HUMAN RESOURCE MANAGEMENT PRACTICES, WORK INTENSITY, AND WORKPLACE DEVIANCE: EXPLORING THE MODERATING ROLE OF CORE SELF-EVALUATIONS

JANET A. BOEKHORST

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York University
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ABSTRACT

Drawing on social exchange, conservation of resources, and self-verification theories, I conduct two studies to examine the impact of perceived human resource management (HRM) practices on workplace deviance. The first study hypothesizes that perceived maintenance and development HRM bundles have a negative indirect effect on deviance via work intensity. Using a two-wave research design (n = 69), the results demonstrated that both HRM bundles were negatively related to deviance via work intensity. The post-hoc analyses revealed that both HRM bundles had an indirect negative effect on organizational deviance, but were not indirectly related to interpersonal deviance.

The second study hypothesizes two moderated mediated models to understand some key moderating effects in the HRM practices and organizational deviance relationship. I first examine a three-way interaction between work intensity, core self-evaluations (CSE), and identity threat on organizational deviance. Afterwards, I hypothesize that this three-way interaction shapes the negative indirect effect of both perceived HRM bundles on organizational deviance via work intensity. Using a cross-sectional research design (n = 125), the results revealed a significant three-way interaction between work intensity, CSE, and identity threat on organizational deviance. The results further revealed that this three-way interaction moderated the indirect effect of perceived development HRM practices (but not perceived maintenance HRM practices) on organizational deviance through work intensity.

Consistent with social exchange theory, this research demonstrates that work intensity mediates the relationship between perceived HRM practices and deviance, thereby advancing our understanding of the 'black box' between HRM practices and employee outcomes. This research also highlights the moderating roles of CSE and identity threat in the work intensity and

organizational deviance relationship. These results demonstrate that the negative relationship between work intensity and organizational deviance strengthens when high CSE employees experience low identity threat. That is, this three-way interaction supports much of the CSE literature that points to the positive implications associated with high CSE, but it also contrasts the mainstream literature by revealing that high CSE may not always be desirable. This research also reveals some of the boundary conditions, namely, CSE and identity threat, in the perceived HRM practices and organizational deviance relationship.

Keywords: Perceptions of HRM practices, work intensity, workplace deviance, core self-evaluations, identity threat, social exchange theory, conservation of resources theory, self-verification theory

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CHAPTER 1: INTRODUCTION

Human resource management (HRM) research has garnered considerable attention from researchers and practitioners across the globe in recent decades (e.g., B. E. Becker & Huselid, 2006; Huselid, 1995; Jiang, Takeuchi, & Lepak, 2013; Lengnick-Hall, Lengnick-Hall, Andrade, & Drake, 2009; Ulrich, 1998). This growth in research is underpinned by the idea that it is the employees who predominantly influence organizational performance – that is, organizations are legal entities that depend on the actions of their employees to help foster high levels of firm performance (Kozlowski & Klein, 2000). A plethora of studies demonstrate that HRM practices, which are fundamental in shaping employee actions, have positive and meaningful financial implications for organizations (Boselie, Dietz, & Boon, 2005; Combs, Liu, Hall, & Ketchen, 2006; Jiang, Lepak, Hu, & Baer, 2012; Subramony, 2009). More specifically, some studies demonstrate that HRM practices are positively related to multiple indicators of firm performance, such as market performance (Chuang & Liao, 2010), department performance, such as service quality (Messersmith, Patel, Lepak, & Gould-Williams, 2011), and individual performance, such as citizenship behaviors (Snape & Redman, 2010). Although much of the early HRM research was conducted at the firm-level (e.g., Arthur, 1994; Delery & Doty, 1996; Huselid, 1995), a burgeoning interest in employee perceptions of HRM practices has manifested in recent years for multiple reasons.

First, a line of extant HRM research posits that it is *employee perceptions* of HRM practices – that is, employee interpretations of HRM practices that are based on prior experiences (Wright & Nishii, 2013) – that subsequently shape their attitudes and behaviors rather than manager reports of these same HRM practices. These employee outcomes then aggregate to significantly influence firm performance (Kozlowski & Klein, 2000). Second, much of the

strategic HRM research focuses on manager reports of HRM practices (Gerhart, Wright, & McMahan, 2000; Gerhart, Wright, McMahan, & Snell, 2000; Huselid & Becker, 2000), but recent research only demonstrates a moderate positive correlation between employee and manager ratings of HRM practices. Indeed, Liao, Toya, Lepak, and Hong (2009) find that employee and manager perceptions of HRM practices positively correlate at the group-level (r = .39), but these researchers also report that managers do provide more favorable ratings of HRM practices than non-managers. Third, research further demonstrates that employees make unique attributions about HRM practices that result in diverse implications for performance outcomes. Specifically, Nishii, Lepak, and Schneider (2008) show that employees who are exposed to the same set of HRM practices make diverse attributions about the motives that underpin the adoption of these HRM practices. The impact of these HRM attributions results in distinct effects on individual-level affective commitment and job satisfaction. In turn, these employee attitudes positively relate to unit-level citizenship behavior and customer satisfaction (Nishii et al., 2008). Fourth, studies show that employee perceptions of HRM practices are the best predictors of employee outcomes compared to other reports of HRM practices (Boxall & Macky, 2009). Taken together, these studies point to the importance of focusing on employee perceptions of HRM practices because it is these employee *perceptions* (rather than the firm-level accounts of HRM practices) that influence employee outcomes and subsequently shape firm performance.

Scholars have, therefore, recently started to use an individual-level approach to HRM research in order to advance our understanding of how perceived HRM practices influence employee outcomes (e.g., Alfes, Shantz, & Truss, 2012; Herrbach, Mignonac, Vandenberghe, & Negrini, 2009; N. Takeuchi & Takeuchi, 2013). In this research, I focus on the effect of

perceived HRM practices on employee job performance because of its fundamental influence on organizational performance (Boxall & Macky, 2009). From a high-level standpoint, job performance refers to employee behaviors and actions that positively contribute to organizational goal accomplishment (Motowildo, Borman, & Schmit, 1997). Rotundo and Sackett (2002) posit that three primary behaviors comprise job performance – that is, task behavior, citizenship behavior, and counterproductive behavior. In short, task behaviors involve the successful completion of required tasks and duties (Mc Manus & Kelly, 1999), organizational citizenship behaviors (OCBs) include voluntary behaviors that benefit the organization yet are not explicitly required (Lee & Allen, 2002), and counterproductive behaviors (CWBs) are harmful actions that deter organizational goal accomplishment (Robinson & Bennett, 1995). Therefore, employees demonstrate strong job performance when they participate in high levels of task performance and OCBs and low levels of CWBs. Most individual-level HRM studies focus on the impact of perceived HRM practices on task performance and OCBs (e.g., Alfes, Truss, Soane, Rees, & Gatenby, 2013), while limited consideration has been given to 'dark' employee behaviors (for exceptions, see: Al-Shuaibi, Subramaniam, & Shamsudin, 2014; Shamsudin, Subramaniam, & Al-Shuaibi, 2012; Shamsudin, Subramaniam, & Ibrahim, 2011; Shamsudin, Subramaniam, & Sri Ramalu, 2014).

Given the dearth of research examining the relationship between perceived HRM practices and 'dark' employee behaviors, the present research focuses on advancing our understanding of this relationship. As alluded, CWB is a broad term that encompasses a range of 'dark' behaviors, such as theft, interpersonal violence, absenteeism, substance abuse, and sabotage, among others (Marcus, Taylor, Hastings, Sturm, & Weigelt, in press). Multiple conceptualizations of CWBs have been proposed (Marcus et al., in press), but the present

research draws on the most commonly used framework of workplace deviance that was developed by Bennett and Robinson (Marcus et al., in press).[1] Specifically, Bennett and Robinson (2000) define workplace deviance as the voluntary use of behaviors that harm the organization and/or its constituents through the violation of organizational norms and interests. This conceptualization includes employees who lack the motivation to adhere to organizational norms, policies, and standards, but it also includes employees who make the conscious decision to violate these standard behavioral expectations within the organizational context (Bennett & Robinson, 2000). Organizational norms, policies, and standards comprise the fundamental moral norms prescribed within societal standards in addition to those formal and informal expectations outlined in organizational policies, rules, and procedures (Bennett & Robinson, 2000). The practical importance of focusing on the link between perceived HRM practices and 'dark' employee behaviors is underscored by the harmful effect of these behaviors.

Specifically, Greenberg (1997) estimates that employee theft, which is the most prevalent form of workplace deviance, amounts to approximately $200 billion each year in the U.S. Collaborative research between PwC and the Retail Council of Canada indicate that employee theft accounts for more than 33 percent of all estimated theft among retailers in Canada (PwC Canada, 2012). Furthermore, approximately 70 percent of employees experience some form of incivility each work day – that is, some form of low intensity interpersonal deviance (Jex, Burnfield Geimer, Clark, Guidroz, & Yugo, 2010). Similarly, research conducted by Pizzino (2002) indicates that 69 percent of public sector employees in Canada have experienced verbal aggression in the workplace. Indeed, incivility can result in particularly negative implications for organizations and employees because it can spiral into quite serious and harmful behaviors

[1] The 'dark' work behaviors literature uses the term workplace deviance synonymously with the term counterproductive work behavior to refer to work behaviors that harm the organization and/or its employees (Marcus et al., in press).

(Andersson & Pearson, 1999). For instance, research shows that employee experiences of incivility can lead to high turnover intentions and poor physical and mental health among these employees (Lim, Cortina, & Magley, 2008). The startling prevalence and importance of addressing workplace deviance within the Canadian context is also highlighted in a recent amendment to the Occupational Health and Safety Act in Ontario to address workplace violence and harassment (Government of Ontario, 2015). Henceforth, it is of interest to organizations to understand how to take preventative actions to avert the occurrence of workplace deviance.

Another important area of research for scholars and practitioners that has received limited attention in the HRM literature relates to the role of individual differences (Guest, 2011). To date, most studies in this area of research examine differences in the attributions that employees make about the perceived motives that underlie the HRM practices in their organization (Nishii et al., 2008). For instance, research shows that unit-level high-performance work systems are linked to HR well-being and HR performance attributions that subsequently shapes organizational commitment and job strain (Van De Voorde & Beijer, 2015). Despite the importance of these types of scholarly advancements, this line of research offers few insights into the moderating role of individual differences in the perceived HRM practices and employee outcomes relationship (Jiang et al., 2013). This dearth of research is rather unexpected given that numerous studies show that individual traits are important moderators in management research (Tepper, Duffy, & Shaw, 2001).

In this research, I focus on the moderating role of core self-evaluations (CSE) – that is, an employee's positive self-concept (Judge, Locke, & Durham, 1997) – because of its fundamental influence on employee job performance. These core evaluations are fundamental beliefs that employees hold that pertain to themselves, other people, and the greater world (Judge et al.,

1997). In particular, these self-evaluations have a dominant influence in shaping employee actions and behaviors, such that CSE has a fundamental influence in shaping situation-specific appraisals. Personality research shows that CSE comprises four personality traits, namely, self-esteem, generalized self-efficacy, internal locus of control, and emotional stability (i.e., low neuroticism) given that these constructs have significant similarities with some important and unique distinctions (Judge et al., 1997). Studies show that employees with high CSE are more likely to view themselves in a positive light, thereby leading to positive employee attitudes and behaviors. In fact, meta-analytic research shows that CSE is positively related to task performance and OBCs, and negatively related to CWBs (C. -H. Chang, Ferris, Johnson, Rosen, & Tan, 2012). Indeed, Judge, Erez, and Bono (1998) posit that high CSE employees tend to be more motivated to perform in their job role, especially because motivation is a key antecedent to job performance.

Research also suggests that CSE can also have an important moderating effect on job attitudes and performance behaviors, such that employee reactions to work events and experiences can be contingent upon the extent to which these employees have a positive self-concept (C. -H. Chang et al., 2012). For example, research shows that CSE moderates the relationship between abusive supervision and intrinsic motivation, such that this relationship is weaker among high CSE employees compared to low CSE employees (H. Zhang, Kwan, Zhang, & Wu, 2014). Moreover, focusing on high CSE employees is also important because approximately 70 percent of people have a positive self-view (Swann, 2012). Based on these studies, I examine the moderating role of CSE in the relationship between perceived HRM practices and deviant work behaviors because CSE can offer a more complete account of how perceived HRM practices influence employee job role performance.

However, recent research shows that high CSE employees who are confronted with information that does not affirm their positive self-concept can be motivated to participate in 'dark' work behaviors (Shantz & Booth, 2014). This research is consistent with the self-esteem literature that provides significant empirical support that counters the conventional wisdom that people with low self-esteem are most apt to participate in aggressive and violent conduct – rather, a plethora of studies demonstrate that people with high (compared to low) self-esteem are more prone to violent and aggressive behaviors when these employees feel threatened (Baumeister, Smart, & Boden, 1996). In a similar vein, recent studies show that interpersonal rejection is an important antecedent of aggressive and antisocial conduct (Leary, Twenge, & Quinlivan, 2006; Smart Richman & Leary, 2009).

In accordance with these studies, this research also examines the moderating effect of identity threat – that is, "any overt action by another party that challenges, calls into question, or diminishes a person's sense of competence, dignity, or self-worth" (Aquino & Douglas, 2003, p. 196). Stated differently, employees experience high identity threat when other people question, blame, criticize, or embarrass them within work-related contexts. For example, employees who have their work unfairly questioned or criticized experience identity threat. This research focuses on identity threat, such that it can have an important role in shaping deviant work behaviors because it can provide important information about the self-concept of employees (Aquino & Douglas, 2003). Indeed, in line with self-verification theory (Swann, 1983), the concept of identity threat can have important implications for self-verification and validation. Therefore, building on the extant literature, I examine the interactive effects between CSE *and* identity threat to offer a more nuanced account of the conditions under which work intensity is related to deviant work behaviors, especially when employees have high CSE.

In sum, there are two dominant areas of HRM research that necessitate some much-needed insights to help researchers and practitioners better understand *why* HRM practices can avert deviant work behaviors. There is also a need for research to better understand the *conditions* under which this indirect effect between perceived HRM practices and employee job performance is shaped by employee differences. In response to these gaps in the literature, this dissertation addresses these two nascent areas of research with an investigation of the moderating roles of CSE and identity threat in shaping the indirect effect of perceived maintenance and development HRM practices on workplace deviance via intense work behaviors. As a result, this research not only advances our understanding of why perceived HRM practices can decrease deviant work behaviors, but it also specifically advances our understanding of the conditions under which CSE and identity threat interact to shape 'dark' workplace behaviors.

Research Statement

The purpose of this multi-study investigation is to understand why and under what conditions perceived HRM practices obviate workplace deviance. This research objective is especially important because there is a scarcity of research devoted toward understanding the link between work and employment practices and deviant work behaviors (Arthur, 2011). In response, the present research examines the mediating role of an important form of job role investment – that is, intense work behaviors – in the perceived HRM bundles and workplace deviance relationship. In this research, I focus on intense work behaviors because these actions represent the extent to which employees choose to invest their personal resources into their job role (Brown & Leigh, 1996). There are two primary work effort behaviors, namely 'working hard' (i.e., work intensity) and 'working long' (i.e., time commitment) that are under the

volitional control of employees. In other words, employee time and energy represent their two key personal resources that they can choose to contribute to the organization (Brown & Leigh, 1996). In this research, I focus on behavioral work intensity because this research aims to understand whether perceived HRM practices can prompt employees to 'work harder' in their job role. More specifically, Study 1 examines the mediating effect of intense work behaviors in the relationship between employee perceptions of maintenance and development HRM bundles and workplace deviance. This research focuses on maintenance and development HRM bundles because these two HRM bundles represent the two fundamental approaches used to manage employees in the workplace (Gong, Law, Chang, & Xin, 2009). That is, maintenance HRM bundles help employees to maintain their current level of functioning, while development HRM bundles help employees to improve their current level of functioning through advancement and growth (Kooij et al., 2013).

According to social exchange theory and conservation of resources (COR) theories, I theorize that perceived maintenance and development HRM practices have a negative indirect effect on workplace deviance via work intensity (Blau, 1964; Hobfoll, 2001). In other words, employees who have positive perceptions about HRM practices choose to reciprocate this perceived investment with intense work behaviors. In turn, these employees also choose to limit their participation in deviant work behaviors in attempt to foster a positive relationship with the organization (Blau, 1964). Moreover, the exertion of personal resources in intense work behaviors leaves few personal resources for other work behaviors (Hobfoll, 1989, 2001). This dual mediation model responds to numerous calls for research to advance our understanding of the 'black box' between HRM practices and employee outcomes (B. E. Becker & Huselid, 2006; Boselie et al., 2005; Jiang et al., 2013; Paauwe, 2009). While some studies show that

maintenance and development HRM bundles can lead to distinct outcomes (Gong et al., 2009), studies also show that these HRM bundles can lead to the same outcomes (Kooij, Jansen, Dikkers, & De Lange, 2010). Interestingly, this research posits that maintenance *and* development HRM bundles can prompt intense work behaviors that subsequently discourage deviant work behaviors. Therefore, this research highlights the importance of both HRM bundles and work intensity in shaping positive job role performance.

Building on this research, Study 2 makes several important advancements. The second study aims to replicate the dual mediation model developed in Study 1 with a different sample. However, there is one notable exception – Study 2 focuses solely on organizational deviance. The post-hoc analyses from Study 1 revealed that there was a significant negative indirect effect of perceived HRM practices on organizational deviance, but not on interpersonal deviance. Social exchange theory (Blau, 1964) supports these analyses, such that employees who perceive HRM practices choose to avoid deviant behaviors directed at the organization (but not other employees) because employees target their positive actions towards the 'sender' of the HRM practices. Therefore, employees who have positive perceptions about HRM practices are not more or less likely to enact deviant actions towards others in the workplace, but employees do avoid organizational deviance because of the perceived investment made by the organization.

Another important advancement made in Study 2 pertains to the focus on employee differences in the perceived HRM bundles and organizational deviance relationship. However, I first hypothesize a three-way interaction between work intensity, CSE, and identity threat on organizational deviance in accordance with self-verification theory (Swann, 1983, 2012). Specifically, I hypothesize that the negative relationship between work intensity and organizational deviance is strongest when high CSE employees experience low identity threat.

Stated differently, highly intense work behaviors lead to low organizational deviance when high CSE employees experience low identity threat. That is, high CSE employees are subject to significant positive information that verifies their positive self-concept from their intense work behaviors and low identity threat, thereby leading to few deviant behaviors. At the same time, this hypothesis implies that low levels of intense behaviors leads to greater organizational deviance among high CSE employees who experience low identity threat. In doing so, the second study helps to shed light into the conditions under which high CSE employees are unlikely to enact 'dark' work behaviors, but simultaneously also shows that there are some conditions under which high CSE employees can be motivated to participate in 'dark' behaviors.

Blending this three-way interaction into the dual mediation model, Study 2 examines two conditional indirect effect models with an examination of the negative relationship between perceived maintenance and development HRM bundles and organizational deviance via work intensity when considering the moderating roles of CSE and identity threat. Specifically, I hypothesize that employee perceptions of both maintenance and development HRM bundles have the strongest negative indirect effect on organizational deviance through intense work behaviors when high CSE employees experience low identity threat. In short, Study 2 highlights the importance of CSE and identity threat in moderating the relationship between perceived HRM practices and organizational deviance. In doing so, I advance our understanding of the conditions under which organizations can expect employees to partake in the fewest deviant actions directed towards the organization.

Research Contributions

This multi-study investigation makes several important contributions. First, in line with

social exchange theory, the present research demonstrates that perceived HRM practices are positively related to work intensity, such that employees who make positive perceptions of HRM practices choose to respond to this perceived investment with intense work behaviors in their current job role (Blau, 1964). While some research examines the HRM practices and work intensity relationship (Godard, 2001; Ramsay, Scholarios, & Harley, 2000), especially within the critical management field (Mariappanadar, 2014), these studies mostly focus on work intensity from the perspective of the nature of the job (i.e., intense job demands). Intense job demands refer to the pace, effort, and affect associated with the activities and tasks of the job (Burke, Singh, & Fiksenbaum, 2010; Green, 2004). However, research has yet to examine the impact of perceived HRM practices on work intensity from a behavioral perspective (i.e., intense work behaviors) – that is, employees who choose to work intensely seek to increase their "energy exerted per unit of time" (Brown & Leigh, 1996, p. 362). This dearth of research hinders our understanding of the complete effects of perceived HRM practices from a work intensity perspective. From a practical standpoint, addressing this gap is particularly important because employees who work intensely in their job role can offer significant benefits to their organization (Brown & Leigh, 1996; Piccolo, Greenbaum, Den Hartog, & Folger, 2010).

This research further demonstrates that there is a negative relationship between employees who work intensely in their current job role and workplace deviance. In other words, employees who choose to work intensely in their current job role avoid participating in workplace deviance in attempt to maintain a positive relationship with their employer (Blau, 1964). According to COR theory, employees who choose to expend some personal resources into intense work behaviors are also more cautious of their reduced personal resources (Hobfoll, 1989, 2001). Therefore, these employees choose to avoid deviant behaviors because such 'dark' work

behaviors increase the likelihood of further personal resource depletion (Hobfoll, 1989, 2001). These results advance the extant research that reveals work intensity is linked to positive employee actions by showing that work intensity is also related to few episodes of negative employee actions.

Blending these aforementioned relationships, this research demonstrates that perceived HRM practices have a negative indirect effect on workplace deviance. In doing so, this research directly responds to calls for more employee-level HRM research, such as: "… it is important to directly assess employees' individual experiences with the work system in theoretical development and empirical testing of the effects of the HPWS on individual-level employee outcomes" (Liao et al., 2009, p. 385). In contrast to most HRM studies that rely on cross-sectional research designs (Wall & Wood, 2005), this study uses a two-wave research design, thereby permitting the investigation of these relationships over a certain time period. Specifically, this research shows that employees who make positive perceptions of HRM practices choose to reciprocate with more intense work behaviors in order to return the received benefit from the organization in a manner that offers meaningful value (Blau, 1964; Gouldner, 1960). In turn, these employees also reduce their participation in deviant actions that could cause significant harm to the organization and its employees. In other words, perceived HRM practices indirectly influence workplace deviance via intense work behaviors. This research advances the extant HRM practices and workplace deviance literatures by demonstrating that HRM practices can be instrumental in not only eliciting positive employees outcomes, such as intense work behaviors, but also in terms of discouraging negative employee actions, such as deviant behaviors. As a result, I offer a more comprehensive account of the impact of perceived HRM practices on employee job performance with a focus on 'dark' work behaviors, thereby advancing our

understanding of the perceived HRM practices 'black box'.

The second study advances the former study in multiple ways. The first contribution rests in the replication of the results of the dual mediation model. However, the results from Study 2 do marginally deviate from those presented in Study 1, such that the second study demonstrates that perceived development HRM practices (but not maintenance HRM practices) have a negative indirect effect on organizational deviance via intense work behaviors. Although the results from both studies mostly support the assertion that perceived HRM practices help to avert workplace deviance, the second study offers some interesting and unexpected results that do not provide full support for this contention.

Another important contribution of Study 2 rests in the interactive effect between CSE and identity threat in the work intensity and organizational deviance relationship. As previously discussed, research offers significant support for the positive link between CSE and positive employee attitudes and behaviors (C.-H. Chang et al., 2012; for an exception, see: Shantz & Booth, 2014). Nevertheless, while self-verification theory explains that there are some conditions under which high CSE employees can decrease their enactment of 'dark' work behaviors, it simultaneously also explains that there are some unique work conditions that can actually motivate high CSE employees to participate in deviant behaviors. Specifically, this research reveals that CSE and identity threat moderate the negative relationship between work intensity and organizational deviance. This negative relationship strengthens when high CSE employees experience low identity threat, such that the positive information from intense work behaviors and the lack of identity threatening information verifies the positive self-concept held by high CSE employees, thereby leading to few episodes of organizational deviance. At the same time, these results also demonstrate that low levels of intense work behaviors lead to greater

organizational deviance among high CSE employees despite low identity threat – that is, the negative information that derives from low levels of work intensity do not confirm the positive self-concept of high CSE employees, thereby motivating deviant actions intended to assert their sense of self-worth.

The combination of this three-way interaction into the dual mediation model results in the contribution of two conditional indirect effect models to the extant HRM literature. These conditional indirect effect models delineate the conditions under which CSE and identity threat interact to shape the indirect effect of perceived HRM bundles on organizational deviance via intense work behaviors. Specifically, the results demonstrate that the mediating effect between perceived development HRM practices (but not maintenance HRM practices) and organizational deviance via intense work behaviors among high CSE employees is significant at low levels of identity threat. This investigation shows that specific personality and work situation characteristics can provide important and meaningful insights into the boundary conditions within the indirect relationship between perceived HRM practices and employee job performance. In doing so, this conditional indirect effect model helps to advance our present understanding of the impact of individual differences in perceived HRM research, especially given the scarcity of studies in this area (Guest, 2011).

This dissertation commences with an overview of the dominant theories used in the strategic HRM literature followed by a review of the research examining the link between perceived HRM practices and job performance at the individual-level. Second, the first study is presented starting with an overview of social exchange theory within the context of HRM research. This chapter then proceeds to discuss the theoretical development, methods, results, contributions, and limitations. Third, the second study is then presented starting with a review of

self-verification theory because it provides the foundation upon which to understand the moderating effects of CSE and identity threat in the negative indirect relationship between perceived HRM bundles and organizational deviance. This chapter then discusses the theoretical development, methods, results, and research contributions. Fourth, this dissertation concludes with a general discussion of this multi-study investigation with an elaboration of the research contributions, practical implications, limitations, and suggested avenues for further inquiry.

CHAPTER 2: LITERATURE REVIEW

Some scholars postulate that the earliest HRM issues manifested during the 1400s and consequently HRM issues predate most of the traditional business functions, such as accounting and finance (Deadrick & Stone, 2014). For example, Deadrick and Stone (2014) contend that HRM issues related to work design, reward allocation, and teamwork were apparent in most hunting and gathering situations, such that individuals often formed into groups, whereby each group member was responsible for specific tasks and duties to facilitate hunting and gathering. However, the intellectual roots of HRM are believed to have manifested hundreds of years later. Despite contentions that the intellectual roots of HRM research date to the mid-1960s (Kaufman, 2001), some scholars posit that this area of research can be traced to the contributions that commenced in the mid-1910s by labor economists and industrial relations academicians (Kaufman, 2001, 2002). Nevertheless, most HRM scholars share the belief that HRM research has largely developed in the three most recent decades (Lengnick-Hall et al., 2009). Scholars categorize this area of research into three domains: micro HRM, macro (strategic) HRM, and international HRM (Boxall, Purcell, & Wright, 2007).

In the following, a review of the dominant theoretical perspectives in strategic HRM research is provided in order to situate the emergence of the literature focused on individual-level perceptions of HRM practices.

Key Advancements in the Macro HRM Literature

Strategic HRM research mostly focuses on examining the relationship between firm-level HRM systems and organizational performance (e.g., Huselid, 1995; Youndt, Snell, Dean, & Lepak, 1996). Most researchers conceptualize these HRM systems as *high performance work*

systems (HPWS) – that is, HRM practices that are aimed at developing and improving employees' skills and abilities to enhance performance outcomes (R. Takeuchi, Lepak, Wang, & Takeuchi, 2007). Although there remains no consensus on the exact number and type of HRM practices within HPWS (Lepak, Liao, Chung, & Harden, 2006), numerous work and employment practices are often included. For example, HPWS often comprise recruitment and selection processes, compensation packages, on-the-job training, internal promotions, and employee participation initiatives (Pfeffer, 1995). The two other common conceptualizations of HRM systems are *high-involvement work systems* and *high-commitment employment systems*. Specifically, high-involvement systems use *work* practices to manage the design of work; therefore, these HRM systems place a significant emphasis on decentralized decision-making, employee participation, and problem-solving teams (Boxall & Macky, 2009). Conversely, high-commitment systems focus on the use of *employment* practices to foster positive employee-employer relationships in order to prompt high levels of employee commitment toward the organization (Boxall & Macky, 2009). These employment practices comprise procedures related to the recruitment, motivation, development, and retention of employees (Boxall & Macky, 2009). The combination of high-involvement *work* practices and high-commitment *employment* practices result in HPWS that use both work and employment practices to foster high levels of employee job performance (Marler, 2012; Zacharatos, Barling, & Iverson, 2005).

One of the first large-scale HRM studies that arguably remains the most influential HRM study was conducted by Huselid (1995) who shows that strategic HRM systems have a significant positive relationship with firm performance. Using a sample of nearly 1,000 firms, Huselid (1995) finds that a one-standard deviation increase in the use of HPWS is associated with a $27,044 increase in sales per employee, $18,641 increase in market value per employee,

$3,814 increase in profits per employee, and a 7 percent decrease in (voluntary and involuntary) turnover. Recent meta-analytic studies corroborate these results leading to what some researchers may deem to be rather conclusive evidence that HRM systems have a positive effect on firm performance (Combs et al., 2006; Jiang, Lepak, Hu, et al., 2012). Nevertheless, some scholars do raise concerns about this positive relationship (Cappelli & Neumark, 2001; Wall & Wood, 2005). Consequently, these concerns point to the need for more research devoted towards examining this relationship. The three theoretical perspectives that dominate the strategic HRM field in attempt to explain how HRM systems influence firm performance are reviewed next (cf. Jackson & Schuler, 1995; Wright & McMahan, 1992).

Universalistic Perspective

The universalistic (i.e., 'best practices') perspective is deemed the most simplistic theoretical explanation of the link between HRM practices and performance. This perspective rests on the premise that there is a positive linear relationship between HRM practices and performance (Delery & Doty, 1996). Specifically, this 'best practices' perspective posits that there are specific individual HRM practices and sets of HRM practices that result in enhanced performance across all firms irrespective of the characteristics of the firm, environment, resources, and so on (Martín-Alcázar, Romero-Fernández, & Sánchez-Gardey, 2005; Pfeffer, 1995). Stated differently, the 'best' HRM practices are those practices that not only have the potential to improve performance, but are also generalizable across organizations in various industries around the globe (B. E. Becker & Gerhart, 1996). The most common 'best' HRM practices comprise extensive training, self-managed teams, selective hiring processes, job

security, high compensation packages, reduced status differences, and extensive information sharing (Pfeffer, 1998).

Martín-Alcázar et al. (2005) posit that agency theory, human capital theory, and transaction costs theory represent some of the more common frameworks that are rooted in the universalistic perspective. For example, Becker's (1964) human capital theory explains that HRM practices have the capacity to improve organizational performance because HRM practices can result in valuable firm-specific human capital mostly through training and development practices. Notwithstanding empirical support for this perspective (Delery & Doty, 1996), this 'best practices' perspective is limited on two primary accounts (Lepak & Shaw, 2008). This approach fails to acknowledge the influence of contextual factors (e.g., environmental conditions) in which the HRM practices are implemented; consequently, the universalistic perspective is unable to account for the contextual influences in the HRM systems and firm performance relationship. Furthermore, this perspective also does not recognize the presence and interactive effects of multiple HRM practices in organizations, thereby omitting consideration of the potential synergistic effects among the individual HRM practices.

Contingency Perspective

The contingency approach (i.e., 'best fit') asserts that HRM practices have the greatest effect on organizational performance when HRM practices 'fit' with respect to internal and external features related to the organization (Delery & Doty, 1996). In other words, specific contingencies (i.e., moderators) can enhance or attenuate the effect of HRM practices on firm performance. A central feature of this perspective is the concept of *external (i.e., vertical) fit* – that is, the congruence between HRM practices and specific external contingencies (Colbert,

2004). This line of research mostly examines the interactive effects between HRM practices and business strategies (Miles & Snow, 1984), but some studies do examine other organizational features (e.g., size, structure, and technology) and the influence of the external environment (e.g., macroeconomics, competition, and labor contexts) (Martín-Alcázar et al., 2005).

Although multiple theories are rooted in the 'best fit' perspective, the most common theory that has been applied to the HRM practices and firm performance relationship is the resource-based view (RBV) (Lengnick-Hall et al., 2009). The RBV posits that valuable, rare, imperfectly imitable, and non-substitutable (VRIN) resources provide organizations with a competitive advantage that allow the firm to outperform its rivals (Barney, 1991). More specifically, valuable resources provide the organization with the opportunity to generate significant wealth, rare resources are not readily available to other organizations because they are uncommon in the market, imperfectly imitable resources are not readily subject to replication by rivals due to their unique nature, and non-substitutable resources are not easily replaced with resources of a similar nature (Barney, 1991).

These VRIN resources provide the organization with a *competitive advantage* when these resources are aligned with unique value-creating business strategies that are not simultaneously used by competitors (Barney, 1991). Organizations benefit from a *sustained competitive advantage* when their competitors cease all duplication efforts because of failed attempts to successfully replicate these value-generating strategies (Barney, 1991). Despite the advancements that the RBV approach has made to the HRM literature, this perspective is not without its criticisms (Kraaijenbrink, Spender, & Groen, 2010; Priem & Butler, 2001). For instance, Wang and Ahmed (2007) argue that the RBV lacks clear terminology (e.g., unclear definitions of resources, capabilities, and processes), fails to acknowledge the dynamic nature of

markets and the evolving nature of firms, and does not adequately explain the process through which resources are converted into a competitive advantage.

Nevertheless, numerous other theoretical perspectives are rooted in this 'best fit' perspective to offer alternative explanations to the HRM practices and firm performance relationship. For example, the behavioral perspective (Jackson, Schuler, & Rivero, 1989; Schuler & Jackson, 1987) asserts HRM practices have a positive effect on firm performance when the HRM practices elicit role behaviors that align with the organizational strategy. Other contingency theories include institutional theory (Eisenhardt, 1988) and the resource dependence framework, among others (Pfeffer & Salancik, 1978). Although the contingency perspective does account for the interactive effects between HRM practices and specific external contingencies, the major drawback of this perspective is its rather simplistic approach, such that it fails to recognize that there are a plethora of interactions within the organizational system that can influence organizational performance (Colbert, 2004).

Configurational Perspective

The configurational perspective posits that HRM bundles result in higher performance outcomes compared to single HRM practices (Huselid, 1995; Ichniowski, Shaw, & Prennushi, 1997; Macduffie, 1995). A central feature of this perspective is the concept of *internal (i.e., horizontal) fit* – that is, the presence of groups of HRM practices that are internally consistent and coherent (Wright & McMahan, 1992). In other words, HRM bundles that have 'internal fit' result in higher performance because HRM bundles with internally aligned HRM practices experience synergistic effects; therefore, these HRM bundles have more value than the sum of individual HRM practices. An important assumption that underlies the concept of internal fit is

equifinality – that is, there are multiple sets of different HRM bundles that comprise unique combinations of HRM practices that all equally result in the maximum value inherent in a set of HRM practices (Doty, Glick, & Huber, 1993).

One of the most common theoretical frameworks that illuminate the concept of HRM bundles is the ability, motivation, and opportunity (AMO) model (Appelbaum, Bailey, Berg, & Kalleberg, 2000). Specifically, the AMO model asserts that HRM practices can be grouped according to practices that are centered on ensuring that employees have the appropriate skills (e.g., rigorous selection, training, and development), motivating employees to make positive contributions (e.g., compensation practices and career advancement), and providing employees with opportunities to make significant contributions (e.g., information sharing and participative decision-making) (Jiang, Lepak, Hu, et al., 2012). A recent meta-analysis provides considerable support for the AMO model by demonstrating that skill- (i.e., ability), motivation-, and opportunity-enhancing bundles are significantly related to key proximal and distal performance outcomes (Jiang, Lepak, Hu, et al., 2012). However, an important limitation of the configurational perspective is that it does not account for the interactive effects between HRM systems and the external environment.

In response to this limitation, an important extension of the configurational perspective has been coined the *contingent configurational perspective* because it emphasizes *both* internal and external fit (Wright & McMahan, 1992). Specifically, HRM bundles that comprise a set of consistent and coherent HRM practices that 'fit' with specific external contingencies result in the highest levels of performance. Indeed, some of the earliest published HRM studies in recent decades recognized the importance of ensuring *both* internal and external 'fit'. For example, Miles and Snow (1984) argue that three different HRM bundles (i.e., defender, prospector, and

analyzer) are most effective when these HRM bundles are congruent with their respective HRM strategy (i.e., building, acquiring, and allocating human resources). To illustrate, an organization that concentrates on building the human resource base should focus on significant entry-level recruitment, extensive training and skill-building programs, and process-oriented performance appraisals (Miles & Snow, 1984). Despite that the contingent configurational perspective does provide a more accurate account of the true complexity of HRM systems, the measurement challenges make testing more than a few configurations unmanageable, thereby hindering its theoretical value (Colbert, 2004).

The Shift from Macro HRM to Micro HRM Research

This review of the dominant theories in the strategic HRM field demonstrates that numerous explanations can account for the relationship between firm-level HRM practices and organizational performance. Although studies offer empirical support for each of these theoretical perspectives (Delery & Shaw, 2001; Wright, Dunford, & Snell, 2001), recent contentions call for more nuanced explanations of the HRM practices and firm performance relationship using a worker-centered approach (Guest, 2011). Specifically, some scholars posit there is a need for more research on employee perceptions of HRM practices because it is *employee perceptions* of HRM practices that affect subsequent employee attitudes and behaviors that aggregate to shape firm-level performance (Liao et al., 2009).

In consequence, an increasing number of scholars draw on cross- and multi-level frameworks to delve into the HRM practices and firm performance 'black box' with a particular focus on the role of employees. This line of worker-centered research mostly focuses on the role of employee attitudes and behaviors at multiple levels of analysis to advance our understanding

of *how* and *why* HRM practices influence performance outcomes. For example, Takeuchi, Chen, and Lepak (2009) use a cross-level framework to demonstrate that HPWS positively relates to concern for employees' climate at the establishment-level that subsequently results in high levels of job satisfaction and affective commitment at the individual-level. Moreover, Messersmith et al. (2011) show that the 'black box' between HPWS and performance at the department-level can be explained by the direct effect of employee attitudes (i.e., job satisfaction, organizational commitment, and empowerment) on organizational citizenship behaviors that are directed at both colleagues and the department. Lastly, S. Chang, Jia, Takeuchi, and Cai (2014) use a firm-level framework to demonstrate that high-commitment work systems at the macro-level positively relate to individual-level employee creativity, especially in situations of strong team cohesion and complex team tasks.

Despite the importance of connecting macro-level constructs to micro-level constructs to advance our understanding of the relationship between HRM practices and performance, scholars have called for more research at the individual-level because, as previously alluded, firm performance does not merely emerge, but rather employee actions aggregate to shape organizational performance (Kozlowski & Klein, 2000). Therefore, research is needed to advance our understanding of the primary organizational processes and procedures, such as HRM practices, that can lead to favorable employee attitudes and behaviors. Since studies show that employees form unique perceptions about HRM practices (Nishii et al., 2008) that differ from managers (Liao et al., 2009), I focus on the impact of employee perceptions of HRM practices on employee job performance at the individual-level. Therefore, the next section reviews the research that examines the link between perceived HRM practices and job performance.

Key Advancements in the Micro HRM Literature

Much of the worker-centered studies in the HRM literature focus on understanding the antecedents and consequences of *perceived HRM practices* – that is, employee interpretations of HRM practices that derive from his or her experiences with these HRM practices (Wright & Nishii, 2013). However, an important point of theoretical distinction that merits a brief discussion is the difference between intended HRM practices, implemented HRM practices, and perceived HRM practices (Nishii & Wright, 2008; Wright & Nishii, 2013). Specifically, organizational decision-makers create the *intended HRM practices* that are meant to support the alignment between the human resource strategy and the organizational business strategy, thereby reflecting a firm-level phenomenon. In contrast, *implemented (actual) HRM practices* refer to the actual implementation of the intended HRM practices, thereby representing a group-level phenomenon. Finally, as noted above, employee *perceptions of HRM practices* are underpinned by employees' experiences and interpretations of the implemented HRM practices, thereby representing an individual-level phenomenon. The desired employee behaviors and attitudes are most likely to manifest when there is congruence between the intended, implemented, and perceived HRM practices (Gelens, Dries, Hofmans, & Pepermans, 2013); however, studies indicate there is often a discrepancy between these different conceptualizations of HRM practices (Khilji & Wang, 2006; Liao et al., 2009).

As previously explained, I focus on perceived HRM practices for multiple reasons, but in particular, I focus on this conceptualization because studies show that perceived HRM practices are the strongest predictors of employee outcomes compared to intended and implemented HRM practices (Boxall & Macky, 2009). The perceived HRM literature has conceptualized and operationalized this construct in many different forms (Gelens et al., 2013). To illustrate, some

researchers define perceived HRM practices as an employee's awareness of the availability or existence of HRM practices (e.g., Bal, Kooij, & De Jong, 2013). Other studies conceptualize employee perceptions of HRM practices in terms of their perceived satisfaction with HRM practices (e.g., Katou, Budhwar, & Patel, 2014; Kinnie, Hutchinson, Purcell, Rayton, & Swart, 2005). Similarly, researchers also examine employee evaluations of HRM practices (e.g., Jensen, Patel, & Messersmith, 2013), while other researchers draw on a combination of the aforementioned approaches (e.g., Macky & Boxall, 2007).

In a similar vein, researchers also differ in terms of how they believe HRM practices should be configured to maximize performance outcomes. In particular, HRM practices are predominantly bundled according to three different factors, namely, the extent of HRM investment, the focus of specific HRM functions, and the goals to be accomplished via HRM practices (Toh, Morgeson, & Campion, 2008). Accordingly, researchers have developed numerous taxonomies to differentiate HRM practices according to these different foci. As previously mentioned, the most common set of HRM bundles refers to the ability-, motivation-, and opportunity-enhancing bundles (Appelbaum et al., 2000). In recent years, however, researchers have proposed other conceptualizations of HRM bundles in order to reflect these different purposes of HRM practices. For example, Toh et al. (2008) propose five different HRM bundles: commitment maximizers, contingent motivators, resource makers, competitive motivators, and cost minimizers. Drawing on social exchange and employee-organization relationship theories, Shaw, Dineen, Fang, and Vellella (2009) offer two different HRM bundles, namely, HRM inducements and investments bundle, and expectation-enhancing HRM bundle. Meta-analytic research by Subramony (2009) differentiates HRM practices according to empowerment-, motivation-, and skill-enhancing HRM bundles. Indeed, these examples

represent a fraction of the taxonomies of HRM bundles that have been developed in recent years (Posthuma, Campion, Masimova, & Campion, 2013).

The present research draws on the differentiation of HRM practices into maintenance and development HRM bundles because these two HRM bundles represent the two dominant approaches to HRM taken by organizations (Gong et al., 2009). HRM practices operate within open systems that require one sub-function (i.e., maintenance HRM bundles) that ensures stability throughout the entire system, while another sub-function (i.e., development HRM bundles) focuses on enhancing the productivity and performance of the system (Gong et al., 2009). In particular, maintenance HRM bundles are intended to help employees maintain their functioning, especially in the presence of new challenges and obstacles (Kooij et al., 2013). This bundle includes formal performance appraisals, career advice, information sharing, and opportunities to share ideas within the organization. In contrast, development HRM bundles are meant to help employees improve their functioning by fostering advancement, growth, and accomplishments (Kooij et al., 2013). This bundle includes HRM practices related to formal training to build operational skills, improving employee knowledge in preparation for future work opportunities, work that is designed to offer challenging tasks, and work opportunities to help employees make use of their knowledge and skills.

Consistent with other HRM taxonomies (Jiang, Lepak, Hu, et al., 2012), studies show that maintenance and development HRM bundles can impact the same employee outcomes (Kooij et al., 2010), but these bundles can also impact different outcomes (Gong et al., 2009). This interesting result highlights an important point of contention that merits further scholarly attention – that is, research is needed to understand the conditions under which the different foci of these different HRM bundles lead to the same outcomes, while at other times lead to

completely distinct outcomes. Stated differently, more research is needed to understand the types of attitudes and behaviors that can manifest from both maintenance and development HRM bundles, while studies are also needed to investigate the differential effects of these HRM bundles. In this research, I contribute to the former need for research with an examination of how maintenance and development HRM bundles indirectly influence deviant behaviors via work intensity. My intention is to demonstrate that *both* types of HRM bundles help to decrease deviant work behaviors. Despite the different foci of these HRM bundles, this research does not include a priori theorizing about the differential effects of the two HRM bundles on workplace deviance for two reasons.

Since both HRM bundles involve significant organizational resources, albeit with different foci (Kooij et al., 2013), there is no basis upon which to theorize that one bundle is expected to induce a stronger behavioral response from employees. In other words, both HRM bundles signal to employees that the organization values their contributions, but it is simply that the foci of the HRM bundles are different. Maintenance HRM bundles signal to employees that they are valued by helping employees to maintain their functioning in the presence of new challenges, while development HRM bundles signal that employees are valued by helping employees to flourish, grow, and improve their functioning (Kooij et al., 2013).[2] Interestingly, this research aims to contrast some of the extant HRM literature by showing that different HRM bundles with different foci can have shared meaningful implications for employee behavior. In further support of this perspective, there is no specific connection between the purpose of these

[2] The social exchange perspective suggests that employees respond 'in kind' to the perceived support from the HRM practices that are offered by the organization (Blau, 1964). According to this theoretical perspective, HRM bundles that are perceived to represent more significant employee investments are likely to elicit stronger behavioral reactions from employees. However, because there is no research to suggest that these bundles represent different levels of HRM investment, I do not theorize differential effects of these HRM bundles. However, this research does include a post-hoc exploration of the potential differences in the strength of these effects on work intensity and specific types of deviant behaviors.

HRM bundles and this specific job performance outcome (i.e., both HRM bundles are not directly intended to decrease deviant behaviors), thereby further suggesting that both HRM bundles can have similar effects on workplace deviance. In essence, I adopt the position that maintenance and development HRM bundles represent similar employee investments and consequently should elicit similar behavioral reactions from employees, especially because neither HRM bundle is specifically focused on decreasing deviant work behaviors.

Since the present research focuses on the relationship between perceived HRM practices and employee job performance, namely, deviant behaviors, the next section reviews the literature that examines the relationship between perceived HRM practices and the three most common job performance dimensions – that is, task performance, citizenship behaviors, and counterproductive work behaviors. However, an overview of the key mediators and moderators that are often used to delineate the relationship between perceived HRM practices and employee outcomes are first reviewed.

Mediators and Moderators

Mediators. The accumulation of studies that provide support for the positive relationship between HRM practices and performance (Combs et al., 2006) has resulted in numerous calls for research to examine this 'black box' (B. E. Becker & Huselid, 2006). Specifically, calls for more research to examine the mediating role of employee attitudes and behaviors in the HRM practices and firm performance relationship started to surface because much of this HRM research neglected the role of employees. Indeed, Guest (2002, p. 353) noted: "workers do not passively accept HR practices but actively evaluate and respond to them". Many researchers have responded to these calls to open up the 'black box' using cross- and multi-level research

designs (Jiang et al., 2013), but there is much less research in this domain that solely focuses on the individual-level (Werner, 2011).

There are two primary avenues in which researchers have explained the effects of HRM practices (Boselie, Brewster, & Paauwe, 2009). The mainstream 'unitarist' perspective asserts that HRM practices are beneficial for both employees and the employer because these HRM practices comprise shared goals and interests. Most HRM research has taken this perspective by showing that HRM practices are positively related to employee attitudes and behaviors that consequently results in increased firm performance. More recently, studies have started to investigate this relationship at the individual-level with an examination of the mediating mechanisms in the positive link between perceived HRM practices and employee outcomes. Researchers have drawn on multiple attitudinal and behavioral mediators to explain this relationship in accordance with the overarching theoretical frameworks driving these studies.[3]

In accordance with this 'unitarist' perspective, the perceived HRM literature has drawn upon multiple employee attitudes and behaviors from both the management and psychology literatures to understand the mediating effects in the perceived HRM practices and employee outcomes relationship. For example, drawing from the employee safety literature, Zacharatos et al. (2005) find that perceived safety climate mediates the relationship between perceived HPWS and personal safety orientation and safety incidents, but trust in management only mediates the relationship between perceived HPWS and safety incidents. Using insights from the person-environment fit literature, Boon, Den Hartog, Boselie, and Paauwe (2011) find that person-organization fit partially mediates the relationships between perceived HPWS and organizational commitment and OCBs. In a similar vein, person-job fit partially mediates the relationships

[3] I draw upon some of the mediation studies in the perceived HRM literature in this section, but for simplicity I do not include all studies. Rather, additional studies are provided in the section that explores the direct and indirect effects of perceived HRM practices on job performance.

between perceived HPWS and turnover intentions and job satisfaction (Boon et al., 2011). Moreover, Liao et al. (2009) find that perceived HPWS positively relate to general service performance via the mediating effects of human capital and perceived organizational support. These researchers further show that perceived HPWS relate to knowledge-intensive service performance through human capital and psychological empowerment (Liao et al., 2009).

Furthermore, psychological empowerment mediates the relationship between perceived high-involvement work processes and job satisfaction, organizational commitment, job performance, and job stress (Butts, Vandenberg, DeJoy, Schaffer, & Wilson, 2009). Emerging research further demonstrates that employee perceptions of the employment relation HRM bundle (but not the people flow HRM bundle) negatively relate to time spent on task activities and positively relate to time spent on contextual activities via extra effort (Boon, Belschak, Den Hartog, & Pijnenburg, 2014). The results also demonstrate there is a negative indirect effect of employee perceptions of three HRM bundles (i.e., people flow, appraisal and reward, and employment relation) on time spent on task activities via job satisfaction and extra effort, but all perceived HRM bundles positively relate to time spent on contextual activities. Furthermore, recent research provides support for the indirect effect of employee perceptions of HPWS on affective commitment through the mediating effects of job satisfaction and engagement, and that perceived HPWS also indirectly relates to turnover intentions via the mediating roles of job satisfaction and engagement (Ang, Bartram, McNeil, Leggat, & Stanton, 2013). Recent research shows that perceived HRM practices indirectly relate to intent to stay via procedural justice of the HRM practices and satisfaction with the manager (Armstrong-Stassen, Freeman, Cameron, & Rajacic, 2015). In short, these studies demonstrate that advancements have been made to demonstrate the effect of perceived HRM practices and employee outcomes, but there are no

consistent mediators across these studies. These inconsistent results insinuate that we do not yet have a complete understanding of the range of possible mediators in the HRM practices and employee outcomes relationship. Therefore, more research on the 'black box' is needed before we can understand which constructs represent the 'core' mediators that have the most fundamental influence in explaining the HRM practices and employee outcomes relationship.

In contrast, the 'pluralist' perspective asserts that HRM practices do not have a positive universal impact on organizations *and* employees. This perspective presumes that the interests and goals of employees and organizations are in direct conflict – that is, the interests of the organization are not congruent with those of the employees. Specifically, this perspective asserts that HRM practices result in positive implications for organizational success, but it often comes at the expense of employees, or at best results in a neutral impact on employees. The most common theoretical account rooted in this perspective is the 'labor process' critique that states that the link between HRM practices and performance can be explained by increased demands and pressures on employees in attempt to increase performance (Ramsay et al., 2000). Critics of HRM research often argue that this push for efficiency often causes harmful health, psychological, and social implications not only for employees, but also for their families and society at large (Mariappanadar, 2012). For example, Jensen et al. (2013) find that employee anxiety and role overload both mediate the positive indirect effect of perceived HPWS on turnover intentions. In other words, perceived HPWS can prompt employees to look for alternative employment because of the workload and anxiety caused by HRM practices.

As mentioned, an important area of this research focuses on the impact of HRM practices in shaping intense work demands to help improve performance outcomes. A key assumption underpinning this perspective is that employees often suffer negative consequences as a result of

more intense work demands, thereby allowing organizations to profit at the expense of their employees (Godard, 2004). In other words, the basic assertion is that HRM practices cause work demands to be more intense that in turn accounts for increased performance and productivity. Despite that this perspective has not garnered significant attention from mainstream HRM research, some scholars have examined the connection between HRM practices and work intensity (and similar work demands), but these studies provide mixed conclusions. For example, Ramsay et al. (2000) provide some support for the labor process viewpoint, such that HPWS are linked to work intensity, but HPWS was examined at the workplace-level as rated by managers. In a similar vein, research shows that high levels of specific HPWS practices relate to higher levels of work intensity, as measured by workload and job stress (Godard, 2001). Research also shows that specific high-performance HRM practices (i.e., performance appraisals, group-working practices, and performance-related pay) can lead to negative work-to-home spillover effects due to the presumed effect of work intensity (White, Hill, McGovern, Mills, & Smeaton, 2003). These researchers note that this is a particularly pressing concern because "… if these practices continue to diffuse, they will lead to further work intensification and the creation of more severe pressures on home life" (White et al., 2003, p. 192).

Moreover, Green (2004) further demonstrates that manager ratings of HRM practices (i.e., pay-related performance and employee involvement) relate to increased work intensity. Recently, qualitative research demonstrates that some workers believe that the effects of HRM practices on increased performance is due to the intensification of their work, such that these employees indicated feeling extreme levels of work overload (Hyde, Harris, Boaden, & Cortvriend, 2009). In a similar vein, a mixed methods study reveals that workers believed that some HRM practices (e.g., performance monitoring) relate to higher work intensity because of the heightened pressure,

stress, and workload associated with the HRM practices (Tregaskis, Daniels, Glover, Butler, & Meyer, 2013).

An important caveat of this research is the conceptualization and operationalization of work intensity (Burchielli, Pearson, & Thanacoody, 2006; Zeytinoglu et al., 2007). This area of research often broadly defines work intensity in terms of the affect, energy, and pace of job tasks and activities (Burke et al., 2010). Therefore, it is without surprise that researchers have drawn on quite distinct measures to evaluate work intensity, especially since there is not one widely accepted measure of intense work demands. The most simplistic measure that has been used is the number of hours worked, but this measure fails to accurately capture the actual *intensity* of work demands (e.g., long hours do not always indicate that employees are required to devote significant personal energies into their work). Some researchers use existing datasets and therefore have been necessitated to select the best measure available in the dataset – for example, Green (2004) measures work intensity with managerial reports that assessed 'how hard people work here'. Another common approach is illustrated by Boxall and Macky (2014) who measure work intensity using three separate measures, namely, the number of hours worked, role overload, and time demands.

These aforementioned studies show that researchers have taken varied approaches to empirically assessing the HRM practices and intense work demands relationship. The inconsistent measuring of work intensity, from a job demands perspective, not only represents an important drawback of this line of research, but it might help to provide a partial account of the mixed results in the extant research. However, the conceptualization and operationalization of work intensity from a behavioral perspective has been consistent across studies (e.g., Brown &

Leigh, 1996; Piccolo et al., 2010). For example, most studies use Brown and Leigh's (1996) conceptualization of work intensity along with the 5-item scale developed in that research.

In sum, the extant HRM research largely focuses on the conceptualization of work intensity from a job demands perspective – that is, intense work demands are often viewed as a negative outcome of HRM practices. The assumption underlying this perspective is the belief that external forces (i.e., the organization) prompt intense work demands that cause the job role to comprise more intense work. In other words, employees do not make the choice to work more intensely in their job role, but rather they experience indirect forces that require them to perform these intense work demands. An important limitation of this vein of research is that work intensity is often viewed through a 'dark' lens, but research has yet to examine whether work intensity can be viewed from a positive perspective within HRM research. In response, this research examines whether perceived HRM practices are positively related to intense work behaviors. This perspective presumes that work intensity is a positive behavior that can be motivated by internal forces (i.e., the employees). Stated differently, this perspective assumes that employees make the conscious decision to choose to 'work harder' in their job role, especially when these employees perceive that the organization makes significant investments in its employees.

Therefore, in this research, I examine how perceived HRM practices influence work intensity from a behavioral perspective to advance our understanding of whether perceived HRM practices prompt intense work behaviors. As mentioned, this research aims to contrast extant research by examining the effect of perceived HRM practices on work intensity from a positive behavioral standpoint. Furthermore, this research also examines the subsequent impact of work intensity on another important employee outcome – that is, workplace deviance. However, prior

to reviewing the research examining the relationship between perceived HRM practices and job performance, I next review the role of moderators in the perceived HRM practices research.

Moderators. While limited research examines the role of mediators in the perceived HRM literature, fewer studies examine the role of moderators in this domain. This lack of research represents an important (and somewhat surprising) gap in the HRM literature because employee perceptions of HRM practices on job performance behaviors are unlikely to be universal across employees due to numerous employee differences. Indeed, studies show that individual differences related to demographic characteristics (Kooij et al., 2010), personality traits (Tepper et al., 2001), and situational factors (Brouer & Harris, 2007) represent important moderators in management research. Recent contentions by scholars call for more studies that examine the role of moderators in HRM research. For example, Jiang et al. (2013, p. 1272) state: "most investigations of mediation process did not consider boundary conditions for the effects studied, which implies another fertile area for future research". Nevertheless, there remain few studies that examine moderators in the HRM practices and employee outcomes relationship.

Most studies that have made strides in this line of research focus on job and work-related attitudes and characteristics as moderators in the perceived HRM practices and employee outcomes relationship. For instance, Boon et al. (2011) demonstrate that person-job fit moderates the relationship between perceived HPWS and job satisfaction and turnover intentions, such that these relationships are strongest when person-job fit is low compared to when person-job fit is high. Moreover, research also demonstrates that perceived HRM practices interact with trust in the employer to shape task performance, turnover intentions, and well-being (Alfes et al., 2012). Furthermore, Braekkan (2012) shows that the negative relationship between perceived HPWS

and psychological contract violations strengthens when there is high (compared to low) relational psychological contract content. Research further demonstrates the moderating effect of job control in the positive relationship between perceived HPWS and employee anxiety and role overload, such that these positive relationships strengthen as job control decreases (Jensen et al., 2013). Drawing from the exchange-based perspective, recent research also shows that employee perceptions of an economic exchange with their employer strengthens the relationship between perceived HPWS and emotional exhaustion, while perceptions of social exchange reduce the strength of this relationship (M. Zhang, Zhu, Dowling, & Bartram, 2013).

Another line of research focuses on the role of personal differences in shaping the link between perceived HRM practices and employee outcomes. For example, meta-analytic research provides some support for the importance of age in shaping the relationship between HRM bundles and affective commitment and job satisfaction (Kooij et al., 2010). Research by Kooij et al. (2013) also shows that age has a significant moderating effect between both maintenance and development HRM bundles and employee well-being. In sum, these studies provide evidence of the importance albeit dearth of research that examines the role of individual differences in the perceived HRM practices literature.

This multi-study investigation examines the moderating role of core self-evaluations for three important reasons. First, research demonstrates that high levels of CSE are extremely important in shaping positive job performance (C. -H. Chang et al., 2012). Therefore, CSE can have an instrumental influence in the perceived HRM practices and job performance relationship. Second, C. -H. Chang et al. (2012) explain that CSE can play a key moderating role in management research because employee reactions to their work environment can be influenced by how worthy employees view themselves. Third, self-verification theory suggests that

employees are motivated to seek feedback that affirms their self-view, but information that contradicts this self-view can motivate negative behaviors that are used to restore their self-view (Swann, 1983, 2012). Therefore, this research examines how both positive and negative feedback can influence deviant work behaviors when employees have high CSE.

Job Performance Outcomes

Task Performance. Mc Manus and Kelly (1999, p. 141) define task performance as "behaviors that are formally recognized as part of the job and either contribute to the organization's technical core directly or service it indirectly". In other words, task performance comprises behaviors that are needed to successfully complete the required tasks and duties of the job. In line with extant HRM research, perceived HRM practices primarily focus on providing employees with the support and resources to facilitate task accomplishment; therefore, employee perceptions of HRM practices should positively relate to task performance.

Multiple studies provide support for both a direct and indirect positive relationship between perceived HRM practices and task performance. For example, Kuvaas and Dysvik (2010) find that employee perceptions of the organization's investment in employee development HRM practices (i.e., the organization's perceived commitment to long-term employee investments) fully mediates the positive relationship between perceived supervisor support and self-report general work performance (i.e., work effort and work quality). In addition, perceived supervisor support also positively moderates the relationship between these development HRM practices and self-report work performance (i.e., work effort and work quality), but only at high levels of perceived supervisor support. Furthermore, Shih, Chiang, and Hsu (2010) show that employee perceptions of high-involvement work systems positively relate

to supervisor ratings of expatriate job performance. However, perceived HRM practices also positively relate to work-family conflict, but work-family conflict negatively relates to job performance. In other words, this research shows that work-family conflict can indirectly diminish the positive implications associated with HRM systems (Shih et al., 2010).

In a similar vein, researchers show that employee experiences of HRM practices positively relate to supervisors' time-lagged ratings of employees' task performance via compliance behavior (Boxall, Ang, & Bartram, 2011). Ehrnrooth and Björkmann (2012) also show that employee perceptions of HRM process (i.e., relevance, intensity, and validity of HRM practice content) positively relate to supervisor-rated core job performance. However, contrary to previous research (Butts et al., 2009), psychological empowerment did not mediate this relationship (Ehrnrooth & Björkman, 2012). Finally, research also demonstrates that employee perceptions of HPWS positively relate to supervisor ratings of job performance, but relational psychological contract and work involvement partially mediate this relationship (Shih, Chiang, & Hsu, 2013). Moreover, research also demonstrates that perceived HRM practices positively relate to self-report task performance via employee engagement (Alfes, Truss, et al., 2013).

In contrast, some studies also indicate that perceived HRM practices do not relate to task performance. For example, Kuvaas (2008) finds that employee evaluations of HRM practices in terms of their satisfaction and adequacy of developmental practices (e.g., career development, training, and performance appraisals) are unrelated to self-report general work performance; however, Kuvaas (2008) did find that these employee evaluations of developmental HRM practices positively relate to work performance at high levels of perceived organizational support, procedural justice, and interactional justice. Similarly, Alfes et al. (2012) show that perceived high-performance HRM practices do not have a direct positive effect on manager ratings of task

performance, but employee trust in the employer does positively moderate this relationship at high levels of trust in the employer. One exception that counters this line of research is by Kuvaas (2008) who finds that perceived developmental HRM practices negatively relate to work performance when employees have a low-quality employee-organization relationship, thereby showing that developmental HRM practices can adversely impact job performance under certain circumstances.

Researchers have extended this line of research by focusing on the link between perceived HRM practices and specific task-related dimensions of job performance. For example, Browning (2006) shows that perceived HRM practices positively relate to service behavior via organizational commitment. As mentioned, Liao et al. (2009) also find that perceived HPWS positively relate to service performance via employee human capital and perceived organizational support. Recently, Ehrnrooth and Björkmann (2012) find that perceived HRM process not only has a direct positive relationship with creative performance, but psychological empowerment also fully mediates this relationship. In sum, extant research has pointed to some convergence related to the positive link between perceived HRM practices and task performance, but this lack of unilateral support does suggest that this relationship is quite complex.

Organizational Citizenship Behaviors. Organizational citizenship behaviors (OCBs) are voluntary behaviors that are not formally defined in an employee's job description, but help to promote organizational functioning (Lee & Allen, 2002). Specifically, extra-role behaviors that are targeted towards other employees are termed *OCB-Individuals* (OCB-I), while behaviors that are directed towards the firm are termed *OCB-Organization* (OCB-O) (L. J. Williams & Anderson, 1991). Sample OCB-I include: helping other colleagues who have work-related

problems and offering assistance to colleagues who have been absent from work (Lee & Allen, 2002). Sample OCB-O include: offering ideas to help the organization improve its current level of functioning and voluntarily attending functions that help to promote the organizational image (Lee & Allen, 2002). In addition to studies that examine the antecedents of OCBs from numerous management and psychological perspectives (Organ & Ryan, 1995), HRM researchers have contributed to this body of research with some meaningful insights into the role of perceived HRM practices in fostering citizenship behavior.

Multiple studies suggest that perceived HRM practices positively relate to OCBs because employees who perceive that the organization has made significant employee investments feel obliged to 'give back' to the organization. For instance, Kuvaas and Dysvik (2010) find that perceived supervisor support positively relates to employee perceptions of the organization's investment in development HRM practices that in turn positively relates to a specific type of OCB, namely, employee helping behaviors. As alluded, research also shows that employee perceptions of high-performance HRM practices positively relate to self-report OCBs (i.e., altruism, civic virtue, and courtesy) (Boon et al., 2011). Moreover, Alfes and colleagues (2012) find that perceived HRM practices positively relate to OCB-I. Corroborating these results, Alfes, Shantz, Truss, and Soane (2013) find that employee perceptions of HRM practices also positively relate to self-report OCB-O. In other words, employees who feel that the organization uses HRM practices to express their commitment often experience a felt obligation to reciprocate with discretionary extra-role behaviors (Alfes, Shantz, et al., 2013). Similarly, Mostafa and Gould-Williams (2014) find that perceived HPWS positively relate to a general measure of OCB that includes both OCB-I and OCB-O.

Nevertheless, limited research does suggest a possible insignificant relationship between

perceived HRM practices and OCBs. For instance, Boselie (2010) finds that employee perceptions of the ability- and motivation-enhancing HRM bundles do not significantly relate to specific OCBs (i.e., altruism, conscientiousness, civic virtue, sportsmanship, and courtesy); however, this study reports that the opportunity-enhancing HRM bundle does positively relate to these OCBs (Boselie, 2010). While most studies offer empirical support for a positive relationship between perceived HRM practices and OCBs, there is some research that suggests that perceived HRM practices might not directly relate to such extra-role behaviors.

Counterproductive Work Behaviors. The third dimension of job performance refers to negative performance behaviors that harm the organization; therefore, the highest performing employees also demonstrate low levels of deviant behaviors (Rotundo & Sackett, 2002). As mentioned, workplace deviance refers to the voluntary use of behaviors that harm the organization and/or its constituents through the purposeful violation of rules and procedures (Robinson & Bennett, 1995). Bennett and Robinson (2000) conceptualize workplace deviance according to behaviors that are directed towards harming the organization (*organizational deviance*) and those that are directed towards harming individuals in the organization (*interpersonal deviance*). Organizational deviance includes showing up late for work and intentionally working slower than one is capable of working (Bennett & Robinson, 2000). Interpersonal deviance includes being rude to others at work and making fun of others in the workplace (Bennett & Robinson, 2000). Despite that some research examines the link between perceived HRM practices to multiple forms of positive job performance behaviors, few studies examine its relationship with workplace deviance.

To date, there are only four known studies that investigate this relationship between

perceived HRM practices and workplace deviance at the individual-level. The earliest known study examines the relationship between perceived HRM practices and interpersonal deviance (Shamsudin et al., 2011). The results indicate that three (i.e., job description, employment security, and internal career opportunities) of the four types of HRM practices (i.e., results-oriented performance appraisal) negatively relate to interpersonal deviance. Drawing on social exchange theory, Shamsudin et al. (2012) posit that HRM practices positively relate to organizational commitment that in turn negatively influences cyberdeviance – a specific form of production deviance – because employees seek to participate in behaviors that adhere to organizational norms.

Furthermore, Al-Shuaibi et al. (2014) find that HRM practices (i.e., performance appraisal, compensation practices, career advancement, and job security) account for nearly 70 percent of the variance in cyberdeviance. Specifically, pay satisfaction partially mediates the relationship between performance appraisals and cyberdeviance, while workload satisfaction partially mediates the relationship between two HRM practices (i.e., performance appraisal and career advancement) and cyberdeviance. Finally, Shamsudin et al. (2014) show that three (i.e., job description, employment security, and internal career opportunities) of four (i.e., results-oriented performance appraisals) HRM practices negatively relate to peer ratings of interpersonal deviance. Specifically, satisfaction with tangible rewards fully mediates the relationship between job descriptions and workplace deviance, and satisfaction with interpersonal relationships fully mediates the relationships between two HRM practices (i.e., job description and internal career opportunities) and partially mediates the relationship between one HRM practice (i.e., employment security) and interpersonal deviance. Taken together, these studies provide evidence of the importance of examining how perceived HRM practices can discourage workplace

deviance, but the scarcity of research in this area has offered few insights into why HRM practices can avert workplace deviance.

Summary

The perceived HRM practices literature has recently started to focus on how employee perceptions of HRM practices influence the three core dimensions of job performance. In line with social exchange theory, employees who perceive that the organization has made significant employee investments through HRM practices choose to reciprocate with positive attitudes and behaviors (Blau, 1964). Furthermore, this perspective also suggests that employees who perceive that the organization is making significant employee investments also choose to avoid 'dark' work behaviors that tend to cause the organization significant harm (Blau, 1964; Gouldner, 1960). However, studies mostly focus on the positive effects of perceived HRM practices on task performance and OCBs, while few studies examine the impact of perceived HRM practices on workplace deviance. As previously mentioned, this dearth of research highlights important theoretical and empirical gaps in the extant HRM literature. Specifically, this line of research does not examine the role of HRM bundles in decreasing workplace deviance, such that most research focuses on specific types of HRM practices (e.g., Al-Shuaibi et al., 2014). Moreover, these studies offer limited insight into the mediating mechanisms that can help us to understand why perceived HRM practices negatively relate to workplace deviance. In particular, further research is also needed to account for the conditions under which these mediations remain significant in order to better account for the true complexity of organizational life (Jiang et al., 2013).

In sum, more research is needed to understand how organizations can create a work

environment that discourages workplace deviance not only from a scholarly standpoint, but from a practical viewpoint as well. Since limited research has focused on the role of work and employment practices in preventing workplace deviance (Arthur, 2011), organizations have a limited understanding of how organizational procedures and processes can thwart deviant behavior. This is a particularly important research need because the costs of workplace deviance for organizations and employees are significant and harmful (Greenberg, 1997; Jex et al., 2010). Therefore, the next chapter uses social exchange theory to theoretically develop the hypotheses that postulate perceived HRM bundles negatively relate to workplace deviance via intense work behaviors in Study 1.

CHAPTER 3: STUDY 1

Theoretical Development

Social Exchange Theory in HRM Research

The employee-employer relationships literature delineates two primary forms of exchange-based relationships, namely, economic exchange and social exchange relationships. Economic exchange relationships manifest when the nature of the relationship is characterized by monetary exchanges over a finite period (Shore, Coyle-Shapiro, Chen, & Tetrick, 2009). These exchange relationships involve a shared understanding of the exchange conditions via formal employment contracts. Specifically, employment contracts set out the required behaviors of both parties, such that the employee concedes to completing a set of tasks and duties in a specified time period in exchange for monetary compensation from the employer. Often both parties refrain from extra-role behaviors because these types of actions exceed the terms and conditions outlined in the employment contract.

In contrast, social exchange relationships involve the exchange of valuable and non-tangible resources by both parties (Shore et al., 2009). *Social exchange theory* states that individuals engage in specific actions with the belief that the receiver will return the received benefit in a similar manner (Blau, 1964). Hence, this form of reciprocity has also been coined 'repayment in kind' (Cropanzano & Mitchell, 2005, p. 875). Specifically, the *norm of reciprocity* posits that the receiver usually experiences a felt obligation to reciprocate the received benefit; consequently, the receiver intentionally participates in actions to benefit the sender in order to sustain a positive relationship with the sender (Gouldner, 1960). To illustrate, an employee who accepts the benefits (or receives some value as a result of the employer's actions) experiences a felt obligation to generate some value for the employer in order to maintain this positive

exchange relationship over time. Indeed, one of the defining characteristics of social exchange relationships pertains to the inherent dependency between these parties (Cropanzano & Mitchell, 2005). However, this reliance involves an inherent risk of uncertainty because these relationships do not include an explicit outline of the exchange conditions (Blau, 1964). Rather, both parties experience an unspecified obligation to return the received benefit from the other party in order to maintain a high-quality relationship.

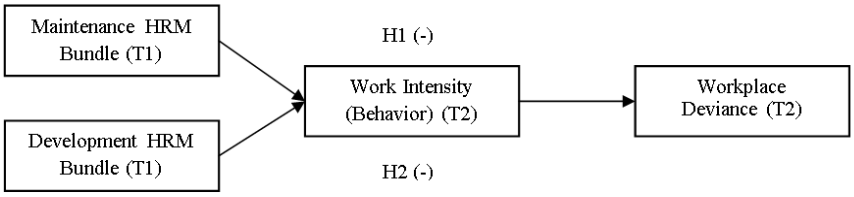
Social exchange theory has been widely used in the management literature because it helps to explain much of the employee behavior that extends beyond the simple completion of tasks and duties (Shore, Tetrick, Lynch, & Barksdale, 2006). This theoretical framework explains why employees choose to participate in positive behaviors and also choose to avoid negative behaviors when these employees perceive that the organization provides meaningful support and resources. In particular, organizations often use HRM practices to create a specific type of exchange-based relationship with their employees, such that most organizations use HRM practices (as a signal of employee investment, concern, value, appreciation, etc.) with the intention of fostering a social exchange relationship. In other words, HRM practices create the perception that the organization cares about their employees through the investment of multiple resources to foster employee performance and well-being. Therefore, employees who make positive perceptions about HRM practices experience a felt obligation to reciprocate via positive employee behaviors in order to 'give back' to the organization (Blau, 1964). Indeed, Gouldner (1960, p. 171) asserts that two principles underlie the norm of reciprocity: "(1) people should help those who have helped them, and (2) people should not injure those who have helped them". In the extant literature, scholars note that most of the individual-level HRM research uses social exchange theory as the core theoretical framework (Alfes, Truss, et al., 2013) to explain *why*

HRM practices result in an array of employee attitudes and behaviors (e.g., Gilbert, De Winne, & Sels, 2011; Gould-Williams & Davies, 2005).

Drawing on social exchange and COR theories, the conceptual model (Figure 1) posits that employee perceptions of HRM bundles negatively relate to workplace deviance via intense work behaviors. Specifically, employees who make positive perceptions about maintenance and development HRM bundles choose to work intensely in their current job role. In turn, these employees who choose to work intensely also avoid deviant behaviors because these deviant behaviors negatively impact their relationship with the organization, and because these employees also have reduced personal resources. I discuss these relationships in greater detail next.

Figure 1

Research Model



Hypotheses Development

Perceived HRM Bundles, Work Intensity, and Workplace Deviance

As previously suggested, employee perceptions of HRM practices positively relate to favorable employee attitudes and behaviors (Alfes et al., 2012; Herrbach et al., 2009; N. Takeuchi & Takeuchi, 2013); however, few studies investigate the relationship between

perceived HRM practices and workplace deviance at the individual-level (for exceptions, see: Al-Shuaibi et al., 2014; Shamsudin et al., 2011, 2012, 2014). This dearth of research has resulted in an insufficient understanding of the complete influence of perceived HRM practices on all three facets of employee job performance, especially with respect to understanding how HRM practices can discourage negative behaviors that can harm the organization and its constituents.

In accordance with the HRM literature, I theorize that employees perceive maintenance and development HRM bundles as employee investments made by the organization because these HRM practices help employees maintain and improve their current level of functioning. In particular, signaling theory states that HRM practices signal to employees that their contributions are genuinely valued and appreciated by the organization with these meaningful employee investments (Connelly, Certo, Ireland, & Reutzel, 2011; Spence, 1973). Therefore, employees often interpret these HRM bundles as investments that can help them maintain and improve their current level of functioning in their job role.

Consequently, employees who make these interpretations experience a felt obligation to reciprocate this perceived investment with positive behaviors and the absence of negative behaviors. Based on the norm of reciprocity, employees who experience a felt obligation to reciprocate this perceived HRM investment choose to participate in positive behaviors that promote organizational functioning (Gouldner, 1960). Indeed, numerous studies from the perceived organizational support literature provide significant support for this contention within employee-employer relationships (Rhoades & Eisenberger, 2002; Riggle, Edmondson, & Hansen, 2009). For example, multiple studies show that employees who perceive high levels of perceived organizational support reciprocate with high levels of job engagement, job involvement, and intrinsic motivation (Crawford, Lepine, & Rich, 2010).

Building on these studies, I posit that employees who make positive perceptions about maintenance and development HRM bundles choose to reciprocate with more intense work behaviors. Specifically, employees choose to work more intensely because this intense investment of oneself into work activities is often believed to offer meaningful value to the organization, especially because such behaviors often lead to other desirable behaviors. Several studies show that intense work behaviors positively relate to job satisfaction (Yoon, Beatty, & Suh, 2001), task performance (Brown & Leigh, 1996), and OCB-I (Piccolo et al., 2010). Therefore, employees choose to reciprocate the perceived organizational investment in HRM practices with intense work behaviors. Similar contentions are made by Boon et al. (2014) who demonstrate that the employment relation HRM bundle (i.e., job design, teamwork, and work-life balance) positively relates to willingness to devote extra effort at work. In a similar vein, research also shows that perceived HRM practices positively relate to another important form of job role investment – that is, employee engagement (e.g., Alfes, Truss, et al., 2013). Indeed, engagement and work intensity both tap into job role investment (Hochwarter & Thompson, 2010), however, Christian, Garza, and Slaughter (2011, pp. 100–101) explain that there is an important difference between these concepts: "as a motivational concept, engagement should relate to persistence and intensity with which individuals pursue their task performance". Stated differently, work engagement is best conceptualized as a motivational concept, while work intensity is more accurately conceptualized as a behavioral concept.

Furthermore, employees who choose to work intensely in their current job role also refrain from deviant work behaviors for several reasons. According to social exchange theory, employees who choose to work intensely in their current job role do so to maintain a positive high-quality work relationship with their employer (Blau, 1964). In other words, employees who

wish to maintain a positive social exchange relationship with their organization often choose to adhere to organizational norms and standards, which undoubtedly includes refraining from workplace deviance (Shamsudin et al., 2012). Indeed, several studies show that constructs related to the investment of oneself into the job role, such as work engagement, negatively relate to 'dark' work behaviors (Den Hartog & Belschak, 2012; Shantz, Alfes, Truss, & Soane, 2013; Sulea et al., 2012). Therefore, social exchange theory states that employees who choose to work intensely subsequently avoid deviant actions because these behaviors are detrimental to the employee-employer relationship due to the significant harm such behaviors can cause the organization (Blau, 1964).

COR theory further posits that employees have finite personal resources and consequently choose when and how to expend their personal resources (Hobfoll, 1989, 2001). However, most employees want to protect their current resources and acquire additional personal resources, especially because resource loss is more prominent than resource gain (Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014). Therefore, because employees have finite personal resources, these employees must make trade-offs when deciding how to expend these personal resources. Employees who choose to work intensely in their current job role in order to reciprocate the perceived support from the organization via the HRM bundles experience fewer personal resources for other expenditures. Stated differently, employees who make the decision to devote significant personal resources via intense work behaviors experience a decrease in their personal resource base, but do so with the intention of stimulating resource gain. In support, Halbesleben and Wheeler (in press) show that employees who have positive work relationships with their colleagues often reinvest their personal resources via helping behaviors to sustain these positive work relationships. Indeed, the 'resource gain cycle' asserts that resource gain puts

employees in a better position to reinvest their personal resources for further resource gain (Hobfoll, 2001); hence, this corollary explains why employees choose to expend their personal resources with intense work behaviors and subsequently choose to avoid deviant behaviors.

Moreover, employees who choose to avoid participating in deviant actions not only seek to prevent resource loss, but they also seek to decrease the likelihood of triggering a 'resource loss cycle' (Hobfoll, 2001). This corollary posits that employees who have insufficient personal resources are particularly prone to experience further resource depletion, but employees often seek to avoid further resource depletion by conserving their current resources. For example, Trougakos, Beal, Cheng, Hideg, and Zweig (2015) demonstrate that employees who devote significant personal resources via daily surface acting experience greater daily exhaustion that subsequently results in fewer OCB-I. Stated differently, employees who participate in surface acting experience significant resource depletion that in turn prompts these employees to avoid 'extra-role' behaviors to conserve their current personal resources. Similarly, employees who perceive resource gain from the HRM bundles, but who also seek to reciprocate with intense work behaviors to trigger further resource gain are most apt to avoid expending personal resources towards deviant actions because of the probable negative implications. Taken together, perceived maintenance and development HRM bundles both negatively relate to workplace deviance via intense work behaviors.

Hypothesis 1: Work intensity mediates the negative relationship between perceived maintenance HRM bundles and workplace deviance.

Hypothesis 2: Work intensity mediates the negative relationship between perceived development HRM bundles and workplace deviance.

Methods

Pilot Study

A pilot study was conducted prior to the distribution of the questionnaire in order to improve the overall quality of the instrument based on the feedback provided by the respondents from the pilot sample (Cooper & Schnidler, 2009; Fink, 2009). This pilot sample comprised three HRM doctoral students and 12 full-time employees from the general working population who were recruited from my social network. The primary benefit of this mixed sample is two-fold. First, the doctoral students completed their doctoral-level training in quantitative research methods, thereby allowing for a critical scholarly perspective to improve the survey based on advanced knowledge of survey design. Second, the full-time employees, who were employed in a range of occupations in multiple industries, were recruited because these respondents were likely to express concerns that would likely represent those of the respondents in the target population. As a result, these particular respondents were able to offer practical insights and recommendations to improve the survey. All respondents were instructed to assess the clarity of the instructions, nature of the questions, and the time needed to complete the survey. In doing so, minor concerns and issues were addressed to improve the data collection process.

Procedure and Sample

There were 30 upper-year students enrolled in a Human Resources Research Methods course at a large Canadian University who were invited to distribute questionnaire packages. Students were invited to recruit seven full-time employees who were at least 18 years of age and had been employed full-time during the past 12 months. Students received course instruction on how to properly recruit participants and collect the data in an ethical manner. The university

ethics board approved this research (Appendix A). Respondents were encouraged to arrange with the student (who recruited them for this research) to receive a copy of the research report that would be created by the student based on this data collection process. Respondents were also offered the opportunity to enter into a draw to win one of four $150 gift certificates to further encourage participation in this research. Students were provided with two full weeks to submit the seven survey packages. I collected the survey packages and inputted the data into SPSS version 22.0. It is difficult to calculate the exact response rate because I do not know how many people were invited to complete the survey by the students (Spector et al., 2006), however, this data collection procedure resulted in 209 completed surveys out of 210 potential surveys. Therefore, there was a 99.5% response rate in terms of the number of returned surveys out of the total potential completed surveys. Similar response rates have been reported using similar data collection strategies (e.g., Halbesleben, Harvey, & Bolino, 2009).

Multiple techniques were used to ensure that students did not complete the survey in lieu of the targeted respondents during the time 1 (T1) data collection period. First, the informed consent form required the name, signature, and contact information of the student *and* participant. The printed names and signatures of the students and their associated participants were compared for similarity. Following a careful review of these printed names and signatures, there were no concerns of potential impersonation. Second, students were informed that a random subsample of the respondents would be called to verify their participation in this research. This verification was conducted during the follow-up survey and did not raise any concerns of impersonation.

The student-recruited sampling strategy has become quite common in research published in top-tier management and psychology journals (e.g., Cullen, Fan, & Liu, 2014; Demerouti, Bakker, & Leiter, 2014; Halbesleben et al., 2009; Treadway, Hochwarter, Kacmar, & Ferris,

2005). Multiple researchers offer significant support for this sampling strategy by contending that multiple advantages (e.g., sample heterogeneity, cost effectiveness, sophisticated research designs, and student learning) can manifest, provided the data collection procedures are carefully constructed (Demerouti & Rispens, 2014; Hochwarter, 2014). Meta-analytic research by Wheeler, Shanine, Leon, and Whitman (2014) further demonstrates that student-recruited samples and non-student-recruited samples are highly comparable in terms of their demographics and statistical results. In other words, student-recruited samples do not differ substantially from non-student-recruited samples in terms of the correlations and personal and work-related characteristics (Wheeler et al., 2014). Finally, the results of student-recruited studies are often generalizable because these samples often include respondents who are employed in an array of occupations, organizations, and industries.

The time 2 (T2) data collection period occurred approximately three months later, such that 126 respondents, who had indicated they were interested in participating in a follow-up study, were invited to complete a short telephone survey. An email with a link to an online survey was sent to a few potential respondents in cases where a telephone number was not provided and in situations where the potential respondents specifically requested to complete the survey online. A telephone script was provided to a research assistant who was trained on the proper ethical procedures on how to conduct structured telephone-based interviews. There were 71 respondents who participated in this 10-minute follow-up telephone survey resulting in a 56.35% response rate. The most common reason for non-participation is attributed to the difficulties associated with contacting participants over the telephone. However, most respondents, who the research assistant was able to speak with, agreed to participate in the follow-up survey. Respondents were mailed a $10 gift certificate in exchange for their

contribution.

A two-wave research design with a three-month interval between the two data collection phases was used for three reasons. First, Mitchell and James (2001) explain that there are no specific guidelines in terms of the most appropriate length of time between data collection phases; therefore, researchers must make their best judgment in accordance with extant research. In line with similar research in the deviance literature (e.g., Eschleman, Bowling, & LaHuis, in press), a three-month interval was selected because it was deemed an appropriate length of time to observe changes in employee behavior. Second, respondents who had recalled participating in this research in recent months in comparison to long time intervals were more likely to participate in the follow-up study because of their familiarity with this research, thereby limiting the potential for excessive attrition. Third, this time period was also selected for practical convenience.

The final sample of 69 respondents comprised 55.1% females and 26.1% managers. In this sample, 15.9% were unionized and 87.0% had permanent employment. Moreover, the average age was 32.28 years old (standard deviation (*SD*) = 9.91 years) and employees had an average organizational tenure of approximately 6 years (mean (*M*) = 70.80 months, *SD* = 81.22 months). An independent samples t-test demonstrated that there were no statistically significant differences among respondents who only participated during the T1 data collection period and those who participated during both rounds of data collection. Specifically, there were no statistically significant differences in terms of gender ($t(254) = -.22$, $p = .83$), age ($t(211) = .34$, $p = .73$), and organizational tenure ($t(265) = .22$, $p = .83$). Respondents were employed across a range of occupations, including: a) sales and service (29.4%), b) business, finance, information technology, and administration (26.5%), c) health occupations (14.7%), d) education, law, and

social, community, and government services (11.8%), e) manufacturing, utilities, trades, transport, equipment operators, and related occupations (11.8%), and f) other occupations (5.8%).

Missing Data

An analysis of the extent and nature of the missing data was required before determining the appropriate technique to address the missing data (Hair, Black, Babin, & Anderson, 2010). A missing values analysis of the items associated with the independent, mediating, dependent, and control variables demonstrated that there were only two items with missing data – items 2 and 3 (Appendix C) – with one response missing for each item. These missing values represent 1.4% of missing data for each of these items. Therefore, there were very low levels of missing data among the matched T1 and T2 datasets. I used listwise deletion to remove two respondents because constructs with fewer than 15% of missing data can easily be addressed using listwise deletion (Hair et al., 2010). Therefore, listwise deletion was an appropriate missing data analysis technique, especially given the dearth of missing data (Schafer & Graham, 2002; Schlomer, Bauman, & Card, 2010). Therefore, the final sample was 69 respondents.

Measures

The T1 survey measured employee perceptions of HRM practices and personal and work-related characteristics. The T2 survey comprised measures related to work intensity and workplace deviance. All measures were not collected at both times periods, thus permitting a two-wave research design. See Appendices B-G for a complete list of the items.

Maintenance and Development HRM Bundles. The HRM practices measure was taken from Kooij et al. (2013) who developed a measure of employee perceptions of maintenance and

development HRM bundles. Respondents were asked to think about whether they were exposed to eight different HRM practices within the past 12 months. A sample maintenance HRM practice item was: "During the past 12 months have you had a formal performance appraisal that provided you with feedback and guidance?". A sample development HRM practice item was: "During the past 12 months have you had formal training to improve your skills and abilities in your current job?". Each bundle was measured with four items that were rated on a scale ranging from 1 = yes, 2 = no, and 3 = don't know. Prior to the analyses, the scale was re-coded into 1 = yes, 0 = no/don't know. An important strength of this dichotomous scale is that it allows for a more objective assessment of HRM practices compared to HRM measures that use Likert-scales (Bal et al., 2013). In accordance with Kooij et al. (2013) and other researchers (Bal et al., 2013; Wright, Gardner, & Moynihan, 2003), in situations where respondents provided 'don't know' responses, these responses were re-coded as a 'no' given that these respondents could not definitively indicate that they had been exposed to specific HRM practices. The total 'yes' scores were summed to create a variable for each bundle (Kooij et al., 2013).[4]

Work Intensity. Brown and Leigh's (1996) 5-item work intensity measure was used to assess the extent to which employees felt they participated in intense work behaviors. All items were rated on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Sample items include: "I work at my full capacity in all of my job duties" and "When there's a job to be done, I devote all my energy to getting it done". The Cronbach's alpha was .91.

Workplace Deviance. Workplace deviance was measured using an 8-item scale developed by Bennett and Robinson (2000) that taps into both interpersonal and organizational deviance. The original 19-item scale was shortened due to space limitations on the questionnaire.

[4] An alpha is not reported for the HRM bundles because an additive index was used to measure HRM practices. Since additive indexes include items that combine to form the construct, the items do not necessarily involve high intercorrelations and therefore a Cronbach's alpha is not appropriate (Delery, 1998; Jiang, Lepak, Han, et al., 2012).

There were 4-items that were used to measure interpersonal deviance and four other items were used to measure organizational deviance. This abbreviated scale has also been used by other researchers (e.g., Shantz et al. (2013) reported an alpha of .81). Sample interpersonal deviance items include: "Made fun of someone at work" and "Acted rudely toward someone at work". Sample organizational deviance items include: "Taken an additional break or longer break than is acceptable at your workplace" and "Put little effort into your work". Respondents rated the items on a 7-point scale to indicate the degree to which they displayed the specific behaviors in the past three months. The scale anchors were: 1 = never, 2 = about once every 3 months, 3 = about once a month or less, 4 = a few times a month, 5 = once a week, 6 = a few times a week, and 7 = every day. This workplace deviance scale resulted in a Cronbach's alpha of .77.

Controls. Multiple control variables were included in the analyses because prior research indicates that these variables are related to workplace deviance. Gender (1 = female, 0 = male) was controlled because males tend to engage in more interpersonal and organizational deviance than females (Henle, 2005). Age and organizational tenure (months) were also controlled because prior research shows that these variables are significantly related to interpersonal and organizational deviance (Restubog, Bordia, & Tang, 2007; Thau, Bennett, Mitchell, & Marrs, 2009). A log transformation of organizational tenure was conducted because there was a negative skew of tenure in this distribution of respondents (Sharpe, De Veaux, & Velleman, 2010). This transformed tenure variable was used in the analyses. In line with T. E. Becker's (2005) recommendations, the analyses were conducted twice – once with the control variables and another time without the control variables. Both sets of results were consistent across all analyses; therefore, the inclusion of control variables did not influence the results (T. E. Becker,

2005). The analyses presented below include the controls (i.e., age, gender, and organizational tenure).

Common Method Variance

Common method variance (CMV) refers to concerns associated with variance arising from measurement processes rather than the actual measures used to tap into the constructs of interest (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Although there is debate about the legitimacy of CMV concerns (Pace, 2010; Spector, 2006), this study uses both methodological and statistical procedures to alleviate potential CMV concerns in accordance with commonly accepted recommendations (Conway & Lance, 2010; Podsakoff et al., 2003; Podsakoff, MacKenzie, & Podsakoff, 2012). However, prior to this discussion, an explanation of the appropriateness of self-report measures within this context is first required, as based on recent recommendations (Conway & Lance, 2010).

Perceived HRM practices are most appropriately captured with self-report measures because this construct is concerned with the extent to which *employees* perceive that they have had opportunities and experiences with various HRM practices. Work intensity is also most appropriately measured via self-reports because the extent to which employees exhibit intense work behaviors often includes actions that are not visible to others in the workplace. For example, some employees may answer work emails at home during non-work hours. Employees are also in the best position to offer accurate assessments about the extent to which they participate in deviant actions, especially because self-report deviant measures capture a wider range of deviant actions that are not necessarily readily apparent to others (Berry, Carpenter, & Barratt, 2012). In addition, research shows that self-report workplace deviance is significantly correlated with

supervisor reports of employee deviance, thereby indicating that self-report deviance is an appropriate and valid measure (Judge, Scott, & Ilies, 2006).

Procedural Remedies. First, the pilot study helped to improve the wording and response scales, thereby minimizing concerns of item ambiguity and complexity (Podsakoff et al., 2012). Second, respondents were informed via the cover letter that all information was confidential and that their name would not be associated with any report or publication of the research (Podsakoff et al., 2003). This letter also informed respondents that there were no right or wrong answers and that each question should be answered in an honest and accurate manner (Podsakoff et al., 2003). Third, the questionnaire was designed to also limit CMV concerns using multiple tactics. Multiple unrelated measures were interspersed between the constructs of interest to foster psychological separation (e.g., Fulmer, Barry, & Long, 2009). The constructs of interest were also counterbalanced to control for potential biases related to item embeddedness, such as priming effects and item-context-induced mood states (Podsakoff et al., 2003). The questionnaire also used multiple scale anchors and reverse-coded items to limit potential biases, such as acquiescence (i.e., yea-saying) and disacquiescence (i.e., nay-saying) biases (Podsakoff et al., 2003, 2012). Finally, since data was collected at two different points in time, temporal separation was fostered between the constructs of interest.

Statistical Remedies. A Harman's single-factor test was conducted using principal component analysis to determine whether one factor accounted for the majority of the covariance among the predictor and dependent variables (Podsakoff & Organ, 1986). The results indicate there were no serious common method concerns because one single factor did not explain the majority of variance, such that the single largest factor only accounted for 28.50% of the variance. The correlational marker technique was also used to further determine whether there

were any common method concerns (Podsakoff et al., 2003, 2012). The correlational marker technique has recently received growing attention to address concerns of this nature in recent years (Williams, Hartman, & Cavazotte, 2010). Indeed, scholars have used the correlational marker variable approach in leading management journals, especially among studies that draw on dichotomous measures (e.g., Bal, De Jong, Jansen, & Bakker, 2012; Booth, Park, & Glomb, 2009).

This correlational marker variable approach requires selecting a marker variable that is theoretically unrelated to the study variables, especially with regards to the dependent variable (Lindell & Whitney, 2001). If the statistically significant zero-order correlations decrease in significance once the marker variable is partialled out, then common method biases are more likely to be of concern. In other words, any decrease in the significance levels of statistically significant zero-order correlations provides evidence that these correlations have shared covariance that is likely partially attributed to common method biases. Traditionally, multiple different marker variables that relate to personal characteristics and employee attitudes and behaviors have been used (Williams et al., 2010). However, researchers should select marker variables that capture the key causes of common method biases that are believed to influence the relationships among the substantive variables (Williams et al., 2010).

In this study, employee creativity was selected as the marker variable, such that there was no theoretical basis upon which to expect that employee creativity would significantly influence workplace deviance (Farmer, Tierney, & Kung-McIntyre, 2003). However, shared covariation among employee creativity and workplace deviance could exist if there were some common method biases (e.g., transient mood states and social desirability). That is, any decrease in the significance of the zero-order correlations could indicate that some common biases could have

influenced employee responses to the survey items. The correlational marker technique (formerly called the partial correlation technique) revealed that employee creativity was not significantly related to workplace deviance (r = -.12, *ns*). The results further demonstrate that the initial significant zero-order correlations remained significant following the partial correlation adjustment (Lindell & Whitney, 2001). This analysis shows that there were zero serious common method concerns.

A confirmatory factor analysis (CFA) was also conducted to assess for the discriminant validity between the constructs. In these analyses, the Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA) were used to assess how well the data fit the proposed model. In line with Hu and Bentler (1999), the cutoff thresholds for TLI and CFI were .95 and for RMSEA was .05, which were used to evaluate model fit. Since the HRM practices measure was assessed using a dichotomous scale, I used the Diagonally Weighted Least Squares (DWLS) estimator within the Lavaan package that is part of the R program version 3.1.3 to assess for distinctiveness between the constructs (Rosseel, 2012). Since the HRM bundles measure is relatively new, a specific CFA was conducted to ensure that the items loaded onto two different HRM bundles. The results generally showed acceptable model fit except for the RMSEA value (χ^2 = 39.449, *df* = 19, p-value = .004, TLI = .943, CFI = .961, RMSEA = .126). Based on the modification indices, two development HRM items ("Had a job that is challenging?" and "Made full use of your training, knowledge, and skills?") were covaried due to the similar nature of the items – that is, challenging jobs usually require the full use of an employee's training, knowledge, and skills. The revised model resulted in significantly better model fit (χ^2 = 20.471, *df* = 18, p-value = .307, TLI = .993, CFI = .995, RMSEA = .045).

Afterwards, the four-factor model that comprised the maintenance and development

HRM bundles, work intensity, and workplace deviance was examined for model fit. The results showed that the data fit the model very well (χ^2 = 187.934, *df* = 182, p-value = .366, TLI = .994, CFI = .995, RMSEA = .022). Since some scholars assert that researchers can differentiate workplace deviance into organizational and interpersonal deviance, I tested two additional models that examined organizational and interpersonal deviance separately in lieu of the general workplace deviance measure. The alternative four-factor model that comprised maintenance and development HRM bundles, work intensity, and interpersonal deviance resulted in good model fit (χ^2 = 125.805, *df* = 113, p = .193, TLI = .984, CFI = .987, RMSEA = .041). This model included fixed parameters set to zero for work intensity and interpersonal deviance because the low correlation (*r* = .15) suggests that these variables are orthogonally related, especially since there is no conceptual link between work intensity and interpersonal deviance (Field, Miles, & Field, 2012). Furthermore, the four-factor model that comprised both of the perceived HRM bundles, work intensity, and organizational deviance also showed good model fit (χ^2 = 113.253, *df* = 113, p = .115, TLI = .980, CFI = .983, RMSEA = .049). In this model, the parameters of the maintenance HRM bundle and work intensity were fixed to zero because there was a rather low correlation between these variables (*r* = .30). Taken together, multiple procedural and statistical remedies demonstrate that CMV is not of substantial concern (Podsakoff et al., 2012).

Analytical Strategy

Bootstrapping was used to test Hypotheses 1 and 2 using the Process macro in SPSS version 22.0 (Hayes, 2013). Prior research has raised serious concern over Baron and Kenny's (1986) causal steps approach to test mediation. This technique has been criticized on a number of grounds, including the fact that normal sampling distributions are required despite that they are

often difficult to obtain with most field data (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002), low statistical power tends to result with this causal steps approach (MacKinnon et al., 2002), and some researchers further state that this four-step causal approach includes an unnecessary condition (i.e., a significant total effect between the independent and dependent variables) (Shrout & Bolger, 2002). In lieu of this approach, researchers have used the Sobel (1982) test because it provides a more rigorous statistical test because of its greater statistical power (Preacher & Hayes, 2004); however, the Sobel test has also been criticized because it requires a large sample size and a normal sampling distribution (Preacher & Hayes, 2004). Most recently, bootstrapping has been recommended for mediation because it does not require a normal distribution and can be used with small samples (Preacher & Hayes, 2004).

Bootstrapping uses the original sample as a 'population reservoir' from which numerous random samples are generated using continuous replacement from the original sample (Mallinckrodt, Abraham, Wei, & Russell, 2006). Stated alternatively, each case has an equal opportunity to be selected each time a new random sample is generated, such that some cases may be drawn several times to generate a new sample and other cases may not be selected at all (Mallinckrodt et al., 2006). Often researchers generate about 5,000 to 20,000 continuous replacement samples. This bootstrapping method results in a significant number of samples that closely reflect the actual population of interest. The indirect effect is assessed within each new sample that is subsequently used to generate confidence intervals (CIs). The CIs for the indirect effect allow for relatively robust statistical tests. As a result, I use Hayes' (2013) Process macro ('model 4') to test Hypotheses 1 and 2 for mediation using bootstrapping procedures.

Results

The means, standard deviations, and correlations are presented in Table 1. The correlation analysis revealed several significant correlations between the predictor and dependent variables. Maintenance HRM practices were significantly correlated with development HRM practices ($r = .57$, $p < .01$) and work intensity ($r = .30$, $p < .05$). Development HRM practices were significantly related to work intensity ($r = .32$, $p < .01$). Work intensity was negatively related to workplace deviance ($r = -.46$, $p < .01$) and positively related to gender ($r = .24$, $p < .05$). Workplace deviance was also significantly related to gender ($r = -.34$, $p < .01$) and age ($r = -.26$, $p < .05$). Organizational tenure was also significantly correlated with age ($r = .68$, $p < .01$). The variance inflation factors (VIFs) were also obtained using regression analysis to test for multicollinearity concerns. The results indicated that multicollinearity was not of great concern because the VIFs were all below 2, which were well below the threshold of 10 (Myers, 1990; Tabachnick & Fidell, 2007).

Table 1

Means, Standard Deviations, and Correlations

Variable	M	S.D.	1	2	3	4	5	6
1. Maintenance HRM bundle	2.80	1.20						
2. Development HRM bundle	2.35	1.41	.57**					
3. Work intensity	6.00	0.89	.30*	.32**				
4. Workplace deviance	1.95	0.88	-.16	-.13	-.46**			
5. Gender	0.55	0.50	.19	.04	.24*	-.34**		
6. Age (years)	32.28	9.91	.02	.22	.22	-.26*	.09	
7. Organizational tenure (months)	1.61	0.47	-.02	.12	.16	-.17	.04	.68**

Notes:
M = mean, S.D. = standard deviation
Gender: female (1), male (0)
$N = 69$
** $p < .01$ (two-tailed)
* $p < .05$ (two-tailed)

Mediation Analyses

This study presents a dual mediation model that posits that both maintenance and development HRM bundles negatively relate to workplace deviance via work intensity. Using 5,000 bootstrap samples to conduct a test of the indirect effect (Preacher & Hayes, 2008), the results demonstrated that a bootstrapped 95% CI around the indirect effect did not contain zero for the maintenance HRM bundle and workplace deviance relationship (-.07, LLCI = -.1774, ULCI = -.0106) (Table 2). Stated differently, there was a significant negative indirect effect of maintenance HRM practices on workplace deviance via work intensity. Therefore, Hypothesis 1 was supported.

Table 2

The Mediating Effect of Work Intensity in the Maintenance HRM Bundle and Workplace Deviance Relationship

Variables	Outcome	
	Unstandardized Coef.	SE
Model 1 (Work intensity)		
Maintenance HRM bundle	.19*	.09
Gender	.30	.21
Age	.02	.01
Organizational tenure	.06	.29
R^2 (Adj. R^2)	.16 (.11)	
F-value	3.13*	
Model 2 (Workplace deviance)		
Work intensity	-.36**	.12
Maintenance HRM bundle	-.00	.08
Gender	-.42*	.19
Age	-.02	.01
Organizational tenure	.02	.27
R^2 (Adj. R^2)	.29 (.24)	
F-value	5.18***	

Model 3 (Total effect model)		
Maintenance HRM bundle	-.07	.09
Gender	-.53*	.20
Age	-.02	.01
Organizational tenure	-.00	.29
R^2 (Adj. R^2)	.18 (.13**)	
F-value	3.48*	

Total, Direct, and Indirect Effects

	Unstandardized Coef.	SE
Direct and total effects		
Maintenance HRM bundle on work intensity (path *a*)	.19*	.09
Work intensity and workplace deviance (path *b*)	-.36**	.12
Total effect of maintenance HRM bundle on workplace deviance (path *c*)	-.07	.09
Direct effect of maintenance HRM bundle on workplace deviance (path c^1)	-.00	.08
Bootstrapping results for the indirect effect		
Indirect effect of maintenance HRM bundle on workplace deviance via work intensity	-.07	.04
CI (95%)	[-.1774, -.0106]	

Notes:
Values are unstandardized regression coefficients
CI = confidence interval
Bootstrapped samples = 5,000
*p < .05, **p < .01, ***p < .001
N = 69

Path *a* denotes the link between the independent variable and the mediating variable. Path *b* denotes the link between the mediating and dependent variables. Path *c* reflects the relationship between the independent and dependent variables when the mediating variable is not included – that is, the total effect model. Path c^1 represents the link between the independent and dependent variables when the mediating variable is entered into the analysis – that is, the direct effect model.

Drawing on the bootstrapping approach, the results further showed that there was a significant indirect effect of development HRM practices on workplace deviance via work

intensity (Table 3). The results specifically indicated that the indirect effect did not contain zero (-.07, LLCI = -.1750, ULCI = -.0094). Therefore, Hypothesis 2 was supported.

Table 3

The Mediating Effect of Work Intensity in the Development HRM Bundle and Workplace Deviance Relationship

Variables	Outcome	
	Unstandardized Coef.	SE
Model 1 (Work intensity)		
Development HRM bundle	.18*	.07
Gender	.38	.20
Age	.01	.01
Organizational tenure	.07	.29
R^2 (Adj. R^2)	.17 (.12)	
F-value	3.38*	
Model 2 (Workplace deviance)		
Work intensity	-.38**	.12
Development HRM bundle	.02	.07
Gender	-.42*	.19
Age	-.02	.01
Organizational tenure	.03	.27
R^2 (Adj. R^2)	.29 (.24)	
F-value	5.21***	
Model 3 (Total effect model)		
Development HRM bundle	-.05	.07
Gender	-.56**	.20
Age	-.02	.01
Organizational tenure	.00	.29
R^2 (Adj. R^2)	.17 (.12**)	
F-value	3.38*	

Total, Direct, and Indirect Effects

	Unstandardized Coef.	SE
Direct and total effects		
Development HRM bundle on work intensity (path *a*)	.18*	.07

Work intensity and workplace deviance (path *b*)	-.38**	.12
Total effect of development HRM bundle on workplace deviance (path *c*)	-.05	.07
Direct effect of development HRM bundle on workplace deviance (path c^1)	.02	.07
Bootstrapping results for the indirect effect		
Indirect effect of development HRM bundle on workplace deviance via work intensity	-.07	.04
CI (95%)	[-.1750, -.0094]	

Notes:
Values are unstandardized regression coefficients
CI = confidence interval
Bootstrapped samples = 5,000
*$p < .05$, **$p < .01$, ***$p < .001$
N = 69

Post-Hoc Analyses

Some researchers recommend separating workplace deviance into organizational deviance and interpersonal deviance because they are conceptually distinct constructs with different predictors (Berry, Ones, & Sackett, 2007); henceforth, post-hoc analyses were conducted to examine whether maintenance and development HRM bundles had different relationships with organizational and interpersonal deviance via work intensity. The descriptive statistics for the post-hoc analyses are outlined in Table 4. Organizational deviance was significantly related to work intensity ($r = -.56$, $p < .01$) and interpersonal deviance ($r = .29$, $p < .05$). Interpersonal deviance was also significantly correlated with gender ($r = -.34$, $p < .01$). The post-hoc mediations are discussed next.

Table 4

Post-Hoc Analysis: Means, Standard Deviations, Correlations, and Reliabilities

Variable	M	S.D.	1	2	3	4	5	6	7
1. Maintenance HRM bundle	2.80	1.20	--						
2. Development HRM bundle	2.35	1.41	.57**	--					
3. Work intensity	6.00	0.89	.30*	.32**	*(.91)*				
4. Organizational deviance	2.28	1.18	-.21	-.18	-.56**	*(.77)*			
5. Interpersonal deviance	1.63	1.00	-.03	-.02	-.15	.29*	*(.78)*		
6. Gender	0.55	0.50	.19	.04	.24*	-.22	-.34**		
7. Age	32.28	9.91	.02	.22	.22	-.21	-.21	.09	
8. Organizational tenure (months)	1.61	0.47	-.02	.12	.16	-.11	-.17	.04	.68**

Notes:
Cronbach's alphas are reported on the diagonal in italicized parentheses
M = mean, S.D. = standard deviation
Gender: female (1), male (0)
$N = 69$
** $p < .01$ (two-tailed)
* $p < .05$ (two-tailed)

The bootstrapping results indicated that both maintenance and development HRM bundles were significantly related organizational deviance via work intensity (Tables 5 and 6). Specifically, maintenance HRM practices had a slightly stronger effect on organizational deviance through work intensity (-.13, LLCI = -.2719, ULCI = -.0272) than development HRM practices (-.12, LLCI = -.2610, ULCI = -.0216).

Table 5

Post-Hoc Analysis: The Mediating Effect of Work Intensity in the Maintenance HRM Bundle and Organizational Deviance Relationship

Variables	Outcome	
	Unstandardized Coef.	SE
Model 1 (Work intensity)		
Maintenance HRM bundle	.19*	.09
Gender	.30	.21
Age	.02	.01
Organizational tenure	.06	.29
R^2 (Adj. R^2)	.16 (.11)	
F-value	3.13*	
Model 2 (Organizational deviance)		
Work intensity	-.67***	.15
Maintenance HRM bundle	-.04	.11
Gender	-.19	.25
Age	-.02	.02
Organizational tenure	.17	.35
R^2 (Adj. R^2)	.33(.28)	
F-value	6.19***	
Model 3 (Total effect model)		
Maintenance HRM bundle	-.17	.12
Gender	-.39	.28
Age	-.03	.02
Organizational tenure	.13	.40
R^2 (Adj. R^2)	.12 (.06*)	
F-value	2.08	

Total, Direct, and Indirect Effects	Unstandardized Coef.	SE
Direct and total effects		
Maintenance HRM bundle on work intensity (path *a*)	.19*	.09
Work intensity and organizational deviance (path *b*)	-.67***	.15
Total effect of maintenance HRM bundle on organizational deviance (path *c*)	-.17	.12
Direct effect of maintenance HRM bundle on organizational deviance (path c^1)	-.04	.11
Bootstrapping results for the indirect effect		
Indirect effect of maintenance HRM bundle on organizational deviance via work intensity	-.13	.06
CI (95%)	[-.2719, -.0272]	

Notes:
Values are unstandardized regression coefficients
CI = confidence interval
Bootstrapped samples = 5,000
*$p < .05$, **$p < .01$, ***$p < .001$
N = 69

Table 6

Post-Hoc Analysis: The Mediating Effect of Work Intensity in the Development HRM Bundle and Organizational Deviance Relationship

Variables	Outcome	
	Unstandardized Coef.	SE
Model 1 (Work intensity)		
Development HRM bundle	.18*	.07
Gender	.38	.20
Age	.01	.01
Organizational tenure	.07	.29
R^2 (Adj. R^2)	.17 (.12)	
F-value	3.38*	

Model 2 (Organizational deviance)		
Work intensity	-.69***	.15
Development HRM bundle	.01	.09
Gender	-.20	.25
Age	-.02	.02
Organizational tenure	.18	.35
R^2 (Adj. R^2)	.33 (.28)	
F-value	6.15***	
Model 3 (Total effect model)		
Development HRM bundle	-.12	.10
Gender	-.46	.28
Age	-.02	.02
Organizational tenure	.14	.40
R^2 (Adj. R^2)	.10 (.05*)	
F-value	1.84	

Total, Direct, and Indirect Effects

	Unstandardized Coef.	**SE**
Direct and total effects		
Development HRM bundle on work intensity (path *a*)	.18*	.07
Work intensity and organizational deviance (path *b*)	-.69***	.15
Total effect of development HRM bundle on organizational deviance (path *c*)	-.12	.10
Direct effect of development HRM bundle on organizational deviance (path c^1)	.01	.09
Bootstrapping results for the indirect effect		
Indirect effect of development HRM bundle on organizational deviance via work intensity	-.12	.06
CI (95%)	[-.2610, -.0216]	

Notes:
Values are unstandardized regression coefficients
CI = confidence interval
Bootstrapped samples = 5,000
*$p < .05$, **$p < .01$, ***$p < .001$
N = 69

However, further post-hoc analyses revealed some particularly interesting results. Additional analyses demonstrated that both maintenance and development HRM bundles were not significantly related to interpersonal deviance through the mediating effect of work intensity (Tables 7 and 8). The bootstrapping results indicated that maintenance HRM bundles were not significantly related to interpersonal deviance via work intensity (-.01, LLCI = -.1035, ULCI = .0554). Development HRM bundles also had a very weak insignificant relationship with interpersonal deviance via work intensity (-.01, LLCI = -.1069, ULCI = .0406).

Table 7

Post-Hoc Analysis: The Mediating Effect of Work Intensity in the Maintenance HRM Bundle and Interpersonal Deviance Relationship

Variables	Outcome	
	Unstandardized Coef.	SE
Model 1 (Work intensity)		
Maintenance HRM bundle	.19*	.09
Gender	.30	.21
Age	.02	.01
Organizational tenure	.06	.29
R^2 (Adj. R^2)	.16 (.11)	
F-value	3.13*	
Model 2 (Interpersonal deviance)		
Work intensity	-.05	.14
Maintenance HRM bundle	.04	.10
Gender	-.65**	.24
Age	-.01	.02
Organizational tenure	-.13	.34
R^2 (Adj. R^2)	.16 (.09**)	
F-value	2.32	
Model 3 (Total effect model)		
Maintenance HRM bundle	.03	.10
Gender	-.67**	.24
Age	-.01	.02
Organizational tenure	-.13	.33
R^2 (Adj. R^2)	.15 (.10**)	
F-value	2.91*	

Total, Direct, and Indirect Effects	Unstandardized Coef.	SE
Direct and total effects		
Maintenance HRM bundle on work intensity (path *a*)	.19*	.09
Work intensity and interpersonal deviance (path *b*)	-.05	.14
Total effect of maintenance HRM bundle on interpersonal deviance (path *c*)	.03	.10
Direct effect of maintenance HRM bundle on interpersonal deviance (path c^1)	.04	.10
Bootstrapping results for the indirect effect		
Indirect effect of maintenance HRM bundle on interpersonal deviance via work intensity	-.01	.04
CI (95%)	[-.1035, .0554]	

Notes:
Values are unstandardized regression coefficients
CI = confidence interval
Bootstrapped samples = 5,000
*$p < .05$, **$p < .01$, ***$p < .001$
N = 69

Table 8

Post-Hoc Analysis: The Mediating Effect of Work Intensity in the Development HRM Bundle and Interpersonal Deviance Relationship

Variables	Outcome: Unstandardized Coef.	SE
Model 1 (Work intensity)		
Development HRM bundle	.18*	.07
Gender	.38	.20
Age	.01	.01
Organizational tenure	.07	.29
R^2 (Adj. R^2)	.17 (.12)	
F-value	3.38*	

Model 2 (Interpersonal deviance)		
Work intensity	-.06	.14
Development HRM bundle	.04	.09
Gender	-.64**	.24
Age	-.01	.02
Organizational tenure	-.13	.34
R^2 (Adj. R^2)	.16 (.09**)	
F-value	2.32	
Model 3 (Total effect model)		
Development HRM bundle	.03	.08
Gender	-.66**	.23
Age	-.02	.02
Organizational tenure	-.13	.33
R^2 (Adj. R^2)	.15 (.10**)	
F-value	2.90*	

Total, Direct, and Indirect Effects

	Unstandardized Coef.	SE
Direct and total effects		
Development HRM bundle on work intensity (path *a*)	.18*	.07
Work intensity and interpersonal deviance (path *b*)	-.06	.14
Total effect of development HRM bundle on interpersonal deviance (path *c*)	.03	.08
Direct effect of development HRM bundle on interpersonal deviance (path c^1)	.04	.09
Bootstrapping results for the indirect effect		
Indirect effect of development HRM bundle on interpersonal deviance via work intensity	-.01	.04
CI (95%)	[-.1069, .0406]	

Notes:
Values are unstandardized regression coefficients
CI = confidence interval
Bootstrapped samples = 5,000
*p < .05, **p < .01, ***p < .001
N = 69

Discussion

The HRM literature has devoted considerable attention toward examining the relationship between employee perceptions of HRM practices and positive employee attitudes and behaviors (e.g., Chowhan, Zeytinoglu, & Cooke, in press; Zacharatos et al., 2005). Building on these studies, I adopt an alternative lens to this literature with an examination of how HRM practices discourage negative work behaviors. In other words, perceived HRM bundles offer multiple positive benefits to organizations with the presence and absence of specific behaviors – that is, this study demonstrates that perceived HRM practices not only elicit intense work behaviors, but they also discourage harmful deviant behaviors. Specifically, this study examines the negative indirect effect of both maintenance and development HRM bundles on workplace deviance via work intensity. Indeed, the results of this study demonstrate that perceived HRM bundles negatively relate to workplace deviance via work intensity. Next, I discuss the contributions of this research to the extant literature followed by a discussion of the limitations.

Research Contributions

This research contributes to the extant HRM literature in several ways. First, the HRM literature has garnered some debate about the relationship between HRM practices and work intensity (e.g., Ramsay et al., 2000). Much of this research stems from critical management scholars who often question who truly benefits from HRM practices (Mariappanadar, 2014) – that is, these researchers question whether HRM practices truly benefit the organization *and* its employees. Some studies show that HRM practices can be harmful to employees by increasing the intensity of work (Ehrnrooth & Björkman, 2012; Hyde et al., 2009; Ramsay et al., 2000; Tregaskis et al., 2013). However, other scholars purport that the relationship between perceived

HRM practices and work intensity is inconclusive (Godard, 2004). An important caveat of this research is that researchers most often conceptualize work intensity from the standpoint of the job demands literature. The job demands perspective broadly defines work intensity according to the pace, effort, and affect associated with the job tasks and duties (Burke et al., 2010). Nonetheless, extant research has yet to examine the link between perceived HRM practices and work intensity from a behavioral perspective – that is, the amount of energy an employee devotes towards work activities (Brown & Leigh, 1996). While multiple studies provide evidence of the positive effects of perceived HRM practices (e.g., Kuvaas & Dysvik, 2010; Zacharatos et al., 2005), research has yet to investigate whether employee perceptions of HRM bundles relate to intense work behaviors.

This study demonstrated that both maintenance and development HRM bundles are positively related to work intensity. According to social exchange theory, employees who perceive that the organization makes significant employee investments using HRM practices can choose to reciprocate this perceived investment with intense work behaviors (Blau, 1964). Stated differently, employees choose to use intense work behaviors in attempt to offer the organization meaningful value in response to their investment in the HRM practices. In doing so, an alternative perspective to the HRM practices and work intensity debate is presented that highlights a positive perspective on how HRM practices influence work intensity. In other words, the focus on behavioral work intensity shows that HRM practices can actually elicit positive forms of work intensity. In other words, employees who perceive HRM practices choose to 'work harder' in response to this perceived investment.

An important area of post-hoc exploration pertains to the potential differences in the strength of employee reactions to these two different HRM bundles. A closer examination of the

post-hoc analyses showed that the regression coefficient of development HRM bundles on work intensity ($b = .18$, $p < .05$) was slightly weaker than for maintenance HRM bundles ($b = .19$, $p < .05$). This negligible difference supports the prior contention that maintenance and development HRM bundles represent similar resource investments and consequently prompt similar behavioral reactions from employees. In other words, these results suggest that maintenance and development HRM bundles are almost equally important in terms of prompting intense work behaviors. In sum, these findings address an important gap in extant HRM research because it offers an alternative view to the HRM practices and work intensity relationship, such that these findings show that HRM practices result in positive behavioral work intensity.

Second, the results demonstrated that work intensity was negatively related to workplace deviance, such that employees who worked more intensely in their job avoided deviant work behaviors. While multiple studies show that intense work behaviors can result in numerous positive employee outcomes (Brown & Leigh, 1996; Piccolo et al., 2010), the current study advances this literature by showing that work intensity can also positively benefit the organization by discouraging negative behaviors.[5] In accordance with social exchange theory, employees who work intensely in their job role choose to avoid negative work behaviors because these behaviors would otherwise increase the likelihood that their relationship with their employer would tarnish (Blau, 1964). Moreover, since employees use personal resources with the exertion of intense work behaviors, these employees have limited personal resources for other activities. Therefore, these employees choose to avoid deviant workplace behaviors because deviant behaviors do not typically represent a wise decision in which to expend personal

[5] This statement must be interpreted with caution. While work intensity is negatively related to workplace deviance, it must be acknowledged that there could also be negative physiological and psychological effects from intense work behaviors that are not yet clearly apparent in extant research. Therefore, organizations should be aware of the full range of positive (and potentially) negative implications of behavioral work intensity before implementing specific procedures and processes to encourage such behavior.

resources, especially because such actions might trigger further resource loss (Hobfoll, 1989, 2001).

Third, few extant studies examine the relationship between perceived HRM practices and 'dark' employee behaviors from a positive lens – that is, the possible impact of HRM bundles in curtailing workplace deviance (Arthur, 2011). This study addresses this gap with an examination of the relationship between perceived HRM practices and workplace deviance. Specifically, the results showed that both maintenance and development HRM bundles had an indirect negative effect on workplace deviance via work intensity. In line with social exchange theory, employees who perceive that both maintenance and development HRM bundles help employees with their current level of functioning choose to 'give back' to the organization with more intense work behaviors (Blau, 1964). As a result, these employees avoid deviant behaviors because doing so would otherwise result in numerous harmful implications (e.g., fewer personal resources, the triggering of a potential resource loss cycle, and a low-quality employee-employer relationship).

In essence, thus far Study 1 shows that maintenance and development HRM bundles not only elicited intense work behaviors, but perceived HRM bundles also indirectly discouraged deviant work behaviors. Similar to the previous post-hoc exploration of the potential differential effects of HRM bundles on intense work behaviors, the bootstrapping results indicated that the impact of maintenance and development HRM bundles on workplace deviance were the same (b = -.07). However, the results interestingly showed that the total effect of maintenance HRM bundles (b = -.07, *ns*) and development HRM bundles (b = -.05, *ns*) on workplace deviance were both statistically insignificant. Therefore, intense work behaviors have a critical mediating effect in terms of explaining why employee perceptions of HRM practices are linked to few deviant behaviors.

Fourth, the current results are further advanced with post-hoc analyses that differentiate workplace deviance into two constructs – organizational and interpersonal deviance (Berry et al., 2007). These supplementary analyses demonstrated that both maintenance and development HRM bundles had a significant indirect negative effect on organizational deviance via work intensity. In other words, employees who perceive that the organization makes significant employee investments via maintenance and development HRM practices choose to reciprocate with intense work behaviors; consequently, these employees avoid deviant behaviors because they are likely to harm the organization. However, the post-hoc analyses that examine the effect of perceived HRM bundles on interpersonal deviance via work intensity revealed that these mediations were not significant.

Specifically, both perceived HRM bundles positively influenced work intensity, but work intensity was not significantly related to interpersonal deviance. Interestingly, this statistically insignificant relationship between work intensity and interpersonal deviance does not support the key principles of COR theory. According to this perspective, employees who have few personal resources due to their intense work behaviors should avoid interpersonal deviant behaviors because it could trigger further resource loss (Hobfoll, 1989). However, social exchange research supports these results, such that employees who perceive that the organization makes significant HRM investments seek to reciprocate this perceived investment with positive behaviors (including the absence of negative behaviors) directed towards the 'sender' who made the perceived investment – that is, the organization (Blau, 1964). Therefore, the empirical evidence supports this argument by revealing that employees subsequently choose to avoid organizational deviance. The post-hoc results further support this social exchange argument by showing that employees are no less or more likely to participate in interpersonal deviance because doing so

would result in beneficial actions aimed at another target who is not the 'sender' of the HRM investment.

Limitations

In spite of the advancements made by the current study, these findings should be interpreted in light of the methodological and theoretical limitations. First, the self-report nature of the data may raise some CMV concerns (Podsakoff et al., 2003); however, in line with Conway and Lance (2010), the examined constructs are most appropriately measured via self-report, as previously discussed. Nevertheless, multiple methodological and statistical procedures minimize any outstanding self-report concerns (Podsakoff et al., 2003, 2012). Indeed, the two-wave research design is a particularly important strength of this research because it controls for some of the more typical CMV concerns (e.g., it reduces biases in the retrieval and reporting stages and minimizes transient mood state biases). Nevertheless, this study does not allow for causal inferences.

Second, the sample size is relatively small, albeit sufficient, for the present analyses. In particular, bootstrapping is useful for small sample sizes, such that bootstrapping is not based on large-sample theory (Preacher & Hayes, 2004). Moreover, mediation analyses have also been conducted with samples that comprise as few as 20 respondents to samples with more than 15,000 respondents (Fritz & MacKinnon, 2007).

Third, in line with most social exchange research, I do not explicitly test for each theoretical underpinning of the conceptual model. For example, employee perceptions of the extent to which HRM practices reflect perceived organizational support are not measured nor are employee ratings of felt obligation – this omission results in an incomplete test of social

exchange theory. However, social exchange theory and numerous studies do offer significant support for the relationships.

Fourth, this study did not examine the role of individual differences, such as CSE and identity threat, in the perceived HRM bundles and workplace deviance relationship. However, this is an important avenue for further research because some individuals are more prone to participating in deviant actions than others (Spector, 2011). In particular, studies show that CSE and identity threat are both linked to deviant actions (Aquino & Douglas, 2003; Shantz & Booth, 2014), thus representing a ripe area for further research.

Based on these limitations, I conduct a second study to not only counter some of these drawbacks, but also to advance the conceptual model in this research. In particular, this subsequent study makes three important advancements to the present research. First, since the post-hoc analyses demonstrate that both of the HRM bundles are significantly related to organizational deviance, but are *not* significantly related to interpersonal deviance, I focus solely on advancing our understanding of the antecedents of organizational deviance. Thus, I aim to provide additional support for the negative indirect effect of both maintenance and development HRM bundles on organizational deviance via intense work behaviors with a different sample at a different point in time.

Second, I explore the moderating roles of CSE and identity threat in the work intensity and organizational deviance relationship. Self-verification theory posits that employees have an inherent need to receive external feedback that reinforces their self-view in order to maintain a sense of coherence, stability, and consistency (Swann, 1983, 2012). The exertion of intense work behaviors and the lack of threatening information can work together to reinforce the positive self-concept of high CSE employees that subsequently is posited to result in few instances of

organizational deviance. At the same time, self-verification theory also purports that low levels of work intensity can lead to high organizational deviance among high CSE employees in spite of low identity threat because the receipt of negative information from the lack of intense work behaviors can motivate these employees to participate in some deviant work behaviors with the intention of garnering positive feedback that supports their positive self-view. Indeed, research shows that deviant work behaviors can be used for strategic and instrumental reasons (Fox & Spector, 2010; Neuman & Baron, 2005). Therefore, this subsequent study focuses on advancing our understanding of the work intensity and organizational deviance relationship with an examination of the moderating roles of CSE and identity threat.

Finally, this three-way interaction between work intensity, CSE, and identity threat is integrated in the relationship between perceived HRM bundles and organizational deviance. Stated differently, perceived HRM bundles minimize organizationally deviant behaviors via intense work behaviors among high CSE employees who experience low identity threat. In doing so, these two moderated mediated models (i.e., a separate moderated mediation for each HRM bundle) provide a more nuanced understanding of the role of individual differences in shaping the HRM practices and organizational deviance relationship – that is, I specifically focus on the conditions under which high CSE employees participate in few instances of organizational deviance.

CHAPTER 4: STUDY 2

Theoretical Development

Self-Verification Theory and Core Self-Evaluations

Social psychologists have long argued that employees have an inherent need to maintain a consistent self-concept – that is, how employees view themselves.[6] Self verification theory posits that employees have an innate need to receive feedback from others that supports their self-view (Swann, 1983, 1987, 2012).[7] In other words, employees are driven to maintain a consistent and coherent understanding of themselves. This need for verification of their self-view holds irrespective of whether employees have a positive or negative perception of themselves (McNulty & Swann, 1994; Swann, Pelham, & Krull, 1989). In other words, employees with a negative self-view seek out information that is consistent with this negative self-view. For example, employees with a negative self-view seek feedback from their colleagues about their negative attributes, such as being an incompetent worker or a poor team player, with the intention of verifying their negative self-view.

Conversely, employees with a positive self-view seek out positive information in the external environment that confirms this positive self-view. For example, employees with a positive self-view seek feedback from their colleagues about their desirable attributes, such as being a natural work group leader or being known as a 'star' performer, because this information affirms their positive self-view. In a similar vein, self-enhancement theory posits that employees

[6] Social psychologists have applied self-verification theory to people mostly outside of the work context, but in this manuscript, I use the term employees given the work-related focus of the present research.

[7] Two concepts that are similar to self-verification theory are confirmation bias and self-consistency theory. Confirmation biases occur when employees focus on seeking and interpreting information with the intention of confirming their beliefs, hypotheses, and expectations that may or may not relate to themselves (Nickerson, 1998). This contrasts self-verification theory, such that the former perspective is not about confirming one's self-view, but rather is about obtaining information that confirms their general thoughts. Furthermore, self-consistency theory posits that employees desire consistent information about themselves for its own sake (Lecky, 1945), but self-verification posits that employees are concerned about verifying their self-concept for the purposes of prediction, stability, and control (Swann, Stein-Seroussi, & Giesler, 1992).

have an internal desire to consistently promote and enhance their self-image (Shrauger, 1975); however, this perspective rests in direct conflict with self-verification theory because the latter view does *not* posit that *all* employees have an innate desire to view themselves in a positive manner. In attempt to reconcile these theoretical contradictions, researchers examined whether people with a negative self-view have a stronger preference for negative feedback, or whether these people more strongly prefer to enhance their self-image. Multiple studies show that self-verification principles actually override self-enhancement principles among people with a negative self-concept (McNulty & Swann, 1994; Swann et al., 1989). This research reveals that people with a negative self-concept have a particularly strong desire to perceive themselves in a negative light (Giesler, Josephs, & Swann, 1996; Swann, Wenzlaff, Krull, & Pelham, 1992). That is, employees with a negative self-concept have stronger self-verification strivings than self-enhancement strivings because it provides a sense of stability and control over their personal life outcomes, thereby allowing them to make sense of their world (Swann, 1983). Therefore, it is with no surprise that the self-verification perspective has garnered extensive empirical support for at least two decades (Chen, English, & Peng, 2006).

Scholars using self-verification theory have drawn on multiple concepts, such as self-esteem and depression, in attempt to understand the consequences associated with positive and negative self-views. In this study, CSE is drawn on to understand the implications associated with both positive and negative self-views within the organizational context. As mentioned, CSE is defined as a positive view of oneself – that is, a positive self-concept (Judge et al., 1997). The CSE concept is a broad dispositional trait that comprises four specific personality traits. In the pioneering stages of this literature, Judge et al. (1997) identified and selected these four traits based on three criteria: a) *evaluation-focus* (the traits must have involved an evaluative

component rather than mere description), b) *fundamentality* (the traits must have underpinned some surface-level traits that are central to the self), and c) *breadth and scope* (the traits must have been broad enough in order to reflect general evaluations about oneself). This process resulted in four personality traits – self-esteem, generalized self-efficacy, internal locus of control, and emotional stability.

First, *self-esteem* reflects the global evaluation of employees' overall self-worth (Baumeister et al., 1996; Rosenberg, 1965). Employees with high self-esteem experience self-liking, self-acceptance, and self-respect (Harter, 1990). Therefore, self-esteem includes both cognitive (e.g., "I am competent") and affective (e.g., "I like myself") components (Pierce & Gardner, 2004). Second, *generalized self-efficacy* reflects the personal beliefs held by employees about their ability to succeed in a number of situations despite encountering challenges and obstacles that could thwart their current level of functioning (Bandura, 1977). Generalized self-efficacy differs from task-specific self-efficacy, such that the former reflects a general belief held by employees about their typical capabilities to succeed in various situations, while the latter refers to the general belief that is held by employees pertaining to their capabilities to successfully complete a specific task (Gibbons & Weingart, 2001). Third, *locus of control* pertains to the beliefs held by employees about the controllability of life events (Rotter, 1966). An *internal* locus of control refers to a strong personal belief that life events are driven by personal choices and actions, while an *external* locus of control represents the belief that external factors, such as fate and luck, dictate life events (Rotter, 1966). Fourth, *emotional stability* represents the general tendency to be confident and secure, such that emotionally stable employees experience limited feelings of worry, stress, fear, and helplessness (Costa & McCrae, 1992). Since emotional stability is the opposite of neuroticism (Costa & McCrae, 1992),

emotionally stable employees exhibit behaviors that are opposite of neurotic behaviors. For instance, emotionally stable employees not only respond to stressful situations with resilience, but these employees also exhibit characteristics of feeling clam, secure, and relaxed. In sum, these four personality traits combine to represent an overall positive self-evaluation – that is, CSE.

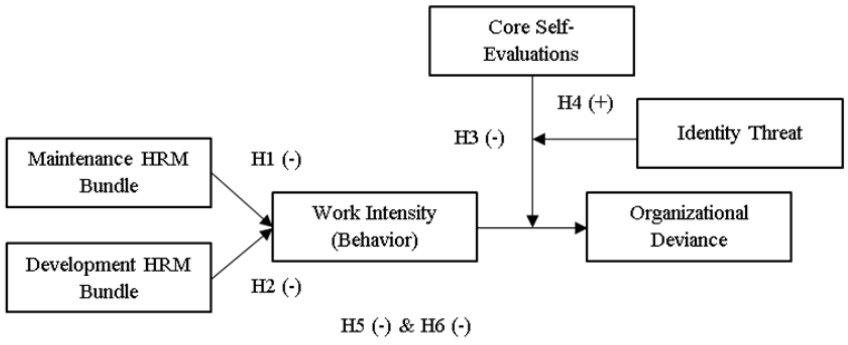
Scholars originally introduced CSE to offer a theoretical explanation of job satisfaction from a dispositional perspective (Judge & Bono, 2001). Since then, significant advancements have been made to this literature. For example, multiple studies show that CSE relates to numerous positive outcomes, such as job performance, life satisfaction, and OCBs (C. -H. Chang et al., 2012). In this study, I focus on delineating the conditions under which high CSE does and does not lead to 'dark' work behaviors based on previous research. While previous studies show that low CSE is linked to negative work behaviors (Ferris et al., 2011), few studies examine the 'dark' side of high CSE despite that research suggests that high CSE can lead to deviant behaviors (e.g., Shantz & Booth, 2014). For example, self-esteem research demonstrates that people with a positive self-concept, but who experience threatened egotism often react with aggressive and violent conduct (Baumeister et al., 1996). In a similar vein, Bushman and Baumeister (1998) contend that threatened egotism (but not self-esteem) is a significant determinant of aggressive behavior. Interestingly, this area of research counters conventional wisdom that purports high self-esteem is *not* an important antecedent of negative behaviors. More recently, Hiller and Hambrick (2005) posit that CEOs often have extremely high levels of CSE compared to most employees; however, this 'hyper-CSE' can result in overly confident actions that have the potential to result in significant negative implications for organizational performance. Based on this line of reasoning, self-verification theory is used to illuminate the

conditions under which CSE is linked to deviant work behaviors.

The present study draws on social exchange, COR, and self-verification theories to examine the conditions under which CSE and identity threat influence the relationship between perceived HRM bundles and organizational deviance. The conceptual model is depicted in Figure 2. Drawing on social exchange and COR theories, employee perceptions of both maintenance and development HRM bundles negatively influence organizational deviance through the mediating effect of work intensity. Drawing on self-verification theory, I also examine the moderating roles of CSE and identity threat in the relationship between work intensity and organizational deviance. Finally, I hypothesize two moderated mediation models that posit CSE and identity threat interact to moderate the strength of the negative indirect effect of both perceived maintenance and development HRM bundles on organizational deviance via work intensity.

Figure 2

Research Model



Hypotheses Development

HRM Bundles, Work Intensity, and Organizational Deviance

In line with the theorizing in Study 1, perceived maintenance and development HRM bundles are posited to negatively relate to organizational deviance via intense work behaviors. Drawing on social exchange theory, employees who perceive maintenance and development HRM bundles choose to reciprocate this perceived investment via intense work behaviors (Blau, 1964). Based on the norm of reciprocity, employees experience a felt obligation to 'repay' the organization with intense work behaviors (Gouldner, 1960). In other words, job role investment, as manifested through intense work behaviors, represents an important avenue in which employees can offer the organization meaningful value in return for the organization's investment made in its employees. Indeed, studies show that perceived HRM practices significantly relate to multiple forms of job role investment, such as work engagement (Alfes, Shantz, et al., 2013) and work effort (Boon et al., 2014).

Social exchange theory also suggests that employees who choose to enact positive behaviors, such as intense work behaviors, in response to the perceived HRM investment, also avoid 'dark' work behaviors because of their potential harmful effect on the employee-employer relationship (Blau, 1964). Moreover, COR theory suggests that employees who exert significant personal resources into their job role subsequently avoid expending additional personal resources towards activities that are unlikely to replenish their personal resource base (Hobfoll, 2001). The 'resource gain cycle' suggests that employees who deliberately choose to reciprocate the perceived HRM investment with intense work behaviors are driven to expend their personal resources as a form of reinvestment to promote further resource gain (e.g., Halbesleben & Wheeler, in press). However, these employees experience some personal resource loss and in

turn avoid deviant behaviors because of the presumed harmful effect of such 'dark' work behaviors. In sum, perceived maintenance and development HRM bundles negatively relate to organizational deviance via intense work behaviors.

Hypothesis 1: Work intensity mediates the negative relationship between perceived maintenance HRM bundles and organizational deviance.

Hypothesis 2: Work intensity mediates the negative relationship between perceived development HRM bundles and organizational deviance.

Work Intensity and Organizational Deviance: The Role of Core Self-Evaluations

Although COR theory suggests that employees who work intensely in their job role are apt to avoid deviant behaviors (Hobfoll, 1989, 2001), this relationship is unlikely to be universal for all employees. That is, there are likely some conditions under which the relationship between work intensity and organizational deviance strengthens and attenuates. Indeed, meta-analytic research demonstrates that personal differences have a unique influence in shaping deviant work behaviors (Hershcovis et al., 2007). The CSE literature suggests that CSE is an important personality trait that represents an important moderating effect in management research because employee reactions to work events can be shaped by the extent to which employees have a positive self-concept (C. -H. Chang et al., 2012). According to self-verification theory, employees maintain their self-view by using strategies and tactics to obtain feedback from others that affirms their self-concept (Swann, 1983, 2012). Therefore, employees who immerse themselves in situations that confirm their self-view experience consistency and stability in their self-concept, thereby prompting positive behaviors and averting 'dark' behaviors (C. -H. Chang et al., 2012). Based on these studies, CSE moderates the negative relationship between work

intensity and organizational deviance, such that the negative relationship is strongest among high CSE employees compared to low CSE employees.

Since employees receive feedback about their self-concept from their work environment (Ashforth & Kreiner, 1999), I posit that positive information in the work environment that relates to an employee's self-concept can have a critical role in shaping positive employee behavior. Indeed, high CSE employees have strong approach-motivation tendencies that underpin the need to approach work situations that are positive, such that these positive experiences reinforce their positive self-concept (Ferris et al., 2011). Therefore, high CSE employees are naturally motivated to seek positive information in the work environment with the intention of reinforcing their positive self-concept (Wu & Griffin, 2012). It is without surprise then that high CSE employees are particularly motivated to achieve high levels of career success given the positive affirmation it provides most employees (Judge & Hurst, 2008). The natural motivation to excel among high CSE employees is evident through research that shows high CSE employees achieve higher job performance (Judge, 2009) and annual income (Judge & Hurst, 2007a) than low CSE employees.

Similarly, I posit that the extent to which high CSE employees work intensely in their job role represents important positive feedback that relates to their positive self-concept because intense work behaviors are not only desirable themselves, but such actions often lead to other positive work outcomes (Brown & Leigh, 1996). Therefore, highly intense work behaviors are likely to lead to low organizational deviance among high CSE employees because intense work behaviors reflect positive actions that provide high CSE employees with information that affirms their positive self-concept (Swann, 2012). As a result, these employees avoid organizationally deviant actions in attempt to maintain a work environment that affirms their positive self-view.

Indeed, the enactment of organizational deviance (e.g., showing up late to work, putting little effort into one's work) can increase the likelihood that employees receive negative information that contradicts the positive information that manifests from their intense work behaviors. Therefore, the negative relationship between intense work behaviors and organizational deviance strengthens among high CSE employees.

The negative relationship between work intensity and organizational deviance, however, weakens among low CSE employees. In line with self-verification theory, intense work behaviors are presumed to provide positive information that contrasts the negative self-concept held by low CSE employees (Swann, 2012). As mentioned, I presume that intense work behaviors provide positive information to employees because such behaviors often result in positive employee outcomes (Brown & Leigh, 1996). However, this positive feedback is unlikely to sit well with low CSE employees because it contradicts their negative self-view. According to self-verification theory, employees with a negative self-concept prefer environments that provide negative feedback that confirms their negative self-view because it provides a sense of coherence and stability (Swann, 2012). In line with this perspective, studies show that depressed individuals prefer unfavorable feedback from others more so than those people with low and high levels of self-esteem (Giesler et al., 1996). However, people who receive positive feedback that contradicts their negative self-concept become motivated to partake in actions to elicit negative information that confirms their negative self-view (Swann & Brooks, 2012). For example, Swann, Wenzlaff, and Tafarodi (1992) show that people with negative self-views actively seek feedback and interaction partners that affirm their negative self-view.

Based on these studies, I posit that the exertion of intense work behaviors can produce inconsistent feelings and thoughts that relate to the negative self-concept held by low CSE

employees. As a result, these low CSE employees choose to participate in some organizational deviance to garner negative feedback from their coworkers and supervisors to affirm their negative self-view. Indeed, organizational deviance (e.g., showing up late, taking longer breaks than is acceptable) can be used to counter the positive feedback that they received due to their intense work behaviors (e.g., Neuman & Baron, 2005). As a result, the expectation of negative feedback that relates to such 'dark' work behaviors can subsequently affirm their negative self-view, thereby providing a sense of stability and control. Similarly, recent research shows that employees who experience vocational misfit (i.e., employees who do not feel that they are in a job role that aligns with their desired job situation) experience frustration that subsequently results in deviant behaviors (Iliescu, Ispas, Sulea, & Ilie, 2015). Taken together, the negative relationship between intense work behaviors and organizational deviance strengthens at high levels of CSE compared to low levels of CSE.

Hypothesis 3: Core self-evaluations moderate the negative relationship between work intensity and organizational deviance, such that the negative relationship between work intensity and organizational deviance is stronger for those employees with high levels of CSE compared to those employees with low levels of CSE.

Work Intensity, Core Self-Evaluations, and Identity Threat on Deviance

Although high levels of CSE often lead to positive outcomes, there are some situations that can prompt high CSE employees to participate in 'dark' work behaviors. For instance, the aforementioned arguments posit that highly intense work behaviors lead to low levels of organizational deviance, especially among high CSE employees. However, this argument also implicitly insinuates that there is also a 'dark' side to high CSE – that is, low levels of intense

work behaviors increase organizational deviance among high CSE employees. The negative information that derives from low levels of work intensity is incongruent with the positive self-view held by high CSE employees who consequently use organizational deviance for strategic and instrumental reasons – such as to validate one's sense of self (Ferris, Brown, & Heller, 2009; Krischer, Penney, & Hunter, 2010; Lawrence & Robinson, 2007; Neuman & Baron, 2005; Penney, Hunter, & Perry, 2011). Moreover, in line with the literatures on threatened egotism and interpersonal rejection that highlight the importance of the link between rejection and 'dark' behaviors (Baumeister et al., 1996; Leary et al., 2006; Smart Richman & Leary, 2009), the concept of identity threat is drawn on to advance our understanding of the conditions under which the negative relationship between work intensity and organizational deviance among high CSE employees is strengthened. Blending these literatures, I posit there is a three-way interaction between work intensity, CSE, and identity threat on organizational deviance. Specifically, I posit that high CSE and low identity threat interact to strengthen the negative relationship between work intensity and organizational deviance.

In line with self-verification theory, highly intense work behaviors are unlikely to prompt 'dark' work behaviors when employees have high levels of CSE (Swann, 1983, 2012), such that intense work behaviors provide positive feedback to high CSE employees that affirm their positive self-concept. Since high CSE employees seek positive feedback in the workplace to affirm their positive self-view (Wu & Griffin, 2012), the exertion of intense work behaviors can have an important role in reinforcing their positive self-view given the positive nature of intense behaviors. For example, intense work behaviors often lead to higher levels of task performance (Brown & Leigh, 1996), thereby providing positive information about the job role performance of high CSE employees. However, a more nuanced account of this relationship requires

consideration of other boundary conditions – in this case, I examine identity threat. That is, non-threatening feedback can further help to decrease deviant work actions because the positive feedback from intense work behaviors *and* the lack of identity threatening information both serve to reinforce the positive self-concept of high CSE employees.

Specifically, high CSE employees who experience low identity threat do not experience threatening information that would otherwise result in negative information that contradicts the positive self-view held by CSE employees. In situations where these high CSE employees experience low identity threat, the personal investment of oneself into their job role with intense work behaviors is unlikely to lead to deviant work behaviors because the received information from their intense work behaviors is consistent with their positive self-view (Swann, 2012). Indeed, studies show that low levels of identity threat are linked to low levels of 'dark' employee behaviors (Aquino & Douglas, 2003; Ferris, Spence, Brown, & Heller, 2012). As previously alluded, the lack of identity threatening information also further reinforces the positive feedback that is received and interpreted from the intense work behaviors, thereby motivating positive employee behaviors. In support of this reasoning, research shows that employees who feel that their belonging needs are addressed (and not thwarted) in the workplace choose to participate in more helping behaviors and fewer harmful behaviors (Thau, Aquino, & Poortvliet, 2007). Similarly, high CSE employees who experience verification of their positive self-view because of the positive and non-threatening information received about their work behaviors are least likely to participate in deviant work behaviors.

Hypothesis 4: There is a three-way interaction between work intensity, core self-evaluations, and identity threat on organizational deviance. Specifically, the negative relationship between work intensity and organizational deviance is strongest when high

CSE employees experience low identity threat.

HRM Bundles, Work Intensity, Core Self-Evaluations, Identity Threat, and Deviance

Blending these theoretical arguments, I posit that CSE and identity threat interact to moderate the strength of the indirect negative relationship between perceived HRM bundles and workplace deviance via work intensity. According to social exchange principles, perceived HRM bundles can motivate employees to reciprocate this perceived investment with intense work behaviors and consequently few deviant behaviors (Blau, 1964; Gouldner, 1960). However, this relationship is unlikely to be the same for all employees. Specifically, I posit that this indirect effect between perceived HRM bundles and organizational deviance is moderated by CSE and identity threat.

Drawing on self-verification theory, I posit that CSE has an important moderating role, such that employees who perceive that there are both maintenance and development HRM bundles in the workplace and who choose to participate in intense work behaviors experience positive feedback that reinforce their positive self-concept (Swann, 2012). This positive feedback is particularly important for reinforcing the positive self-view held by high CSE employees, such that HRM bundles indirectly signal that the organization values and cares for its employees (Takeuchi et al., 2009). Moreover, intense work behaviors also provide positive information, especially to high CSE employees, because these behaviors can indicate that these employees are viewed as positive workers (e.g., hardworking, passionate, and strong work ethic) and/or that the job role has specific desirable characteristics (e.g., challenging work, interesting assignments, and significant tasks) that require intense work behaviors (Piccolo et al., 2010). Therefore, high CSE employees who have these positive work experiences feel a stable and coherent sense of

oneself due to this positive feedback, thereby resulting in few deviant behaviors.

More specifically, the moderating influence of CSE in this indirect relationship between perceived HRM bundles and organizational deviance is particularly strong among high CSE employees who experience low levels of identity threat. That is, positive perceptions about HRM bundles and intense work behaviors provide positive feedback among high CSE employees that affirm their positive self-view, but when these high CSE employees also experience low identity threat, these employees experience the highest level of congruence between their positive self-view and the information received in the workplace (e.g., Swann, 2012). Indeed, research shows that low identity threat (compared to high identity threat) results in positive outcomes because there is limited negative information that would otherwise threaten the self-view of employees (Aquino & Douglas, 2003). Therefore, high CSE employees who are subject to low identity threat experience the most positive feedback about their self-view and as a result these employees choose to participate in the lowest levels of deviant actions. Indeed, these high CSE employees experience limited motivation to use deviance for instrumental purposes, such as to assert their self-worth (Lawrence & Robinson, 2007). Taken together, I hypothesize that CSE and identity threat interact to moderate the indirect effect of HRM bundles on organizational deviance through the mediating effect of intense work behaviors.

Hypothesis 5: Core self-evaluations interact with identity threat to moderate the strength of the negative relationship between perceived maintenance HRM bundles and organizational deviance via work intensity, such that the negative relationship between perceived maintenance HRM bundles and organizational deviance via work intensity is strongest when high CSE employees experience low levels of identity threat.

Hypothesis 6: Core self-evaluations interact with identity threat to moderate the strength

of the negative relationship between perceived development HRM bundles and organizational deviance via work intensity, such that the negative relationship between perceived development HRM bundles and organizational deviance via work intensity is strongest when high CSE employees experience low levels of identity threat.

Methods

Pilot Study

A pilot study was conducted using a mixed sample of 25 doctoral students and full-time employees. As previously noted, this mixed sample allows for both critical scholarly insights and employee-related comments that are presumed to reflect the target sample. In particular, the questionnaire was distributed to five HRM doctoral students who completed their coursework and comprehensive examinations. There were also 20 full-time employees who were recruited from my social network to participate in the pilot study. These respondents were employed in a range of occupations and industries, thereby resulting in a wide range of insights from working professionals. Respondents were instructed to record the time required to complete the survey in addition to noting issues where they experienced challenges when completing the online questionnaire. In doing so, this pilot study helped to address concerns that could have otherwise manifested during the online data collection process. A second pilot study was important in order to address potential unexpected concerns that could manifest from the use of the new measures and the electronic data collection procedure.

Procedure and Sample

The sample was recruited with the assistance of the alumni center at a large Canadian

university who sent an email invitation to a random sample of 2,000 alumni. This target sample of university alumni was invited to complete an online questionnaire that would take approximately 15 minutes to complete over the course of two full weeks. A friendly reminder email was sent to potential respondents one week following the initial invitation to encourage participation. In order to further bolster the response rate, potential respondents were invited to enter into a draw to win one of five $100 gift certificates. The university ethics committee also approved this research (Appendix A).

There were 228 respondents who provided consent to participate in this research, thereby representing an 11.40% response rate. This response rate is in line with other published studies in top-tier management and psychology journals that have used similar data collection strategies. For example, several studies in these journals that have used university alumni samples reported response rates that hover in the 5-10% range (e.g., Greenhaus, Ziegert, & Allen, 2012; Thompson, 2005). Nevertheless, this response rate is not a major concern because Schalm and Kelloway (2001) demonstrate that the correlation between response rates and effect sizes are not significant in survey-based research. Similarly, Goldberg (2003) demonstrates that respondents do not provide significantly different measures of the independent and dependent variables compared to non-respondents. In sum, non-response biases are unlikely to have a substantial effect on the data obtained in this research.

Although 228 respondents consented to participating in this study, only 168 of these respondents rated at least one item in the survey, thereby representing an actual response rate of 8.40%. The missing values analysis was, therefore, based on these 168 respondents. The HRM practices measure demonstrated the least amount of missing data with 0.6% missing data for maintenance HRM practices and 1.8% missing data for development HRM practices. The work

intensity and workplace deviance variables (which were on the same survey page that was included towards the end of the questionnaire) exhibited the greatest amount of missing data with 18.3% and 17.2%, respectively. Moreover, the control variables were collected at the end of the survey and hovered in this same range with missing data of 17.9% for gender and 18.5% for both age and organizational tenure. An analysis of the missing data indicated that the missing values are largely due to attrition throughout the questionnaire, such that the increase in missing data was aligned with the order in which the items were presented in the questionnaire. While the missing data does slightly exceed the 15 percent threshold in some cases (Hair et al., 2010), I used listwise deletion because the missing values often did not exceed this threshold. Indeed, in cases where the threshold was exceeded, it was apparent that the missing data was due to attrition. Therefore, the final sample resulted in 125 respondents.

This final sample comprised 64.8% females with an average age of 30.04 years (*SD* = 6.21 years). The average organizational tenure was 3.25 years (*SD* = 2.87 years) and 73.6% of respondents did not have any managerial responsibilities, which means that 26.4% of respondents held managerial responsibilities. Respondents were employed in a range of occupations, including: a) business, finance, information technology, and administration (66.4%), b) education, law, and social, community, and government services (12.0%), and c) sales and service (11.2%), d) trades, transport, equipment operators, and related occupations (4.8%), and e) other occupations (5.6%).

Since the predominant concern of low response rates is the potential for non-response biases (Rogelberg & Stanton, 2007), multiple analyses were conducted to assess for potential response biases. Based on prior research (Baruch & Holton, 2008), an independent samples t-test demonstrated that the early respondents (who completed the survey in the first week) did not

significantly differ from the late respondents (who completed the survey in the second week). Testing for potential differences between these groups is important because late respondents are presumed to be quite similar to non-respondents (Armstrong & Overton, 1977). The results indicated there were no significant differences with regards to gender ($t(123) = -1.01$, $p = .32$), age ($t(123) = .94$, $p = .35$), and organizational tenure ($t(123) = -.39$, $p = .70$). These analyses further indicated that respondents also did not significantly differ in terms of their responses to maintenance HRM practices ($t(123) = -1.40$, $p = .16$), development HRM practices ($t(123) = -.30$, $p = .76$), work intensity ($t(123) = -.30$, $p = .77$), CSE ($t(123) = 1.10$, $p = .28$), identity threat ($t(123) = -1.26$, $p = .21$), and organizational deviance ($t(123) = .71$, $p = .48$).

Measures

This study used the same HRM bundles, work intensity ($\alpha = .96$), and organizational deviance ($\alpha = .75$) measures that were used in Study 1. Only the additional measures are described below. See Appendices B-G for the complete list of items.[8]

Core Self-Evaluations. The 12-item CSE scale developed by Judge, Erez, Bono, and Thoresen (2003) was used to assess for the extent to which respondents had positive self-evaluations. Items were rated on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). A sample item is: "I am confident I get the success I deserve in life". The scale included six-items that were reverse-scored prior to the analyses. A sample item that was reverse-scored is: "Sometimes, I do not feel in control of my work". The Cronbach's alpha was .84.

Identity Threat. The 9-item scale used by Aquino and Douglas (2003) assessed for identity threat. Respondents were asked to indicate the number of items that one or more coworkers displayed the targeted behaviors in the previous 12 months. Items were rated

[8] This list includes the self-complete and telephone-administered instructions for both Study 1 and Study 2.

according to the following scale: 1 = never, 2 = 1-3 times, 3 = 4-6 times, 4 = 7-9 times, and 5 =10 times or more. A sample item includes: "Judged your work in an unjust manner". Since Aquino and Douglas (2003) contend that one item does not load onto this scale, I conducted a CFA to test whether the 9-item scale was appropriate, which is discussed below. Note: The CFA showed that two items loaded poorly onto the 9-item scale and, therefore, were deleted prior to conducting the analyses. The revised scale resulted in a Cronbach's alpha of .92.

Controls. Similar to the first study, I controlled for gender (1 = female, 0 = male), age, and organizational tenure because prior research demonstrates that these personal and work-related characteristics are linked to organizational deviance (Henle, 2005; Restubog et al., 2007; Thau et al., 2009). Since the organizational tenure variable was skewed, a log transformation was conducted and used for subsequent analyses (Sharpe et al., 2010). Two sets of analyses were conducted – one with controls, and the other without controls. The results remained consistent across all analyses; therefore, the inclusion of controls did not alter the findings (T. E. Becker, 2005). The results presented below include the analyses with the control variables.

Common Method Variance

As previously discussed, Conway and Lance (2010) argue that, to some extent, researchers have heightened self-report concerns themselves, but Conway and Lance do contend that specific circumstances permit self-report measures, provided there are valid justifications. This study draws upon two additional variables that are measured via self-report. The first measure of CSE is appropriately measured via self-report because employees are in the best position to evaluate the extent to which they genuinely feel they hold positive self-evaluations. Moreover, Judge et al. (2003) report only a moderate correlation of .43 between self- and other-

reports of CSE. Indeed, personality research demonstrates that: "personality variables, as measured by self-reports, have substantial validities, which has been established in several quantitative reviews of hundreds of peer-reviewed research studies" (Ones, Dilchert, Viswesvaran, & Judge, 2007, p. 1020). The second measure of identity threat is also appropriately obtained using self-report measures because others may not be fully aware of the full range of identity threatening episodes that are experienced by targets themselves. Nevertheless, similar to Study 1, several procedural and statistical remedies were used to reduce concerns of common method variance.

Procedural Remedies. This study used the same procedural remedies as in Study 1. In particular, a pilot study was used to address concerns of item clarity and ambiguity (Podsakoff et al., 2012). In the informed consent letter, respondents were informed that all information was confidential, and respondents were instructed to answer the questions in an honest and accurate manner (Podsakoff et al., 2003). This study also included multiple measures that were unrelated to the research questions with the intention of psychologically separating the constructs of interest (Podsakoff et al., 2012). The questionnaire also included numerous remedies, such that I counterbalanced the key measures, multiple different scale anchors were integrated, and reverse-coded items were also used to help mitigate CMV concerns (Podsakoff et al., 2003, 2012).

Statistical Remedies. Multiple statistical remedies were used to further ensure that there were no serious CMV concerns. The Harmon's one-factor test indicated that one factor accounted for 18.99% of the variance, thereby suggesting that there were no significant common method concerns (Podsakoff & Organ, 1986). Moreover, the correlational marker technique was used to further minimize potential CMV concerns (Lindell & Whitney, 2001). Since employee creativity data was not collected in this study (as in Study 1), desire for status (Dahling, Whitaker,

& Levy, 2009) was selected as the marker variable because there was no theoretical basis upon which to expect a significant relationship between desire for status and organizational deviance. However, significant covariation among these variables could be shared, provided there were some specific common method biases present (e.g., social desirability and mood states). The results indicated that desire for status was not significantly related to organizational deviance (r = -.03, *ns*). The results also showed that the significant zero-order correlations remained significant after the correlational marker technique was applied (Lindell & Whitney, 2001). This indicates that there were no serious CMV concerns.

Confirmatory factor analyses were also used to ensure discriminant validity between the constructs. First, I used maximum likelihood (ML) estimation in AMOS version 22.0 to ensure that the items all loaded appropriately onto the identity threat construct. As previously mentioned, I specifically conducted a CFA for identity threat because Aquino and Douglas (2003) indicate that one item ("Swore at you") should not be included due to a low factor loading. In this study, the 9-item scale resulted in poor model fit (χ^2 = 132.381, *df* = 27, p-value = .000, TLI = .751, CFI = .850, RMSEA = .177). Due to low factor loadings, I removed two items in two separate subsequent analyses ("Swore at you" and "Made insulting comments about your private life"). Based on the modification indices, I also covaried items 5 and 9, along with items 1 and 8 given the shared content of these items. The resulting 7-item factor resulted in acceptable model fit (χ^2 = 19.529, *df* = 12, p-value = .077, TLI = .977, CFI = .987, RMSEA = .071). Therefore, a 7-item scale was used to assess for identity threat.

Once again, to ensure that the two HRM bundles were in fact distinct constructs, I used the DWLS estimator using the Lavaan package in R (Rosseel, 2012). The results demonstrated that the two HRM bundles were in fact distinct constructs, as shown by the good model fit (χ^2 =

22.437, *df* = 19, p-value = .263, TLI = .991, CFI = .994, RMSEA = .038). The 6-factor model that comprised the two HRM bundles, work intensity, CSE, identity threat, and organizational deviance also resulted in very good model fit (χ^2 = 603.275, *df* = 581, p-value = .253, TLI = .993, CFI = .994, RMSEA = .018). In this model, the parameters between maintenance and development HRM bundles and identity threat were both fixed to zero because these variables were weakly correlated, respectively (*r* = -.13 and *r* = -.04). From a conceptual standpoint, there is also no theoretical relationship between these HRM bundles and identity threat. In essence, concerns of common method bias are significantly minimized based on these procedural and statistical remedies.

Analytical Strategy

Similar to Study 1, the mediation analyses ('model 4') were tested using bootstrapping procedures with Hayes' (2013) Process macro. The moderating role of CSE in the relationship between work intensity and organizational deviance was tested using Hayes' (2013) moderated regression analysis ('model 1'). Prior to the moderation analysis, work intensity and CSE were both mean-centered. The three-way interaction between work intensity, CSE, and identity threat was tested using 'model 3' in Hayes' (2013) Process macro. The predictor variables, namely, work intensity, CSE, and identity threat were also mean-centered prior to the three-way interaction analysis. The final set of hypotheses pertaining to the final two moderated mediated models were tested using 'model 18' (Hayes, 2013). The work intensity, CSE, and identity threat variables were also mean-centered prior to the conditional indirect effect analyses. In line with much of the extant literature, the analyses drew on 5,000 bootstrapped samples (e.g., Mawritz, Mayer, Hoobler, Wayne, & Marinova, 2012). Specifically, the bootstrapping analytical technique

was used, which obtains confidence intervals based on a predetermined set of bootstrapped samples to determine whether the conditional indirect effects remain significant at varying levels of CSE and identity threat.

Results

Table 9 presents the means, standard deviations, and correlations. The correlation analyses showed that maintenance HRM practices were significantly correlated with development HRM practices ($r = .57$, $p < .01$) and CSE ($r = .33$, $p < .01$). The development HRM practices were correlated with work intensity ($r = .26$ $p < .01$), CSE ($r = .27$, $p < .01$), and organizational deviance ($r = -.21$, $p < .05$). Work intensity was also negatively correlated with organizational deviance ($r = -.49$, $p < .01$). Moreover, CSE was correlated with organizational tenure ($r = .20$, $p < .05$). Identity threat was also correlated with organizational deviance ($r = .25$, $p < .01$). Lastly, age was correlated with organizational tenure ($r = .36$, $p < .01$). Multicollinearity was not of concern because the regression analyses indicated that all VIFs were well below 2 (Myers, 1990; Tabachnick & Fidell, 2007).

Table 9

Means, Standard Deviations, and Correlations

Variable	M	S.D.	1	2	3	4	5	6	7	8
1. Maintenance HRM bundle	2.81	1.15								
2. Development HRM bundle	2.45	1.39	.57**							
3. Work intensity	5.89	1.06	.10	.26**						
4. Core self-evaluations	4.97	0.85	.33**	.27**	.15					
5. Identity threat	1.56	0.68	-.13	-.04	-.04	-.16				
6. Organizational deviance	2.46	1.30	-.13	-.21*	-.49**	-.08	.25**			
7. Gender	0.65	0.48	-.07	-.06	-.07	-.16	.01	.06		
8. Age	30.04	6.21	-.05	-.05	.04	.16	-.08	.01	-.06	
9. Organizational tenure (years)	0.36	0.40	.04	-.08	-.12	.20*	.03	.13	-.01	.36**

Notes:
M = mean, S.D. = standard deviation
Gender: female (1), male (0)
$N = 125$
** $p < .01$ (two-tailed)
* $p < .05$ (two-tailed)

Mediation Analyses

Hypotheses 1 and 2 propose that perceived maintenance and development HRM bundles negatively relate to organizational deviance via work intensity. Drawing on the bootstrapping procedures for simple mediation analyses, the results revealed that there was not a significant indirect effect between maintenance HRM practices and organizational deviance via work intensity (-.06, LLCI = -.1706, ULCI = .0237) (Table 10). Thus, Hypothesis 1 was not supported.

Table 10

The Mediating Effect of Work Intensity in the Maintenance HRM Bundle and Organizational Deviance Relationship

Variables	Outcome	
	Unstandardized Coef.	SE
Model 1 (Work intensity)		
Maintenance HRM bundle	.10	.08
Gender	-.13	.20
Age	.02	.02
Organizational tenure	-.45	.26
R^2 (Adj. R^2)	.04 (.01*)	
F-value	1.27	
Model 2 (Organizational deviance)		
Work intensity	-.58***	.10
Maintenance HRM bundle	-.10	.09
Gender	.07	.22
Age	.00	.02
Organizational tenure	.23	.28
R^2 (Adj. R^2)	.26 (.23)	
F-value	8.22***	
Model 3 (Total effect model)		
Maintenance HRM bundle	-.16	.10
Gender	.15	.24
Age	-.01	.02
Organizational tenure	.49	.32
R^2 (Adj. R^2)	.04 (.01*)	
F-value	1.26	

Total, Direct, and Indirect Effects	Unstandardized Coef.	SE
Direct and total effects		
Maintenance HRM bundle on work intensity (path *a*)	.10	.08
Work intensity and organizational deviance (path *b*)	-.58***	.10
Total effect of maintenance HRM bundle on organizational deviance (path *c*)	-.16	.10
Direct effect of maintenance HRM bundle on organizational deviance (path c^1)	-.10	.09
Bootstrapping results for the indirect effect		
Indirect effect of maintenance HRM bundle on organizational deviance via work intensity	-.06	.05
CI (95%)	[-.1706, .0237]	

Notes:
Values are unstandardized regression coefficients
CI = confidence interval
Bootstrapped samples = 5,000
*$p < .05$, **$p < .01$, ***$p < .001$
N = 125

Path *a* denotes the link between the independent variable and the mediating variable. Path *b* denotes the link between the mediating and dependent variables. Path *c* reflects the relationship between the independent and dependent variables when the mediating variable is not included - that is, the total effect model. Path c^1 represents the link between the independent and dependent variables when the mediating variable is entered into the analysis - that is, the direct effect model.

However, the bootstrapping procedures indicated that a significant negative indirect effect existed between perceived development HRM practices and organizational deviance (Table 11). Specifically, the results indicated that development HRM practices were significantly related to organizational deviance through the mediating effect of work intensity (-.11, LLCI = -.2237, ULCI = -.0310). Thus, Hypothesis 2 was supported.

Table 11

The Mediating Effect of Work Intensity in the Development HRM Bundle and Organizational Deviance Relationship

Variables	Outcome	
	Unstandardized Coef.	SE
Model 1 (Work intensity)		
Development HRM bundle	.19**	.07
Gender	-.11	.19
Age	.02	.02
Organizational tenure	-.38	.25
R^2 (Adj. R^2)	.09 (.06)	
F-value	3.05*	
Model 2 (Organizational deviance)		
Work intensity	-.57***	.10
Development HRM bundle	-.07	.08
Gender	.08	.22
Age	.00	.02
Organizational tenure	.20	.28
R^2 (Adj. R^2)	.26 (.22)	
F-value	8.14***	
Model 3 (Total effect model)		
Development HRM bundle	-.18*	.08
Gender	.14	.24
Age	-.01	.02
Organizational tenure	.42	.31
R^2 (Adj. R^2)	.06 (.03*)	
F-value	1.88	

Total, Direct, and Indirect Effects

	Unstandardized Coef.	SE
Direct and total effects		
Development HRM bundle on work intensity (path *a*)	.19**	.07
Work intensity and organizational deviance (path *b*)	-.57***	.10
Total effect of development HRM bundle on organizational deviance (path *c*)	-.18*	.08

Direct effect of development HRM bundle on organizational deviance (path c^{1})	-.07	.08
Bootstrapping results for the indirect effect		
Indirect effect of development HRM bundle on organizational deviance via work intensity	-.11	.05
CI (95%)	[-.2237, -.0310]	

Notes:
Values are unstandardized regression coefficients
CI = confidence interval
Bootstrapped samples = 5,000
*$p < .05$, **$p < .01$, ***$p < .001$
N = 125

Interaction Analyses

Hypothesis 3 states that CSE moderates the relationship between work intensity and organizational deviance (Table 12). Using moderated regression in Hayes' (2013) Process macro, the results indicated that CSE did not significantly moderate the relationship between work intensity and organizational deviance ($b = .12$, *ns*). Because the interaction was not statistically significant, no further probing of the interaction in terms of simple slopes analyses was required. In sum, Hypothesis 3 was not supported.

Table 12

The Moderating Effect of Core Self-Evaluations in the Work Intensity and Organizational Deviance Relationship

Variables	Outcomes	
	Unstandardized Coef.	SE
Core self-evaluations	-.05	.13
Work intensity	-.56***	.11
Work intensity x Core self-evaluations	.12	.13
Gender	.07	.22
Age	.00	.02
Organizational tenure (years)	.24	.29
R^2 (Adj. R^2)	.26 (.22**)	
F-value	6.73***	

Notes:
The predictor variables were mean-centered
Values are unstandardized regression coefficients
* p <.05, ** p <.01, *** p <.001
N = 125

However, this two-way interaction was extended with Hypothesis 4 that posits a three-way interaction between work intensity, CSE, and identity threat on organizational deviance. The results indicated there was a significant three-way interaction between work intensity, CSE, and identity threat on organizational deviance (b = .70, p < .05) (Table 13). This result provided support for Hypothesis 4.

Table 13

Three-Way Interaction between Work Intensity, Core Self-Evaluations, and Identity Threat on Organizational Deviance

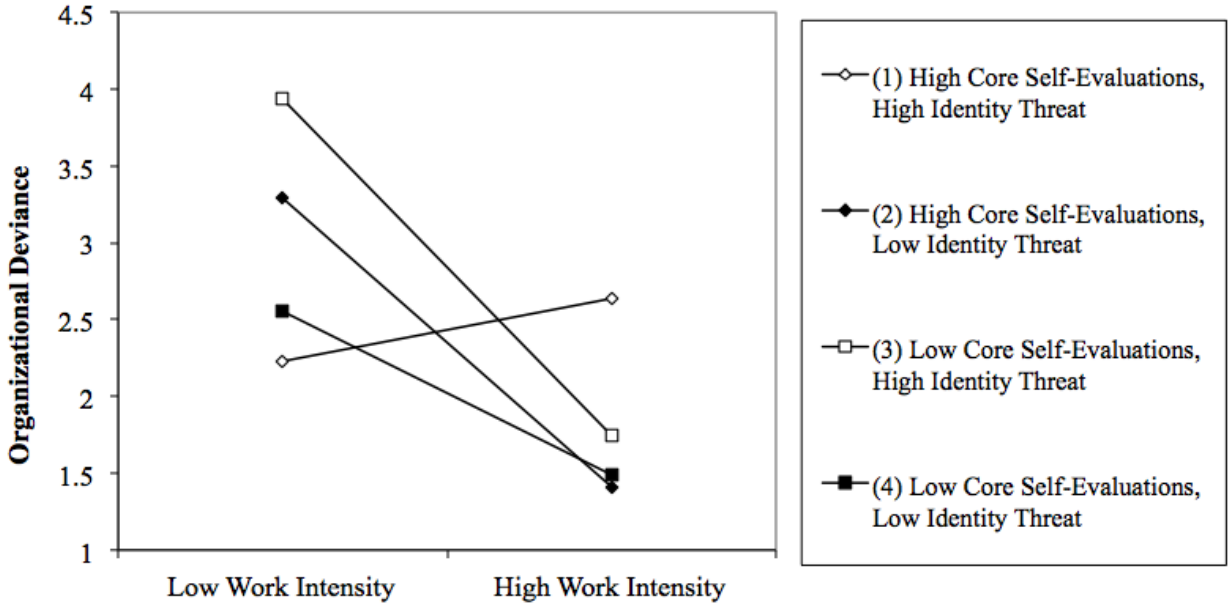
Variables	Outcomes	
	Unstandardized Coef.	SE
Core self-evaluations	-.02	.13
Work intensity	-.56***	.10
Work intensity x Core self-evaluations	.25	.14
Identity threat	.34*	.17
Work intensity x Identity threat	.20	.12
Core self-evaluations x Identity threat	-.32	.20
Work intensity x Core self-evaluations x Identity threat	.70*	.30
Gender	.13	.21
Age	.00	.02
Organizational tenure (years)	.07	.28
R^2 (Adj. R^2)	.35 (.29*)	
F-value	6.10***	

Notes:
The predictor variables were mean-centered
Values are unstandardized regression coefficients
* p <.05, ** p <.01, *** p <.001
N = 125

The interaction is plotted in Figure 3. This plotted interaction showed that there was a negative relationship between work intensity and organizational deviance when high CSE employees experienced low identity threat. Interestingly, the plotted interaction also showed that there was actually a positive relationship between work intensity and organizational deviance when high CSE employees experienced high identity threat. The plotted interaction further showed that work intensity and organizational deviance was negatively related when low CSE employees experienced low and high identity threat. Next, simple slopes analyses were conducted to examine whether these simple slopes differed significantly from zero.

Figure 3

Three-Way Interaction between Work Intensity, Core Self-Evaluations, and Identity Threat on Organizational Deviance



To further probe this interaction, simple slopes analyses were used to determine whether the effect of the independent variable on the dependent variable was significant at multiple levels of the moderating variables (Table 14). Using Hayes' (2013) Process macro, this three-way interaction was significant among high CSE employees at low identity threat (b = -.79, p < .01). Further analyses of the results showed that this three-way interaction was not significant among high CSE employees at high identity threat (b = .19, *ns*). Moreover, the results further showed that among low CSE employees, the three-way interaction was significant at both high identity threat (b = -1.03, p < .01) and low identity threat (b = -.55, p < .01).

According to Dawson and Richter (2006), the slope difference test is also recommended for three-way interactions in order to discern whether there are statistically significant differences between the various pairs of slopes. Specifically, I tested whether the simple slope

for high CSE and low identity threat was significantly different from all other combinations of the simple slopes. I also tested whether each of the remaining simple slopes were significantly different from each other. The results revealed significant differences in the slopes among high CSE employees when they experienced low identity threat compared to high CSE employees who experienced high identity threat (Slopes 1 and 2: $t = 2.37$, $p < .05$). However, there were no significant differences in the simple slopes of high CSE employees who experienced low identity threat compared to low CSE employees who experienced high identity threat (Slopes 2 and 3: $t = 0.61$, *ns*) and low CSE employees who experienced low identity threat (Slopes 2 and 4: $t = -1.17$, *ns*). The slope difference test also showed that the simple slope for high CSE employees who experienced high identity threat significantly differs from low CSE employees who experienced high identity threat (Slopes 1 and 3: $t = 2.55$, $p < .05$) and low CSE employees with low identity threat (Slopes 1 and 4: $t = 2.25$, $p < .05$). Finally, the results also revealed that there were no statistically significant differences in the simple slopes between low CSE employees who experienced high identity threat compared to those who experienced low identity threat (Slopes 3 and 4: $t = -1.92$, *ns*).

In sum, the results provide partial support for Hypothesis 4, such that the three-way interaction was significant, but the strongest negative relationship between work intensity and organizational did not occur under conditions of high CSE and low identity threat. Rather, the strongest negative relationship between work intensity and organizational deviance occurred when low CSE employees experienced high identity threat.

Table 14

Conditional Effect of Work Intensity on Organizational Deviance at Multiple Values of Core Self-Evaluations and Identity Threat

Identity Threat	CSE	Effect	SE	t-value	p-value	LLCI	ULCI
Low	Low	-.55	.15	-3.58	.0005	-.8558	-.2463
Low	Moderate	-.67	.13	-5.16	.0000	-.9267	-.4126
Low	High	-.79	.23	-3.51	.0007	-1.2337	-.3428
Moderate	Low	-.77	.13	-5.94	.0000	-1.0250	-.5125
Moderate	Moderate	-.56	.10	-5.42	.0000	-.7605	-.3532
Moderate	High	-.35	.18	-1.95	.0532	-.6949	.0048
High	Low	-1.03	.21	-5.01	.0000	-1.4412	-.6244
High	Moderate	-.42	.12	-3.46	.0008	-.6604	-.1797
High	High	.19	.32	.60	.5483	-.4413	.8268

Notes:
Values are unstandardized regression coefficients
CI = confidence interval
Bootstrapped samples = 5,000
N = 125

Table 15

Slope Difference Test

Pair of Slopes	t-value for Slope Difference	p-value
(1) and (2)	2.37	.02
(1) and (3)	2.55	.01
(1) and (4)	2.25	.03
(2) and (3)	0.61	.54
(2) and (4)	-1.17	.25
(3) and (4)	-1.92	.06

Notes:
(1) = High CSE, High identity threat
(2) = High CSE, Low identity threat
(3) = Low CSE, High identity threat
(4) = Low CSE, Low identity threat
N = 125

Moderated Mediation Analyses

The final set of hypotheses examines the conditional indirect effect of CSE and identity threat in the relationships between the perceived HRM bundles and organizational deviance via work intensity. Using bootstrapping procedures in Hayes' (2013) Process macro, the results demonstrated that the effect of maintenance HRM practices on organizational deviance via work intensity at various values of CSE and identity threat were not significant (Table 16). Therefore, Hypothesis 5 was not supported.

Table 16

Conditional Indirect Analyses of the Maintenance HRM Bundle on Organizational Deviance via Work Intensity at Multiple Levels of Core Self-Evaluations and Identity Threat

Variables	Outcome	
	Unstandardized Coef.	SE
Model 1 (Work intensity)		
Maintenance HRM bundle	.10	.08
Gender	-.13	.20
Age	.02	.02
Organizational tenure	-.45	.26
R^2 (Adj. R^2)	.04 (.01*)	
F-value	1.27	
Model 2 (Organizational deviance)		
Work intensity	-.55***	.10
Maintenance HRM bundle	-.07	.09
Core self-evaluations	.00	.13
Identity threat	.33	.17
CSE x Identity threat	-.31	.20
Work intensity x Core self-evaluations	.26	.14
Work intensity x Identity threat	.20	.12
Work intensity x Core self-evaluations x Identity threat	.68*	.30
Gender	.12	.21
Age	.00	.02
Organizational tenure	.07	.28
R^2 (Adj. R^2)	.35 (.29*)	
F-value	5.56***	

Mediator	CSE	Threat	Effect	SE	LLCI	ULCI
Work Intensity	Low	Low	-.06	.05	-.1894	.0204
	Low	Moderate	-.08	.06	-.2213	.0294
	Low	High	-.10	.08	-.3184	.0282
Work Intensity	Moderate	Low	-.07	.05	-.1916	.0260
	Moderate	Moderate	-.06	.05	-.1634	.0223
	Moderate	High	-.04	.04	-.1486	.0141
Work Intensity	High	Low	-.08	.06	-.2495	.0190
	High	Moderate	-.03	.04	-.1398	.0086
	High	High	.02	.05	-.0465	.1752

Notes:
Values are unstandardized regression coefficients
Low = 1 SD below the mean
Moderate = mean
High = 1 SD above the mean
Intensity, CSE, and identity threat were mean-centered
CI = confidence interval
Bootstrapped samples = 5,000
N = 125

The results, however, indicated that the indirect effect of development HRM practices on organizational deviance via work intensity was significant at multiple levels of CSE and identity threat (Table 17). In other words, the strength of the mediating relationship between development HRM practices and organizational deviance via work intensity was examined at three standard deviations of the moderating (i.e., CSE and identity threat) variables. Specifically, I tested the strength of the mediating relationship at high (+1 SD), moderate (mean), and low (-1 SD) levels of the moderators. The results indicated that the indirect effect of development HRM practices on organizational deviance via intense work behaviors was significant among high CSE employees who experienced low levels of identity threat (b = -.15, LLCI = -.3327, ULCI = -.0470) and moderate levels of identity threat (b = -.06, LLCI = -.1802, ULCI = -.0048), but not at high levels of identity threat (b = .04, LLCI = -.1106, ULCI = .2285). Moreover, the results further showed that the conditional indirect effect of development HRM practices on organizational deviance was significant at low (-1 SD) and moderate (mean) levels of CSE when identity threat was high, moderate, and low. While the results show that the strongest negative relationship between perceived development HRM bundles and organizational deviance via work intensity occurred when low CSE employees experienced high identity threat, the results still provided partial, albeit not full, support for Hypothesis 6.

Table 17

Conditional Indirect Analyses of the Development HRM Bundle on Organizational Deviance via Work Intensity at Multiple Levels of Core Self-Evaluations and Identity Threat

Variables	Outcome	
	Unstandardized Coef.	SE
Model 1 (Work intensity)		
Development HRM bundle	.19**	.07
Gender	-.11	.19
Age	.02	.02
Organizational tenure	-.38	.25
R^2 (Adj. R^2)	.09 (.06)	
F-value	3.05*	
Model 2 (Organizational deviance)		
Work intensity	-.54***	.11
Development HRM bundle	.06	.08
Core self-evaluations	.00	.13
Identity threat	.34*	.17
Core self-evaluations x Identity threat	-.32	.20
Work intensity x Core self-evaluations	.25	.14
Work intensity x Identity threat	.20	.12
Work intensity x Core self-evaluations x Identity threat	.67*	.30
Gender	.12	.21
Age	.00	.02
Organizational tenure	.05	.28
R^2 (Adj. R^2)	.35 (.29*)	
F-value	5.58***	

Mediator	CSE	Threat	Effect	SE	LLCI	ULCI
Work Intensity	Low	Low	-.11	.05	-.2338	-.0216
	Low	Moderate	-.15	.06	-.3006	-.0468
	Low	High	-.19	.09	-.4429	-.0656
Work Intensity	Moderate	Low	-.13	.05	-.2521	-.0390
	Moderate	Moderate	-.10	.04	-.2119	-.0328
	Moderate	High	-.08	.05	-.1818	-.0027
Work Intensity	High	Low	-.15	.07	-.3327	-.0470
	High	Moderate	-.06	.04	-.1802	-.0048
	High	High	.04	.08	-.1106	.2285

Notes:
Values are unstandardized regression coefficients
Low = 1 SD below the mean
Moderate = mean
High = 1 SD above the mean
Intensity, CSE, and identity threat were mean-centered
CI = confidence interval
Bootstrapped samples = 5,000
N = 125

Discussion

The present study makes several important contributions to the extant literature that deepens our understanding of the conditions under which perceived HRM bundles influence organizational deviance. In particular, this study showed that only perceived development HRM practices (but not perceived maintenance HRM practices) had a negative indirect effect on organizational deviance via intense work behaviors. The results further demonstrated that CSE did not moderate the relationship between work intensity and organizational deviance; however, CSE and identity threat did interact to shape the work intensity and organizational deviance relationship. The results further indicated that the relationship between perceived development HRM practices (but not perceived maintenance HRM practices) on organizational deviance through work intensity among high CSE employees was significant at low identity threat. In doing so, this study makes several important contributions to extant research.

Research Contributions

This study presents some interesting albeit unexpected results that advance the findings from Study 1. Drawing on social exchange theory, employees who perceive that the organization makes employee investments with HRM practices experience a felt obligation to 'give back' to the organization (Blau, 1964). Since both maintenance and development HRM bundles represent employee investments, employee perceptions of these HRM bundles should theoretically lead to

positive work behaviors, such as intense work behaviors and subsequently limited deviant behaviors (Blau, 1964; Hobfoll, 2001). However, the results demonstrated that only development HRM practices (but not maintenance HRM practices) had a significant indirect effect on organizational deviance via intense work behaviors.

Two possible explanations can account for this statistically insignificant indirect effect between perceived maintenance HRM bundles and organizational deviance. Maintenance HRM bundles might represent a weaker employee investment that subsequently fails to elicit intense work behaviors ($b = .10$, *ns*) compared to development HRM bundles ($b = .19$, $p < .01$). Although extant research does not suggest that these two bundles represent two different levels of investment, this study (in contrast to Study 1) does suggest that maintenance and development HRM bundles might not necessarily be perceived as equal employee investments. Thus, employees might not feel obliged to 'give back' to the organization with very strong positive behaviors (and the absence of negative behaviors) when they perceive maintenance HRM practices. Indeed, social exchange theory suggests that employees only choose to enact positive actions when they experience a felt obligation to 'give back' to the organization (Blau, 1964).

Another potential explanation is that employees might choose to respond with other work behaviors that are meaningful, albeit to a lesser extent, to better reflect the nature of the perceived investment. Intense work behaviors might represent a stronger form of reciprocation that is appropriate in response to perceived development HRM bundles because such HRM practices are perceived as greater employee investments. However, maintenance HRM bundles might not be perceived as significant and meaningful as development HRM bundles; therefore, employees might choose to respond to maintenance HRM bundles with behaviors that represent

a weaker form of reciprocation, such as task-related effort.[9]

This study also investigates the moderating effect of CSE in the work intensity and organizational deviance relationship. According to self-verification theory, I theorize that work intensity negatively relates to organizational deviance among high CSE employees because intense work behaviors are favorable behaviors that reinforce the positive self-concept held by high CSE employees, thereby decreasing deviant work behaviors (Swann, 1983, 2012). However, the results did not support this prediction. Alternatively, it is possible that the two-way interaction does not provide sufficient insight into explaining the conditions under which high CSE employees might or might not be motivated to participate in deviant actions. In other words, the feedback related to work intensity might not be strong enough to influence 'dark' work behaviors. However, research shows that there are some situations where high self-esteem people can react very strongly to external influences, such as in situations where employees are subject to esteem threats (Duffy, Shaw, Scott, & Tepper, 2006). Drawing on this line of research, I posit that the concept of identity threat can help to advance our understanding of the relationship between work intensity and organizational deviance among high CSE employees.

Therefore, I examine a three-way interaction between work intensity, CSE, and identity threat on organizational deviance. I predict that the strongest negative relationship between work intensity and organizational deviance occurs when high CSE employees experience low identity threat. In line with self-verification theory, the results showed that the negative relationship between work intensity and organizational deviance was strengthened when high CSE employees experienced low identity threat (Swann, 1983, 2012). In other words, highly intense

[9] Task-related effort is an example of a weaker form of reciprocation because it only relates to behavioral effort related to task duties. Conversely, work intensity is a more holistic construct that taps into the intensity and energy exerted towards an employee's overall job role. Indeed, this construct includes additional activities outside of a person's job role that are deemed important in order to be successful in an employee's job role.

work behaviors decrease deviant work behaviors among high CSE employees who experience low identity threat. The positive information that derives from highly intense work behaviors and low identity threat both affirm the positive self-concept of high CSE employees, thereby leading to infrequent organizational deviance. Therefore, these results show that low identity threat is critical in terms of decreasing deviant work behaviors. At the same time, these results also highlight the 'dark' side of CSE – that is, low levels of work intensity lead to greater organizational deviance among high CSE employees in spite of low identity threat. Low levels of intense work behaviors can lead to negative feedback that does not affirm the positive self-concept of high CSE employees despite that these employees are subject to low identity threat. Hence, these employees participate in some deviance to assert their self-worth. In sum, the results show that high levels of intense work behaviors lead to low levels of deviant actions when high CSE employees experience low identity threat.

Further investigation of the three-way interaction points to some interesting and unexpected trends. The results showed that the strongest negative relationship between work intensity and organizational deviance actually occurred when low CSE employees experienced high identity threat. This result is certainly unexpected – however, one plausible explanation that might account for this relationship draws on behavioral plasticity theory. According to this theoretical perspective, the behaviors of employees with low self-esteem are particularly malleable, as they are strongly affected by external information (Brockner, 1988). In other words, low self-esteem employees react more strongly to environmental cues compared to those with high self-esteem – thus, these low self-esteem employees are more 'behaviorally plastic' (Brockner, 1988). In a similar vein, low CSE employees are particularly influenced by high identity threat because they have few resources to 'buffer' the negative influence of threatening

information. Therefore, behavioral plasticity theory helps to explain why the work intensity and organizational deviance relationship is strongest when low CSE employees experience high identity threat, such that these low CSE employees are particularly susceptible to changing their behavior in response to threatening information within the external environment.

To illustrate, behavioral plasticity theory suggests that when these low CSE employees experience high identity threat, the negative relationship between work intensity and organizational deviance becomes particularly strong (Brockner, 1988). Indeed, these low CSE employees become particularly motivated to participate in deviant actions to obtain negative feedback that verifies their negative self-concept, such that the negative feedback flowing from their low levels of intense work behaviors does not sufficiently reinforce their negative self-concept. In support, self-verification research shows that when people receive information that does not verify how they perceive themselves, these people 'ramp up' their efforts to elicit the desired information from their interaction partners (Swann & Hill, 1982). Therefore, self-verification and behavioral plasticity theories blend to explain why low CSE employees who experience high identity threat are particularly influential in strengthening the negative relationship between work intensity and organizational deviance.

Conversely, the three-way interaction results showed that the weakest negative relationship between work intensity and organizational deviance occurred when low CSE employees experienced low identity threat. According to self-verification theory, the negative relationship between work intensity and organizational deviance weakens when low CSE employees experience low identity threat. That is, the positive information that flows from intense work behaviors generally does not sit well with low CSE employees, but research suggests that the lack of identity threatening information can help to restore their self-concept,

thereby leading to few episodes of organizational deviance. Indeed, some of the earliest self-verification research supports this finding by revealing that people with a negative self-concept actually prefer to receive positive information, but only when it affirms their (rare) positive attributes (Swann et al., 1989). Similarly, the positive information that flows from intense work behaviors might actually reinforce these (rare) positive attributes of low CSE employees, especially since these employees experience low identity threat. Therefore, the negative relationship between work intensity and organizational deviance attenuates when low CSE employees experience low identity threat, such that the absence of identity threatening information ensures that the feedback they receive from their work environment does not contradict their self-view.

Interestingly, the three-way results also showed that there was one positive three-way interaction. Work intensity was positively related to organizational deviance among high CSE employees who experienced high identity threat. Self-verification theory explains that this negative feedback from high identity threat does not support the positive self-view held by high CSE employees in spite of the exertion of significant personal resources in intense work behaviors (Swann, 1983, 2012). Subsequently, these high CSE employees become motivated to act out with deviant actions to assert their self-worth (Neuman & Baron, 2005). While the results did support the positive nature of this three-way interaction, the results were not statistically significant. It could be that the positive relationship between work intensity and organizational deviance might not be moderated by high CSE employees who experience high identity threat because high identity threat might not be meaningfully enough to truly motivate these high CSE employees to participate in deviant actions. Since high CSE employees are confident employees with high levels of self-esteem who feel in control of their lives (Judge et al., 1997), these

employees might not take high levels of identity threat seriously because they are confident that their intense work behaviors are meaningful and valuable to the organization.

In sum, this research supports and expands much of the CSE research that focuses on the positive implications that derive from CSE (C. -H. Chang et al., 2012). In support, this three-way interaction provided support for the positive implications associated with high CSE, such that high levels of work intensity and low identity threat were key variables in terms of shaping infrequent deviant actions. At the same time, the results also interestingly showed that low CSE employees can also participate in positive behaviors, such that high levels of work intensity was also a critical factor in decreasing deviant actions among these low CSE employees in situations of both high and low identity threat. Moreover, in contrast to most CSE studies, the results also provided insights into the specific conditions under which high CSE employees can be motivated to enact 'dark' work behaviors – that said, low levels of work intensity was generally a critical factor in shaping deviant actions among both high and low CSE employees. Perhaps most importantly, the results offered significant support for the original hypothesis that the negative relationship between work intensity and organizational deviance strengthens when high CSE employees experience low identity threat. When comparing the two-way and three-way interactions, these results further showed that identity threat has a profound impact on employee behavior, especially since the two-way interaction was not significant while the three-way interaction received significant statistical support.

Lastly, the results also showed that CSE and identity threat interact to shape the negative indirect effect of perceived development HRM practices (but not perceived maintenance HRM practices) on organizational deviance via work intensity. It is not unexpected that the conditional indirect effect model involving maintenance HRM practices was not significant because the

mediation analyses showed that maintenance HRM practices were not significantly related to intense work behaviors. However, the results further showed that high levels of CSE interact with low identity threat to significantly moderate the negative indirect effect of perceived development HRM practices on organizational deviance via intense work behaviors. According to social exchange theory, employees who make positive perceptions about development HRM practices should reciprocate with intense work behaviors and in turn these employees also choose to participate in low levels of organizational deviance (Blau, 1964). However, this relationship is strengthened among high CSE employees who experience low levels of identity threat because high CSE employees who make positive perceptions of development HRM practices, participate in high levels of work intensity, and are subject to low levels of identity threat are subject to significant positive feedback that reinforces their positive self-view. In other words, HRM practices, intense work behaviors, and low identity threat do not pose any negative information that could threaten the positive self-view of high CSE employees. In line with self-verification theory, these high CSE employees subsequently refrain from organizational deviance because there is no negative information that threatens their positive self-view that would otherwise prompt deviant behaviors to assert their sense of self-worth (Swann, 1983, 2012). In doing so, this moderated mediated model advances extant perceived HRM research because it outlines key boundary conditions under which perceived HRM practices lead to low levels of organizational deviance.

In the next chapter, I provide an overview of the theoretical and practical implications associated with this multi-study investigation. The limitations of both studies are highlighted along with fruitful avenues for further inquiry.

CHAPTER 5: GENERAL DISCUSSION

Significant advancements have been made in the HRM literature in recent decades (Huselid, 1995; Jiang et al., 2013; Lengnick-Hall et al., 2009; Nishii et al., 2008). More recently, scholars have highlighted the importance of examining employee *perceptions* of HRM practices (Liao et al., 2009; Wright & Nishii, 2013), but research in this area remains relatively nascent. The present research addresses numerous calls for research by focusing on employee perceptions of HRM practices. For example, recent calls include: "… mainstream HPWS research has paid little attention to employees' perceptions of HPWS" (M. Zhang, Fan, & Zhu, 2014, p. 423) and "…little is know about how employees perceive and interpret HR practices" (Boon et al., 2011, p. 138). However, the research that has been conducted in this area shows that perceived HRM practices positively relate to desirable employee attitudes and behaviors (e.g., Kuvaas & Dysvik, 2010). Nevertheless, there is a dearth of research that explores the link between perceived HRM practices and 'dark' employee behaviors at the individual-level (for exceptions, see: Al-Shuaibi et al., 2014; Shamsudin et al., 2011, 2012, 2014). This lack of research fails to provide a complete understanding of how perceived HRM practices influence all three facets of employee job performance – that is, task performance, citizenship behaviors, and deviant work behaviors.

The present research contributes to this field of research with a multi-study investigation that examines the effect of perceived HRM practices on workplace deviance via work intensity. This research further examines the role of individual differences in HRM research with an investigation of the interactive effects between CSE and identity threat in the perceived HRM practices and organizational deviance relationship. In doing so, these studies make several important contributions to the extant literatures. Next, I will discuss the mediation results followed by a discussion of the role of individual differences in shaping these mediations.

Afterwards, the practical implications of this research will be discussed followed by an overview of the research limitations and avenues for future inquiry.

Research Contributions

This multi-study investigation demonstrated that employee perceptions of HRM practices are positively linked to intense work behaviors. Study 1 used a two-wave research design that demonstrated that both perceived development and maintenance HRM bundles had a significant positive relationship with work intensity. However, full support for this assertion was not found in Study 2, such that only development HRM practices (not maintenance HRM practices) had a significant positive relationship with work intensity (but maintenance HRM practices did have a positive, albeit insignificant, relationship with work intensity). This statistically insignificant relationship might be explained by the fact that different HRM bundles might reflect different levels of employee investment.

Specifically, in line with the employee-employer relationships literature, organizations can create different types of relationships with their employees based on their differential use of HRM practices that subsequently elicits distinct attitudinal and behavioral responses from employees (Tsui, Pearce, Porter, & Tripoli, 1997). Indeed, social exchange theory suggests that development HRM bundles might reflect greater employee investments that subsequently results in higher levels of work intensity because employees feel more obligated to 'give back' to the organization (Blau, 1964). In particular, development HRM bundles might be perceived as a greater employee investment because these HRM practices help to foster personal and professional growth and development, whereas maintenance HRM bundles simply focus on providing employees with the resources to help them only maintain their current level of

functioning (Kooij et al., 2013). Since maintenance HRM bundles might be perceived as a less significant investment, employees might choose to respond to this investment with behaviors that are still meaningful, but offer less value than intense work behaviors. For example, some employees might choose to respond to maintenance HRM bundles with behaviors that require less energy exertion than work intensity, such that some employees might partake in task-related effort because it focuses energies only on in-role work activities rather than in- and extra-role work activities. However, this explanation is not supported in Study 1, such that this study demonstrates a significant positive relationship between perceived maintenance HRM practices and work intensity.

Nevertheless, both studies offer relatively strong support for three of the four hypotheses that examine the positive relationships between both perceived HRM bundles and work intensity. These findings contribute to the literature examining the relationship between HRM practices and work intensity, such that most of these extant studies focus on work intensity from the perspective of job demands (i.e., the impact of HRM practices on the intensity of work demands). This vein of research offers mixed results related to the relationship between HRM practices and work intensity (Godard, 2001; Ramsay et al., 2000) – that is, some studies show that HRM practices can result in work intensity (Ehrnrooth & Björkman, 2012; Ramsay et al., 2000; Tregaskis et al., 2013), while other studies fail to provide evidence for such a result (Godard, 2004). The present study extends this line of research by focusing on how perceived HRM practices can shape the extent to which employees choose to invest themselves into their job role by focusing on work intensity from a behavioral perspective. In other words, employee perceptions of HRM bundles prompt intense work behaviors with the intention of reciprocating the organization's investment with valued behaviors. These results demonstrate that employees

who perceive significant employee investments in HRM practices are more likely to invest themselves into their job role in order to 'give back' to the organization in a meaningful manner.

This investment of oneself into the job role is not only a positive outcome itself, but can also result in other beneficial outcomes – this includes the absence of negative behaviors. Both studies demonstrated that work intensity had a significant direct negative effect on deviant behaviors. Specifically, Study 1 demonstrated that work intensity was negatively related to workplace deviance, but the post-hoc analyses further revealed that work intensity had a significant direct negative effect on organizational deviance (but not on interpersonal deviance). Similarly, Study 2 corroborated these latter results, such that the analyses showed there was a direct negative relationship between work intensity and organizational deviance. In doing so, these results reveal that work intensity results in subsequent beneficial implications – that is, employees who choose to work intensely also refrain from deviant behaviors that result in significant negative implications for organizations. In accordance with social exchange theory, employees who choose to work intensely in their current job role choose to do so with the intention of participating in behaviors that benefit the organization (Blau, 1964; Gouldner, 1960). Therefore, employees who wish to maintain a positive working relationship with their employer also choose to avoid deviant actions that could harm the employee-employer relationship. COR theory also suggests that the exertion of personal resources in intense work behaviors leads to fewer personal resources for other behaviors (Hobfoll, 1989, 2001). Since deviant work behaviors are negative actions that could prompt further personal resource loss, employees avoid participating in organizationally deviant work behaviors when they have few personal resources.

The mediation analyses in Study 1 demonstrate that employee perceptions of both maintenance and development HRM bundles have a negative indirect effect on workplace

deviance via intense work behaviors. Specifically, the post-hoc analyses showed that employees who perceived that the organization offered HRM practices to help employees maintain and improve their current levels of functioning chose to reciprocate this perceived investment with intense work behaviors and in turn also avoided deviant actions directed towards the organization. In a similar vein, Study 2 demonstrated that development HRM practices (but not maintenance HRM practices) had an indirect negative effect on organizational deviance via intense work behaviors. While some plausible explanations that might account for the statistically insignificant indirect effect of maintenance HRM practices on organizational deviance have already been discussed, both studies generally provide rather compelling evidence that perceived HRM practices generally have an indirect negative effect on deviant actions.

Taken together, these two studies contrast much of the critical HRM research that points to the potential harmful effect of HRM practices (Mariappanadar, 2014). Rather, this research contributes to the line of research that shows that HRM practices are linked to numerous positive employee behaviors (Alfes, Shantz, et al., 2013; Ehrnrooth & Björkman, 2012; Kuvaas & Dysvik, 2010). This multi-study investigation also shows that perceived HRM practices not only directly prompt intense work behaviors, but also indirectly discourage deviant actions. The focus on these behavioral outcomes is important because it provides some clarity to the mixed results related to the HRM practices and work intensity relationship, and also addresses the dearth of research that examines how HRM practices can discourage workplace deviance (Arthur, 2011). Therefore, this multi-study investigation offers a more comprehensive understanding of the complete effects of HRM practices by showing that perceived HRM practices not only benefit the organization with positive employee behaviors (e.g., intense work behaviors), but also through the deterrence of negative behaviors (e.g., workplace deviance). In doing so, I respond to

calls for more perceived HRM research on employee job performance. For example, Alfes, Truss, et al. (2013, p. 852) state that a: "… small number of other studies that have demonstrated a link between positive experiences of HRM practices and individual-level performance outcomes". This under-researched area represents an important gap in extant research because employee deviance is a pervasive phenomenon (Kidwell & Martin, 2005) that not only costs organizations billions of dollars each year (Greenberg, 1997), but also results in harmful implications for employees (Lim et al., 2008).

The HRM literature also offers limited insights into the role of individual differences in shaping the link between employee perceptions of HRM practices and subsequent attitudes and behaviors (Guest, 2011). In response, Study 2 addresses this research need in two different ways. This research focuses on the moderating role of CSE in the work intensity and organizational deviance relationship. Drawing on self-verification theory, I argue that the negative relationship between work intensity and organizational deviance is strongest among high CSE employees compared to low CSE employees (Swann, 1983, 2012). Stated differently, the exertion of high levels of work intensity lead to low levels of organizational deviance among high CSE employees because these employees experience congruence between their positive self-view and their work situation, especially since high CSE employees are driven towards positive work situations (Ferris et al., 2011). Therefore, these employees are unlikely to participate in deviant behaviors because there is no motivation driving such 'dark' work behaviors. However, the results indicated that this interactive effect was not statistically significant.

One plausible explanation for this insignificant relationship could be that the assumption that work intensity provides feedback to employees about their self-concept might not fully capture the true complexity of the situation. For example, the exertion of few intense work

behaviors among high CSE employees might not provide significant negative feedback that disconfirms their identity, thus potentially accounting for this non-significant interactive effect. Nevertheless, self-esteem research does show that there are some conditions (e.g., esteem threatening situations) where people with high self-esteem can be significantly impacted by external cues (Duffy et al., 2006). In response, this research examines the role of identity threat in motivating employee behavior in these situations. Drawing on research from the interpersonal rejection literature (Leary et al., 2006), I examine a three-way interaction between work intensity, CSE, and identity threat on organizational deviance.

The three-way interaction analyses demonstrated that there was a significant interactive effect between work intensity, CSE, and identity threat on organizational deviance. The results supported the hypothesis that the negative relationship between work intensity and organizational deviance strengthens when high CSE employees experience low identity threat. That is, highly intense work behaviors lead to significantly fewer organizationally deviant behaviors when high CSE and low identity threat interact because high CSE employees experience positive information from the intense work behaviors *and* the lack of identity threatening information that in turn reduces organizational deviance. In doing so, these results support much of the extant literature that reveals numerous positive implications associated with high CSE (C. -H. Chang et al., 2012). At the same time, these results interestingly suggest that high CSE can have a 'dark' side – that is, low levels of work intensity is likely to result in greater organizational deviance because the exertion of few intense work behaviors does not affirm the positive self-concept of high CSE employees despite low identity threat. In turn, these employees become motivated to strategically participate in some deviant work behaviors to assert their self-worth (Lawrence & Robinson, 2007). The results also showed that this negative relationship

between work intensity and organizational deviance actually reversed when high CSE employees experienced high identity threat. Stated differently, highly intense work behaviors lead to greater organizational deviance when high CSE employees experience high identity threat, such that the negative information from identity threat motivates high CSE employee to assert their self-worth with deviant actions. While the three-way analyses supported the positive nature of this relationship, the result was not statistically significant. Nevertheless, this research supports most CSE research that highlights the positive outcomes associated with high CSE (C. -H. Chang et al., 2012), but does provide some evidence that supports the small area of research that suggests there is a 'dark' side to high CSE (Judge & Hurst, 2007b; Shantz & Booth, 2014). This research also contributes to the limited research that explores the antecedents of 'cold' aggression where aggressive actions are initiated with the purpose of self-gain (Fox & Spector, 2010), such that most studies focus on 'hot' aggression where employees are provoked to react with aggressive conduct (Neuman & Baron, 2005).

Finally, the results also demonstrated a significant interactive effect between CSE and identity threat in the perceived development HRM practices (but not perceived maintenance HRM practices) and organizational deviance relationship via intense work behaviors. The results indicated that employee perceptions of development HRM practices were negatively related to organizational deviance via work intensity among high CSE employees who experienced low levels of identity threat. In other words, perceived development HRM bundles are positively related to intense work behaviors that in turn leads to low levels of organizational deviance among high CSE employees, especially when these employees experience low levels of identity threat. In line with self-verification theory, high CSE employees strive for positive feedback that affirms their positive self-view to create a sense of stability and coherence in their lives (Swann,

1983, 2012). Indeed, development HRM bundles, intense work behaviors, and the absence of identity threat leads to a work situation that affirms this positive sense of self. Consequently, these high CSE employees refrain from deviant actions that could harm the organization. This conditional indirect effect model provides key insights in the boundary conditions under which perceived development HRM bundles can decrease organizational deviance by focusing on high CSE employees and low identity threat. In sum, this multi-study research project not only makes important contributions to the extant literature, but it also points to important implications for practitioners.

Practical Implications

Organizations are encouraged to use both maintenance and development HRM practices to motivate intense work behaviors and to avert deviant behaviors. Organizations should foster work intensity because the present research along with extant studies show that intense work behaviors prompt other positive employee actions and decrease deviant work actions (Brown & Leigh, 1996; Piccolo et al., 2010). Organizations also need to discourage deviance because such actions can lead to harmful implications for employees and the organization (Greenberg, 1997; Lim et al., 2008). Based on social exchange principles, organizations should implement both maintenance and development HRM practices to show employees that they are valued and appreciated in order to encourage work intensity and discourage deviant behaviors (Blau, 1964; Gouldner, 1960). For example, practitioners should use training and development programs to provide employees with the knowledge and skills to enable these employees to work intensely in their job roles. One important caveat of this recommendation is that practitioners need to ensure that employees are not 'overloaded' in their job roles because research shows that intense work

demands can lead to negative employee outcomes (Boxall & Macky, 2014; Macky & Boxall, 2008), such as greater stress and lower job satisfaction (Zeytinoglu et al., 2007).

Line managers and HRM practitioners also need to collaborate to make it abundantly clear to employees that the organization offers its employees numerous HRM practices to help them maintain and improve their current level of functioning. For example, communication tactics can include special orientation sessions during the onboarding process to communicate the different types of available HRM practices, frequent informal and formal discussions about HRM opportunities with employees should be initiated by line managers and supervisors, and newsletters can be used to communicate upcoming HRM-related activities and events. HRM practitioners should also provide line managers with the appropriate training and support to ensure that the enactment of HRM practices occurs in a positive manner in order to foster positive employee perceptions of these HRM practices.

Moreover, HRM practitioners are also encouraged to devise creative procedures and practices to discourage deviant behaviors. In line with the above discussion that points to the importance of showing employees that their contributions are appreciated and valued, HRM practitioners are encouraged to collaborate with line managers to develop innovative activities and initiatives to express their appreciation for their employees. Furthermore, HRM practitioners should create a positive work environment that focuses on fostering positive interpersonal interactions and discouraging identity threat (e.g., situations where an employee criticizes, questions, and challenges another's self-worth and dignity in the workplace). Specifically, training should be provided to all employees to encourage these positive interactions to help employees understand how to appreciate and respect individual differences in the workplace.

Similarly, line managers and HRM practitioners are further advised to ensure that the

work environment is conducive to employees depending on their level of CSE. For example, employees with high levels of CSE need to be in positive work situations that support their positive self-view, thereby motivating positive employee behaviors. From a practical standpoint, this phenomenon is especially important because about 70 percent of people have positive self-views (Swann, 2012). In terms of recruitment and selection processes for future employees, I do not advocate for personality testing to identify the levels of CSE among potential employees because studies show that focusing on CSE can lead to adverse selection decisions due to the relationship between CSE and socioeconomic indicators (C. -H. Chang et al., 2012). Moreover, studies also show that there are response distortion concerns associated with self-evaluation testing, especially during the selection process (C. -H. Chang et al., 2012).

Nevertheless, practitioners can use personality testing with current employees in order to help create a work environment that suits their personality needs. For instance, the present research shows that a combination of highly intense work behaviors and low identity threat make high CSE employees unlikely to participate in organizational deviance. Therefore, since high CSE employees have a learning goal orientation and are motivated to achieve high levels of career success (C. -H. Chang et al., 2012; Judge & Hurst, 2008), line managers should place high CSE employees in jobs that involve challenging work assignments that require significant learning for success in these job roles. Specifically, line managers should also set specific and challenging learning goals to facilitate their professional development, especially because learning goals lead to better outcomes (Seijts, Latham, Tasa, & Latham, 2004; Tasa, Celani, & Bell, 2013). In a similar vein, line managers can also choose to increase employee autonomy by providing opportunities for job crafting (Wrzesniewski & Dutton, 2001), thereby allowing these high CSE employees to modify their current job role to allow for more challenging and

meaningful work. These types of job assignments can provide high CSE employees with opportunities that maximize their potential contribution to the organization via intense work behaviors, thereby further reinforcing their positive self-concept and decreasing the possibilities of identity threat.

Finally, while low CSE employees strive for negative information to confirm their negative self-concept, these employees do respond favorably to positive information so long as it truly affirms their positive attributes (Swann et al. 1989). Therefore, line managers should seek to consistently reinforce the positive actions of low CSE employees to affirm their positive attributes, thereby limiting their motivation to participate in deviant actions to affirm their negative self-concept. Despite the practical importance of the present research, there are some limitations that must be noted.

Limitations

Despite the scholarly and practical contributions of this research, this multi-study research design used self-report data to analyze the hypothesized conceptual models. While some researchers have raised concerns over self-report measures in organizational research (Podsakoff et al., 2003), others contend that these concerns might be inflated because some circumstances do warrant self-report data, provided there are appropriate justifications (Conway & Lance, 2010). As discussed, the self-report measures used in both studies are certainly well suited to test the hypothesized relationships because such measures provide accurate and in-depth insights into the constructs of interest. Nevertheless, multiple procedural and statistical remedies were used in both studies to limit CMV concerns (e.g., pilot study, assured confidentiality, various response formats, reverse-coded items, inclusion of unrelated variables, counterbalance of the key

variables, temporal separation among constructs, Harman's single-factor test, and the partial correlation adjustment).

In a similar vein, the cross-sectional dataset used in Study 2 prevents causal inferences (Pedhazur & Schmelkin, 1991); however, the two-wave research design in Study 1 does offer further support for the direction of the hypothesized mediations. The presence of a significant interactive effect in Study 2 further counters concerns of method variance (Evans, 1985). In addition, social exchange, COR, and self-verification theories offer meaningful theoretical support for the direction of the hypothesized relationships. Furthermore, the external validity of the results may also be limited because both datasets are from a specific Anglophone region in the Canadian context, especially because studies show that HRM practices are shaped by cultural contexts (Aycan et al., 2000).

Some of the specific underpinnings of both social exchange and self-verifications were not explicitly tested, thereby limiting the theoretical value of these studies. For example, social exchange theory indicates that HRM bundles are perceived as employee investments made by the organization that consequently elicits a felt obligation to reciprocate with meaningful behaviors (Blau, 1964). However, these studies do not explicitly test for perceived organizational support and felt obligation. Similarly, according to self-verification theory, employees who experience a lack of stability and coherence in their self-view can become motivated to create a coherent and consistent sense of oneself with actions that assert their sense of self-worth in the workplace (Swann, 1983, 2012). However, Study 2 did not explicitly test for the specific underlying motive(s) that can prompt deviant actions, but the three-way interaction between work intensity, CSE, and identity threat does indicate that a threatened work identity is an important antecedent of such deviant actions. Another limitation of Study 2 is that work intensity,

as an explicit form of feedback related to an employee's self-concept, was not explicitly tested, nor were the feelings associated with intense work behaviors among employees. This multi-study investigation also adopts the perspective that intense work behaviors represent a positive employee behavior, however, there might be circumstances where intense work behaviors could be conceptualized as a negative work behavior. For instance, there could be some conditions in which intense work behaviors might actually result in negative employee outcomes, such as poor employee health and well-being. Nevertheless, these theories and extant research do offer significant theoretical support for the hypothesized relationships, while also presenting interesting opportunities for future research.

Avenues for Future Research

Future research is needed to methodologically and theoretically advance this multi-study research endeavor in multiple ways. Future research should replicate the current results using a multi-wave and multi-source dataset to address self-report and cross-sectional concerns. For example, researchers could obtain peer reports and organizational records on workplace deviance to corroborate the current research that uses self-report measures of deviance. Future research can also seek to collect the data over three time periods to completely assess for the time-lagged effects between perceived HRM practices, work intensity, and workplace deviance. In doing so, this research can help us to better understand the causal nature of the hypothesized relationships.

To further enhance the external validity of these studies, researchers should also extend these findings outside the Western cultural context to understand the potential implications associated with cultural differences in the indirect relationship between perceived HRM bundles and deviant behaviors. Indeed, Cropanzano and Mitchell (2005) note that, despite that the norm

of reciprocity is viewed as a universal norm, its use does differ across cultural contexts. Henceforth, future research is needed to examine the hypothesized relationships outside the Western context to better understand the influence of national culture within this research context. Since there could also be potential context effects related to occupational, job status, and industry characteristics, these hypothesized models should be examined in other work-related contexts. On a final methodological note, future research should also draw on qualitative methodologies using multiple techniques, such as focus groups, in-depth interviews, and observation, to gather rich insights into the experience of maintenance and development HRM bundles within the work environment.

From a theoretical standpoint, research is needed to expand the maintenance and development HRM bundles measure, such that researchers should explore the inclusion of other theoretically relevant HRM practices (e.g., pay-for-performance) to more accurately explain employee reactions to such perceived HRM bundles. Another important avenue for future inquiry involves expanding the dual mediation model to examine the influence of perceived HRM bundles and intense work behaviors on other employee outcomes, such as extra-role behaviors, employee well-being, and career-related outcomes. A specific vein of future research includes testing the theoretical underpinnings of the hypothesized model. Specifically, research is needed to advance our understanding of the nature of the relationship between perceived HRM practices and intense work behaviors. As previously suggested, scholars should explicitly test the role of perceived organizational support and felt obligation to deepen our understanding of why employees choose to reciprocate with intense work behaviors. For example, the perceived maintenance HRM bundle was not significantly related to intense work behaviors in Study 2; however, this result contrasts the results in Study 1, thereby representing an important avenue for

future research. Therefore, researchers should delve into this relationship to understand the differential effects of maintenance and development HRM bundles (e.g., under what conditions do maintenance HRM bundles fail to elicit positive employee outcomes?).

More research is also needed to test how intense work behaviors can provide employees with important information about their self-concept. In particular, this research uses previous research to presume that highly intense work behaviors serve as positive feedback; however, research is needed to ensure that such information does in fact provide employees with positive information. Future research should also examine whether intense work behaviors are motivated by internal or externals forces, such that these distinct motivations might have a differential influence on employee behavior. Similarly, another important avenue requires researchers to also test how these intense work experiences can make employees experience positive emotions, especially since research shows that emotions have a critical role in shaping deviant behaviors (Khan, Quratulain, & Bell, 2014). For example, the exertion of intense work behaviors among high CSE employees can make employees experience positive emotions that subsequently lead to fewer deviant behaviors. Furthermore, research should also examine whether there are any differential employee outcomes resulting from the specific source of identity threat. For example, employees could respond differently to identity threat from their colleagues relative to their supervisors.

Another important area that requires further research includes examining the different theoretical underpinnings of the relationship between perceived HRM practices and workplace deviance. From a social exchange perspective, researchers should examine how different forms of social support (e.g., organizational, leader, team, and colleague) mediate the relationship between perceived HRM practices and workplace deviance, especially because research shows

that social support is critical for alternative work arrangements (Julien, Somerville, & Culp, 2011). Researchers could also draw on other theoretical frameworks to better understand why perceived HRM practices can reduce deviant actions. To illustrate, the frustration-aggression model could be used to explain that some work situations (e.g., lack of participation opportunities, poor compensation systems, few training and development opportunities, and narrow career paths) could cause employees to become frustrated that consequently induces negative emotions and in turn 'dark' work behaviors (Fox & Spector, 1999). Further inquiry is also needed to examine whether there are any conditions in which perceived HRM practices can actually result in workplace deviance. For instance, researchers should explore whether there are circumstances where perceived HRM practices can lead to psychological contract violations that could subsequently prompt deviant work behaviors.

Another important area of future research includes exploring the nomological network between intense work behaviors, intense work demands, and related concepts to advance our understanding of the distinct conceptualizations of these constructs. In addition, since work intensity has rarely been examined from a behavioral perspective, more research is also needed to examine the implications of intense work behaviors more generally. In this multi-study investigation, extant studies are drawn on to make the assumption that intense work behaviors reflect positive employee outcomes. For instance, research shows that job role investment behaviors, such as work involvement, are positively correlated with important work outcomes, such as job satisfaction (Karambayya & Reilly, 1992). However, while the present research contributes to the extant literature that shows work intensity has positive implications, there is some evidence to suggest that intense work behaviors can prompt negative employee outcomes. COR theory suggests that the constant exertion of intense work behaviors could result in

significant resource depletion that could lead to harmful physiological and psychological effects (Hobfoll, 1989, 2001). In a similar vein, researchers should also examine specific individual differences to understand the conditions under which the perceived HRM practices and intense work behaviors relationship is strengthened or even attenuated. For example, social identity researchers could examine how the salience of an employee's professional work identity could enhance this relationship, such that employees whose work is intricately tied to their personal identity could be more prone to perceive HRM practices in the workplace and in turn might exert more intense work behaviors. In doing so, an exploration of these individual differences can help to better advance our understanding of how HRM practices shape employee attitudes and behaviors.

Conclusion

The extant HRM literature has made significant advancements in recent decades that has not only garnered considerable interest among academicians (Bowen & Ostroff, 2004; Huselid, 1995; Nishii et al., 2008), but practitioners and media outlets have also demonstrated an active interest in HRM research (Bagga & Srivastava, 2014; Duff, 2010; Huselid, 1994). The present multi-study investigation demonstrates that positive employee perceptions of HRM bundles can prompt desired employee behavior (i.e., intense work behaviors), but can also curtail negative behavior (i.e., deviant actions). The results from both studies offer significant support for the indirect effect of development HRM practices (but only partial support for maintenance HRM practices) on 'dark' work behaviors via work intensity. Moreover, this research also points to the importance of examining how CSE and identity threat interact to shape the work intensity and organizational deviance relationship. Specifically, the present research shows that the negative relationship between work intensity and organizational deviance is shaped by CSE and identity

threat, such that this negative relationship strengthens when high CSE employees experience low identity threat. Therefore, practitioners must ensure that they create work environments that are conducive to both high and low CSE employees, especially because failure to do so can result in 'dark' work behaviors. Finally, this research shows that perceived development HRM bundles (but not perceived maintenance HRM bundles) can lead to few instances of organizational deviance via work intensity, especially among high CSE employees who experience low identity threat. Despite that this multi-study investigation makes several important advancements to the extant literatures, there remains a wealth of meaningful opportunities for some much-needed research that can continue to result in important implications for both researchers and practitioners.

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APPENDICES

APPENDIX A

Ethics Approval

YORK
UNIVERSITÉ
UNIVERSITY
OFFICE OF
RESEARCH
ETHICS (ORE)

5th Floor,
Kaneff Tower,
4700 Keele St.
Toronto ON
Canada M3J 1P3
Tel: 416 736 5914
Fax 416 650 8197
www.research.yorku.ca

Certificate #:	**STU 2013 - 168**
Approval Period:	**12/09/13-12/09/14**

Memo

To: Janet Boekhorst, Human Resource Management - Graduate Program, janetb@yorku.ca

From: Alison M. Collins-Mrakas, Sr. Manager and Policy Advisor, Research Ethics
(on behalf of Duff Waring, Chair, Human Participants Review Committee)

Date: **Monday, December 09, 2013**

Re: Ethics Approval

Taking a Closer Look at the Impact of HR practices: A Multi-Sample Study

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I am writing to inform you that the Human Participants Review Sub-Committee has reviewed and approved the above project.

Should you have any questions, please feel free to contact me at: 416-736-5914 or via email at: acollins@yorku.ca.

Yours sincerely,

Alison M. Collins-Mrakas M.Sc., LLM
Sr. Manager and Policy Advisor,
Office of Research Ethics

APPENDIX B

Maintenance HRM Bundle Measure

Instructions: During the past 12 months have you…

Response options:

_____ Yes

_____ No

_____ Don't know

Items:

1. Had a formal performance appraisal that provided you with feedback and guidance?
2. Received helpful career advice?
3. Received as much information as you need to do your job?
4. Had opportunities to give ideas for improvements?

*Note: The instructions for the HRM bundles measures are the same for both studies because HRM practices were measured using self-completion questionnaires.

APPENDIX C

Development HRM Bundle Measure

Instructions: During the past 12 months have you…

Response options:

_____ Yes

_____ No

_____ Don't know

Items:

1. Had formal training to improve your skills and abilities in your current job?
2. Had formal training to develop knowledge and skills for future jobs?
3. Had a job that is challenging?
4. Made full use of your training, knowledge, and skills?

*Note: The instructions for the HRM bundles measures are the same for both studies because HRM practices were measured using self-completion questionnaires.

APPENDIX D

Work Intensity Measure

Study 1 Instructions (Interviewer-administered questionnaire): I am now going to read several statements to you about your current job, and then you can let me know how much you agree or disagree with each statement on a scale from 1 to 7. If you respond with a 1, that means that you strongly disagree with the statement. If you respond with a 7, this means that you strongly agree with the statement. Then there are all the numbers in between 1 to 7 that you can choose from. What's important to remember is that a low number means that you disagree, and a high number means that you agree, and the options are from 1 to 7. Any questions before we begin? So, how much do you agree with the statement…

Study 2 Instructions (Self-completion questionnaire): To what extent do you agree or disagree with the following statements about how you work?

Response options:

_____ Strongly disagree

_____ Disagree

_____ Disagree somewhat

_____ Neither

_____ Agree somewhat

_____ Agree

_____ Strongly agree

Items:

1. When there's a job to be done, I devote all my energy to getting it done
2. When I work, I do so with intensity
3. I work at my full capacity in all of my job duties
4. I strive as hard as I can to be successful in my work
5. When I work, I really exert myself to the fullest

APPENDIX E

Workplace Deviance Measure

Study 1 Instructions (Interviewer-administered questionnaire): Now I'd like you to think about how you've been feeling at work in the past 3 months. I will now read out a number of statements and I'll ask you to respond to them by stating a number from 1 - 7 to let me know the frequency with which you have felt this way in the past 3 months. So if you respond with a 7, this means that you have felt in this way about every day for the past three months. If you respond with a 6, this means that you have felt this way a few times a week; if you respond with a 5, this means that you have felt this way about once a week. If you respond with a 4, this means that you have felt this way a few times each month, and with a 3, about once a month or less, and if you respond with a 2, you've only felt this way about one time in the past three months. If you respond with a 1, this means that you've never felt this way in the past three months. In general then, a high number means 'a lot' and a low number means 'not so much'. Would you like me to repeat those options for you? Any questions? So, how often, on a scale of 1 to 7, have you felt like:

Study 2 Instructions (Self-completion questionnaire): How often have you exhibited the following behaviors in the past year?

Study 1 Response options:

_____ Never

_____ About once every 3 months

_____ About once a month or less

_____ A few times a month

_____ Once a week

_____ A few times a week

_____ Every day

Study 2 Response options:

_____ Never

_____ Once a year

_____ Twice a year

_____ Several times a year

_____ Monthly

_____ Weekly

_____ Daily

Items:

1. Taken an additional or longer break than is acceptable at your workplace
2. Put little effort into your work
3. Came in late to work without permission
4. Intentionally worked slower than you could have worked
5. Made fun of someone at work
6. Acted rudely toward someone at work
7. Cursed at someone at work
8. Said something hurtful to someone at work

*Note: Items 1-4 tap into organizational deviance, while items 5-8 tap into interpersonal deviance.

APPENDIX F

Core Self-Evaluations Measure

Instructions: After reading the statements below, please rate the extent to which you agree with the statements.

Response options:

_____ Strongly disagree

_____ Disagree

_____ Disagree somewhat

_____ Neither

_____ Agree somewhat

_____ Agree

_____ Strongly agree

Items:

1. I am confident I get the success I deserve in life
2. Sometimes I feel depressed (R)
3. When I try, I generally success
4. Sometimes when I fail I feel worthless (R)
5. I complete tasks successfully
6. Sometimes, I do not feel in control of my work (R)
7. Overall, I am satisfied with myself
8. I am filled with doubts about my competence (R)
9. I determine what will happen in my life
10. I do not feel in control of my success in my career (R)

11. I am capable of coping with most of my problems

12. There are times when things look pretty bleak and hopeless to me (R)

*Note: (R) denotes a reverse-scored item.

APPENDIX G

Identity Threat Measure

Instructions: For each statement listed below, please indicate the number of times that one or more coworkers displayed the target behaviors towards you in the past 12 months. Please only report the behaviors that caused you to experience psychological or emotional discomfort.

Response options:

_____ Never

_____ 1-3 times

_____ 4-6 times

_____ 7-9 times

_____ 10 times or more

Items:

1. Did something to make you look bad
2. Swore at you*
3. Made insulting comments about your private life*
4. Looked at you in a negative way
5. Judged your work in an unjust manner
6. Criticized you unfairly
7. Questioned your abilities or judgments
8. Embarrassed you in front of your coworkers

9. Unfairly blamed you for a negative outcome

*Note: Items 2 and 3 are denoted with an asterisk (*) to indicate that these two items were deleted from the scale for the final analyses because the CFA showed that these two items loaded poorly onto the identity threat scale.