices were significantly and positively correlated with green behavior intention ($r = .30$, $p < .01$) and trust in the organization ($r = .39$, $p < .01$), or negatively correlated with organization cynicism ($r = -.41$, $p < .01$). Compliance-achieving green HRM practices were also significantly and positively correlated with green behavior

intention ($r = .19, p < .01$) and trust in the organization ($r = .10, p < .05$), but not significantly correlated with organizational cynicism ($r = -.07, p > .05$). Moreover, line manager's ethical leadership was significantly and positively correlated with trust in the organization ($r = .30, p < .01$), or negatively correlated with organizational cynicism ($r = -.22, p < .01$). However, it was not significantly correlated with green behavior intentions ($r = .05, p > .05$).

For the correlations between the independent variables, none of them were significantly correlated ($r < .001, p > .05$ for all of the correlations), but they were orthogonal to each other. For the correlations between the dependent variables, green behavior intentions were significantly and positively correlated with trust in the organization ($r = .48, p < .01$), and negatively correlated with organizational cynicism ($r = -.57, p < .01$). Trust in the organization was also significantly and negatively correlated with organizational cynicism ($r = -.78, p < .01$).

Furthermore, Table 7 displays the sample sizes, means, and standard deviations for each dependent variable across the eight experimental conditions of this study. As one can see, the ratings of all low conditions were the lowest for green behavior intention and trust in the organization (4.52 and 3.49, respectively), or the highest for organizational cynicism (4.72) among the eight conditions. On the other hand, the ratings of all high conditions were the highest for green behavior intention and trust in the organization (5.73 and 5.71, respectively), or the lowest for organizational cynicism (3.08) among the eight conditions.

To determine the main and interactive effects on the dependent variables, I examined the data through a multivariate analysis of variance (or MANOVA) to obtain

multivariate and univariate results. While Table 8a presents the results of the effects from control variables, Table 5b reports the direct and interactive effects as hypothesized.

6.4. Hypothesis 1: Direct Effects of Commitment-Eliciting Green HRM Practices

In Hypothesis 1, I proposed that the commitment-eliciting green HRM practices will be positively related to green behavior intention (i.e., Hypothesis 1a) and trust in the organization (i.e., Hypothesis 1b), and negatively related with organizational cynicism (i.e., Hypothesis 1c). As reported in Table 8b, the results from multivariate analysis of variance revealed significant main effects of commitment-eliciting green HRM practices on the three dependent variables (Pillai's Trace = .20, Wilks' Lambda = .80, Hotelling's approximate = .25, Roy's Largest Root = .25; $F(3, 401) = 33.705$, $p < .001$ for all values). Based on the criteria (i.e., the effect size is *small* for $.01 \leq \eta_p^2 \leq .06$, *medium* for $.06 \leq \eta_p^2 \leq .14$, and *large* for $.14 \leq \eta_p^2$) suggested by Gray and Kinnear (2012), the effect size was large ($\eta_p^2 = .20$).

Furthermore, results from univariate analyses of variance indicated that the main effects of commitment-eliciting green HRM practices were individually significant on green behavior intention ($F = 40.44$, $p < .001$), trust in the organization ($F = 80.70$, $p < .001$), and organizational cynicism ($F = 88.39$, $p < .001$). The effect sizes were medium for green behavior intention ($\eta_p^2 = .09$), and large for both trust in the organization ($\eta_p^2 = .17$) and organizational cynicism ($\eta_p^2 = .18$).

To determine the simple slopes of each univariate relationship, I reported the pairwise comparisons for the main effects of independent variables on each dependent variable in Table 9. Results of simple slopes indicate that the mean scores of green

behavior intention and trust in the organization were significantly higher ($\Delta M = .66$, *standard error* = .10, $p < .001$; and $\Delta M = 1.08$, *standard error* = .12, $p < .001$, respectively) in the high condition of commitment-eliciting green HRM practices ($M = 5.41$, *standard error* = .07; $M = 5.09$, *standard error* = .09, respectively) than in the low condition ($M = 4.75$; $M = 4.01$, respectively). Similarly, the mean score of organizational cynicism was significantly lower ($\Delta M = -.97$, *standard error* = .10, $p < .001$) in the high condition of commitment-eliciting green HRM practices ($M = 3.56$, *standard error* = .07) than in the low condition ($M = 4.53$).

Based on the evidence above, commitment-eliciting green HRM practices were significantly and positively related to green behavior intention and trust in the organization, and negatively related to organizational cynicism. Hypothesis 1 was fully supported.

6.5. Hypothesis 2: Two-way Interactive Effects of Green HRM Practices

Hypothesis 2 proposed that the relationship between the commitment-eliciting green HRM practices and the dependent variables will be moderated by compliance-achieving Green HRM, such that the relationships will be strengthened. However, multivariate analysis results in Table 8b indicated that the two-way interactive effect was not significant (Pillai's Trace = .00, Wilks' Lambda = .99, Hotelling's approximate = .00, Roy's Largest Root = .00; $F(3, 401) = .43$, $p = .73$ for all values). Moreover, results from univariate analyses of variance indicated that none of the two-way interactive effects was significant on green behavior intention, trust in the organization, or organizational cynicism. ($F = .02$, $p = .90$; $F = .53$, $p = .47$; and $F = 1.08$, $p = .30$, respectively).

Therefore, Hypothesis 2 was not supported.

6.6. Hypothesis 3: Three-way Interactive Effects

Hypothesis 3 proposed three-way interactive effects of commitment-eliciting green HRM practices, compliance-achieving green HRM practices, and line manager's ethical leadership on dependent variables. However, multivariate analysis results in Table 8b indicated that the three-way interactive effect was not significant (Pillai's Trace = .00, Wilks' Lambda = .99, Hotelling's approximate = .00, Roy's Largest Root = .00; $F(3, 401) = .24, \rho = .87$ for all values). Moreover, results from univariate analyses of variance indicated that none of the three-way interactive effects was significant on green behavior intention, trust in the organization, or organizational cynicism. ($F = .30, \rho = .59$; $F = .05, \rho = .83$; and $F = .09, \rho = .76$, respectively). Therefore, Hypothesis 3 was not supported.

6.7. Supplemental Analyses

In this study, I proposed three hypotheses and examined the direct and interactive effects of commitment-eliciting green HRM practices on the dependent variables. As shown in Tables 8 through 11, I further examined the direct and interactive effects of compliance-achieving green HRM practices and line manager's ethical leadership on the dependent variables.

6.7.1. Main effects of compliance-achieving green HRM practices. As Table 8b indicated, results from multivariate analysis of variance revealed significant main effects of compliance-achieving green HRM practices on the three dependent variables (Pillai's Trace = .05, Wilks' Lambda = .96, Hotelling's approximate = .05, Roy's Largest Root = .05; $F(3, 401) = 6.30, \rho < .001$ for all values). The effect size was small ($\eta_p^2 = .05$).

Results from univariate analyses of variance indicated that the main effects of compliance-achieving green HRM practices were significant for green behavior intention ($F = 15.60, \rho < .001$), and trust in the organization ($F = 5.00, \rho = .03$). However, the main effect was not significant on organizational cynicism ($F = 1.76, \rho = .19$). Moreover, the effect sizes were medium for green behavior intention ($\eta_p^2 = .09$), and small for trust in the organization ($\eta_p^2 = .01$).

Furthermore, results from the pairwise comparisons in Table 9 indicated that the mean scores of green behavior intention and trust in the organization were significantly higher ($\Delta M = .41, \text{standard error} = .10, \rho < .001$; and $\Delta M = .27, \text{standard error} = .12, \rho = .03$, respectively) in the high condition of compliance-achieving green HRM practices ($M = 5.28, \text{standard error} = .07$; $M = 4.69, \text{standard error} = .09$, respectively) than in the low condition ($M = 4.87$; $M = 4.42$, respectively). However, the mean scores of organizational cynicism were not significantly different ($\Delta M = -.14, \text{standard error} = .10, \rho = .19$), although the mean score for the high condition ($M = 3.97, \text{standard error} = .07$) was lower than the mean score for the low condition ($M = 4.11$).

Based on the evidence above, compliance-achieving green HRM practices were significantly and positively related to green behavior intention and trust in the organization, but not significantly related to organizational cynicism.

6.7.2. Main effects of the line manager's ethical leadership. As Table 8b indicated, results from multivariate analysis of variance revealed significant main effects of line manager's ethical leadership on the three dependent variables (Pillai's Trace = .12, Wilks' Lambda = .88, Hotelling's approximate = .13, Roy's Largest Root = .13; $F(3, 401) = 17.78, \rho < .001$ for all values). The effect size was medium ($\eta_p^2 = .12$).

Results from univariate analyses of variance indicated that the main effects of line manager's ethical leadership were only significant for trust in the organization ($F = 49.74$, $\rho < .001$), and organizational cynicism ($F = 27.91$, $\rho < .001$). However, the main effect was not significant for green behavior intention ($F = 1.57$, $\rho = .21$). Moreover, the effect sizes were medium for both trust in the organization ($\eta_p^2 = .11$) and organizational cynicism ($\eta_p^2 = .07$).

Furthermore, results from the pairwise comparisons in Table 9 indicated that the mean scores of trust in the organization and organizational cynicism were significantly higher ($\Delta M = .85$, *standard error* = .12, $\rho < .001$) in the high condition of line manager's ethical leadership ($M = 4.98$, *standard error* = .09) than in the low condition ($M = 4.13$). Similarly, the mean scores of organizational cynicism were significantly lower ($\Delta M = -.54$, *standard error* = .10, $\rho < .001$) in the high condition of line manager's ethical leadership ($M = 3.77$, *standard error* = .07) than in the low condition ($M = 4.31$). However, the mean scores of green behavior intention were not significantly different ($\Delta M = .13$, *standard error* = .10, $\rho = .21$), although the mean score from high condition ($M = 5.14$, *standard error* = .07) was higher than from low condition ($M = 5.01$).

Based on the evidence above, a line manager's ethical leadership was significantly and positively related to trust in the organization, negatively related to organizational cynicism, but not significantly related to green behavior intention.

6.7.3. Two-way interactive effects of commitment-eliciting green HRM practices and line manager's ethical leadership. Results in Table 8b further indicated the two-way interactive effects of commitment-eliciting green HRM practices and line

manager's ethical leadership on dependent variables. Multivariate analysis results reported that the effects were not significant (Pillai's Trace = .01, Wilks' Lambda = .99, Hotelling's approximate = .01, Roy's Largest Root = .01; $F(3, 401) = 1.70, \rho = .17$). However, results from univariate analyses of variance indicated that two-way interactive effect was significant on organizational cynicism. ($F = 4.07, \rho = .04$) with small effect ($\eta_p^2 = .01$).

As reported in Table 10 and 11, the mean score of organizational cynicism was significantly lower ($\Delta M = -.75, \rho < .001$) in a high condition of commitment-eliciting green HRM practices ($M = 3.93$) than in a low condition ($M = 4.69$) when ethical leadership was low. In the high ethical leadership condition, the mean score difference was significantly larger ($\Delta M = -1.17, \rho < .001$) in a high condition of commitment-eliciting green HRM practices ($M = 3.19$) than in a low condition ($M = 4.36$). The effect size was also medium under low ethical leadership ($\eta_p^2 = .12$), but large under high ethical leadership ($\eta_p^2 = .24$). As demonstrated in Figure 2, the negative relationship between commitment-eliciting green HRM practices and organizational cynicism was significantly strengthened under a high ethical leadership condition with lower mean scores of organizational cynicism.

Therefore, there was no significant two-way interactive effect of commitment-eliciting green HRM practices and a line manager's ethical leadership on the dependent variables altogether. However, there was a significant, univariate two-way interactive effect on organizational cynicism.

6.7.4. Two-way interactive effects of compliance-achieving green HRM practices and line manager's ethical leadership. Results in Table 8b also indicated

another two-way interactive effect of compliance-achieving green HRM practices and line manager's ethical leadership on dependent variables. Multivariate analysis results revealed that the effect was not significant (Pillai's Trace = .00, Wilks' Lambda = .99, Hotelling's approximate = .00, Roy's Largest Root = .00; $F(3, 401) = .14, p = .98$). Moreover, results from univariate analyses of variance indicated that the three-way interactive effects were not significant for on green behavior intention, trust in the organization, and organizational cynicism. ($F = .09, p = .76$; $F = .07, p = .79$; and $F = .02, p = .79$, respectively). Therefore, there were no significant two-way interactive effects of compliance-achieving green HRM practices and line manager's ethical leadership on the dependent variables altogether and individually.

6.7.5. Main and interactive effects on the sub-dimensions of green behavior intention. The original construct of green behavior was proposed by Boiral and Paillé (2012) to have three sub-dimensions (i.e., eco-initiative, eco-civic engagement, and eco-helping behavior). I treated them as a three-dimensional construct. I thus examined the main and interactive effects of green HRM practices and line manager's ethical leadership on these subscales of green behavior intention along with the other dependent variables. Tables 12 and 13 indicate the results from multivariate and univariate analyses of variance.

First, results from multivariate analysis of variance revealed significant main effects of commitment-eliciting green HRM practices on the sub-constructs of green behavior intention, trust in the organization, and organizational (Wilks' Lambda = .79, $F(5, 399) = 21.22, p < .001$). The effect size was large ($\eta_p^2 = .21$). Similarly, both compliance-achieving green HRM and ethical leadership revealed significant main effects

from multivariate analyses (Wilks' Lambda = .89, $F(5, 399) = 10.09$, $\rho < .001$; Wilks' Lambda = .88, $F(5, 399) = 11.39$, $\rho < .001$, respectively). The effect sizes were medium for both ($\eta_p^2 = .11$; .13, respectively).

Furthermore, results from univariate analyses of variance indicated that the main effects of commitment-eliciting green HRM practices were individually significant for eco-initiative ($F = 25.90$, $\rho < .001$), eco-civic engagement ($F = 45.41$, $\rho < .001$), and eco-helping behavior ($F = 23.37$, $\rho < .001$). The effect sizes were small for eco-initiative and eco-helping behavior ($\eta_p^2 = .06$; .06 respectively), and medium for eco-civic engagement ($\eta_p^2 = .18$).

Similarly, results also indicated that the main effects of compliance-achieving green HRM practices were individually significant for eco-initiative ($F = 41.77$, $\rho < .001$), eco-civic engagement ($F = 7.41$, $\rho < .01$). However, the main effect on eco-helping behavior was not significant ($F = 3.25$, $\rho = .07$). The effect sizes were medium for eco-initiative ($\eta_p^2 = .09$) and small for eco-civic engagement ($\eta_p^2 = .02$).

Main effects of line manager's ethical leadership were only significant for eco-initiative ($F = 4.02$, $\rho < .05$), but not eco-civic engagement ($F = 1.02$, $\rho = .31$) or eco-helping behavior ($F = .21$, $\rho = .65$). The effect size was small for eco-initiative ($\eta_p^2 = .01$).

Moreover, results for simple slopes of each univariate relationship are presented in Table 13. For all of the three sub-scales, mean scores were significantly higher in the high commitment-eliciting green HRM practices condition, compared to the low condition ($\Delta M = .57$, *standard error* = .11, $\rho < .001$ for eco-initiative; $\Delta M = .76$, *standard error* = .11, $\rho < .001$ for eco-civic engagement; and $\Delta M = .76$, *standard error* = .11, $\rho < .001$

for eco-helping behavior). Similarly, mean scores for eco-initiative and eco-civic engagement were significantly higher for the high compliance-achieving green HRM practices condition, compared to the low condition ($\Delta M = .72$, *standard error* = .11, $p < .001$ for eco-initiative; and $\Delta M = .31$, *standard error* = .11, $p < .01$ for eco-civic engagement). For ethical leadership, eco-initiative scores in the high condition were significantly greater than in the low condition ($\Delta M = .22$, *standard error* = .11, $p < .05$).

Overall, commitment-eliciting green HRM practices were significantly and positively related to all three sub-constructs of green behavior intention, compliance-achieving green HRM practices were positively related to the eco-initiative and eco-civic engagement dimensions, and line manager's ethical leadership was positively related to the eco-initiative dimension of green behavior. However, results in Table 12 indicated that none of the two-way or three-way interactive effects was significant for the sub-dimensions of green behavior intentions.

Chapter 7: Discussion and Conclusion

7.1. Limitations and Future Research

The purpose of this study was to examine employee reactions to the commitment-eliciting and compliance-achieving green HRM practices under varying conditions of line managers' ethical leadership. Before discussing key findings and implications, I first acknowledge that this study has a few limitations. First, the findings of this study might lack external validity given the experimental setting for manipulating green HRM practices in a hypothetical company. Although I developed the scenarios based on the recent sustainability reports of multiple companies, sources of information for compliance-oriented green HRM practices were significantly limited. As a result, manipulations between commitment-eliciting and compliance-achieving green HRM practices might have been imbalanced. For example, the effects of punishing employees who did not comply with the environmental rules by salary deduction might be much stronger than those of rewarding employees who engaged in voluntary green behaviors with incentives. During the experiments, participants might have experienced cognitive distractions with this over-manipulation, which could have diluted the effects of other manipulations and contributed to the nonsignificant findings for the predicted interaction effects. Therefore, future experiments may require further revisions and validations of commitment-eliciting and compliance-achieving green HRM practices to enhance the

study's external validity using more balanced manipulations of the two green HRM orientations.

Second, I examined the three-way interactive effects of a line manager's ethical leadership, focusing on the facilitating role to effectively implement and communicate the two orientations of green HRM practices. However, it may be possible to examine and compare the two-way effect of commitment-eliciting green HRM practices and ethical leadership with that of compliance-achieving green HRM practices and ethical leadership. For example, one of the supplemental analyses I conducted revealed a significant two-way effect of commitment-eliciting green HRM practices and the line manager's ethical leadership on employee organizational cynicism, such that the negative association between commitment-eliciting green HRM practices and organizational cynicism was stronger in the high ethical leadership condition. Although I found no significant results for the two-way effects of compliance-achieving green HRM practices and ethical leadership partially due to the over-manipulation issues, future research that compare the two orientations of green HRM practices under the boundary conditions of line managers' ethical leadership may yield different results.

Third, this study used a video simulation to examine employee reactions to green HRM practices in a hypothetical organization. However, future research that tests similar hypotheses in a field setting might yield additional insights about the mechanisms through which green HRM practices induce the leaders' and employees' green behaviors in a variety of organizations, taking into account other contextual conditions (e.g., company size, organizational climate, cultural norms, team diversity, or traits of leaders and employees) while also adopting a multi-level perspective. For example, Norton and

colleagues (2014) suggested that a firm's sustainability policies would increase employees' perceptions of the green work climate in an organization and among co-workers which then lead to employees' task-related and proactive green behaviors, respectively (Norton, Zacher & Ashkanasy, 2014). Furthermore, another recent study by Norton and colleagues (2017) demonstrated how employees' perceptions of the firm's environmental strategy at the between-person level moderates the motivational process of daily employee green behaviors at the within-person level. While they tracked the temporal changes of employee green behaviors over a short period (i.e., days), future research might usefully examine the temporal effects of green HRM over a longer period of time (i.e., months or years) and determine which orientations of green HRM yield impose more enduring effects to induce employee green behaviors.

Fourth, this experimental study was developed under the fundamental assumption that employees in the hypothetical company have environmental awareness and related KSAs at the average level. While this approach might be useful for our understanding of employee reactions to firms' environmental practices, puzzles may still remain whether employees would engage in actual green behaviors without considering the individual traits (e.g., personality, environmental awareness, or moral reflectiveness) that may hinder such commitment. Hence, future research may reject the assumption of this study and examine how those individual traits would influence the employee reactions to green HRM practices, or how green HRM practices would attract employees with higher environmental concerns. For example, Rupp and colleagues (2013) reported that the positive effects of employees' perceptions of CSR practices on employees' organizational citizenship behaviors were stronger for employees with a stronger moral identity (Rupp,

Shao, Thorton, & Skarlicki, 2013). Based on the attraction-selection-attrition (ASA) model (Schneider, 1987) and signaling theory (Spence, 1973), Gully and colleagues (2013) also examined how firms' social and environmental responsibility messages might contribute to employees' job pursuit intentions due to their perceived person-organization fit and organizational attraction. Future research could examine whether employees selected for greater environmental awareness generally react more positively to the green HRM practices of commitment-eliciting and compliance-achieving approach, compared to employees selected without concern for their environmental awareness or green attitudes.

Fifth, this study examined only one specific style of leadership among those discussed in the leadership literature. Since other leadership styles, such as transformational or transactional leadership, might interact with green HRM differently, future research could compare the influence of various styles on effectively implementing green HRM practices. For example, a recent meta-analysis by Hoch and colleagues (2018) examined the potential utility of moral-related leadership styles (i.e., ethical, authentic, and servant leadership) above and beyond transformational leadership on employee attitudes, behaviors, and perceptions of their relationship with their organizations and leaders. Future research may compare diverse leadership styles as a boundary condition for interaction between commitment and compliance approaches of green HRM.

Sixth, the student samples of this study may have been another limitation. Although manipulations were in place to portray a realistic virtual company and line manager, compared to actual employees, these students have relatively little working

experiences in such organizational settings and under the supervision of a line manager. As discussed earlier, current employees with longer organizational tenure may react differently to various combinations of green HRM and a line manager's leadership style (e.g., Vlachos et al., 2013). Therefore, future research is needed to replicate the experiment with actual employees with longer work experiences.

Lastly, since I collected data in the United States, it is possible that the findings of this study might not generalize to other cultural contexts. For example, the significant interactive effects of commitment- and compliance-oriented approaches of employee governance on organizational performance reported by Su et al. (2018) were based on data collected in China. Furthermore, environmental issues are salient in domestic and international politics (Guber, 2001). In this regard, employees' political inclinations might be another key boundary condition for the future study. Indeed, I found a significant negative relationship between the study participants' political inclinations and green behavior intention, such that the more conservative participants reported lower green behavior intentions (see Table 6). Hence, I call for future research to replicate the experiments with additional samples across different cultural and political contexts.

7.2. Summary of Key Findings

Despite the above limitations, this study yielded some interesting findings, which I discuss next. Analyses of the experimental data on 417 undergraduate students in two U.S. management schools revealed that commitment-eliciting green HRM was significantly and positively related to green behavior intention and trust in the organization, and it was negatively related to organizational cynicism. This finding is consistent with the results of past research on CSR (e.g., Gond et al., 2017) and

predictions from the green HRM literature (e.g., Ji et al., 2012; Ziberras & Coan, 2015; Shen, Dumont, & Deng, 2016), which suggest that green HRM practices can shape positive employee attitudes toward pro-environmental behavior and their organization. In particular, most green HRM scholars have argued that green HRM practices can promote employees' commitment to their organizations' environmentally sustainable strategies (e.g., Tang et al., 2017), and my specific findings regarding the main effects of commitment-eliciting green HRM on green behavior intentions support those arguments.

Further, my findings suggest that compliance-achieving green HRM practices may also be effective, although I did not hypothesize such an effect. Specifically, I learned from the results of my supplemental analyses compliance-achieving green HRM practices had direct positive effects on green behavior intentions and trust in the organization and had not significant effect on organizational cynicism. These findings suggest that study participants might have perceived the organization as authentic in its concerns about environmental sustainability because it enforced green HRM practices among employees. Thus, although compliance-achieving HRM practices do not promote voluntary green behavior, they nevertheless suggest that employees can trust that their organization that will seriously engage in sustainability for the future. However, compared against the direct effects of commitment-eliciting green HRM, this compliance-achieving approach might be less effective in shaping employees' attitudinal outcomes.

I further hypothesized the two-way interactive effects of commitment-eliciting and compliance-achieving green HRM. As reported, I found no evidence of such interactive effects on any employee reaction outcome from the experiment. One possible

explanation is that the individuals might not have made consistent and clear attributions regarding the organization's true intentions when perceiving conflicting signals from the two different orientations of green HRM. Such unclear or inconsistent attributions might have resulted in an unclear judgment of the organization's authenticity regarding environmental sustainability and an associated uncertainty as to whether their reactions would be shaped to be positive or negative.

Meanwhile, I found evidence that a line manager's ethical leadership moderated the direct effect of commitment-eliciting green HRM practices on employee organizational cynicism from the supplemental analyses results. Commitment-eliciting green HRM practices were associated with lower organizational cynicism when the manager displayed highly ethical leadership. However, there was no evidence of such interactive effects on green behavior intention or trust in the organization. One possible interpretation of these results is that an ethical line manager helps to convince employees that the organization's self-interest is not the prior motive for adopting green HRM practices. That is, when there is consistency between the organization's green HRM practices and a line manager's ethical leadership may, it sends a signals a seriousness of intent to improve environmental sustainability and reduces the likelihood of employees viewing organizational pronouncements as mere greenwashing. This finding supports recent developments in the SHRM scholarship (e.g., Sikora & Ferris, 2014) suggesting that a line manager's role is essential for implementing HRM practices that achieve positive follower outcomes.

Lastly, I found no evidence of a three-way interactive effect regarding commitment-eliciting green HRM, compliance-achieving green HRM, and the line

manager's ethical leadership. Again, the weaknesses of this study related to the manipulation of compliance-achieving green HRM or the student sample's lack of organizational experience under a line manager may be possible reasons. Moreover, given the lack of research on the role of a line manager's leadership style in implementing green HRM practices, the manipulation of a line manager's ethical leadership may not have been extensive enough to enact the combination of commitment-eliciting and compliance-achieving green HRM practices. Since the line manager was virtually manipulated in my experiment, participants without daily experiences of an ethical leader may not have had enough information to draw inferences about how he or she would implement green HRM practices. These findings provide several key implications for research and practice.

7.3. Theoretical Implications

First, the findings of this study contribute to the SHRM literature by offering the possibility of broadening the theoretical construct of green HRM to include both commitment-eliciting and compliance-achieving HRM practices as potentially valuable for improving environmental sustainability. As discussed earlier, green HRM research was originally anchored within SHRM research as a targeted system for environmental sustainability (e.g., Christiana, Dainty, Daniels, Tregaskis, & Waterson, 2017). Since the green HRM literature had generally incorporated a commitment-oriented approach in its conceptualization, my propositions of employing commitment-eliciting and compliance-achieving orientations offer a novel theoretical perspective to combine both notions when conceptualizing green HRM systems. Although I found no evidence of interaction effects

between these two orientations on employee attitudes, the findings regarding the direct effects of each orientation offer a meaningful insight for green HRM research.

Moreover, my propositions of compliance-oriented HR approaches may also offer contributions to the SHRM literature broadly. As debates about the effects of control or compliance approaches have been ongoing (e.g., Patel et al., 2013; Hauff et al., 2014; or Su et al., 2018), my findings regarding compliance-achieving HRM practices offer novel empirical evidence about how different types of practices influence employees' attributions about their organizations' motives. However, since this study was not conducted in a real organizational setting, a future field study is necessary to examine how employees make attributions, shape their attitudes, and engage in a certain behavior or perform as expected over time (e.g., Hauff et al., 2014).

Furthermore, my findings in this study contribute to both the SHRM and leadership literatures by revealing the interactive effects of commitment-eliciting green HRM practices and line managers' ethical leadership on employees' views of the employee–employer relationship (i.e., feelings of organizational cynicism). Since the roles of the HRM system and leadership have generally been discussed in isolation from one another in the environmental sustainability literature, little is known about whether and how employee attitudes toward environmental practices are shaped, positively or negatively, by a line manager's ethical leadership. By proposing interactive effects between two green HRM approaches and a line manager's ethical leadership, my conceptualizations suggest an unexplored boundary condition of a line manager's ethical leadership style to implement green HRM practices and influence employee perceptions of the employee–employer relationship. A recent call was also made by leadership

scholars to examine ethical leadership as a potential boundary condition for employee reactions to sustainability-related management practices (De Roeck and Maon, 2018); this study responds to this call with empirical findings.

This thesis also contributes to the CSR literature by proposing employee reactions to sustainability-targeted HRM practices. Corporate social responsibility researchers have suggested that when employees perceive an organization's CSR practices, they tend to make attributions about the organization's engagement by evaluating both the organization's authenticity and the employee–employer relationship (see review by Rupp and Mallory, 2015). My thesis study proposed to broaden such understandings of employee reactions by conceptually offering boundary conditions of compliance-achieving green HRM and line managers' ethical leadership. In particular, my findings regarding the interactive effects of commitment-eliciting green HRM with ethical leadership on organizational cynicism may be an exemplary boundary condition. When employees acknowledge that there is a conflicting context between commitment-eliciting environmental management practices and an unethical leader, the findings of my thesis did not suggest that they would make distinct attributions to environmental management and their leader; instead, my findings suggest that employees make attributions to the organization that are integrated with their reflections on the employee–employer relationship.

The above finding also suggests a contribution to social exchange theory as it has been applied in the CSR literature. Previous research suggested that employees would respond to CSR practices with greater trust in the organization as a result of the social exchange process (e.g., Farooq et al., 2014). While the social exchange process fits well

when explaining how employees react to commitment-eliciting HRM practices, it does explain why compliance-achieving green HRM practices are associated with employees feeling a sense of greater trust in the organization. My findings suggest the possibility that an employee's evaluation of the employee–employer relationship may remain positive even if an organization's governance approach emphasizes employee compliance rather than commitment.

Lastly, my findings from this study also contribute to recent research regarding employees' green behaviors. A group of organizational behavior scholars proposed an integrated model of employee green behavior by combining person and context factors within an organization (Norton et al., 2015, 2017); my thesis study provides support for the proposition that HRM approaches and the line manager's leadership are meaningful contextual factors to predict employees' green behavior. While previous research has examined the relationship between leaders' moral reflectiveness and their employees' voluntary workplace green behavior (Kim et al., 2017), this study expands that finding and suggest that an ethical leadership style further impacts employees' general attitudes toward their organization.

7.4. Practical Implications

If the findings of this study were replicated, they would have several practical implications for organizations, line managers, and individual employees. First, this study suggests that organizations may need to carefully design their environmental management practices according to commitment-eliciting and compliance-achieving approaches taking into consideration both the organization's and employees' perspectives. For example, if an organization had pursued a cost-leadership strategy,

compliance-achieving green HRM practices may be regarded as a favorable option for its business strategy to enhance the organization's energy efficiency. However, my thesis suggests that although it would be more favorable concerning imminent organizational outcomes to adopt a compliance-achieving approach, employees may react differently to this outcome under different orientations of green HRM practices. As shown in my findings, organizational cynicism was much lower under high commitment-eliciting green HRM practices. Since this study proposes that employees react to organizational environmental management practices with evaluations of the employee–employer relationship, it suggests that executives should take into account and strive to leverage the potential for these positive attitudinal consequences in addition to other costs and benefits associated with compliance-achieving and commitment-eliciting HRM practices.

Second, the findings of this study have implications for line managers, whose leadership styles may be influential when implementing green HRM practices. Specifically, employees may become more cynical about their organization when the commitment-eliciting green HRM practices are implemented by a line manager whom employees perceive as engaging in unethical behavior. Although this study did not consider the influence of other leadership styles on employee outcomes associated with corporate sustainability, its findings suggest that green HRM practices will likely be more effective in driving positive employee outcomes when carried out by ethical line managers. Accordingly, organizations that include sustainability goals as part of their strategic objectives may find it is useful to adopt HRM practices such as selection, development, and disciplinary actions designed to ensure the managerial talent pool is morally upstanding as well as being motivated and technically competent.

Lastly, this research also has implications for those employees who enact corporate sustainability. Its findings revealed that employees evaluate how authentically organizations engage in environmental issues, the degree to which they are concerned with self-interest, and how seriously they consider the employee–employer relationship when environmental management practices are implemented. As McShane and Cunningham (2012) noted, managers may need to continuously communicate with employees regarding the authenticity of their organization’s environmental initiatives, regardless of the organization’s specific environmental management practices. Doing so, they can deliver a message to employees that their organization strongly values the employee–employer relationship. It will, in turn, re-assure employees and prevent any unnecessary suspicion toward their organizations.

7.5. Conclusion

For effective implementation of green HRM practices, I proposed two different approaches to creating a green HRM system and examined how the two approached influenced employees’ attitudes toward an organization. Furthermore, I proposed that a line manager’s ethical leadership style would be the effective implementations of commitment-eliciting and compliance-achieving green HRM practices. The findings of this study extend the SHRM and CSR literature by suggesting that both commitment-eliciting and compliance-achieving green HRM practices can be effective means for promoting environmental sustainability. Although there was no evidence to support an interaction effect when the two approaches together comprise the organization’s green HRM practices, I demonstrated that employees react with more positive attitudes to commitment-eliciting green HRM practices when their line manager is an ethical leader.

This finding also extends both the SHRM and the leadership literature in that the quality of the line manager when implementing HRM practices may be considered as having a key influence on employee's perception and attribution regarding an organization's internal environmental management practices.

To further determine how the two different HRM orientations may work under the line manager's ethical leadership, I call for future research to replicate the study in various contexts using field surveys to track how employees evaluate an organization's true motives regarding their environmental sustainability initiatives. In doing so, I anticipate that future research will create more knowledge about how, why, and when employees react most desirably to willingly engage in environmental sustainability with their organization for the future.

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Appendix A: Components of Scenarios

Instruction (Presented before the video)	Common Background Information (Beginning of the video)
<p>Imagine that you are an employee of the multinational company <i>Sonnet Electronics</i> and now it's been your third year since you joined the product management department at the headquarters (HQ) in California. Sonnet is one of the world's leading manufacturing companies in global markets across North America, Europe, and Asia. Last year, <i>Sonnet Electronics</i> decided to seriously address its environmental sustainability and implement various management practices.</p> <p>Now you are asked to watch this internal company report from the HR department and be informed of the organization's circumstances around sustainable strategy. This four-minute video presents the objective assessment of management practices and the line manager's leadership for environmental issues. After watching the video, you will be asked to respond to a short list of questions to evaluate how you feel about this company as an employee.</p>	<p>Over the past decade, Sonnet Electronics has grown as a global market leader with remarkable success. The board of directors acknowledged greater roles for environmental issues and decided to enhance environmental sustainability. To do so, Sonnet has invested in renovating its plants and offices to be in compliance with environmental standard such as ISO14001, and collaborate with suppliers for sustainable supply chain management. It also interactively communicates its passion and effort with customers on blogs and social media pages.</p>

Commitment-Eliciting Green HRM Practices			
Level	Employee Training in Sustainability (Sources: BASF, IBM, Marks & Spencer, and Nestlé cases)	Career Opportunities in Sustainability (Sources: Unilever and IBM cases)	Extensive Benefits & Reward in Sustainability (Sources: Intel & Alcoa cases)
High	Sonnet invests \$150 million per year to develop employees' awareness of environmental issues, energy-saving knowledge to save energy, and sustainable leadership skills. During your working hours, you will be given 20 hours per month to voluntarily participate in these training programs and freely share feedback and challenges within your unit.	To maximize training outcomes, we have also invested \$20 million in sustainability projects originating from employees' ideas. Each employee is given 4 hours per week to develop project ideas and engage in actual projects as an empowered project leader. Every year, 20 successful project leaders will be promoted cross-functionally as project managers to engage in other units.	To reward highly sustainable performance, employees will receive up to 25% more in annual bonus for voluntary green behaviors, rated by their unit managers and coworkers. It's the biggest raise in the industry for environmental sustainability. Employees with a top 10% green score will be granted five more paid vacation days next year with formal recognition at our annual meeting.
Low	Sonnet doesn't invest a special budget for employee sustainability training. During regular training, employees will only briefly learn about general environmental issues for 10 minutes, once per year. There will be no further session for you to share feedback or learn from other's experience about sustainability.	Each year, all employees are expected to personally spend extra time and suggest any sustainability project idea for their units. Only one idea will be selected for a future project. If selected, you will be awarded a \$10 gift card, but nothing more for your promotion or career even if the project idea would have high potential for success.	If employees show any sustainable performance, their annual bonus will be raised by 1% maximum determined by managers. In fact, this is smaller raise than any other competitors. The top 1% green performer of the entire company will be also granted one more paid vacation day. But even if you'd win these rewards, you may not receive any formal recognition at the annual meeting.

Compliance-Achieving Green HRM Practices			
Level	Emphasis on Work Rules and Procedures in Sustainability (Sources: LG, Visa, & Toyota Cases)	Closer Employee Supervision Practices in Sustainability Compared to Competitors (Sources: Cisco, Amazon & UPS Cases)	Punishment for Violating Rules and Regulations in Sustainability (Sources: Guerci et al., 2015; Renwick et al., 2008; Mandip, 2012)
High	Sonnet invests \$80 million to enforce environmental compliance across all jobs under the 'Compliance Program' chaired by the Chief Compliance Officer. Every quarter each unit manager names two employees with the lowest compliance. These employees then must complete 20 hours of online compliance training by the compliance officer.	Sonnet has also invested \$530 million in developing a compliance tracking system. With employee consent, it will track employee's daily energy usage at work. All trash and recycling bins will require the use of a company ID card. The Chief Compliance Officer will also closely monitor your data and warn you and your managers weekly if you didn't comply with the environmental regulations.	If employees violate environmental rules, they will receive a written warning. For the second charge, 25% of your next monthly paycheck will be deducted. For the third violation, you will be punished with a five-day suspension. Your manager and HR department will seriously consider your discharge after any further violation. Compared to other competitors, this is the strictest enforcement for environmental sustainability in the industry.
Low	Sonnet doesn't invest any special budget for environmental compliance. The HR department will issue a short recommendation list for energy efficiency at work. Employees don't need to comply with the list, since it's just a general recommendation. The Chief Compliance Officer will briefly talk about it, but each employee can decide how much to follow the recommendations.	Also, Sonnet won't monitor employee compliance performance, but only give employees brief suggestions. No employee will be monitored as to whether they recycle or not at work. The Chief Compliance Officer will annually write employees with general recommendations for environmental sustainability, but no personal data will be collected.	If employees seriously violate environmental rules at work, the unit manager will briefly chat with you for more details of the incidents. If you violate again, the manager will discuss suggestions for you, but you won't be punished at all in your pay, vacation, or anything related to your career. Compared to other competitors, this policy is very loose not to control employees much around environmental issues.

Level	<p style="text-align: center;">Line Manager's Ethical Leadership (Sources: Van Gils et al., 2015; Brown et al., 2005)</p>
High	<p>Your line manager is a reliable person and asks himself what the right thing is to do before making decisions. He also takes honest and balanced decisions in his work. He listens to what employees have to say and keeps their interest in mind when deciding. At work he discusses the importance of ethical norms and disciplines employees who violate ethical standards. He defines success not only in terms of results, but also in the way the results are obtained.</p> <p>Particularly, he has had high concern for environmental issues and a strong belief in working in an environmentally friendly manner. At every meeting and interaction with employees, he communicates what the company's upcoming goals are to improve environmental sustainability in both the short and long term, and stimulates managers and employees to address these issues in their jobs to ensure all employees are easily engaged in promoting sustainability inside and outside the company. All in all, your leader sets an example of how to do things the right way in terms of ethics for employees and the natural environment.</p>
Low	<p>Your line manager is not really a reliable person and rarely asks himself what the right thing to do is before making decisions. In his work, he does not always make honest and balanced decisions. He does not listen to what employees have to say and does not keep their interest in mind when deciding. At work he never discusses the importance of ethical norms and does not pay attention to whether employees behave in accordance with ethical standards. He defines success only in terms of results, and does not care about the way results are obtained.</p> <p>Particularly, he has had low concern for the natural environment and little belief in working in an environmentally friendly manner. At meetings, he mostly communicates about the company's imminent financial goals, but seldom about goals for environmental sustainability. He stimulates managers and employees to improve productivity and job performance but not energy efficiency or other environmental issues that the company faces today. All in all, your leader is not a good example of how to do things the right way in terms of ethics for employees and the natural environment.</p>

Appendix B: Study Questionnaire

INFORMED CONSENT FORM

Study Title: Employee views of company management practices.

You are being asked to participate in a research study that is being conducted by Hanbo Shim at the Rutgers University. This is a study about company's leadership and management.

Purpose of the study:

The purpose of this study is to investigate how people view a company's leaders and the way they manage their employees to see how it could affect employee attitudes and behavior.

What will be done?

You will first watch a four-minute video and respond to a few questions afterwards. In total, your participation should take no more than 20 minutes. Participation in this study is voluntary. The only alternative to this study is not to participate.

Risks or discomforts:

Minimal risks are anticipated from taking part in this study. If you feel uncomfortable with a question, you can skip that question or withdraw from the study altogether. If you decide to quit at any time before you have finished the questionnaire, your answers will not be recorded. You will not get the extra credits without its completion.

Benefits of this study:

Completing the study, you will receive extra credits for your current course. Moreover, you will be contributing to knowledge about leadership and management at work.

Confidentiality:

Your responses will be kept completely confidential. We will know your IP address when you respond to the Internet survey. We will ask you to include your university email address when you complete the Internet survey. Your name and address will not be stored with data from your survey or data from your survey responses. Instead, you will be assigned a participant number based on your school email address you would provide. The researchers will see your individual survey responses and the results. All information you provide will be treated confidentially.

Once data collection is complete, your e-mail address will be shredded and no link between the survey data and identity will exist. There are no foreseeable risks to participation except for the remote possibility that your email address would be inadvertently disclosed. However, the principal investigator has put in place adequate protections for your privacy in that all information provided will be kept confidential by using a randomly generated number code in place of your email address. This code will be kept securely by the research team only until study completion by July 15th, 2018.

Compensation:

Completing the survey, you will receive extra credits for your current course as promised by your instructor.

Withdrawal:

Your participation is voluntary; you are free to withdraw your participation from this study at any time. If you do not want to continue, you can simply leave this website. If you do not click on the "submit" button at the end of the survey, your answers and participation will not be recorded. You also may choose to skip any questions that you do not wish to answer.

How the findings will be used:

The results of the study will be used for academic research. The results from the study will be presented in academic conferences and the results might be published in an academic journal in management.

Contact information:

If you have concerns or questions about this research study, please contact the PI (Hanbo Shim) at hs612@rutgers.edu or at (201) 310-6684.

If you have questions about your rights as a research subject, please contact the IRB Director at (973)-972-3608 Newark/ (732)-235-9806 New Brunswick/Piscataway.

By selecting the choice below, you are indicating that:

1. You have read the above information
2. You voluntarily agree to participate
3. You are 18 years of age or older

☐ **Yes, I have read and agreed with the inform consent.**

Participant Survey

I. Please read the instructions below. Then watch the video:

Instructions:

Imagine you are an employee at the multinational company *Sonnet Electronics*. Sonnet is one of the world's leading electronics manufacturing companies in global markets across North America, Europe, and Asia. Last year, *Sonnet Electronics* decided to address environmental sustainability and implement various new management practices.

For the past 3 years, you have been working in the product management department at the headquarters (HQ) in California. Now the company has asked you to watch a video that describes the Sonnet Electronics' sustainability strategy. This four-minute video describes the company's management practices and the line manager's leadership style. After watching the video, you will be asked to respond to a few questions to evaluate how you would feel as an employee at Sonnet Electronics.

PLEASE WATCH THE VIDEO NOW.

Then go to the next page AFTER WATCHING THE VIDEO

II. Please use the scale below to respond to each question about Sonnet Electronics.

	Not at All	Very Little	Moderately Little	Some Extent	Moderately Much	Very Much	To a Great Extent
1. To what extent do you think Sonnet Electronics induces or encourages your commitment?	1	2	3	4	5	6	7
2. To what extent do you think Sonnet Electronics strictly enforces your compliance to the rules and procedures?	1	2	3	4	5	6	7
3. To what extent do you think this line manager is an ethical leader?	1	2	3	4	5	6	7

III. Please indicate how much you intend to engage in these behaviors as an employee at Sonnet Electronics.

Working at Sonnet Electronics,

I Intend To:

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
4. weigh the consequences of my actions in my work before doing something that could affect the environment.	1	2	3	4	5	6	7
5. voluntarily carry out environmental actions and initiatives in my daily work activities.	1	2	3	4	5	6	7
6. make suggestions to my colleagues about ways to protect the environment more effectively, even when it is not my direct responsibility.	1	2	3	4	5	6	7
7. actively participate in environmental events organized in and/or by Sonnet Electronics.	1	2	3	4	5	6	7
8. stay informed of Sonnet Electronics' environmental initiatives.	1	2	3	4	5	6	7
9. undertake environmental actions that contribute	1	2	3	4	5	6	7

positively to the image of Sonnet Electronics.							
10. volunteer for projects, endeavors or events that address environmental issues at Sonnet Electronics.	1	2	3	4	5	6	7
11. spontaneously give my time to help my colleagues take the environment into account in everything they do at work.	1	2	3	4	5	6	7
12. encourage my colleagues to adopt more environmentally conscious behavior.	1	2	3	4	5	6	7
13. encourage my colleagues to express their ideas and opinions on environmental issues.	1	2	3	4	5	6	7

IV. Please indicate how much you would agree to trust Sonnet Electronics if you would work as an employee.

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
14. I believe Sonnet Electronics has high integrity.	1	2	3	4	5	6	7
15. I can expect Sonnet Electronics will treat me in a consistent and predictable fashion.	1	2	3	4	5	6	7
16. Sonnet Electronics will be always honest and truthful.	1	2	3	4	5	6	7
17. In general, I believe Sonnet Electronics will have good motives and intentions.	1	2	3	4	5	6	7
18. I think Sonnet Electronics will <u>NOT</u> treat me fairly.	1	2	3	4	5	6	7
19. Sonnet Electronics is open and up-front with me.	1	2	3	4	5	6	7

V. Please indicate how much you would agree with below sentences if you would work as an employee of Sonnet Electronics.

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
20. Any efforts to make things better around here are likely to succeed.	1	2	3	4	5	6	7
21. Company management is good at running improvement programs or changing things in our business.	1	2	3	4	5	6	7
22. Overall, I expect more success than disappointment in working with this company.	1	2	3	4	5	6	7
23. This company pulls its fair share of the weight in its relationship with its employees.	1	2	3	4	5	6	7
24. Suggestions on how to solve problems around here won't produce much real change.	1	2	3	4	5	6	7
25. This company will meet my expectations for quality of work life.	1	2	3	4	5	6	7
26. Company management is more interested in its goals and needs than in its employees' welfare.	1	2	3	4	5	6	7

VI. Please indicate how much you would agree or disagree with each statement below.

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
27. I regularly think about the ethical implications of my decisions.	1	2	3	4	5	6	7
28. I think about the morality of my actions almost every day.	1	2	3	4	5	6	7
29. I often find myself pondering about ethical issues.	1	2	3	4	5	6	7
30. I often reflect on the moral aspects of my decisions.	1	2	3	4	5	6	7
31. I like to think about ethics.	1	2	3	4	5	6	7

VII. Please fill in the information below.

32. What is your gender?	<input type="checkbox"/> Male	<input type="checkbox"/> Female	<input type="checkbox"/> Other
33. What is your racial ethnicity?	<input type="checkbox"/> White <input type="checkbox"/> Asian	<input type="checkbox"/> Black <input type="checkbox"/> Other	<input type="checkbox"/> Hispanic
34. What is your educational background?	<input type="checkbox"/> None <input type="checkbox"/> Associate's Degree <input type="checkbox"/> Master's Degree <input type="checkbox"/> Others	<input type="checkbox"/> High School <input type="checkbox"/> Bachelor's Degree <input type="checkbox"/> Doctoral Degree	
35. What is your age?	() years old		
36. How long was your past work experience, if any (both full-time and part-time)? Please respond in the total number of months or years.	() months or years		
37. What is your home country or region?	<input type="checkbox"/> USA <input type="checkbox"/> Canada <input type="checkbox"/> China <input type="checkbox"/> Japan <input type="checkbox"/> Korea <input type="checkbox"/> Southeastern Asia <input type="checkbox"/> Latin America <input type="checkbox"/> Western Europe <input type="checkbox"/> Eastern Europe <input type="checkbox"/> Scandinavian Countries <input type="checkbox"/> Central Asia <input type="checkbox"/> Australia, New Zealand, or Pacific Islands <input type="checkbox"/> Africa <input type="checkbox"/> Others ()		
38. In politics, to what extent do you consider yourself between <u>Conservative</u> and <u>Liberal</u> ?	<input type="checkbox"/> Very Liberal <input type="checkbox"/> Somewhat Liberal <input type="checkbox"/> Neutral <input type="checkbox"/> Somewhat Conservative <input type="checkbox"/> Very Conservative		
39. Among those below, which country is not the signatory of the Paris Climate Agreement? (i.e., the global accord for natural environment preservation)	<input type="checkbox"/> USA <input type="checkbox"/> Japan <input type="checkbox"/> Algeria <input type="checkbox"/> North Korea (DPRK)		

THIS IS THE END OF THE SURVEY.
THANK YOU FOR YOUR PARTICIPATION.

Appendix C: Copy of Rutgers University IRB Approval Letter

Rutgers Arts & Sciences IRB-New Brunswick

DHHS Federal Wide Assurance Identifier: FWA00003913

IRB Chair Person: Beverly Tepper

IRB Director: Michelle Watkinson

Study ID: Pro2018000517

Modification: Mod2018000799

Title: The Interactive Model of Green HRM Practices and Ethical Leadership

Principal Investigator: Hanbo Shim

Study Coordinator: Susan E. Jackson

Study Performance Sites: School of Management and Labor Relations, Rutgers

University: 94 Rockafeller Rd, Piscataway, NJ

Hankamer School of Business, Baylor University: 1621 S 3rd St. Waco, TX

Effective Date: 4/20/2018

Study Expiration Date: 4/2/2019

Risk Determination: Minimal Risk

Review Type: Expedited

Expedited Category: (7)

ALL APPROVED INVESTIGATOR(S) MUST COMPLY WITH THE FOLLOWING:

1. Conduct the research in accordance with the protocol, applicable laws and regulations, and the principles of research ethics as set forth in the Belmont Report.

2. Continuing Review: Approval is valid until the protocol expiration date shown above.
To avoid lapses in approval, submit a continuation application at least eight weeks before the study expiration date.
3. Expiration of IRB Approval: If IRB approval expires, effective the date of expiration and until the continuing review approval is issued: All research activities must stop unless the IRB finds that it is in the best interest of individual subjects to continue. (This determination shall be based on a separate written request from the PI to the IRB.) No new subjects may be enrolled and no samples/charts/surveys may be collected, reviewed, and/or analyzed.
4. Amendments/Modifications/Revisions: If you wish to change any aspect of this study, including but not limited to, study procedures, consent form(s), investigators, advertisements, the protocol document, investigator drug brochure, or accrual goals, you are required to obtain IRB review and approval prior to implementation of these changes unless necessary to eliminate apparent immediate hazards to subjects.
5. Unanticipated Problems: Unanticipated problems involving risk to subjects or others must be reported to the IRB Office (45 CFR 46, 21 CFR 312, 812) as required, in the appropriate time as specified in the attachment online at: <https://orra.rutgers.edu/hssp>
6. Protocol Deviations and Violations: Deviations from/violations of the approved study protocol must be reported to the IRB Office (45 CFR 46, 21 CFR 312, 812) as required, in the appropriate time as specified in the attachment online at:
<https://orra.rutgers.edu/hssp>
7. Consent/Assent: The IRB has reviewed and approved the consent and/or assent process, waiver and/or alteration described in this protocol as required by 45 CFR 46

and 21 CFR 50, 56, (if FDA regulated research). Only the versions of the documents included in the approved process may be used to document informed consent and/or assent of study subjects; each subject must receive a copy of the approved form(s); and a copy of each signed form must be filed in a secure place in the subject's medical/patient/research record.

8. Completion of Study: Notify the IRB when your study has been stopped for any reason. Neither study closure by the sponsor or the investigator removes the obligation for submission of timely continuing review application or final report.
9. The Investigator(s) did not participate in the review, discussion, or vote of this protocol.
10. Letter Comments: There are no additional comments.

**Author's Notation per IRB request: Rutgers IRB has originally approved 350 subjects for this study. Since this study has collected more samples than the approved sample size, Rutgers IRB has reviewed this study again in study closure. The IRB Director of Arts and Sciences has approved to conclude this study and publish in the Rutgers electronic theses and dissertations (ETD) system under the condition of adding this notation in the manuscript. For any question related to this notation, please contact the IRB Director of Arts and Sciences as listed below:*

Michelle Watkinson, CIP

IRB Director-Arts and Sciences IRB (all campuses)

Office of Research and Regulatory Affairs

Office: 732235-6043 | email: Michelle.Watkinson@ored.rutgers.edu

Table 1. A Typology of Green HRM Approaches

Compliance-achieving	High	Green HRM with “Disciplined” Approach Commitment: Low Compliance: High	Green HRM with “Hybrid” Approach Commitment: High Compliance: High
	Low	Green HRM with “Unstructured” Approach Commitment: Low Compliance: Low	Green HRM with “Bonded” Approach Commitment: High Compliance: Low
	<div> <div>Low</div> <div>High</div> </div> Commitment-eliciting		

Table 2. Scenarios of Commitment-eliciting Green HRM, Compliance-achieving Green HRM, and a Line Manager's Ethical Leadership

Compliance-achieving	High	Scenario C "Disciplined" <u>Green HRM Practices</u> Commitment: Low Compliance: High	Scenario D "Hybrid" <u>Green HRM Practices</u> Commitment: High Compliance: High
	Low	Scenario A "Unstructured" <u>Green HRM Practices</u> Commitment: Low Compliance: Low	Scenario B "Bonded" <u>Green HRM Practices</u> Commitment: High Compliance: Low
		Low High Commitment-eliciting	

Low Ethical Leadership

Compliance-achieving	High	Scenario G "Disciplined" <u>Green HRM Practices</u> Commitment: Low Compliance: High	Scenario H "Hybrid" <u>Green HRM Practices</u> Commitment: High Compliance: High
	Low	Scenario E "Unstructured" <u>Green HRM Practices</u> Commitment: Low Compliance: Low	Scenario F "Bonded" <u>Green HRM Practices</u> Commitment: High Compliance: Low
		Low High Commitment-eliciting	

High Ethical Leadership

Table 3. Compositions of Manipulated Factors and Participants per Scenario

	Sequences of Manipulated Factors in Each Scenario (presented after common background introduction)			N
Scenario A1	Low Commitment-eliciting	Low Compliance-achieving	Low Ethical Leadership	26
Scenario A2	Low Ethical Leadership	Low Commitment-eliciting	Low Compliance-achieving	26
Scenario B1	High Commitment-eliciting	Low Compliance-achieving	Low Ethical Leadership	26
Scenario B2	Low Ethical Leadership	High Commitment-eliciting	Low Compliance-achieving	26
Scenario C1	Low Commitment-eliciting	High Compliance-achieving	Low Ethical Leadership	26
Scenario C2	Low Ethical Leadership	Low Commitment-eliciting	High Compliance-achieving	26
Scenario D1	High Commitment-eliciting	High Compliance-achieving	Low Ethical Leadership	26
Scenario D2	Low Ethical Leadership	High Commitment-eliciting	High Compliance-achieving	26
Scenario E1	Low Commitment-eliciting	Low Compliance-achieving	High Ethical Leadership	27
Scenario E2	High Ethical Leadership	Low Commitment-eliciting	Low Compliance-achieving	26
Scenario F1	High Commitment-eliciting	Low Compliance-achieving	High Ethical Leadership	26
Scenario F2	High Ethical Leadership	High Commitment-eliciting	Low Compliance-achieving	26
Scenario G1	Low Commitment-eliciting	High Compliance-achieving	High Ethical Leadership	26
Scenario G2	High Ethical Leadership	Low Commitment-eliciting	High Compliance-achieving	26
Scenario H1	High Commitment-eliciting	High Compliance-achieving	High Ethical Leadership	26
Scenario H2	High Ethical Leadership	High Commitment-eliciting	High Compliance-achieving	26

Note. Participants for were randomly assigned to each scenario.

Table 4. Comparison of Alternative Models

	χ^2	df	$\Delta\chi^2(\Delta df)$	CFI	RMSEA	SRMR
Comparing 1-, 2-, and 3-factor models						
1. 3-factor model	866.59	227		.88	.08	.06
2. 2-factor model: TO and OC combined	1025.24	228	90.44 (1)***	.86	.09	.06
3. 2-factor model: GBI and OC combined	1519.18	228	219.97 (1)***	.77	.12	.11
4. 2-factor model: GBI and TO combined	1864.89	228	473.30 (1)***	.70	.13	.13
5. 1-factor model: GBI, TO, and OC combined	2253.90	231	728.35 (4)***	.63	.15	.13
Comparing between 3-factor models						
3-factor model with two OC items omitted ^a	697.50	186		.90	.08	.05
3-factor model with entire items	866.59	227	171.98 (41)***	.88	.08	.06

*** $p < .001$ (one-tailed) $N = 417$

Note. GBI = Green Behavior Intention; OC = Organizational Cynicism; TO = Trust in the organization. All $\Delta\chi^2$ are compared with Model 1.

^aTwo items of organizational cynicism omitted are: ‘*Suggestions on how to solve problems around here won’t produce much real change*’, and ‘*Company management is more interested in its goals and needs than in its employees’ welfare.*’ Item loadings of these items are listed in Table 5.

Table 5. Confirmatory Factor Analysis: Items and Factor Loadings

Scale	Loading
Green Behavior Intention (“I intend to...”)	
Intention for Eco-initiative	.84
To weigh the consequences of my actions before doing something that could affect the environment in Sonnet Electronics.	.78
To voluntarily carry out environmental actions and initiatives in my daily work activities.	.89
To make suggestions to my colleagues about ways to protect the environment more effectively, even when it is not my direct responsibility.	.87
Intention for Eco-civic Engagement	.99
To actively participate in environmental events organized in and/or by Sonnet Electronics.	.82
To stay informed of Sonnet Electronics’ environmental initiatives.	.79
To undertake environmental actions that contribute positively to the image of Sonnet Electronics.	.87
To volunteer for projects, endeavors or events that address environmental issues in Sonnet Electronics.	.80
Intention for Eco-helping Behavior	.85
To spontaneously give my time to help my colleagues take the environment into account in everything they do at work.	.87
To encourage my colleagues to adopt more environmentally conscious behavior.	.89
To encourage my colleagues to express their ideas and opinions on environmental issues.	.83
Trust in the organization	
I believe Sonnet Electronics has high integrity.	.86
I can expect Sonnet Electronics will treat me in a consistent and predictable fashion.	.76
Sonnet Electronics will be always honest and truthful.	.85
In general, I believe Sonnet Electronics will have good motives and intentions.	.83
I think Sonnet Electronics will treat me fairly.	.86
Sonnet Electronics is open and up-front with me.	.79
Organizational Cynicism	
Any efforts to make things better around here are likely to succeed. (R)	.81
Company management is good at running improvement programs or changing things in our business. (R)	.87
Overall, I expect more success than disappointment in working with this company. (R)	.87
Sonnet Electronics pulls its fair share of the weight in its relationship with its employees. (R)	.86
Suggestions on how to solve problems around here won’t produce much real change.	.16 ^a
Sonnet Electronics will meet my expectations for quality of work life. (R)	.78
Company management is more interested in its goals and needs than in its employees’ welfare.	.19 ^a

Note. (R) = reverse-coded items.

^a These were the two items omitted for one of the model comparisons in Table 4.

Table 6. Descriptive Statistics and Correlations

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Gender ^a	.62	.49												
2. Race ^b	1.57	1.42	-.00											
3. Age	21.08	2.26	-.05	-.09*										
4. Political Inclination ^c	2.88	1.11	.19**	-.31**	.02									
5. Moral Reflectiveness	5.43	1.08	.06	.01	.08*	-.05								
6. Environmental Awareness ^d	.42	.49	-.02	-.03	-.02	-.07	-.00							
7. Commitment-eliciting GHRM	.50	.50	.08	.00	-.02	.01	.04	-.01						
8. Compliance-achieving GHRM	.50	.50	-.00	.08	.01	-.02	.02	-.00	.00					
9. Ethical Leadership	.50	.50	.04	-.00	-.03	-.02	-.02	-.05	-.00	-.00				
10. Green Behavior Intention	5.08	1.16	.16**	.08*	.04	-.09*	.24*	.02	.30**	.19**	.05			
11. Trust in the organization	4.55	1.40	.04	.03	.02	-.02	.11*	-.01	.39**	.10*	.30**	.48**		
12. Organizational Cynicism	4.04	1.19	-.06	-.09*	-.01	.02	-.06	-.04	-.41**	-.07	-.22**	-.57**	-.78**	

* $p < .05$ (one-tailed)

** $p < .01$ (one-tailed)

^a 0 = male, 1 = female;

^b 0 = White, 1 = Black, 2 = Hispanic, 3 = Asian, 4 = Others.

^c 1 = *very liberal*; 2 = *somewhat liberal*; 3 = *neutral*; 4 = *somewhat conservative*; and 5 = *very conservative*.

^d 0 = Incorrect response to the environmental awareness question, 1 = Correct response to the environmental awareness question.

Table 7. Sample Sizes and Mean Scores Per Condition

Study Conditions				Dependent Variables					
				Green Behavior Intention		Trust in the organization		Organizational Cynicism	
Commitment-eliciting Green HRM	Compliance-achieving Green HRM	Line Manager's Ethical Leadership	N	M	SD	M	SD	M	SD
Low	Low	Low	52	4.52	1.43	3.49	1.33	4.72	1.09
High	Low	Low	52	5.07	.97	4.43	1.40	4.10	1.11
Low	High	Low	52	4.91	1.10	3.77	1.36	4.66	1.00
High	High	Low	52	5.56	1.00	4.84	1.04	3.76	.97
Low	Low	High	53	4.52	1.34	4.33	1.31	4.39	1.32
High	Low	High	52	5.34	1.01	5.40	1.16	3.27	.81
Low	High	High	52	4.97	1.09	4.45	1.34	4.35	1.23
High	High	High	52	5.73	.58	5.71	.70	3.08	.76

Table 8a. MANOVA Examining the Effects of Control Variables on Dependent Variables

Control Variable	Multivariate results				Dependent Variable	Univariate results			
	<i>F</i>	<i>df</i> (between)	ρ	η_p^2		<i>F</i>	<i>df</i> (between)	ρ	η_p^2
Gender	3.05	3	.03	.02	Green Behavior Intention	6.99	1	.01	.02
					Trust in the organization	.10	1	.75	.00
					Organizational Cynicism	.27	1	.61	.00
Race	1.85	3	.14	.01	Green Behavior Intention	1.37	1	.24	.00
					Trust in the organization	.16	1	.69	.00
					Organizational Cynicism	3.61	1	.06	.01
Age	.19	3	.91	.00	Green Behavior Intention	.41	1	.52	.00
					Trust in the organization	.37	1	.54	.00
					Organizational Cynicism	.29	1	.59	.00
Political Inclination	.50	3	.68	.00	Green Behavior Intention	.72	1	.40	.00
					Trust in the organization	.09	1	.77	.00
					Organizational Cynicism	.03	1	.86	.00
Moral Reflectiveness	9.94	3	<.001	.07	Green Behavior Intention	23.57	1	<.001	.06
					Trust in the organization	5.89	1	.02	.01
					Organizational Cynicism	1.40	1	.24	.00
Environmental Awareness	1.00	3	.39	.00	Green Behavior Intention	.41	1	.52	.00
					Trust in the organization	.01	1	.92	.00
					Organizational Cynicism	1.66	1	.20	.00

Note. N = 417, MANOVA = multivariate analysis of variance, η_p^2 = effect size

Table 8b. MANOVA Examining the Interactions of Commitment-eliciting Green HRM Practices, Compliance-achieving Green HRM Practices, and a Line Manager's Ethical Leadership on Dependent Variables

Independent Variable	Multivariate results				Dependent Variable	Univariate results			
	<i>F</i>	<i>df</i> (between)	ρ	η_p^2		<i>F</i>	<i>df</i> (between)	ρ	η_p^2
Commitment-eliciting GHRM	33.71	3	<.001	.20	Green Behavior Intention	40.44	1	<.001	.09
					Trust in the organization	80.70	1	<.001	.17
					Organizational Cynicism	88.39	1	<.001	.18
Compliance-achieving GHRM	6.30	3	<.001	.05	Green Behavior Intention	15.60	1	<.001	.04
					Trust in the organization	5.00	1	.03	.01
					Organizational Cynicism	1.76	1	.19	.00
Line Manager's Ethical Leadership	17.78	3	<.001	.12	Green Behavior Intention	1.57	1	.21	.00
					Trust in the organization	49.74	1	<.001	.11
					Organizational Cynicism	27.91	1	<.001	.07
Commitment-eliciting GHRM × Compliance-achieving GHRM	.43	3	.73	.00	Green Behavior Intention	.02	1	.90	.00
					Trust in the organization	.53	1	.47	.00
					Organizational Cynicism	1.08	1	.30	.00
Commitment-eliciting GHRM × Line Manager's Ethical Leadership	1.70	3	.17	.01	Green Behavior Intention	1.13	1	.29	.00
					Trust in the organization	.52	1	.47	.00
					Organizational Cynicism	4.07	1	.04	.01
Compliance-achieving GHRM × Line Manager's Ethical Leadership	.11	3	.96	.00	Green Behavior Intention	.02	1	.89	.00
					Trust in the organization	.21	1	.65	.00
					Organizational Cynicism	.05	1	.83	.00
Commitment-eliciting GHRM × Compliance-achieving GHRM × Line Manager's Ethical Leadership	.24	3	.87	.00	Green Behavior Intention	.30	1	.59	.00
					Trust in the organization	.05	1	.83	.00
					Organizational Cynicism	.09	1	.76	.00

Note. N = 417, MANOVA = multivariate analysis of variance, GHRM = Green HRM, η_p^2 = effect size

Table 9. Pairwise Comparisons of Dependent Variables Per Independent Variable

Dependent Variables	Independent Variables								
	Commitment-Eliciting Green HRM			Compliance-achieving Green HRM			Line Manager's Ethical Leadership		
	Low Condition	High Condition	Marginal Means	Low Condition	High Condition	Marginal Means	Low Condition	High Condition	Marginal Means
GBI	4.75 (4.61, 4.89)	5.41 (5.26, 5.55)	.66*** (.45, .86)	4.87 (4.73, 5.02)	5.28 (5.14, 5.42)	.41*** (.21, .61)	5.01 (4.87, 5.16)	5.14 (5.00, 5.29)	.13 (-.07, .33)
TO	4.01 (3.84, 4.18)	5.09 (4.92, 5.26)	1.08*** (.77, .85)	4.42 (4.25, 4.58)	4.69 (4.52, 4.85)	.27* (.03, .51)	4.13 (3.96, 4.29)	4.98 (4.81, 5.14)	.85*** (.61, 1.08)
OC	4.53 (4.38, 4.67)	3.56 (3.41, 3.70)	-.97*** (-1.17, -.77)	4.11 (3.97, 4.25)	3.97 (3.83, 4.12)	-.14 (-.34, .07)	4.31 (4.17, 4.46)	3.77 (3.63, 3.91)	-.54*** (-.75, -.34)

* $p < .05$ ** $p < .01$ *** $p < .001$

Note. Signs on mean differences indicate the direction of change in dependent variables: + = increase, - = decrease; values in parentheses depict 95% confidence interval for the means or mean differences; all pairwise comparisons are made with Bonferroni adjustment.

GBI = Green Behavior Intention, TO = Trust in the organization, OC = Organizational Cynicism;

Table 10. Mean Scores for Organizational Cynicism by Conditions of Commitment-eliciting Green HRM Practices and Line Manager's Ethical Leadership

Commitment-eliciting Green HRM	Line Manager's Ethical Leadership	M	SE	95% Confidence Interval	
				Lower Bound	Upper Bound
Low	Low	4.69	.10	4.49	4.90
Low	High	4.36	.10	4.16	4.56
High	Low	3.93	.10	3.73	4.14
High	High	3.18	.10	2.98	3.38

Table 11. Pairwise Comparisons of the Change in Organizational Cynicism per Condition

Commitment-eliciting Green HRM	Mean Score of Organizational Cynicism		Mean difference	<i>df</i> (contrast, error)	η_p^2
	Low Ethical Leadership	High Ethical Leadership			
Low	4.69 (4.48, 4.89)	4.36 (4.15, 4.56)	-.33* (-.65, -.01)	1, 201	.02
High	3.93 (3.73, 4.14)	3.19 (2.99, 3.40)	-.77*** (-1.02, -.51)	1, 200	.15
Mean Difference	-.75*** (-1.04, -.46)	-1.17*** (-1.46, -.87)			
<i>df</i> (contrast, error)	1, 200	1, 201			
η_p^2	.12	.24			

* $p < .05$ ** $p < .01$ *** $p < .001$

Note. Signs on mean differences indicate the direction of change in organizational cynicism: + = increase, - = decrease; values in parentheses depict 95% confidence interval for the means or mean differences; all pairwise comparisons are made with Bonferroni adjustment; η_p^2 = effect size.

Table 12. MANOVA Examining the Interactions of Commitment-eliciting Green HRM, Compliance-achieving Green HRM, and Line Manager's Ethical Leadership on Sub-dimensions of Green Behavior Intention

Independent Variable	Multivariate results ^a				Dependent Variable (Green Behavior Intention)	Univariate results ^b			
	<i>F</i>	<i>df</i> (between)	ρ	η_p^2		<i>F</i>	<i>df</i> (between)	ρ	η_p^2
Commitment-eliciting GHRM	21.22	5	<.001	.21	Eco-initiative	25.90	1	<.001	.06
					Eco-civic Engagement	45.41	1	<.001	.10
					Eco-helping Behavior	23.37	1	<.001	.06
Compliance-achieving GHRM	10.09	5	<.001	.11	Eco-initiative	41.77	1	<.001	.09
					Eco-civic Engagement	7.41	1	.01	.02
					Eco-helping Behavior	3.25	1	.07	.01
Line Manager's Ethical Leadership	11.39	5	<.001	.13	Eco-initiative	4.02	1	.05	.01
					Eco-civic Engagement	1.02	1	.31	.00
					Eco-helping Behavior	.21	1	.65	.00
Commitment-eliciting GHRM × Compliance-achieving GHRM	1.12	5	.35	.01	Eco-initiative	.02	1	.89	.00
					Eco-civic Engagement	.23	1	.63	.00
					Eco-helping Behavior	1.14	1	.29	.00
Commitment-eliciting GHRM × Line Manager's Ethical Leadership	1.09	5	.37	.01	Eco-initiative	.61	1	.43	.00
					Eco-civic Engagement	1.44	1	.23	.00
					Eco-helping Behavior	.68	1	.41	.00
Compliance-achieving GHRM × Line Manager's Ethical Leadership	.14	5	.98	.00	Eco-initiative	.09	1	.76	.00
					Eco-civic Engagement	.07	1	.79	.00
					Eco-helping Behavior	.02	1	.89	.00
Commitment-eliciting GHRM × Compliance-achieving GHRM × Line Manager's Ethical Leadership	.92	5	.47	.01	Eco-initiative	1.94	1	.16	.01
					Eco-civic Engagement	.23	1	.64	.00
					Eco-helping Behavior	.11	1	.74	.00

Note. N = 417, MANOVA = multivariate analysis of variance, GHRM = Green HRM, η_p^2 = effect size

^a Multivariate analysis results were computed from five dependent variable: Green behavior intentions (eco-initiative, eco-civic, eco-helping), trust in the organization, and organizational cynicism.

^b Univariate results for trust in the organization and organizational cynicism were omitted in this table (presented in Table 8b above).

Table 13. Pairwise Comparisons of Sub-dimensions of Green Behavior Intentions Per Independent Variable

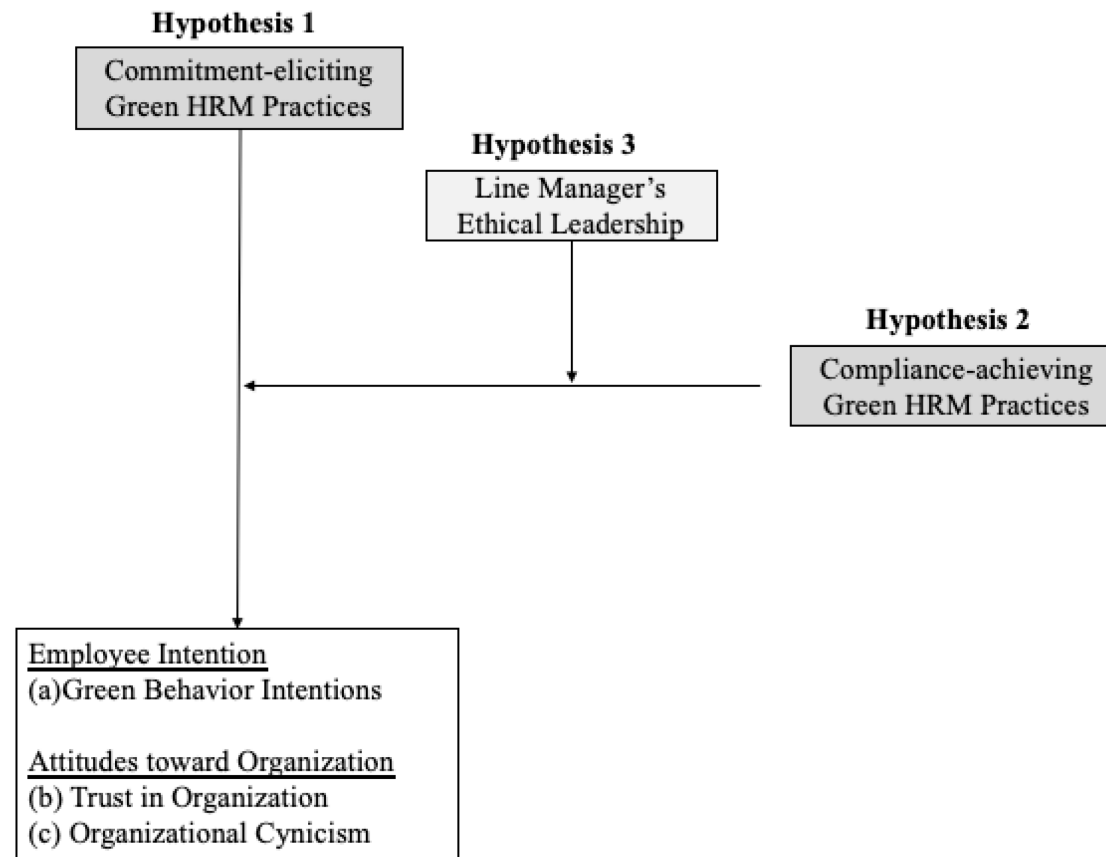
Dependent Variables (GBI)	Independent Variables								
	Commitment-Eliciting Green HRM			Compliance-achieving Green HRM			Line Manager's Ethical Leadership		
	Low Condition	High Condition	Marginal Means	Low Condition	High Condition	Marginal Means	Low Condition	High Condition	Marginal Means
Eco-Initiative	4.96 (4.80, 5.11)	5.53 (5.37, 5.68)	.57*** (.35, .79)	4.88 (4.73, 5.04)	5.60 (5.45, 5.76)	.72*** (.50, .94)	5.13 (4.97, 5.29)	5.35 (5.20, 5.51)	.22* (.00, .44)
Eco-civic Engagement	4.73 (4.58, 4.89)	5.49 (5.34, 5.65)	.76*** (.54, .98)	4.96 (4.80, 5.12)	5.27 (5.11, 5.42)	.31** (.09, .53)	5.06 (4.90, 5.21)	5.17 (5.01, 5.33)	.11 (-.11, .34)
Eco-helping Behavior	4.56 (4.39, 4.73)	5.17 (4.99, 5.34)	.61*** (.36, .86)	4.75 (4.58, 4.93)	4.98 (4.80, 5.15)	.23 (-.02, .47)	4.84 (4.66, 5.01)	4.89 (4.72, 5.07)	.06 (-.19, .31)

* $p < .05$ ** $p < .01$ *** $p < .001$

Note. Signs on mean differences indicate the direction of change in dependent variables: + = increase, - = decrease; values in parentheses depict 95% confidence interval for the means or mean differences; all pairwise comparisons are made with Bonferroni adjustment.

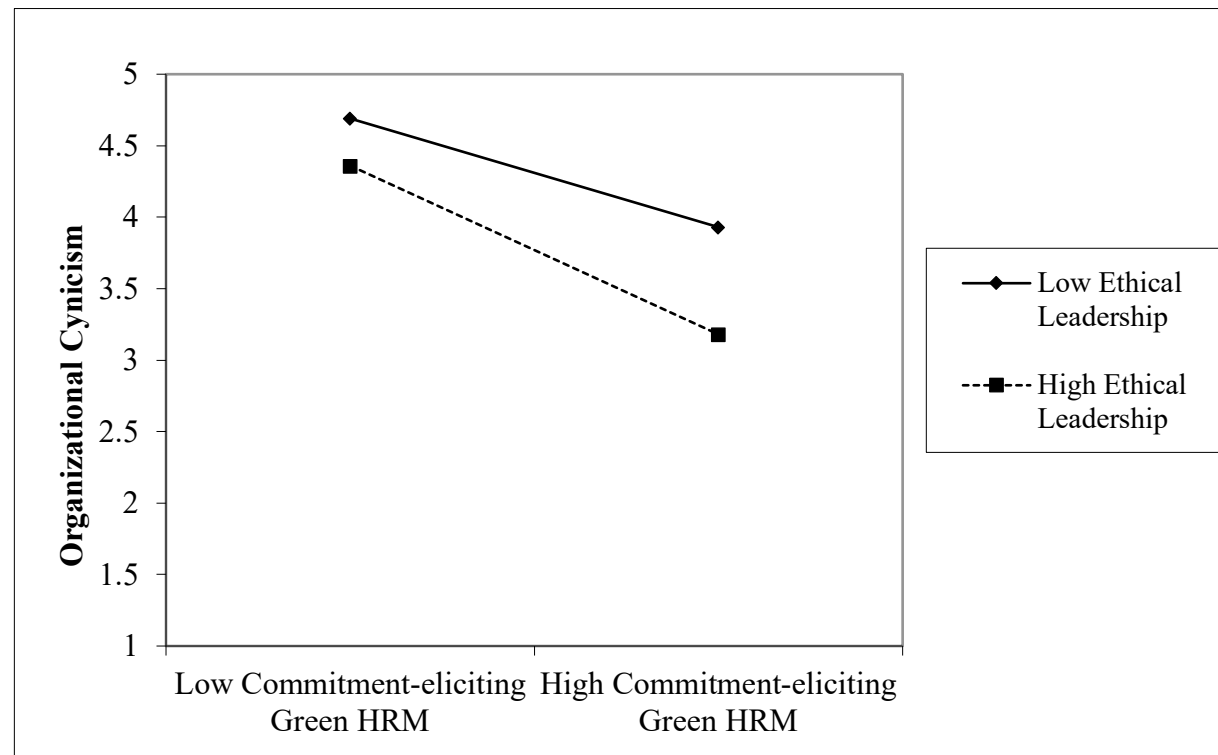
GBI = Green Behavior Intention.

Figure 1. Conceptual Model of Interaction between Green HRM Practices and Line Manager's Ethical Leadership



Note: Control variables of this study are employee's demographic information (i.e., age, gender, racial ethnicity, and political orientation, moral reflectiveness, and environmental awareness).

Figure 2. Moderating Effect of Line Manager's Ethical Leadership on the Relationship between Commitment-eliciting Green HRM and Organizational Cynicism



Note. Mean score differences in organizational cynicism are statistically significant for high ethical leadership (mean difference between low and high Commitment-eliciting Green HRM = .75, $p < .001$), and low ethical leadership (mean difference between low and high Commitment-eliciting Green HRM = 1.17, $p < .001$).