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Pressure to be creative: How employees respond to organizational creativity pressure

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HOW EMPLOYEES RESPOND TO ORGANIZATIONAL CREATIVITY PRESSURE

BY

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How Organizational Creativity Pressure Influences Employee Work Engagement

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ABSTRACT

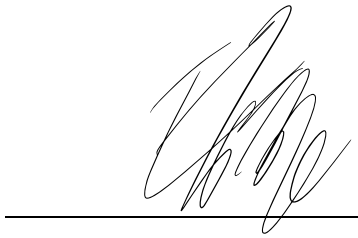
Creativity and innovation are vital for organizational growth and success, driving many organizations to increase pressure for employee creativity. Yet, researchers have neglected investigating how employees respond to creativity pressure at the workplace. This dissertation introduces and develops a new scale for the concept of *organizational creativity pressure* – the pressure on employees to continually develop novel and useful ideas and solutions. The scale is further validated through extensive assessment of content and construct validity, empirically differentiating the construct from similar others such as performance pressure and support for creativity.

Drawing on the transactional theory of stress (Lazarus & Folkman, 1984) and the need-based theory of work motivation (Green, Finkel, Fitzsimons, & Gino, 2017), I theorize that organizational creativity pressure is appraised more strongly as a challenge stressor than a hindrance stressor, in turn promoting work engagement in employees. Building on the emerging research on gender and creativity, I further theorize that the positive effects of organizational creativity pressure on challenge appraisal and work engagement are stronger for men than for women. Four studies provide evidence consistent with the model. Interestingly, the pattern of interaction is such that men are significantly less motivated and engaged than women at low organizational creativity pressure. At high organizational creativity pressure, there is no significant gender difference in work engagement. Women are also not more likely to see organizational creativity pressure as a hindrance stressor compared to men. This essay has important theoretical contributions to research in creativity, gender, and workplace stress. In a separate chapter, I investigate whether organizational creativity pressure induces

feeling of task uncertainty among employees, which in turn leads to negative perception of fairness in the workplace. In sum, this dissertation draws attention to the new construct and the related workplace phenomenon, develops a scale to provide a foundation for empirically rigorous research and investigates both positive and negative effects of organizational creativity pressure in the workplace.

I hereby declare that this PhD dissertation is my original work
and it has been written by me in its entirety.
I have duly acknowledged all the sources of information
which have been used in this dissertation.

This PhD dissertation has also not been submitted for any degree
in any university previously.



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DEDICATION

To Seung-Wook,

my love, my best friend, and the greatest blessing in my life

who always stands by me, loves me, and inspires me

To God

for making all things possible at his own timing

CHAPTER 1: INTRODUCTION

The common adage "innovate or die" reflects the increasing importance of creativity and innovation as a source of competitive advantages necessary for organizational growth and survival in the modern economy (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Barsh, Capozzi, & Davidson, 2008; Bharadwaj & Menon, 2000; DeFillippi, Grabher, & Jones, 2007; Shalley, Zhou, & Oldham, 2004). Creativity is defined as the generation of products or ideas that are both novel and useful (Amabile, 1983). The ability to generate ideas and solutions that are different from existing ones enables organizations to solve problems effectively (Mumford & Gustafson, 1988), identify new opportunities, and cope with fast-changing environments (Oldham & Cummings, 1996; Runco, 2004). The importance of creativity is not limited to specific domains because new and useful ideas and solutions confer competitive advantages on organizations regardless of industries (Dul & Ceylan, 2011; Mumford, Whetzel, & Reiter-Palmon, 1997; Perry-Smith, 2006; Shalley, Gilson, & Blum, 2000). Shalley et al. (2000:215) note that "creativity exists along a continuum, with creative activities ranging from minor adaptations to major breakthroughs." Earlier research echoed this point by noting that there are various types of creativity – "Big-C" creativity such as revolutionary innovation as well as "little-c" creativity, or everyday creativity (Simonton, 2013). Thus, there is certain level of creativity that is demanded across a wide spectrum of jobs (Shalley et al., 2000). It is worth highlighting that, in the rise of automation, creativity is identified as one of the core skills to have in order to survive (Desjardins, 2018), which will add more weight to the existing pressure for employee creativity. It is thus not surprising that many organizations nowadays place a heightened emphasis on employee

creativity and increase pressure for creative performance through a host of incentives, policies, and socio-cultural interventions (Shalley & Gilson, 2004; Thompson, 2003).

However, to date, how employees respond to the increasingly pervasive organizational pressure for creativity has not attracted much research attention. The view that employee creativity engenders positive organizational outcomes has led researchers to focus on understanding how to promote employee creativity (Amabile & Pratt, 2016; George, 2007; Gilson, 2008). While contributing to the pervasive emphasis on creativity as a core workplace performance imperative, creativity scholars have thus far neglected investigating how the pressure for creativity at the workplace influences employees' work experiences. In the era of industrial revolution 4.0, employees' creative abilities will be more valuable (Desjardins, 2018; Frey & Osborne, 2017). Thus, employees will likely experience the greater pressure from organization to perform creatively, which warrants the context-specific theorizing. Without scientific knowledge of the pressure for creative performance, organizations cannot fully understand opportunities and costs of the pressure. For example, does organizational pressure to perform creatively help or hurt employees' work experiences? Do employees from different demographic backgrounds (e.g., men vs women) respond differently to creativity pressure or the lackthereof? These are important questions because organizational pressure for creativity is increasingly pervasive (Zhexembayeva, 2020), yet our understanding of its impact on employees is limited.

Identifying the research gap, my dissertation directs attention to the pressure specifically on creative performance and aims to understand how

employees respond to organizations' pressure for employee creativity. This will contribute scientific knowledge of how the pressure influences employee experiences. More specifically, the current dissertation introduces the concept of *organizational creativity pressure* and investigates how employees respond to this pressure. I define *organizational creativity pressure* as the pressure from the organization on employees to continually develop novel and useful ideas and solutions at work. Organizational creativity pressure is high, for example, when senior management often emphasizes the importance of employees' creative performance verbally, includes creativity as a core value of the organizations, or makes policies and practices to reward creative performance. Prior organizational research has examined various types of workplace pressures (e.g., *citizenship pressure*: Bolino, Turnley, Gilstrap & Suazo, 2010; *conformity pressure*: Goncalo & Duguid, 2012; *earnings pressure*: Zhang & Gimeno, 2010; *time pressure*: Maruping, Venkatesh, Thatcher, & Patel, 2015; *performance pressure*: Mitchell, Baer, Ambrose, Folger, & Palmer, 2018), uncovering unique effects of specific work-related pressures. I believe that organizational creativity pressure is a unique type of workplace pressure which warrants research attention.

The purpose of this dissertation is largely threefold: First, I introduce the new concept of organizational creativity pressure by presenting theoretical discussion as well as developing and validating a scale to measure the construct. Directing attention to the pressure and developing the theoretical and empirical investigation of the pressure, the current research raises the awareness of the need to know more about the organizational pressure for creativity, allowing both scholars and practitioners to better understand the role of creativity in modern organizations. Second, conceptualizing organizational creativity pressure as a type

of workplace stressor, I build on stress literature to examine whether and how the pervasive workplace stressor influences employee work motivation. This segment of the dissertation also addresses whether and why men and women respond to the pressure differently. Third, I explore the detrimental effects of organizational creativity pressure on experience of task uncertainty as well as perceived overall fairness at work, which highlights that organizational creativity pressure entails both positive and negative effects.

The current dissertation makes several notable theoretical contributions. First, this research introduces a new concept of organizational creativity pressure, highlighting the need to examine the consequences of an increasingly common workplace phenomenon – constant pressure to be creative at work. This dissertation informs when and why organizational creativity pressure can be beneficial and detrimental. Investigating the effects of organizational creativity pressure, this research demonstrated that increasing creativity demands from organizations, while stressful, may also serve as a motivating force for employees because the pressure to be creative is appraised as a form of positive challenge. Second, by comparing high and low organizational creativity pressure against a baseline control condition (Study 7), I explore the effect of low level (of lack) of organizational creativity pressure for employees. This approach is significant in that it departs from earlier research that tends to highlight consequences of increasing workplace pressures as opposed to the lackthereof. Third, this research advances growing research on gender and creativity by demonstrating that men and women have different work experiences under different levels of organizational creativity pressure. As theorized, I found that the positive effect of organizational creativity pressure on work engagement is stronger for men than

women. Interestingly, the data also shows that men are not significantly more motivated and engaged than women at high organizational creativity pressure. Rather, men are especially demotivated and unengaged at work compared to women when organizational creativity pressure is low. This finding highlights that men versus women may value and experience creative challenges differently – men appear to value creativity challenges more and the lack of creative challenges at work is more demotivating for men than women. Lastly, this dissertation contributes to the growing line of 'the dark side of creativity' research (e.g., Gino & Ariely, 2012; Vincent & Kouchaki, 2016). Such research endeavors not only redress the "innovation maximization fallacy", the assumption that all creativity is good, (Anderson, Potočnik, & Zhou, 2014) but also provide insights for organizations to make more informed innovation-relevant organizational decisions (Khessina, Goncalo, & Krause, 2018).

CHAPTER 2: LITERATURE REVIEW

In this chapter, I strive to develop better understanding of the new concept – organizational creativity pressure. In doing so, I conceptually distinguish organizational creativity pressure from other similar constructs such as general performance pressure and perceived organizational support for creativity. I propose that distinctive characteristics and drivers of creativity make organizational creativity pressure a unique type of pressure at work. For instance, decades of research on creativity have shown that the creativity process is a highly indeterministic one, requiring trial and errors, not just mere effort (Amabile, 1996; Mueller, Melwani, & Goncalo, 2012; Simonton, 2015). This process is therefore risky, involving high levels of uncertainty and failures (George, 2007). At the same time, the creative process also provides room for experimentation and potentially outlets for self-expressions and self-actualization (Green, Finkel, Fitzsimons, & Gino, 2017; Maslow, 1971; Runco, Ebersole, & Mraz, 1991). Additionally, creative performance is driven by distinct factors. Specifically, intrinsic motivation, and not just mere external rewards or punishments, is required to drive and sustain high levels of creativity (Amabile, 1996; Shalley et al., 2004). Research suggests that flexible organizational structure is conducive to creativity compared to layers of bureaucratic processes and rules (Amabile & Conti, 1999; MacKenzie, 1998). Creativity is also enhanced by specific "approach-oriented" individual level characteristics such as uniqueness motivation and openness to new experiences (Dollinger, 2003; Feist, 1998; McCrae, 1994). Because creativity is such a distinct type of workplace performance, the effects of organizational creativity pressure might be different from those arising from other forms of workplace pressure previously studied.

I conceptualize organizational creativity pressure as a type of performance pressure, the perceived pressure for employees to perform better (Eisenberger & Aselage, 2009). However, the aforementioned unique aspects of creativity help us distinguish organizational creativity pressure from general performance pressure in two key ways. First, employees under performance pressure may be able to deal with the pressure by increasing efforts because doing so likely lead to greater performance in non-creative work (Gardner, 2012). On the contrary, given the highly indeterministic processes of creativity (Amabile, 1996; Mueller et al., 2012; Simonton, 2015), employees are not likely to successfully respond to organizational creativity pressure by merely increasing efforts. Second, intrinsic motivation (Amabile, 1996; Shalley et al., 2004) and approach orientations (Dollinger, 2003; Feist, 1998; McCrae, 1994) are key drivers of creative performance but such motivational factors may not be as critical for general non-creativity related performance. Given these differences, it is likely for employees to respond differently to creativity pressure compared to general performance pressure.

It is also important to distinguish organizational creativity pressure from other creativity-related similar constructs such as organizational support for creativity. Although both organizational creativity pressure and organizational support for creativity focus on producing more creative outcomes at work, organizational support for creativity, defined as the extent to which supervisors and organizations recognize employee creativity (Madjar, Oldham, & Pratt, 2002), emphasizes the organizational role in encouraging employees to develop creativity by enabling employees to exhibit creativity. However, I conceptualize organizational creativity pressure as a type of workplace stressor, a workplace

environment that likely elicit a stress response (Everly & Lating, 2013) as it pertains to organizational demands on employees. Thus, while organizational support for creativity is a creativity-related enabler, organizational creativity pressure is a creativity-related stressor. In sum, organizational creativity pressure is a workplace stressor demanding greater employee creativity that focuses on achieving approach-oriented goals, for which employees needs intrinsic motivation to deal with and cannot cope with merely by increasing efforts.

I examine how organizational creativity pressure as a form of workplace stressor influences employee motivation. Building on theory and evidence in organizational stress literature (Cavanaugh, Boswell, Roehling, & Boudreau, 2000; Crawford et al., 2010; LePine, Podsakoff, & LePine, 2005), I theorize that although organizational creativity pressure, like any workplace stressor, might induce some level of stress, it also promotes work engagement in employees. This is because the pressure to be creative challenges employees to expand current possibilities and go beyond status quo to generate something new and useful; this challenge, if successfully met, can lead to significant opportunities as well as personal and professional growth. Specifically, creating something new and useful contributes to organizations (Amabile et al., 1996; Barsh et al., 2008; Bharadwaj & Menon, 2000; DeFillippi et al., 2007; Shalley et al., 2004) and the society (Glăveanu et al., 2020). Thus, employees are likely to deem creative work as highly meaningful (Kotter-Grühn, Wiest, Zurek, & Scheibe, 2009; Sheldon, Elliot, Kim, & Kasser, 2001). Drawing on the need-based theory of work motivation (Green et al., 2017), I argue that organizational creativity pressure has the potential to fulfill employees' growth needs (including self-actualization) and sense of meaning at work, leading to greater work engagement.

Prior research has shown that men and women may respond to workplace stressors differently (Camgoz, Ekmekci, Karapinar, & Guler, 2016; Karatepe, Yavas, Babakus, & Avci, 2006; Kim, Murrmann, & Lee, 2009; Ptacek, Smith, & Dodge, 1994). Thus, building on the growing research on gender and creativity (Elmore & Luna-Lucero, 2017; Luksyte, Unsworth, & Avery, 2018; Proudfoot, Kay, & Koval, 2015) that has shown that both men and women internalize the idea that creativity is stereotypically masculine attribute, I further propose that men and women employees respond to organizational creativity pressure differently.

In addition, building on distinctive characteristics of creative works within organizations (e.g., Amabile, 1997; Cropley, 2006; Zhou & George, 2001), I further argue that employees under creativity pressure likely experience task uncertainty. Drawing on Uncertainty Management Theory (Lind & Van den Bos, 2002) and discussion on creative processes that are subjective and not transparent (e.g., idea evaluation process: Mueller et al., 2012), I argue that such employees also tend to have less favorable fairness judgements about organizations.

CHAPTER 3: THEORY DEVELOPMENT AND HYPOTHESES

Organizational creativity pressure as a challenge stressor

Employee creativity has been regarded as a driving force of organizational growth and survival (Amabile, Barsade, Mueller, & Staw, 2005; Khessina et al., 2018). My research focus on organizational creativity pressure stems from the observation that at workplace there is increasing pressure on having to perform tasks creatively. Pressure is defined as "any factor or combination of factors that increases the importance of performing well on a particular occasion" (Baumeister, 1984:610). Such pressure for greater creativity can be

conceptualized as a stressor, an external stimulus that challenges or threatens individuals, which in turn elicits responses (Latack, 1986). According to the organizational stress literature, stressors are largely classified into two types: challenge stressor and hindrance stressor (Cavanaugh et al., 2000; Crawford et al., 2010; LePine et al., 2005). Challenge stressors refer to stressors that are demanding yet providing opportunities for professional and personal growth and gains (Cavanaugh et al., 2000). These stressors are seen to present opportunities for high performance and a strong sense of achievements if one could overcome the difficult situations (Webster, Beehr & Christiansen, 2010; Webster, Beehr, & Love, 2011). Prior research has identified high workload, responsibility and job complexity as challenge stressors. Conversely, hindrance stressors are the demanding stressors that are also perceived as thwarting personal goals and development. Examples of hindrance stressors include role ambiguity, red tape, and job insecurity (Cavanaugh et al., 2000). In the current research, I draw on the seminar transactional theory of stress (Lazarus & Folkman, 1984) which postulates that a person's appraisal of a stressor is the key driver of one's cognitive and behavioral reactions to the stressor. Workplace stressors may be appraised by workers as either a challenge or a threat, which then informs their responses and employees appraise stressors in consistent manners (Brief & George, 1995).

Scholars have noted that workplace stressors may be appraised as both a hindrance stressor and a challenge stressor simultaneously (Lazarus & Folkman, 1984; Mitchell et al., 2019; Webster et al., 2011). As a form of demand that organizations place on employees, organizational creativity pressure is likely to create some level of stress and strain in employees. Compounded by the fact that

the creative performance involves indeterministic processes (e.g., trial and errors and repeated failures) and cannot be achieved by mere effort, employees are likely to experience frequent roadblocks, disappointments, and at times feel disheartened (George, 2007; Simonton, 2015). Hence, I expect organizational creativity pressure to be positively associated with hindrance appraisal.

However, I argue that the distinctive characteristics and associated benefits of creativity would also cause employees to appraise organizational creativity pressure as a challenge stressor at work. Not only is creative work beneficial and meaningful for organizations and society (Amabile et al., 1996; Glăveanu et al., 2020; Shalley et al., 2004), it is also an important source of professional development at work for employees. Indeed, researchers have long argued that creativity could be a means of self-actualization (Goff & Torrance, 1991; Green et al., 2017; Rhodes, 1990; Krems, Kenrick, & Neel, 2017), the process of realizing one's greatest potentials ("growth needs", Maslow, 1943). Thus, while constant pressures for greater creativity may be strain-provoking, given that creativity may be perceived as meaningful activity for self and for others (e.g., organization, society) and that creativity is associated with opportunities for personal growth at work, it would also be appraised as a challenge stressor at workplace.

Although organizational creativity pressure may be appraised as both types of stressors, I hypothesize that organizational creativity pressure would be more strongly associated with challenge appraisal. This hypothesis is predicated on prior research which suggests that any given workplace pressure is often more strongly associated with one form of stressor than the other (e.g., Webster et al., 2011). For example, Webster and colleagues (2011) found that role conflict and ambiguity are more strongly associated with hindrance appraisal compared to

challenge appraisal but workload and responsibility are more strongly associated with challenge appraisal than with hindrance appraisal. Conservation of Resources (COR) theory (Hobfoll, 1989) proposes that whether a stressor leads to positive or negative outcomes depend on perceived net gain or loss of resources (O'Brien & Beehr, 2019). The self-determination theory (SDT; Ryan & Deci, 2000) suggests that individuals have innate psychological needs for autonomy and competence as well as inherent tendency to growth. I argue that employees would appraise creativity pressure as fulfilling such needs because the pressure is associated with numerous positive outcomes of creative performance for self, organization and society (Amabile et al., 1996; Glăveanu et al., 2020; Rhodes, 1990; Shalley et al., 2004). They would then perceive overall gains from creativity pressure, which outweighs potential loss. Thus, I hypothesize as follows:

Hypothesis 1. Organizational creativity pressure is more strongly related with challenge appraisal than with hindrance appraisal.

I next examine the motivational consequences of organizational creativity pressure among employees, specifically its effects on work engagement. Work engagement refers to employee's positive motivational state that requires cognitive and physical dedication such as vigor and absorption at the workplace (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002). When individuals perceive opportunities in stressful yet enriching experiences (e.g., challenge stressor), it increases a sense of meaningfulness, positive thinking and positive emotions (Britt, Adler, & Bartone, 2001; McCrae, 1984, Folkman & Lazarus, 1985). Such process presents work-related psychological fulfillment (Gonzalez-Mulé & Cockburn, 2017) and in turn enhance self-resources (Macey & Schneider, 2008) for employees to expend more efforts and maintain focus and energy at

workplace (Cavanaugh et al., 2000; Lazarus & Folkman, 1984; LePine et al., 2005).

While organizational creativity pressure has two opposing effects, the stronger effect would dominate and create a net effect in its direction. This argument is consistent with prior research that argued that one pathway (e.g., positive effect via challenge appraisal) would offset the other pathway (e.g., negative effect via hindrance appraisal) (Crawford et al., 2010; Lepine et al., 2005). Building on this logic and that organizational creativity pressure is strongly associated with challenge appraisal (H1), the net effect of organizational creativity pressure should flow through challenge appraisal, thereby increasing work engagement.

Ample empirical evidence support the link between challenge appraisal and work engagement (Courtright, Colbert, & Choi, 2014; Karatepe, Beirami, Bouzari, & Safavi, 2014; Mitchell et al., 2019; see Crawford et al., 2010 for a meta-analysis). For instance, a meta-anaytic path analyses show that challenge stressors are positively and significantly related to work engagement (Crawford et al., 2010). The need-based theory of work motivation (Green et al., 2017) further supports my argument that organizational creativity pressure would increase work engagement. The theory proposes that employees have expectations of need fulfillment and work experiences that meet such expectations can increase work engagement. Specifically, organizational practices that fulfill fundamental human needs such as self-actualization (Maslow, 1943) could serve as a motivating force. Creative work that promotes personal growth and self-actualization would be considered meaningful and important for employees (Fairlie, 2011; Kotter-Grühn et al., 2009; Sheldon et al., 2001). Thus, I argue that employees have growth

needs for realizing their greatest potentials at work and that organizations with creativity pressure provides opportunities to fulfill such needs, leading to greater work engagement. In sum, I theorize that organizational creativity pressure is positively related to work engagement because employees likely appraise organizational creativity pressure as a challenge stressor.

Hypothesis 2. Organizational creativity pressure is positively related to work engagement.

Hypothesis 3. Challenge appraisal mediates the positive relationship between organizational creativity pressure and work engagement.

Moderating role of gender

Researchers have acknowledged the role of individuals in understanding responses to stressors (Lazarus & Folkman, 1984; Suls &Fletcher, 1985). Research on responses to workplace stressors have found that various individual factors (e.g., conscientiousness: Lin, Ma, Wang, & Wang, 2015; core self-evaluation: Yuan, Li, &Lin, 2014) and contextual factors (e.g., organizational support: Wallace, Edwards, Arnold, Frazier, & Finch, 2009; leadership: Zhang et al., 2014) moderate effects of challenge stressors. More relevant to the current study is a body of research that showed that men and women respond to stressors differently (e.g., Camgoz et al., 2016; Karatepe et al., 2006; Kim et al., 2009; Ptacek et al., 1994). For example, researchers (e.g., Karatepe et al., 2006) found that role conflict has stronger negative effect on job satisfaction for women than men employees because men, being more task-oriented (Eagly, Karau, & Makjijani, 1995), can handle the stress more effectively. Although prior research does not suggest that men are more likely to appraise workplace stressors as challenge, this research proposes that men employees would more likely perceive

creativity pressure as a challenge stressor in workplace compared to women employees.

Emerging research suggests that both men and women likely internalize the idea that creativity implicates masculine attributes (Elmore & Luna-Lucero, 2017; Luksyte et al., 2018; Proudfoot et al., 2015). For example, Proudfoot and colleagues (2015) showed that creativity is stereotypically associated with masculine characteristics such as being daring and willingness to take risks. Such masculine attributes are central to creative thinking, accounting for why men are often seen as more creative than women. Similarly, Luksyte et al., (2018) documented that innovative behaviors are more associated with men than with women and that innovative behaviors are translated into favourable performance evaluation only for men. Innovative behaviors are seen as stereotypically masculine because they often involve risk taking and challenging status quo, qualities which are associated with men. Women are less expected to engage in innovative behaviors compared to men because such behaviors would deviate from prescriptive gender stereotypes. It is important to note that these stereotypic effects regarding gender and creativity are exhibited by both men and women observers (Elmore & Luna-Lucero, 2017; Luksyte et al., 2018; Proudfoot et al., 2015) suggesting that these gendered assumptions about creativity as masculine attribute are widely held in society and likely deeply internalized by individuals regardless of their gender.

To the extent that workplace phenomena that are related to masculine attributes (e.g., autonomy, status, power and achievements) are central to men's professional identities (Allmark, Grogan, & Jeffries, 2018; Cinamon & Rich, 2002; Gal, 1992; Kiesling, 1998; Krems et al., 2017), creativity is likely to be

more central to professional identity for men than for women. For example, Krems et al. (2017) documented that men are more likely to seek masculine values (e.g., status) during self-actualization pursuits compared to women. On the contrary, affiliation and kin care, which reflect more stereotypically feminine values, are important for women's self-actualization processes. Given that creative work embodies largely masculine characteristics (e.g. risk taking, challenging status quo), men may be more likely than women to see it as an avenue for self-actualization and growth.

In support of this line of logic, other research suggests that women's experiences with creative process seem to be less favorable compared to men's. Although it was not central to their research focus, studies have presented empirical evidence that men are more likely to report higher level of creative self-efficacy (Karwowski, lebuda, Wisniewska, & Gralewski, 2013; Liu, Pan, Luo, Wang, & Pang, 2017), one's self view regarding one's creative ability (Tierney & Farmer, 2002), and lower level of creativity anxiety (Daker et al., 2019), which refers to anxiety specific to doing creative work.

Building on these arguments, I propose that men, given their greater tendency to pursue creativity for self-actualization, higher creative self-efficacy and lower creativity anxiety, would see creativity challenges more favorably compared to women. Moreover, men may be more likely than women to welcome creativity challenges as they have greater motivation for uniqueness - desire to be different from others (Baumeister & Sommer, 1997; Wood, Christensen, Hebl, & Rothgerber, 1997) and are more likely to be open to new ideas and experiences. (Costa, Terracciano, & McCrae, 2001). Thus, I believe that while women do value creativity, creativity may be less central to their professional identity and women

may have lesser need for it as a form of self-actualization. Conversely, men employees have greater needs to exhibit creativity and organizations with creativity pressure may fulfill such needs, increasing employee motivation (Green et al, 2017). Thus, I hypothesize that gender will moderate positive effects of organizational creativity pressure on challenge appraisal and work engagement such that the positive relationships are stronger for men than for women.

Hypothesis 4a. Gender moderates the positive effect of organizational creativity pressure on challenge appraisal such that the positive relationship is stronger for men than for women.

Hypothesis 4b. Gender moderates the positive effect of organizational creativity pressure on work engagement such that the positive relationship is stronger for men than for women.

Hypothesis 5. Gender moderates the indirect positive effect of organizational creativity pressure on work engagement through challenge appraisal.

Figure 1 presents an overall depiction of the theoretical model for this research.

Insert Figure 1 about here

The negative effects of organizational creativity pressure

As the current dissertation draws attention to the relatively recent workplace phenomenon of increasing creativity pressure, I further examine potential negative aspects of pressuring creativity among employees in order to highlight both positives and negatives of the creativity pressure. Most creativity research has focused on creativity as a desired outcome (Anderson et al., 2014), which reflects well how much creativity is appreciated in the workplace.

However, a small but growing body of work has investigated creativity as an antecedent to other negative organizational outcomes (e.g., Gino & Ariely, 2012; Khessina et al., 2018; Vincent & Kouchaki, 2016). For example, Gino and Ariely (2012) found that creative people are more likely to engage in unethical behaviors. The authors explain that cognitive flexibility which is often associated with creativity may make individuals to make self-serving unethical decisions. Vincent and Kouchaki (2016) revealed that creative identity causes psychological entitlement and unethical behavior, especially when creativity is perceived to be rare. Harrison and Wagner (2016) found that engaging in certain creative behaviors at work make employees to spend less time with family at home. As shown in such research, scholars pay increasing attention to 'the dark side of creativity', which is an important line of research because it can help organizations to make more fully informed innovation-relevant organizational decisions (See Khessina et al., 2018).

This dissertation aims to provide theoretical and empirical investigation of how and why employees may negatively respond to organizational creativity pressure. The most prominent contribution of the current research is that while the existing research on the hidden costs of creativity focuses on implications of being creative, the current research focuses on the detrimental effects of creativity-related organizational factor (i.e., organizational creativity pressure). Thus, it motivates future research to expand the scope of research in understanding negative and unexpected impact of creativity and innovation at workplace. Building on distinctive characteristics of creativity such as challenging the status quo (Zhou & George, 2001) and deviating from standard approaches (Cropley, 2006) as well as the fact that creative processes are highly indeterministic

(Amabile, 1996; Mueller et al., 2012; Simonton, 2015), I argue that employees under creativity pressure likely experience high level of task uncertainty. Drawing on Uncertainty Management Theory (Lind & Van den Bos, 2002), I further argue that employees under creativity pressure develop less favorable fairness perception about the organizations because they are more sensitive to fairness information due to experienced task uncertainty while creative processes are less predictable.

Organizational creativity pressure and task uncertainty

The review of creativity literature provides two main reasons why employees under creativity pressure may experience high level of task uncertainty, the type of uncertainty caused by complexity of tasks (Hartmann, 2005). Creativity is inherently about non-routine works (Amabile, 1997) and 'thinking outside the box' (Shin & Zhou, 2007). Petrou and colleagues (2020) explain that 'box' may symbolize standard procedures and rules, thus creativity is associated with deviating from norms and the "usual" (Cropley, 2006). Creative ideas promote challenging the status quo (Zhou & George, 2001) and risk taking (Perry-Smith, 2006) and provide the foundation for organizational changes (Woodman et al., 1993). Heavily influenced by the assumption that all creativity is good (Anderson et al.,2014), scholars criticized that organizations with layers of bureaucratic and routine processes are known to be detrimental to employee creativity (Amabile & Conti, 1999). In a similar vein, researchers emphasized that autonomy and latitude in doing work can improve creativity (Amabile, 1988), focusing on the positive effects of flexible workplace on creative performance. However, do such flexible and non-routine workplace always necessarily present conducive environments for employees? I focus on the fact that flexibility can

also be seen as lack of rules and procedures to rely on (Weick, 1979) and propose that organizations with high level of creativity pressure may provide workplace with fewer fixed procedures and rules, which may increase task uncertainty among employees.

It is also worth highlighting that not all creative ideas are implemented at the end (Mueller et al., 2012; Zhou & George, 2001). Creators cannot be sure whether and when their ideas will be implemented (Metcalfe, 1986), which adds to the task uncertainty employees experience. More specifically, during the idea generation process, creators tend to self-filter their own ideas (McCarthy, Chen, & McNamee, 2018), in which process creators are expected to come up with ideas that are both novel and practical and the novelty of an idea often makes one unsure whether an idea is practical enough (Amabile, 1996). As creators proceed to later stages of innovation which are interpersonal in nature, creators may experience task uncertainty to a greater extent. A group of research (Mueller et al., 2012; Mueller, Melwani, Loewenstein, & Deal, 2018) suggest that decision makers often reject ideas due to uncertain nature of creativity, which supports the argument that employees may experience task uncertainty with creativity processes. In a recent study, Goncalo and Katz (2020) explain that sharing creative ideas is the act of revealing the self as creative ideas often reflect one's unique knowledge and experience (Cheng, Sanchez-Burks, & Lee, 2008). In creative processes, creators are at the risk of being socially rejected or ridiculed (Diehl & Stroebe, 1987, Diehl & Stroebe, 1991; Moscovici & Lage, 1976). Because shared creative ideas likely reflect one's knowledge, experience and self-identity (Cheng et al., 2008), such processes can be unpleasant. Thus, employees under high creativity pressure experience work environment where they are prone

to encounter high level of task uncertainty. In summary, creators may face task uncertainty under high creativity pressure because 1) organizations may lack procedures, rules and standards for employees to follow, 2) creators are unsure if and when their ideas will reach implementation and 3) creators may experience unpleasant creative processes. Hence, I hypothesize as follows:

Hypothesis 6: Organizational creativity pressure is positively related to task uncertainty.

Organizational creativity pressure and negative fairness perception

Employees' fairness perception has strong impact on their contribution and attitudes towards the organization. For example, when employees perceive organizations to be fair, employees tend to engage in more organizational citizenship behavior, have higher organizational commitment and perform better at work (Ambrose & Schminke, 2009; Colquitt, Noe, & Jackson, 2002; Colquitt et al., 2013; Karriker & Williams, 2009). On the contrary, when employees perceive organizations to be unfair, they engage in counterproductive work behaviors, develop negative attitudes towards the organization and more likely to quit (Cohen-Charash & Spector, 2001; Colquitt et al., 2013; De Boer, Bakker, Syroit, Schaufeli, 2002). The fact that employees' fairness judgements have important organizational implications (Colquitt & Zipay, 2015; Cropanzano, Fortin, & Kirk, 2015) motivated researchers to investigate psychology of fairness judgments (Proudfoot & Lind, 2015).

The experience of uncertainty is generally aversive and individuals are motivated to reduce feeling of uncertainty (Hogg, 2007; Jonas et al., 2014). According to the Uncertainty Management Theory (UMT; Lind & Van den Bos, 2002; Van den Bos, 2001; Van den Bos & Lind, 2002), when individuals

experience unpredictable environments, they are more likely to attend to fairness information in order to cope with feelings of uncertainty. Hence, employees under creativity pressure would be more sensitive to fairness information within organization because they are likely to experience task uncertainty. Research on creative processes provide a reason to argue that employees with sensitivity to fairness information would have less favorable fairness judgements about their organizations. As discussed above, creative processes are highly indeterministic (Amabile, 1996; Mueller et al., 2012; Simonton, 2015). Thus, employees' creative efforts do not guarantee greater outcomes, which might make employee experience unpredictable and unpleasant. For example, in the idea evaluation process, which is an integral part of innovation process within organizations, creators often face roadblocks and disappointments (George, 2007; Simonton, 2015) as their ideas are filtered out by decision makers (Singh & Fleming, 2010). Research shows that creative idea evaluation process is subject to bias since what is perceived as creative is rather subjective (Mueller et al., 2012; Mueller et al., 2018), which makes it difficult to predict success of creative ideas and understand why certain ideas fail (Amabile, 1996). However, employees with creative outcomes receive preferential treatments (Vincent & Kouchaki, 2016) such as job autonomy (Baucus et al. 2008), higher status and additional resources (Audia & Goncalo 2007). Thus, employees with sensitivity to fairness information would find such work environment as unfair where procedures are not transparent and subject to bias yet rewards are considerable. In summary, I argue that employees under creativity pressure would have less favorable fairness judgement about their organizations because their heightened attention to fairness information would

make the fact that their efforts are often not paid off in creative processes salient. Thus, I hypothesize as follows:

Hypothesis 7: Organizational creativity pressure is negatively related to overall perceived fairness.

Hypothesis 8: Task uncertainty mediates the negative relationship between organizational creativity pressure and overall perceived fairness.

Insert Figure 2 about here

CHAPTER 4: SCALE DEVELOPMENT

Study 1: Item Generation

In this dissertation, I developed a scale to measure organizational creativity pressure following extensive validation processes. Table 1 summarizes the scale development steps and descriptions of the corresponding samples in each step. Prior to following the processes, clearly defining the new construct in unambiguous manner as well as differentiating it from other similar constructs are of the foremost importance (MacKenzie, Podsakoff, & Podsakoff, 2011). The extensive theoretical discussion of the new construct above allowed me to define the construct as clear and concise as possible (Hinkin, 1995). In Step 1, following Hinkin's (1998) recommendations, I collected episodes of felt organizational pressure for creative performance from 75 full-time working professionals in the United Kingdom via Prolific Academic (64% male, age mean=32.27, age S.D.= 5.91) and in-depth semi-structured interviews with ten South Korean working professionals (entrepreneur, designer, civil servant etc.; 4 males) to generate items. Participants were asked to share their workplace experiences of when they felt the pressure from their organizations to be creative. Responses include, "when my boss constantly asked me to work on my tasks creatively", "when we were challenged to come up with new strategies to achieve more sales", and "when my career promotion depends on my creative abilities." Based on the episodes and interview materials, I developed 8 initial items. Table 2 presents the initial 8 items.

Insert Table 1 and Table 2 about here

Study 2: Item Refinement

In Step 2, the item refinement step, following prior studies (e.g., Baer et al., 2018; Long, Baer, Colquitt, Outlaw, & Dhensa-Kahlon, 2015; Rodell, 2013), I recruited 123 full-time working professionals (64 % male; M_{age}=32.27, SD_{age}=5.91) who 1) are full-time workers, 2) have enough experience and expertise of taking surveys, 3) have at least completed bachelor's degree or above to ensure sufficient intellectual ability for the task (Hinkin & Tracey, 1999) in the United States via MTurk. Participants were paid US$ 0.50 for their participation. I provided participants with the definition of organizational creativity pressure and the 8 generated items from Step 1 and asked them to indicate the extent to which they think each item assesses organizational creativity pressure on a 7-point scale (1 = "*This item is an extremely bad match to the concept defined above"* to 7 = "*This item is an extremely good match to the concept defined above"*) (Baer et al., 2018; Long et al., 2015). Following prior studies on scale development (Hinkin & Tracey,1999; Methot et al., 2020; Rodell, 2013), I kept all the items above the mean level correspondence between the items and the definition. In the sample, the mean correspondence between the organizational creativity pressure scale and the definition was 5.30; thus, I excluded four items below this mean, resulting in 4 items for the final scale. The mean correspondence between the four items and the definition was 5.5. Table 3 presents the items and factor loadings.

Insert Table 3 about here

Study 3: Content Validity

In Step 3, I followed procedures for content validity assessment recommended by Colquitt et al. (2019). Specifically, Colquitt et al. (2019) suggested that the content validity process should demonstrate not only that a scale corresponds well with its intended construct but also that the correspondence is significantly more meaningful when compared to other similar constructs. I recruited an independent sample of 154 students at a Singaporean University (36 % male; M_{age}=21.17, SD_{age}=1.50) to indicate the extent to which they think the given items correspond to the definition of organizational creativity pressure. In order to assess content validity, Colquitt et al (2019) recommends calculating two indicators – *htc* (*Hinkin Tracey correspondence*) and *htd* (*Hinkin Tracey distinctiveness*). The index of *htc* is calculated by dividing the average correspondence score by the number of anchors (i.e., number of scale points). In order to test how well the generated items distinctively correspond to the definition of the new construct compared to similar others, I calculate *htd* value by asking participants to assess how well the 4 items of organizational creativity pressure correspond to definitions of the two orbiting constructs – *performance pressure* (Mitchell et al., 2018) and *perceived organizational support for creativity* (Zhou & George, 2001). The organizational creativity pressure scale has an average correspondence of 5.77 on its construct, and an average definitional correspondence rating of 3.47 with performance pressure and 4.69 with organizational support for creativity. I followed the procedures and formula from Colquitt et al. (2019) to derive the *htc* value of 0.83 and *htd* value of 0.23. Given that the focal scale (i.e., organizational creativity pressure) and orbiting scales have an average correlation of 0.53, I referred to the evaluation criteria in

Colquitt et al. (2019), which suggests that a *htc* value of 0.83 indicates "moderate" level of level of definitional correspondence and a *htd* value of 0.23 indicates "very strong" level of definitional distinctiveness.

Study 4: Construct Validity

In Step 4, in order to assess construct validity, I recruited an independent sample of 120 full-time working professionals (42 % male; M_{age}=31.33, SD_{age}=6.65) in the United Kingdom on Prolific Academic. For the purpose of assessing convergent validity of the new scale with closely related constructs (Schwab, 1980), besides the 4 item scale for organizational creativity pressure, I asked participants to also complete measures for the constructs including performance pressure, leader expectations for creativity, perceived organizational support for creativity and promotion focus.

Performance Pressure. Participants completed the measure of performance pressure (Mitchell et al., 2018). A sample item is "I feel tremendous pressure to produce results." Participants answered the 4 items on a 5-point scale (1= "*strongly disagree*" to 5= "*strongly agree*"). Cronbach's alpha for the 4 items was .86. Organizational creativity pressure and performance pressure are moderately correlated (r=.39, $p < .01$).

Creativity-related constructs. Participants completed measures of constructs that similarly focus on the emphasis on creative performance at workplace. I administered the 4 items of *leader expectations for creativity* (Carmeli & Schaubroeck, 2007) on a 5-point scale (1= "*not at all*" to 5 = "*to a large extent*"). A sample item is "My supervisors think of me as a creative employee." Cronbach's alpha for the 4 items was .89. Also, participants answered 4 items of *perceived organizational support for creativity* (Zhou & George, 2001)

on a 5-point scale (1= "*not at all*" to 5= "*to a large extent*"). A sample item is "Creativity is encouraged at my company." Cronbach's alpha for the 4 items was .86. Organizational creativity pressure is moderately correlated to *leader expectations for creativity* (r =.63, p <.01) and *perceived organizational support for creativity* (r = .66, p <.01).

Promotion focus. Given that organizational creativity pressure entails thoughts on ideals, it likely induces promotion focus at workplace (Liberman, Molden, Idson, & Higgins, 2001). I asked participants the 9 items of the promotion focus measure (Neubert, Kacmar, Carlson, Chonko, & Roberts, 2008). A sample item is "At work, I am motivated by my hopes and aspirations." Participants responded on a 5-point scale (1= "*strongly disagree*" to 5= "*strongly agree*"). Cronbach's alpha for the 9 items was .88. Organizational creativity pressure is moderately correlated to promotion focus (r = .33, p < .01).

A principal components analysis revealed that the four organizational creativity pressure items loaded strongly onto one factor (loadings from .79 to .89) with no cross loadings onto other factors. A confirmatory factor analysis of the organizational creativity pressure items demonstrated an acceptable fit (x^2 = 3.75, CFI = .99 , RMSEA = .09, SRMR = .02). The correlations among the variables measured and descriptive results are presented in Table 4. As expected, organizational creativity pressure has moderately positive correlations with performance pressure (r = 0.39), leader expectations for creativity (r = 0.63), perceived organizational support for creativity (r = 0.66) and promotion focus (r = 0.33).

The five-factor model (organizational creativity pressure, performance pressure, leader expectations for creativity, perceived organizational support for

creativity and promotion focus) fit the data well (x^2 = 384.346, CFI= .93, RMSEA= .06, SRMR = .06). I also ran pair-wise comparisons and as shown in the Table 5, the two-factor models were significantly better than one-factor models. These results provide discriminant validity evidence for the measure.

Insert Table 4 and Table 5 about here

CHAPTER 5: HYPOTHESES TESTING

Overview of Studies

In addition to four studies conducted for scale development and validation in Chapter 4, this dissertation provides 8 empirical studies to test both models presented in Figure 1 and Figure 2. Study 5 serves to provide empirical support for the argument that compared to women, men are more likely to see creativity as important for their professional identity as well as that men have more favorable experiences with creative challenges. Study 6 and Study 7 are experimental studies to establish the causal effect of organizational creativity pressure on employee work engagement. I then use the validated measure of organizational creativity pressure in organizational setting in Study 8 and study 9 to test all hypotheses for Figure 1 model. Study 10 – Study 12 are experimental studies that test hypotheses for Figure 2 model.

Study 5: Gender Difference in Professional Identity

The purpose of this study is to examine whether creativity is more central to professional identity for men compared to women.

Sample and procedures

A total of 125 full time working professionals (53% men) were recruited via MTurk. The average age of the participants was 36.82 (S.D. = 6.44) and the average working experience (years) of the sample was 16.93 (S.D.= 7.43).

Participants were given a list of work values including 6 creativity-related work values and 6 non-creativity-related work values and asked to rate how important each work value is to them as working professionals on 7-point scale (1 = *"Not at all important"* to 7 = *"Extremely important"*). The creativity-related work values are 'creativity', '"thinking outside the box"', 'uniqueness',

'challenging the status quo', 'risk taking' and 'autonomy'. The non-creativity-related values include 'integrity', 'hard work' and 'collaboration.' In addition, I asked participants to complete measure of creative self-efficacy (3 items, Tierney & Farmer, 2002). A sample item is "I have confidence in my ability to solve problems creatively" and Cronbach's alpha for the three items was .86. Participants also completed a measure of creativity anxiety (8 items, Daker et al., 2019). A sample item is "Having to think "outside the box" makes me feel anxious." Cronbach's alpha for the eight items was .97. I added these measures to replicate findings from earlier research on how men tend to have more favorable experiences with creative processes compared to women.

Study 5 : Results

Means, standard deviations and correlations for this study are presented in Table 6. I aggregated the six creativity-related work values and the Cronbach's alpha was .84. Without control variables, importance of creativity-related work values for professional identity was marginally significantly higher among men (b = .37, p = .08) than among women. Controlling for age, marital status, the number of working experience (years) and tenure in the industry, compare to women, men more significantly perceive creativity-related work values as important to their professional identities (b = .45, $p < .05$). I also aggregated scores for three work values which are more directly focused on creativity (creativity, "thinking outside the box", and uniqueness). Cronbach's alpha for the three items was .84. Without control variables, importance of creativity-related work values for professional identity was marginally significantly higher among men (b = .48, p = .06) than among women. When I added age, marital status, the number of working experiences (years) and tenure in the industry as control variables, centrality of

creativity-related work values for professional identity was significantly stronger among men compared to women (b = .60, p < .05). On the contrary, I found no gender difference for non-creativity-related values (b = -.00, p = ns). Taken together, these findings provide empirical support for my argument that creativity is more important for men employees compared to women employees. In addition, the data also replicated gender differences in creative self-efficacy and creativity anxiety. The independent t-test analysis results indicate that compared to women, men have higher creative self-efficacy (men: mean = 5.53, S.D. = .13; women: mean = 4.92, S.D. = .15; t123 = 3.10, p = .00) and lower creativity anxiety (men: mean = 1.83, S.D. = .11; women: mean = 2.21, S.D. = .14; t123 = - 2.16, p < .05).

Insert Table 6 about here

Study 6: Experiment 1

Sample and Procedures

A total of 197 university students in a Singaporean business school was recruited to participate in the experiment in exchange of course credit. The sample consists of 32 % male and 87% identified themselves as Chinese. The average age was 21.40 (S.D.=1.67).

Participants were invited to a laboratory and asked to sign the consent form. Participants were first asked to report their demographic information such as age, nationality and gender.

Organizational creativity pressure manipulation. Participants were then randomly assigned to either high organizational creativity pressure and low organizational creativity pressure and asked to read a short passage about a fictitious company Alco.

For the high organizational creativity pressure condition:

> At Alco, thinking and acting creatively is highly expected for employees. Creativity is considered the most desired quality for performing well. Senior management constantly pushes employees to develop creative solutions to organizational problems. Thus, the pressures for creative performance are high and increasing. To succeed at Alco, one must carry out tasks creatively.

For the low organizational creativity pressure condition:

> At Alco, thinking and acting creatively is not always expected for employees. Creativity is considered a useful, but not the most desired quality for performing well. Senior management does not see the need to push hard on employees to develop creative solutions to organizational problems. Thus, the pressures for creative performance are not high. To succeed at Alco, one must adhere to some well-established ways to carry out tasks.

After reading the passages, participants were asked to imagine that they are employees of Alco and answer questions on challenge appraisal and work engagement.

Measures

Mediator: challenge appraisal. I adapted four items from Drach-Zahavy & Erez (2002) to measure challenge appraisal. Sample items include "Working at Alco would provide opportunities to overcome obstacles" and "Working at Alco would provide opportunities to strengthen my self-esteem." Cronbach's alpha for the four items was .83.

Hindrance appraisal. I adapted four items from Drach-Zahavy & Erez (2002) to measure hindrance appraisal. Sample items include "Working at Alco seems tiresome" and "I would be worried that working at Alco might threaten my self-esteem." Cronbach's alpha for the four items was .85.

Dependent variable: work engagement. I adapted 9 items from UWES-9 from Schaufeli, Bakker, & Salanova (2006). Sample items include "At Alco, I would feel bursting with energy," and "I would be enthusiastic about my job at Alco." Cronbach's alpha for the 9 items was .93.

Study 6 : Results

Manipulation Check

To check that the effectiveness of the manipulation, after reading the passages, participants were asked to indicate the extent to which they think "the pressures for creative performance are high at Alco" on a 5-point scale (1= "*strongly disagree*" to 5= "*strongly agree*"). Participants in the high *organizational creativity pressure* condition were more likely to report that the pressures for creative performance are higher in Alco (M=4.61, *SD* = .05) than participants in the low *organizational creativity pressure* condition (M= 1.82, *SD* = .07), $t_{195} = 32.27$, $p < .001$. Thus, the manipulation was effective.

Consequences of *Organizational Creativity Pressure*

Hypothesis 1 states that organizational creativity pressure is more strongly associated with challenge appraisal compared to hindrance appraisal. Correlation results show that organizational creativity pressure is more strongly associated with challenge appraisal ($b = .54$, $p < .001$) compared to hindrance appraisal ($b = .34$, $p < .001$), supporting Hypothesis 1. Hypothesis 2 states that organizational creativity is positively associated with work engagement. T-test analysis results indicate that participants in the high organizational creativity pressure condition reported higher challenge appraisal of the pressure (low organizational creativity pressure: M = 2.99, SD = .08; high organizational creativity pressure: M =3.88, SD = .05; $t_{195} = 9.05$, $p < .001$) and reported higher level of work engagement (low organizational creativity pressure: M = 2.78, SD = .07; high organizational creativity pressure: M =3.37, SD = .07; $t_{195} = 5.75$, $p < .001$). The Cohen's D value was .82, indicating a large-sized effect. Figure 3 and 4 depict the differences in level of challenge appraisal and work engagement across the two conditions respectively. Thus, the results support Hypothesis 2.

Insert Figure 3 and figure 4 about here

The Role of Challenge Appraisal

I ran the mediation analysis using structural equation modeling, with paths toward continuous variables estimated using OLS regression. The indirect effect significance was tested by using the bootstrap method with 5,000 bootstrap samples (Shrout & Bolger, 2002) and computing bias-corrected confidence intervals. The results indicate that higher organizational creativity pressure leads to higher level of reported work engagement by increasing challenge appraisal of

the pressure (b = 0.56, $CI_{95\%}$ = 0.42, 0.74). The results thus lend support for Hypothesis 3.

Gender differences in response to organizational creativity pressure

Hypothesis 4a states that gender significantly moderates the effect of organizational creativity pressure on challenge appraisal. Moderation analysis shows that gender does not significantly moderate the effect of organizational creativity pressure on challenge appraisal (b = -.08, p = ns) as well as work engagement (b =-.17, p = ns). Thus, study 6 does not support Hypothesis 4a, 4b as well as 5.

Study 7: Experiment 2

Study 6 presents initial findings consistent with the theory. The purpose of study 7 is largely threefold. First, I aimed to replicate the findings with full-time working professionals. Second, more importantly, I added control condition in Study 7 in order to clarify whether the effect is driven by high end or low end of creativity pressure, as suggested by power research (see Schaerer, du Plessis, Yap, & Thau, 2016). Lastly, I used a more comprehensive measure for work engagement (Rich, Lepine, & Crawford, 2010), which comprises three different dimensions of work engagement – physical, cognitive and emotional aspects (Newman & Harrison, 2008).

Sample and Procedures

A total of 536 full-time working professionals were recruited via Amazon Mechanical Turk (MTurk). Twenty-three participants were excluded because they failed to follow the instruction, resulting in the final sample of 513. The sample consists of 51% male and 94% American. Majority of them (74%) identified themselves as White, 10 % identified themselves as Black, 8% identified themselves as Asian, and 5% identified themselves as Hispanic. The average age was 34.67 (S.D.=6.76) and the average working experience was 8.85 years (S.D.=6.25). Participants received US$1.00 for their participation.

After signing the consent form, participants were asked to report their demographic information (e.g., gender, age and organization tenure). I used the same procedures used in Study 6. Participants were randomly assigned to one of three experimental conditions: high organizational creativity pressure, low organizational creativity pressure, and a control condition. They were next asked

to imagine that they were employees of this company and answer follow up questions about working there.

Organizational creativity pressure manipulation

Participants in low and high organizational creativity pressure conditions read the same passages used in Study 6.

Control condition:

> Alco was founded in 2015. Alco provides a variety of services to clients and for the last five years, it has worked with many types of companies. Alco responds to client inquiries via website, phone and email within 24 hours. Employees at Alco follow the normal working hours from Monday to Friday.

Measures

Mediator: challenge appraisal. I used the same measure used in Study 6. Cronbach's alpha for the scale was .89.

Hindrance appraisal. I used the same measure used in Study 6. Cronbach's alpha for the 4 items was .87.

Dependent variable: work engagement. I adapted the 18-item scale from Rich et al. (2010), which comprehensively addresses three different dimensions of work engagement – physical, cognitive and emotional aspects (Newman & Harrison, 2008) on a 5-point scale (1 = "*strongly disagree*" to 5 = "*strongly agree*"). Sample items include, "At Alco, I would work with intensity on my job"(physical engagement), "At Alco, I would be enthusiastic in my job"(emotional engagement) and "At Alco, I would devote a lot of attention to my job" (cognitive engagement). Cronbach's alpha for the 18 items was .96.

Study 7: Results

Manipulation Check

To check whether the manipulation was effective, after reading the passages, participants were asked to indicate the extent to which they think "the pressures for creative performance are high at Alco" on a 5-point scale (1= "*strongly disagree*" to 5= "*strongly agree*"). A one-way ANOVA revealed that participants in the high organizational creativity pressure condition reported that the creativity pressure at Alco was higher (M = 4.45, SD = .73) than in the low organizational creativity pressure condition (M = 1.83, SD = 1.19) and the control condition (M = 2.82, SD = .90), $F(2, 510)=344.60$, $p < .001$. All pairwise comparisons between the low-, high organizational creativity pressure and control condition were statistically significant at $p < 0.01$.

Organizational creativity pressure as a challenge stressor

Hypothesis 1 states that organizational creativity pressure is more strongly associated with challenge appraisal compared to hindrance appraisal. Correlation results indicate that organizational creativity pressure is more strongly associated with challenge appraisal ($b = .45$, $p < .001$) compared to hindrance appraisal ($b = .15$, $p < .001$). I next used structural equation modelling (SEM), with paths toward continuous variables estimated using OLS regression to compare these two effects. The effect significance was tested by using the bootstrap method with 5,000 bootstrap samples (Shrout & Bolger, 2002) and computing bias-corrected confidence intervals. The relative effect of organizational creativity pressure on challenge appraisal ($b = .51$; 95% CI = .42, .60) was significantly stronger ($b = .32$, 95% CI = .18, .47) compared to the effect of organizational creativity pressure on hindrance appraisal ($b = .19$; 95% CI = .08, .28), lending support for Hypothesis 1. Figure 5 shows the mean level differences in challenge appraisal across the three conditions.

Consequences of organizational creativity pressure

Hypothesis 2 states that organizational creativity pressure is positively related to work engagement. A one-way ANOVA was conducted to test whether the level of work engagement was different across the three conditions. Results indicated significant differences in work engagement across conditions, F (2, 510) = 22.49, p <.001. Participants in the high organizational creativity pressure condition reported higher level of work engagement than participants in the low organizational creativity pressure and the control condition. The tukey comparisons indicate that while the differences are in expected directions (low organizational creativity pressure: M = 3.46, SD = .82; control condition : M = 3.79, SD = .73; high organizational creativity pressure: M = 3.95, SD = .59), the contrast between low organizational creativity pressure condition and control condition is stronger (b = *.33,* p < .001) than the contrast between control condition and high organizational creativity pressure (b = .17, p = .10). The results are consistent when I differentiate the three types of work engagement (i.e., physical, cognitive and emotional work engagement). Figure 5 shows the mean level differences in work engagement across the three conditions. Overall, the results support Hypothesis 2.

Insert Figure 5 and figure 6 about here

The mediating role of challenge appraisal

Hypothesis 3 states that challenge appraisal mediates the positive relationship between organizational creativity pressure and work engagement. I used structural equation modeling and the bootstrap method with 5,000 samples (Shrout & Bolger, 2002) to test the mediation effect. The results found that the confidence intervals of the indirect effect of organizational creativity pressure

through challenge appraisal on work engagement excluded zero (b = 0.29, CI [0.23, 0.36]), lending support for Hypothesis 3. The multiple mediation analysis results reveal that the challenge appraisal pathway is stronger (b = .28, 95% CI = [.23, .35]), compared to hindrance appraisal pathway (b = -.02, 95% CI = [-.04, -.00]) in explaining the effect of organizational creativity pressure on work engagement. The difference between the two pathways is statistically significant (b = .30, 95% CI = [.24, .37]). Thus, Hypothesis 3 is supported.

Gender differences in response to organizational creativity pressure

Hypothesis 4a states that gender moderates the effect of organizational creativity pressure on challenge appraisal. A 3 (low organizational creativity pressure vs. control vs. high organizational creativity pressure) x 2 (men vs. women) ANOVA on challenge appraisal reveals an insignificant interaction effect. Hypothesis 4b states that gender moderates the effect of organizational creativity pressure on work engagement. A 3 (low organizational creativity pressure vs. control vs. high organizational creativity pressure) x 2 (male vs. female) ANOVA on work engagement also reveals insignificant interaction effect. Hence, Study 7 does not support Hypothesis 4a and 4b. Consequently, there is no support for Hypothesis 5.

Study 8: Survey 1

The purpose of this research is largely twofold. First, in this research, I use the validated organizational creativity pressure in order to examine the effects in the organizational setting. Second, taking the more realistic approach, study 8 aims to find support for gender hypotheses.

Sample and procedures

I recruited an independent sample of 300 full time working professionals in the United Kingdom via Prolific Academic. The sample consists of 49% men and 66% British. The average age was 32.52 (S.D.= 6.00) and the average working experience was 8.42 (S.D. = 5.89). Participants came from various industries including manufacturing, financial services and information technology.

Measures

Independent variable: organizational creativity pressure. I administered the validated organizational creativity pressure scale. Participants responded to the measure on 5-point scale (1= "*strongly disagree*" to 5= "*strongly agree*"). Cronbach's alpha for the four items was .84.

Dependent variable: work engagement. Participants rated their level of work engagement using the nine-item scale by Schaufeli, Bakker, & Salanova (2006). Sample items are "At work, I feel bursting with energy" and "I am enthusiastic about my job." Cronbach's alpha for 9 items was .93.

Control variables

Family to Work stress. I controlled for work stress coming from family obligations because it may influence gender difference in how family matters influence engagement at work (Keene & Reynolds, 2005). Participants were asked four items on a 5-point scale (1 = "strongly disagree" to 5= "strongly agree") (Gutek, Searle,

& Klepa, 1991). A sample item is "I am often too tired at work because of things I have to do at home." Cronbach's alpha for the four items was .87.

Work Hours. I controlled for work hours because working hours may influence employee engagement (ten Brummelhuis & Bakker, 2012). Following Valcour (2007), I measured work hour by asking two items: "How many hours do you work in a typical week, including paid breaks but excluding lunch and overtime", "How many hours of overtime do you work in a typical week?"

Performance pressure. Controlling for performance pressure allows us to conservatively estimate the effect of creativity pressure at workplace. I controlled for performance pressure with four items (Mitchell et al., 2018). Sample item include "I feel tremendous pressure to produce results" and "I would characterize my workplace as a results-driven environment." Cronbach's alpha for the four items was .80.

Study 8: Results

Means, standard deviations and correlations for the Study 8 are presented in Table 7. Zero-order correlations indicate that organizational creativity pressure is positively related to work engagement ($r = .20$, $p < .001$), family to work stress ($r = .12$, $p < .05$), work hour ($r = .13$, $p < .05$), overtime ($r = .12$, $p < .05$) and performance pressure ($r = .25$, $p < .001$). Hypothesis 2 states that organizational creativity pressure is positively related to work engagement. As shown in Table 8, organizational creativity pressure is positively related to work engagement without (Model 1: $b = 0.17$, $p < .001$) and with control variables (Model 2: $b = 0.15$, $p < .001$) ,which supports Hypothesis 2. I added interaction term to test Hypothesis 4b, which states that gender moderates the effect of organizational creativity pressure on work engagement. As shown in Model 3 of Table 8, gender

significantly interacts the effect of organizational creativity pressure on work engagement (b = .30, p < .001). Figure 7 depicts the interactive effect. Simple slope results show that while the effect of organizational creativity pressure has a positive effect on work engagement for men (b = .32, p < .001) but not for women (b = .02, p = .71). More specifically, while there is no gender difference at high level of organizational creativity pressure, at low organizational creativity pressure, men are significantly less engaged. These results provide support for Hypothesis 4b.

Insert Table 8 and Figure 7 about here

Study 9: Field survey

The purpose of Study 9 is to replicate the findings from Study 8 and test all hypotheses in Figure 1 model. In order to address possible common method variance bias problem (Podsakoff, MacKenzie, & Podsakoff, 2012) in study 8, I used dyads in this study to measure organizational creativity pressure.

Sample and Procedures

A total of 150 employee-supervisor dyads were recruited via ROI ROCKET, a market research firm in the U.S. Supervisors were 62% male and, on average, 46.91 years old (S.D. = 10.17). Supervisors have an average work experience of 23.52 years (S.D.= 12.39) and have worked for the current organization for 12.84 years (S.D.= 9.43). Supervisors' titles include project managers, sales managers, general manager and heads of operations. Employees were 47% male and, on average, 41.62 years old (S.D.=9.49). Employees have an average work experience of 19.45 years (S.D.= 11.39) and have worked for the current organization for 9.01 years (S.D.= 7.18). Employees' job titles include consultants, assistant managers, business analysts and IT managers. On average, the dyads have been working together for 7.11 years (S.D.=6.74). The industries represented in the data include IT, health care, engineering, and financial services.

Measures

Independent variable: organizational creativity pressure. I administered the validated organizational creativity pressure scale to both supervisors and employees in the current study. Cronbach's alpha for the 8 items was .91. I then aggregated both ratings to operationalize organizational creativity pressure for the dyad to derive a more objective score. The correlation between the supervisor and employee measures of this variable was .69.

Mediator: challenge appraisal. I asked employees to appraise organizational creativity pressure at workplace with 4 items from Drach-Zahavy & Erez (2002) used in previous studies on a 5-point scale (1= "*strongly disagree*" to 5= "*strongly agree*"). Cronbach's alpha for the four items was .83.

Dependent variable: work engagement. Employees completed the 18-item scale from Rich et al. (2010) used in study 7. Cronbach's alpha for the scale was .96.

Control Variables

Importance of creativity in the industry. Given that it is possible that individuals who self-select into jobs that require more creativity may respond to organizational creativity pressure more favorably, I controlled for the importance of creativity in the industry. I asked employees to indicate how important it is to be creative in their industry on a 5-point scale (1= "*not important*" to 5= "*very important*").

Performance pressure. Controlling for performance pressure allows us to conservatively estimate the effect of organizational creativity pressure at workplace. I controlled for performance pressure with 4 items from Mitchell et al. (2018) on a 5-point scale (1 = "*strongly disagree*" to 5 = "*strongly agree*"). Sample items are "I feel tremendous pressure to produce results" and "The pressures for performance in my workplace are high." Cronbach's alpha for the 4 items was .80.

Family to work stress. I controlled for work stress coming from family obligations because men and women may differ in how family matters influence engagement at work (Keene & Reynolds, 2005). Participants completed 6 items on a 5-point scale (1 = "*strongly disagree*" to 5= "*strongly agree*") (Carlson, Kacmar,

&Williams, 2000). Sample items are "The time I spend on family responsibilities often interfere with my work responsibilities" and "Due to stress at home, I am often preoccupied with family matters at work." Cronbach's alpha for the 6 items was .96.

Work hours. I controlled for work hours and overtime because working long work hours may decrease employee work engagement (ten Brummelhuis & Bakker, 2012). Following Valcour (2007), I measured work hour with 2 items: "How many hours do you work in a typical week, including paid breaks but excluding lunch and overtime", "How many hours of overtime do you work in a typical week?"

Hindrance appraisal. In order to rule out the possibility that the effects are driven by hindrance appraisal, I controlled for hindrance appraisal by asking participants to answer 4 items adapted from Drach-Zahavy & Erez (2002) used in Study 8 on a 5-point scale (1= "*strongly disagree*" to 5= "*strongly agree*"). Cronbach's alpha for the 4 items was .89.

Age. Older employees may experience organizational creativity pressure negatively and less likely to display work engagement because cognitive processing might be more taxing for such workers (Kenny, Yardley, Martineau, & Jay, 2008). Thus, I controlled for employees' age (years).

Conscientiousness. A meta-analysis shows that conscientiousness is positively related to work engagement (Christian, Garza, & Slaughter, 2011). I controlled for employees' conscientiousness by asking supervisors to complete 10-item scale from Goldberg (1999) on a 5-point scale (1 = "*not descriptive of the employee at all*" to 5 = "*very descriptive of the employee*"). Sample items include

"This employee makes plans and sticks to them," and "This employee is always prepared." Cronbach's alpha for the 10 items was .90.

Study 9: Results

Preliminary Analyses

Means, standard deviations and correlations for the Study 9 variables are presented in Table 9. Zero-order correlations indicate that organizational creativity pressure is positively related to challenge appraisal (r = .47, p <.001), hindrance appraisal (r = .25, p <.001) and work engagement (r = .20, p <.001). Unsurprisingly, organizational creativity pressure is moderately related to importance of creativity in the industry (b = .52, p < .001) and performance pressure (b = .39, p < .001). Organizational creativity pressure is also positively associated with family to work stress (b = .23, p < .001), and overtime (b = .21, p < .05) suggesting that the pressure to be creative can be a source of stress and demands additional work.

Organizational creativity pressure as a challenge stressor

Correlation results indicate that organizational creativity pressure is more strongly associated with challenge appraisal (b = 47, p < .001) compared to hindrance appraisal (b = 25, p < .001). Controlling for importance of creativity in the industry, performance pressure, family to work stress, work hours, overtime, challenge appraisal, age and conscientiousness, the effect of organizational creativity pressure on challenge appraisal (b = .38; 95% CI = .22, .54) was significantly stronger (b = .25, 95% CI = .02, .52) compared to the effect of organizational creativity pressure on hindrance appraisal (b = .13 ; 95% CI = -.09, .30), lending support for Hypothesis 1.

Consequences of organizational creativity pressure

Hypothesis 2 states that organizational creativity pressure is positively related to work engagement. As shown in the Table 10, organizational creativity pressure is positively associated with work engagement without control variables (model 1: $b = .13$, $p = .02$) and with control variables (model 2: $b = .18$, $p = .01$). There is thus support for Hypothesis 2.

Insert Table 9 and Table 10 about here

The mediating role of challenge appraisal

Hypothesis 3 states that challenge appraisal mediates the positive relationship between organizational creativity pressure and work engagement. I found that the confidence intervals of the indirect effect of organizational creativity pressure through challenge appraisal on work engagement excluded zero without ($b = .17$, CI [.11, .25]) and with control variables ($b = .13$, CI [.08, .20]). Supplementary analysis results indicate that controlling for importance of creativity in the industry, performance pressure, family to work stress, work hours, overtime, challenge appraisal, age and conscientiousness, hindrance appraisal does not mediate the relationship between organizational creativity pressure and work engagement ($b = -.01$, CI [-.05, .01]). Overall, these findings support Hypothesis 3.

Gender differences in response to organizational creativity pressure

Hypothesis H4a states that gender moderates the positive effect of organizational creativity pressure on challenge appraisal. I ran moderated multiple regression and simple slope analyses (Aiken & West, 1991) to test Hypothesis H4a. As shown in Table 11, the interaction effect on challenge appraisal is significant (model 3: $b = -.31$, $p = .02$). Simple slope analyses show that the effect of organizational creativity pressure on challenge appraisal for men ($b = .56$, $p < .001$)

is stronger than the effect for women (b = .24, p = .01). As shown in Figure 8, compared to women, men under high level of organizational creativity pressure more strongly appraise organizational creativity pressure as a challenge stressor. The gender difference is statistically significant (r = -.37, CI [-.66, -.07]). Overall, Hypothesis H4a is supported.

Insert Table 11 and Figure 8 about here

Hypothesis H4b states that gender moderates the positive effect of organizational creativity pressure on work engagement. As shown in Model 3 of Table 10, organizational creativity pressure and gender interact to significantly influence work engagement (b = -.21, p < .05). Simple slope analyses reveal that the effect of organizational creativity pressure on engagement is significant for men (b = .23, p = .00) but not for women (b = .04, p =.59). As shown in Figure 9, while organizational creativity pressure has no effect on work engagement for women, the pressure has a positive impact on work engagement for men. It is worth highlighting that men under low level of organizational creativity pressure are significantly less engaged. The gender difference is statistically significant (r = .25, CI [.00, .49]). Thus, the results provide support for Hypothesis 4b.

Insert Figure 9 about here

Moderated mediation

Hypothesis 5 states that gender moderates the indirect effect of organizational creativity pressure on work engagement through challenge appraisal. To test the moderated mediation, I used bias-corrected confidence intervals of 5,000 bootstraps. Results show that the moderated mediation effect is stronger for men (b

= 0.12, CI [0.03, 0.25]) than for women (b = 0.05, CI [0.01, 0.12]) and the gender difference is statistically significant (b = 0.07, CI [0.01, 0.19]). Thus, overall, the results support Hypothesis 5.

Full model

I tested the full model depicted in Figure 1, which contains both challenge appraisal and hindrance appraisal pathways. Moderated mediation results indicate that the challenge appraisal pathway remains significant. The moderated mediation effect is stronger for men (*b* = 0.18, CI [0.09, 0.31]) than for women (b = 0.08, CI [0.02, 0.14]) and this gender difference is statistically significant (b = 0.11, CI [0.01, 0.23]). The hindrance pathway, however, is insignificant (*b* = - 0.01, CI [- 0.03, 0.05]).

Supplementary Analyses

I conducted supplementary analyses to examine (a) gender difference in hindrance appraisal of organizational creativity pressure and (b) potential curvilinear relationship between organizational creativity pressure and work engagement. Regression analysis reveals that there is no significant gender difference in hindrance appraisal of organizational creativity pressure (*b* = -.16, *p* = .31), suggesting that women are not more likely to see organizational creativity pressure as a hindrance even though they are less likely to see it as challenge compare to men. Could there be a curvilinear relationship between organizational creativity pressure and work engagement such that some level of organizational creativity pressure is motivating but when the pressure is too high, employees become demotivated? I tested this possibility and the result was insignificant (*b* = .05, *p* = ns) suggesting that employees do not become less engaged when organizational creativity pressure is very high. In addition, one might wonder

whether challenge appraisal of creativity pressure moderates the effect of creativity pressure on work engagement. As shown in Figure 10, the interactive effect is significant ($b = .13$, $p < .05$) such that the effect of organizational creativity pressure on work engagement is positive for those with high level of challenge appraisal of creativity pressure ($b = .16$, $p = .03$) but not for those with low level of challenge appraisal ($b = -.02$, $p =$ ns). Hindrance appraisal of creativity pressure does not moderate the effect of creativity pressure on work engagement ($b = .02$, $p =$ ns).

Insert Figure 10 about here

Study 10: Experiment 3

In study 10, I examine whether experimentally varying the degree of organizational creativity pressure may induce feeling of task uncertainty as well as negative overall fairness perception.

Sample and Procedures

I recruited a total of 166 university students (40% male, M_{age}=21.46, SD_{age}= 1.83) in a Singaporean business school. Participants were invited to a laboratory and asked to sign the consent form. They participated in the experiment in exchange of course credit. I used the same manipulation materials used in Study 5.

Measures

Task uncertainty I used four items adapted from Colquitt et al. (2012). Participants were asked to imagine to be employees of the fictitious company and report how they would feel. Sample items include "Many things would seem unsettled at Alco" and "I would not be able to predict how things will go at Alco" (reversed). Cronbach's alpha for the four items was .93.

Overall fairness perception. I adapted items from Ambrose & Schminke (2009) to measure perceived overall fairness. I asked participants to imagine to be employees at Alco and how fair they would perceive the company to be. Sample items include "Overall, I would be treated fairly by Alco", "Usually, the way things work in Alco would be not fair" and "For the most part, Alco would treat its employees fairly." Cronbach's alpha for the four items was .90.

Study 10: Results

The effect of organizational creativity pressure on task uncertainty

Hypothesis 6 states that organizational creativity pressure is positively related to task uncertainty. To test Hypothesis 6, I ran T-Test to test whether induced organizational creativity pressure increases felt task uncertainty. T-test analysis results indicate that participants in the high organizational creativity pressure condition reported higher level of feeling of uncertainty (low organizational creativity pressure: M = 3.49, SD = 0.17; high organizational creativity pressure: M = 5.13, SD = 0.12; $t_{164} = 7.80$, $p < .001$). Figure 11 depicts the mean level difference in felt task uncertainty between the two groups. Cohen's D value was 1.21 and the results provide support for Hypothesis 6.

The effect of organizational creativity pressure on perceived overall fairness.

Hypothesis 7 states that organizational creativity pressure is negatively related to perceived overall fairness. Participants in high organizational creativity pressure reported lower level of perceived overall fairness compared to those in low organizational creativity pressure (low organizational creativity pressure: M = 4.96, SD = .10; high organizational creativity pressure: M = 4.42, SD = .11; $t_{164} = 3.64$, $p < .001$). Cohen's D value was .57. Figure 12 shows the mean level difference in perceived overall fairness between the two groups. The results support Hypothesis 7.

The mediating effect of task uncertainty

Hypothesis 8 states that feeling of uncertainty mediates the effect of organizational creativity pressure on perceived overall fairness. I used structural equation modeling to run the mediation analysis. The results indicate that induced high level of organizational creativity pressure leads to lower level of perceived overall fairness because it increases feeling of task uncertainty (b = - 0.36, CI [-.59, -.17]), lending support for Hypothesis 8.

Insert Figure 11 and Figure 12 about here

Study 11: Experiment 4

The purpose of study 11 is threefold. First, I wanted to replicate the findings using a sample of full-time working professionals. Second, I added a control condition wherein information of creativity is not present. Third, I used multiple measures to operationalize task uncertainty and overall fairness perception.

Sample and Procedures

A sample of 129 full-time working professionals (48% male, M_{age}= 35.95, SD_{age}= 7.00) was recruited via MTurk to participate in the study. They participated in the study in exchange of participation fee.

After signing the consent form, participants were randomly assigned to either high organizational creativity pressure and control condition. I used the same manipulation materials used in Study 7.

Measure

Task uncertainty 1. I used the same measure used in Study 10.

Task uncertainty 2. Four items were adapted from Hochwarter, Ferris, Zinko, Arnell & James (2007). Sample items include "I would be unclear regarding what is expected of me at Alco," and "I would not fully understand the reporting channels at Alco." Cronbach's alpha for the four items was .93.

Overall fairness perception 1. I used the overall fairness perception measure used in Study 10. Cronbach's alpha for the six items was .90.

Overall fairness perception 2. Three items were adapted from Kim & Leung (2007). A Sample item is "All in all, Alco would treat me fairly." Cronbach's alpha for the three items was .97.

Study 11: Results

The effect of organizational creativity pressure on task uncertainty

I ran T-Test to test whether induced organizational creativity pressure compared to control condition increases felt task uncertainty. T-test analysis results indicate that participants in the high organizational creativity pressure condition reported higher level of task uncertainty compared to those in control condition (control condition: M = 3.07, SD = 0.13; high organizational creativity pressure: M = 4.34, SD = 0.20; $t_{127} = 5.43$, $p < .001$). The results are consistent when I used the second measure of task uncertainty (control condition: M = 3.12, SD = 0.14; high organizational creativity pressure: M = 3.59, SD = 0.19; $t_{127} = 1.99$, $p < .05$). Figure 13a and 13b show the mean level differences in task uncertainty. The results support hypothesis 6.

The effect of organizational creativity pressure on perceived overall fairness.

Participants in high organizational creativity pressure reported lower level of perceived overall fairness compared to those in control condition (control condition: M = 2.60, SD = 0.10; high organizational creativity pressure: M = 2.03, SD = 0.15; $t_{127} = 3.23$, $p < .001$). Using the alternative measure of overall fairness perception, I found the consistent results (control condition: M = 5.54, SD = 0.11; high organizational creativity pressure: M = 4.88, SD = 0.16; $t_{127} = 3.43$, $p < .001$). Figure 14a and 14b depict the mean level differences in overall fairness perception between the two conditions. These results provide support for hypothesis 7.

Insert Figure 13a, 13b, 14a and 14b about here

The mediating effect of task uncertainty

To test the mediation effect, I used structural equation modelling. The results indicate that induced organizational creativity pressure leads to lower level of perceived overall fairness because it increases feeling of task uncertainty (b = -0.54, CI [-.89, -.28]). Hence, hypothesis 8 is supported.

Study 12: Experiment 5

The purpose of study 12 is largely twofold. First, I aim to replicate the findings from Study 10 and Study 11. Second, I added a control condition in which employees are expected to perform well in general (performance pressure).

Sample and Procedures

A total of 199 university students (41% male, M_{age}=21.44, SD_{age}= 1.62) in a Singaporean business school were invited to a laboratory to participate in the study. Participants received course credit for their participation.

After signing the consent form and answering demographic questions such as gender and age, participants were randomly assigned to one of three conditions: high performance pressure, low organizational creativity pressure, and high organizational creativity pressure. Participants in low and high organizational creativity pressure conditions read the same passages used in Study 10. Participants in high performance pressure read the following:

> At Alco, delivering high-quality results is highly expected for employees. Good performance is considered the most desired quality. Senior management constantly pushes employees to achieve good results. Thus, the pressures for job performance are high and increasing. To succeed at Alco, one must deliver high-quality results.

Passages in the three conditions were highly standardized in terms of length, structure, style and wording. After reading the passage, participants were asked to imagine that they work at Alco as employees and answer questions on uncertainty and overall fairness perception.

Measures

Task uncertainty. I used the same measure (Colquitt et al., 2012) used in Study 10.

Overall fairness perception. I used the same measure (Ambrose & Schminke, 2009) used in Study 10.

Study 12: Results

The effect of organizational creativity pressure on task uncertainty

Hypothesis 6 states that organizational creativity pressure is positively related to task uncertainty. To test Hypothesis 6, I ran one-way ANOVA and the results indicate that participants in high organizational creativity pressure condition reported higher task uncertainty (M =5.22, SD = 1.06) compared to those in low organizational creativity pressure (M = 3.55, SD = 1.58) and high performance pressure (M= 4.62, SD = 1.20), F (2, 196) = 27.66, $p < .001$. All pairwise comparisons were statistically significant at $p < .001$. Figure 15 shows the mean level difference in task uncertainty across conditions. Hence, Hypothesis 6 is supported.

The effect of organizational creativity pressure on perceived overall fairness.

Hypothesis 7 states that organizational creativity pressure is negatively related to perceived overall fairness. ANOVA results show that participants in high organizational creativity pressure (M = 4.33, SD = 1.00) reported lower level of overall fairness perception compared to low organizational creativity pressure (M = 4.94, SD = .83) and high performance pressure (M = 4.65, SD = .87) F (2, 196) = 7.64, $p < .001$. All pairwise comparisons were statistically significant at $p < .001$. Figure 16 depicts the mean level difference in overall fairness perception across conditions, lending support for Hypothesis 7.

The mediating effect of task uncertainty

Hypothesis 8 states that task uncertainty mediates the effect of organizational creativity pressure on perceived overall fairness. In order to run the

mediation analysis with a categorical independent variable, I used sureg command in Stata 16. The results indicate that task uncertainty does not mediate the relationship between organizational creativity pressure and perceived overall fairness (*b* = .10, CI [-.04, .29]). In addition, I ran structural equation modeling to run mediation analysis excluding the performance pressure condition. The results indicate that task uncertainty mediates the effect of organizational creativity pressure on perceived overall fairness (*b* = .37, CI [.13, .60]), which provides partial support for hypothesis 8.

Insert Figure 15 and Figure 16 about here

CHAPTER 6: FUTURE RESEARCH & CONCLUSION

Summary of findings

Using experiment and survey studies, I found that employees are more likely to be engaged at work under high compared to low organizational creativity pressure because the pressure is appraised more strongly as a challenge stressor than a hindrance stressor. Interestingly, results indicate that organizations with a low level of organizational creativity pressure may be demotivating for employees compared to a control condition wherein creativity is neither emphasized or discouraged. Study 6 and Study 7 do not provide support for gender differences in responses to organizational creativity pressure. One explanation is that, as opposed to real world social settings, experimental settings do not provide social cues to make gender difference in professional identity salient. It might also be so because it is a vignette study without any actual behaviors included. However, Study 8 and Study 9 show support for the gender differences. I found that men and women responded to organizational creativity pressure differently such that the effects of organizational creativity pressure on challenge appraisal and work engagement are stronger for men than for women. Specifically, men are less engaged when organizational creativity pressure is low whereas women are not affected by organizational creativity pressure. There is no gender difference in hindrance appraisal as a function of organizational creativity pressure. Overall, these findings suggest that men appear more likely than women to *require* organizational creativity pressure to be engaged at work. In addition, three experimental studies provide evidence that employees under high organizational

creativity pressure may experience high task uncertainty and develop negative perception of organizational fairness.

Theoretical Contributions

This dissertation has several theoretical implications. First, I advanced a new concept of organizational creativity pressure and in doing so, address the question of how the pressure for employee creativity influences employee work experiences. To this end, I also developed a scale to provide a foundation for future research on organizational creativity pressure. Generating scientific knowledge on the effects of the organizational creativity pressure help us better understand the dynamics of modern organizations given the growing importance of creativity as a performance imperative. More broadly, this research introduces a novel line of inquiry in creativity research. In response to Anderson and colleagues' (2014) call for more diverse perspectives on creativity research, emerging creativity studies have taken a notable attempt to expand the scope of organizational creativity literature (see Khessina et al., 2018 for a review). Majority of creativity studies still focuses on how to engender greater workplace creativity (e.g., Kapadia & Melwani, 2020; Shin & Grant, 2020) or the direct consequences of being creative (e.g., Gino & Ariely, 2012; Harrison & Wagner, 2016; Vincent & Kouchaki, 2015). For example, Gino and Ariely (2012) proposed that creativity might cause people to be less rule-abiding. I acknowledge the importance of this line of inquiry. Yet given the increasing emphasis on creativity, it behooves organizational scholars to also investigate how employees respond to creativity-related organizational pressure. This research contributes a novel approach to the 'dark side of creativity' research by examining the negative

effects of creativity-relevant organization-level factor. This dissertation represents an important first step in this direction.

Second, my research contributes to understanding gender differences at the workplace. The topic of gender in organizational research has attracted much research attention and prior research had significantly advanced understanding of how men and women have differential work experiences and outcomes (Joshi, Neely, Emrich, Griffiths, & George, 2015). While early research tended to focus on the disadvantages or barriers women face at work (Lyness & Grotto, 2018), recent papers have taken different approaches toward understanding gender dynamics at the workplace (Leslie, Manchester, & Dahm, 2017; Schaumberg & Flynn, 2017; Thompson, Bergeron, & Bolino, 2020). For example, Thompson and colleagues (2020) documented that men are more likely than women to need organizational support before they would engage in organizational citizenship behaviors. Extending this inquiry, the present study demonstrated that compared to women, men might need stronger organizational creativity pressure to be engaged at work. Taken together, a picture whereby men seem to need greater organizational interventions (support or pressure) than women to be motivated at work begins to emerge.

Third, the present research advances current knowledge regarding gender and creativity. Prior research has mostly focused on gender differences in creative performance and found inconclusive evidence of inherent gender gaps (e.g., Baer & Kaufman, 2008; Hedges & Nowell, 1995). Interestingly, work outcomes and processes related to creativity continue to differ between men and women in organizations with high focus on creativity (Daker et al., 2019; Joshi, Son, & Roh, 2015). This research opens new avenues for research on gender and creativity by

showing the differential impact of organizational creativity pressure on men versus women. Here, it did not seem that women are disadvantaged. Compared to men, women appear less dependent on organizational creativity pressures to be motivated at work. This dissertation also presents an empirical evidence that creativity is more central to men's professional identity compared to women's, providing additional insights on the relationship between gender and creativity.

Fourth, the findings of the current dissertation contribute to the organizational stress literature. Horan and colleagues (2020) highlights the need to explicitly measure stress appraisal as mechanisms which allows researchers to develop fuller understanding of various types of workplace stressors. The current dissertation explores the unique effects of the new type of workplace stressor by measuring explicit appraisals of the pressure. In addition, I showed that organizational creativity pressure is appraised simultaneously both as a challenge and a hindrance, but is more strongly appraised as the former. This is because although organizational creativity pressure creates some strains for employees, it also provides sense of meaning and valuable opportunities for personal growth and self actualization. This finding highlights that the overall effect of organizational creativity pressure on employees is a positive rather than a negative one. It is also notable that the finding further differentiates organizational creativity pressure from general performance pressure which is more likely appraised as a hindrance stressor than a challenge stressor at work (Mitchell et al, 2018). Earlier research in the organizational stress literature has primarily focused on well-established workplaces stressors such as workload, responsibility, and role ambiguity (Webster et al., 2011). Researchers have emphasized the need to explore stressors beyond those in *a priori* classifications such as Cavanaugh et al.,

(2000) (Horan et al., 2000) in order to explore unique effects of various stressors (O'Brien & Beehr, 2019). More recent research has extended the scope of the literature by exploring the unique effects of various types of workplace stressors (e.g., abusive supervision: Scheuer, Burton, Finkelstein, & Parker, 2016; performance pressure: Mitchell et al., 2019). Introducing the concept of organizational creativity pressure, this dissertation join such research endeavors to demonstrate that different stressors have distinctive characteristics. Exploring the moderating role of gender, this dissertation research also address the call for more research needed to understand boundary conditions in response to work-related stressors (O'Brien & Beehr, 2019).

Lastly, this dissertation contributes a novel perspective to understand the association between uncertainty and creativity. Earlier research focused on the effects of uncertain experience on creative processes (e.g., Mueller et al., 2012; Mueller et al., 2018). For example, Mueller and colleagues (2012) showed that experience of uncertainty makes individuals to reject creative ideas. Similarly, Mueller and colleagues (2018) found that taking up decision-maker role may increase experience of uncertainty, which in turn motivates them to discount creative ideas with cues of low social approval. Although scholars (e.g., George, 2007) argued that creativity can raise the level of uncertainty, prior research did not examine further how aspects of creativity influence experience of uncertainty. Investigating the effect of creativity pressure on task uncertainty, the current dissertation shows that creativity-relevant work experience can indeed introduce feeling of uncertainty. In doing so, this dissertation draws attention to the observation that employees may negatively respond to emphasis on creativity and innovation at work (Zhexembayeva, 2020) and aims to explain why.

Limitations and Future Directions

The current dissertation focuses on the impact of organizational creativity pressure on work engagement, task uncertainty and fairness perception. However, I expect organizational creativity pressure to have effects on other workplace experiences and behaviors as well. For instance, drawing on research that creativity is associated with unethical behaviors (Gino & Ariely, 2012), it is plausible that organizational creativity pressure might induce more ethical transgressions in organizations. Specifically, because creativity is indeterministic and not purely enhanced by effort, some employees might feel compelled to take shortcuts to achieve creativity goals.

Future research can also explore effects of the pressure more broadly. For example, future research can examine how the creativity pressure differs from and interacts with organizational support for creativity to influence employee work experiences at work. Additionally, future research can further examine whether employees of different demographic backgrounds beyond gender experience the organizational creativity pressure differently. For example, employees of different cultural backgrounds might respond to the creativity pressure differently given the association between creativity and individualistic values (Goncalo & Staw, 2006). One speculation is that people from less individualistic and more conformistic cultures might find organizational creativity pressure more of a hindrance than a challenge compared to their individualistic and non-conforming counterparts because their cultures might not encourage thinking out of the box or challenging status quo. Given that creativity is gaining more importance in collaborative contexts in modern organization, future research should further examine the effects of organizational creativity pressure on teams. For example, one might

investigate what team-level factors can mitigate the negative effect of organizational creativity pressure on experienced task uncertainty.

Three studies (Study 10- Study 12) take experimental approach for the investigation on the effects of organizational creativity pressure on task uncertainty and fairness perception. Future research should replicate the findings in the field setting using the validated measure of organizational creativity pressure. Also, because all three experimental studies use vignette without actual behavior, another experimental study that asks participants to come up with creative ideas while varying the level of pressure for creativity can add value to understand the impact of creativity pressure on task uncertainty and fairness perception. In addition, future research can examine what can buffer the detrimental effect of organizational creativity pressure on task uncertainty and fairness perception.

Lastly, one might wonder how to reconcile the effects of organizational creativity pressure on work engagement fairness perception. I argue that one can still be engaged at work even when one perceives the organization as unfair because the work may still be rewarding, or the individual may be intrinsically motivated. This, however, implies that in order to paint a fuller picture of the impact of creativity pressure at workplace, future research should provide concrete and nuanced understanding of creativity pressure. It will also be worth distinguishing the effects of creativity pressure on processes and work outcomes.

Practical Implications

This dissertation offers some useful practical implications. It seems that pressurizing employees for greater creative performance may actually motivate employees at work. In fact, organizations with a low level of organizational

creativity pressure could unintentionally provide demotivating environments, especially for men employees. This finding has implication for men-dominated organizations because such organizations can benefit the most from placing high emphasis on creative performance. This dissertation suggests that organizations should not shy away from pressurizing employees for greater creative performance. Although such pressure induces some stress, overall, the effect appears energizing. In addition, the current dissertation also shows that high creativity pressure may also make employees to feel uncertain about their tasks and develop negative fairness judgements about their organizations. My research also shows that creativity pressure may induce higher level of task uncertainty compared to general performance pressure. Managers should be mindful of such effects when promoting creative performance. In summary, this dissertation informs when and why creativity pressure in organizations can be beneficial and detrimental, thus helps organizations to be aware of potential benefits and downsides of pressuring creativity in different organizational contexts.

CONCLUSION

Despite the increasing focus on employees' creative performance in modern organizations, researchers have thus far neglected to investigate the consequences of creativity pressure at the workplace. The current dissertation takes creativity research in a new direction by investigating how employees respond to organizational creativity pressure. The research effort in this new direction could encourage organizational researchers to begin looking at the effects of creativity in new perspectives.

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Figure 1. Theoretical Model 1

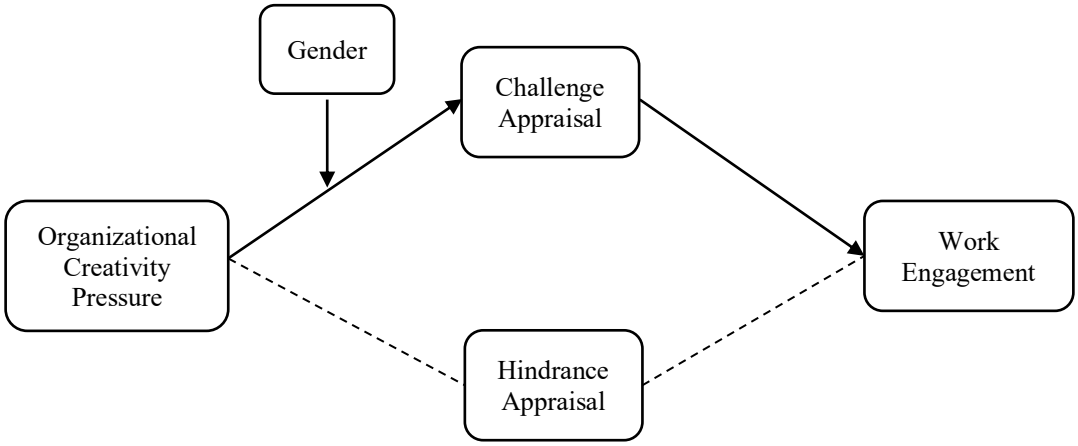


Figure 2. Theoretical Model 2

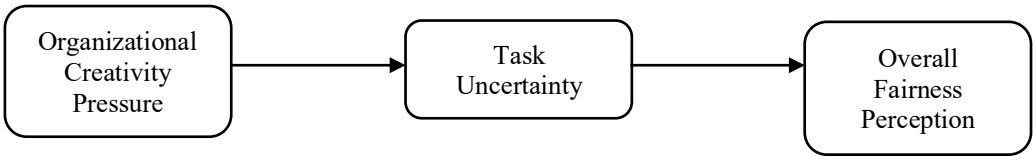


Figure 3. Mean difference in level of challenge appraisal (Study 6)

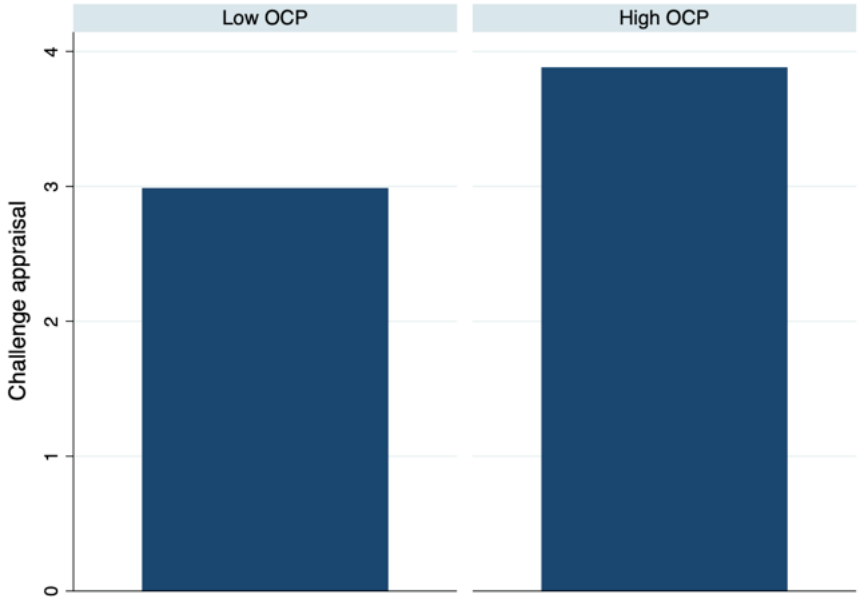


Figure 4. Mean difference in level of work engagement (Study 6)

Figure 5. Mean level difference in challenge appraisal (Study 7)

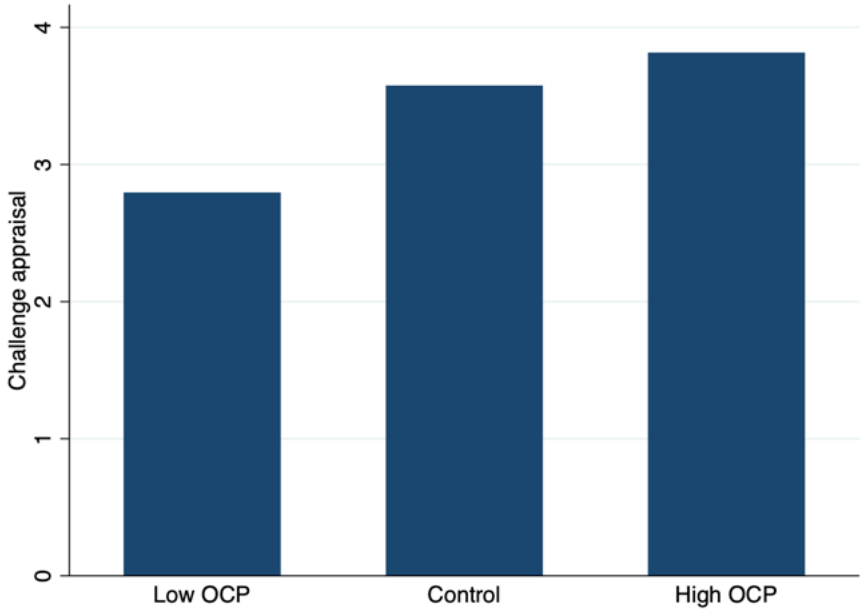


Figure 6. Mean level difference in work engagement (Study 7)

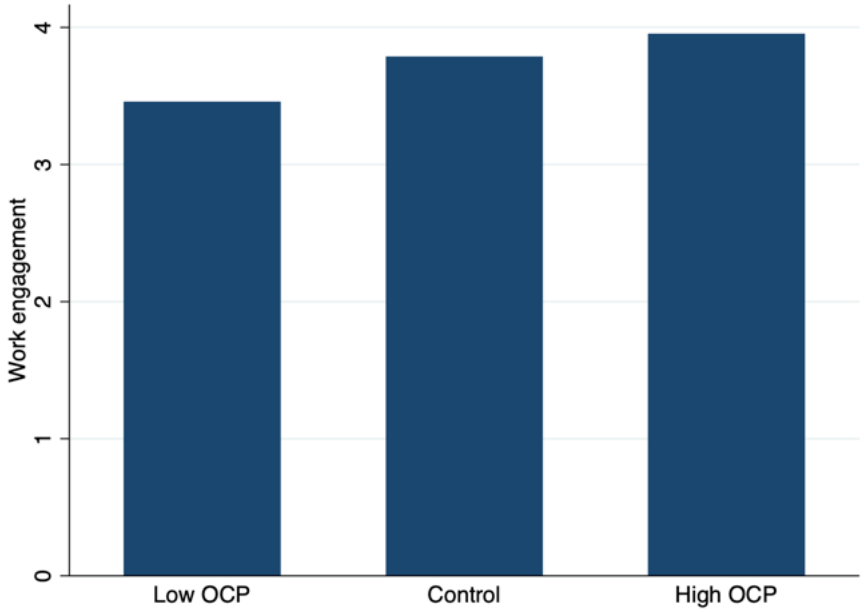


Figure 7. Interactive effect of Organizational Creativity Pressure and gender on work engagement (Study 8)

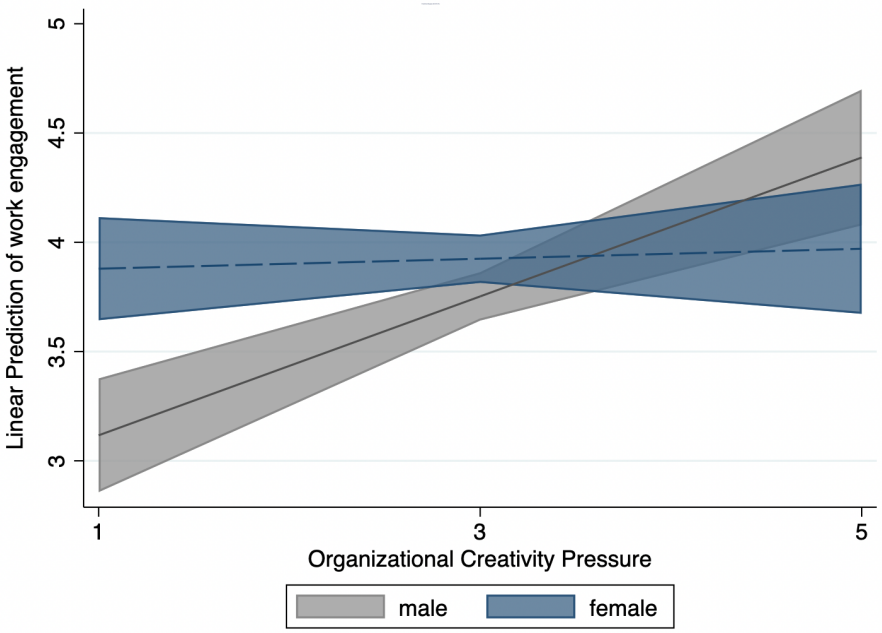


Figure 8. Interactive effect of Organizational Creativity Pressure and gender on challenge appraisal (Study 9)

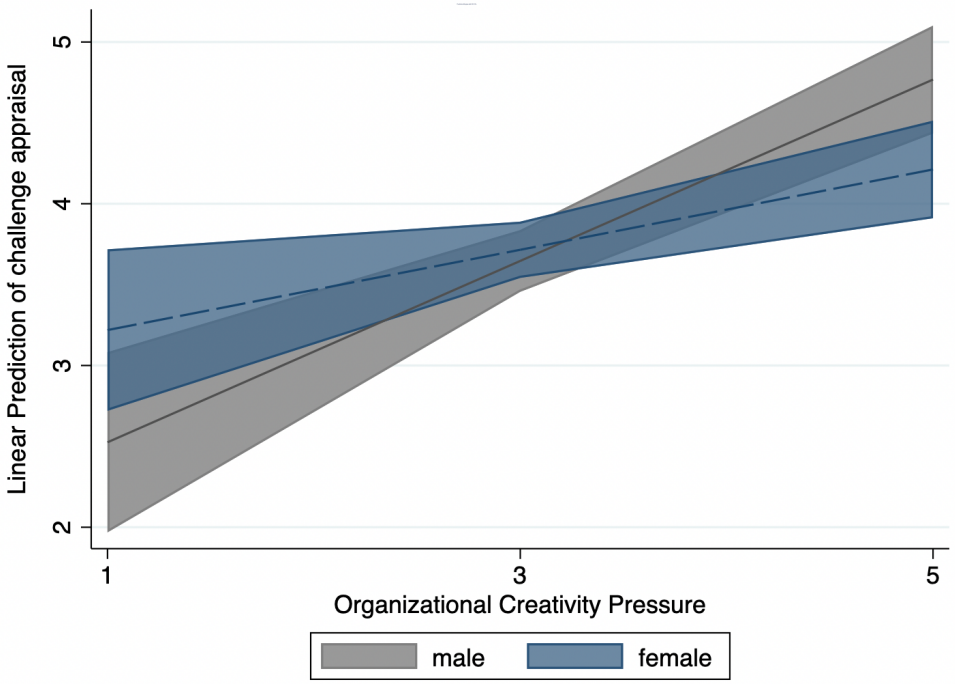


Figure 9. Interactive effect of Organizational Creativity Pressure and gender on work engagement (Study 9)

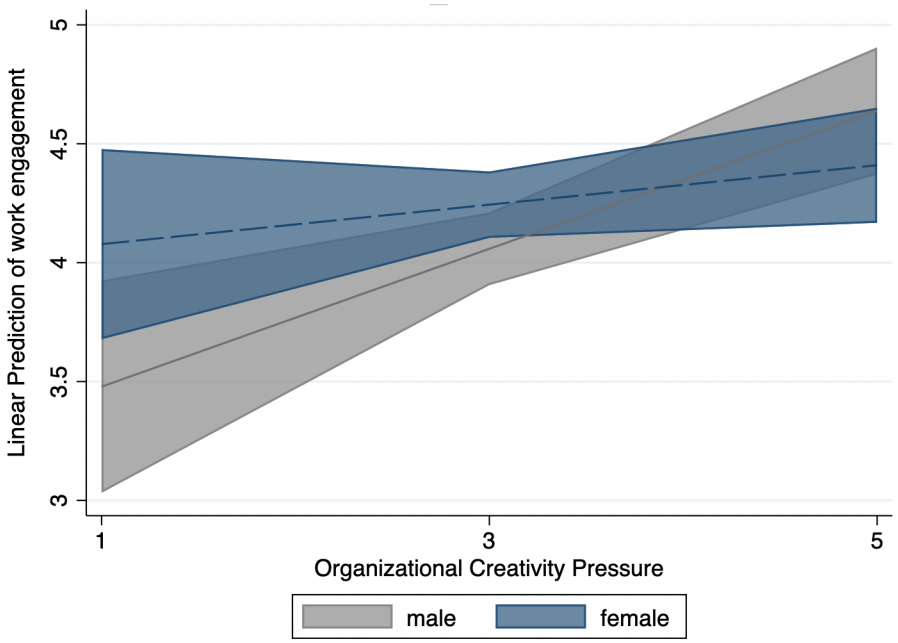


Figure 10. Interactive effect of organizational creativity pressure and challenge appraisal on work engagement (Supplementary analysis)

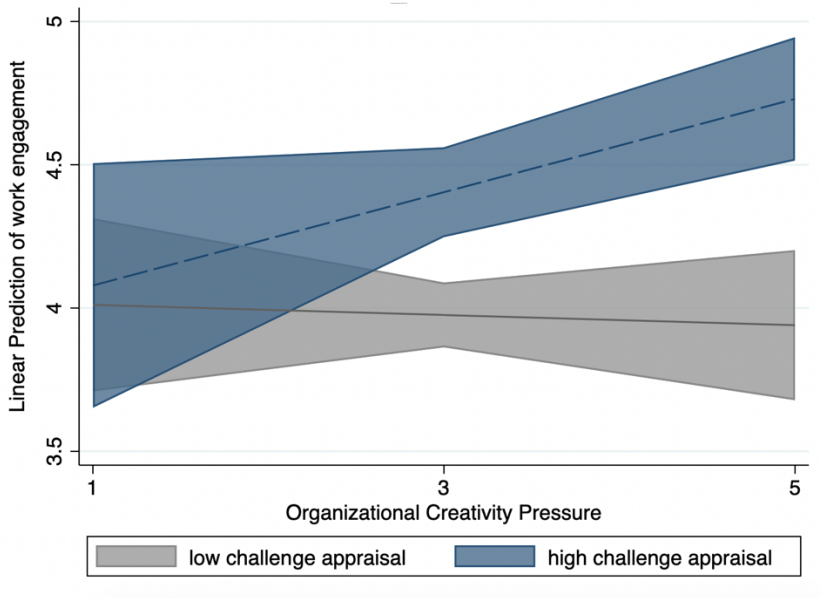


Figure 11. Mean level difference in Task uncertainty (Study 10)

Figure 12. Mean level difference in perceived overall fairness (Study 10)

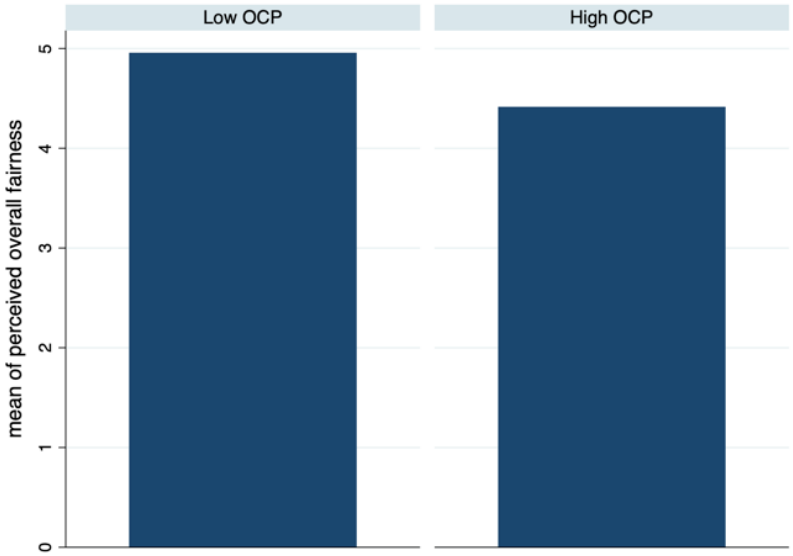
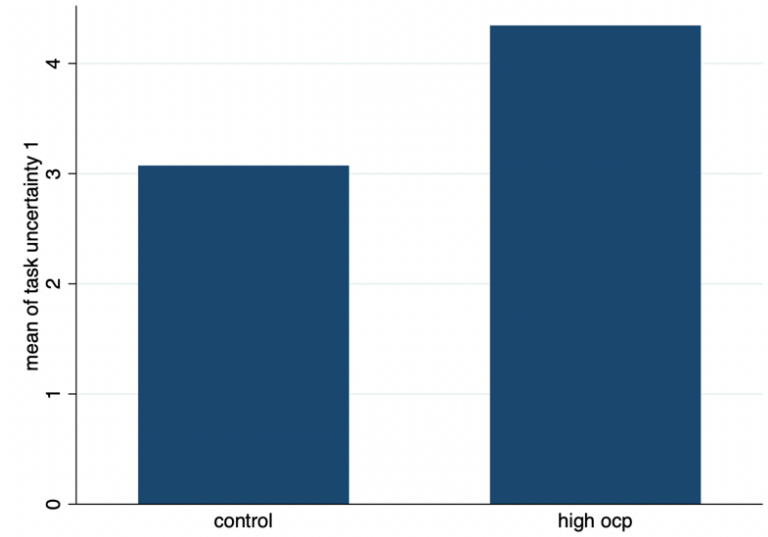


Figure 13a and 13b. Mean level differences in task uncertainty (Study 11)



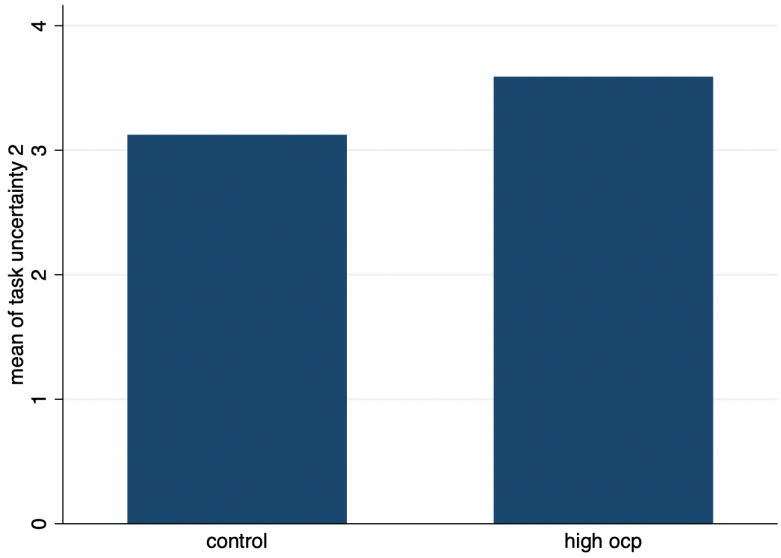
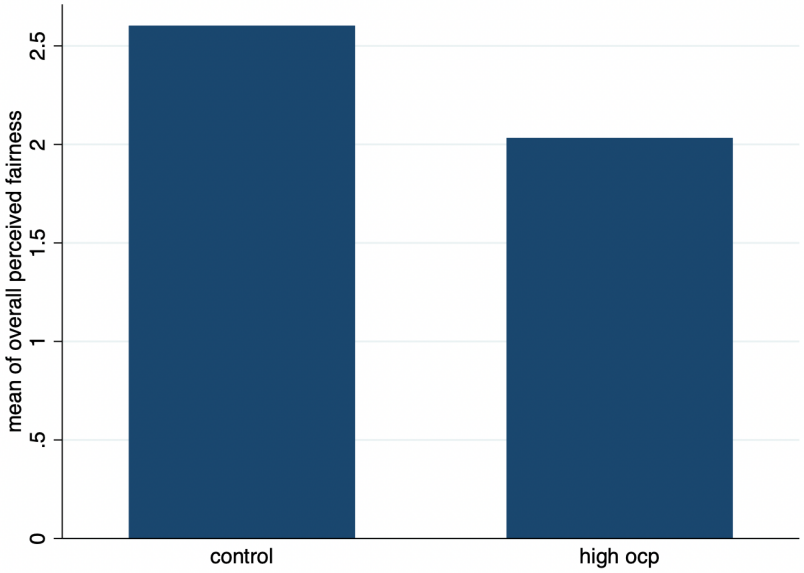


Figure 14a and 14b. Mean level differences in overall perceived fairness (Study 11)



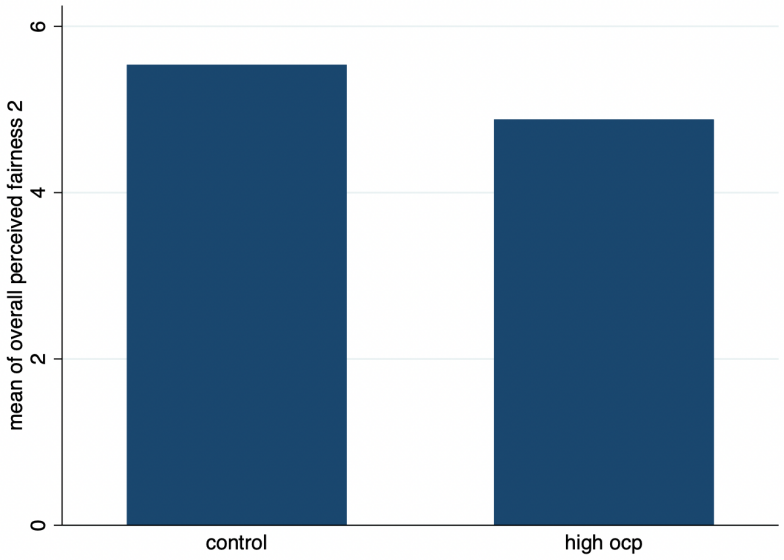


Figure 15. Mean level difference in task uncertainty (Study 12)

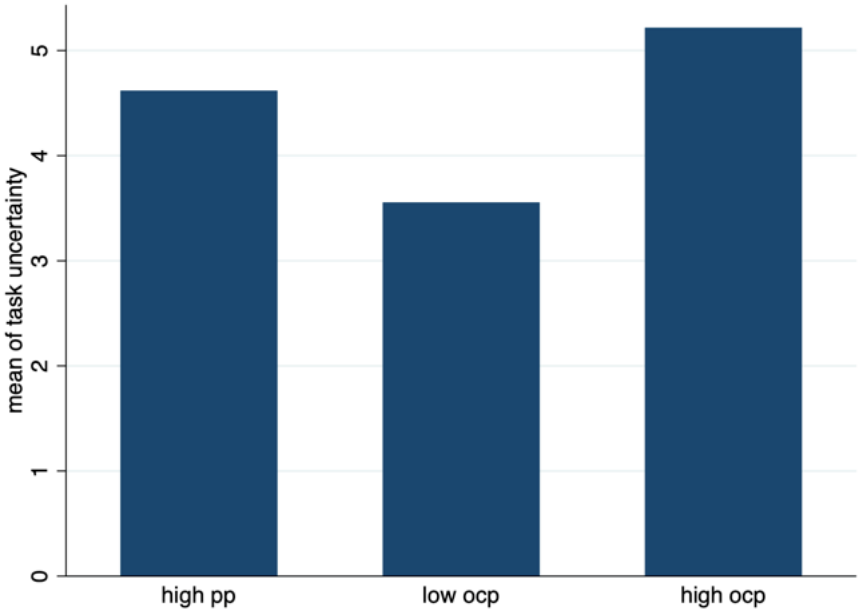


Figure 16. Mean level difference in perceived overall fairness (Study 12)

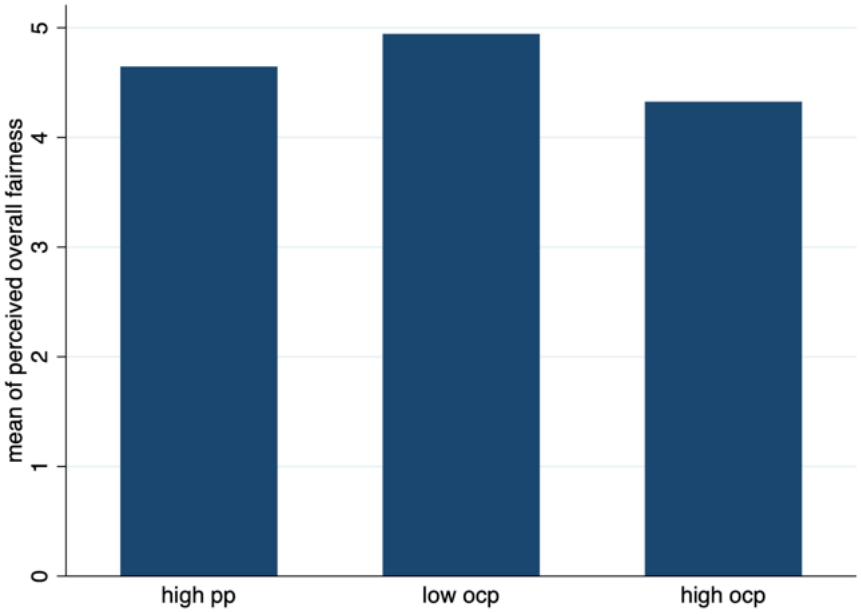


Table 1. Summary of Scale Development Steps

Scale Development Step	Data Characteristics	Data from
Step 1: Item generation	75 full time workers in the United Kingdom, 64% male, age mean=32.27 (*SD*=5.91), work experience mean=7.71 (*SD*=5.40); In-depth interviews with 10 full time workers in South Korea, 4 male	Prolific/ Snow sampling from South Korea
Step 2: Item refinement	123 full time workers in the United States, 54% male, average age=35.82 (*SD*= 6.8), average working experience = 14.12 (*SD*=7.31)	MTurk
Step 3: Content validity	154 university students in Singapore, 36% male, average age=21.17 (*SD*=1.50)	Singaporean students
Step 4: Construct validity	120 full time workers in the United Kingdom, 42% male, average age=31.15 (*SD*= 6.57), average working experience = 10.56 (*SD*=6.64)	Prolific

Table 2. Initial 8 items of Organizational Creativity Pressure (Study 1)

Initial Items
Management constantly pushes me to develop novel ideas to achieve goals at my company.
The pressures for creative performance are high at my company.
In order to be seen as a highly valuable employee, I must show creative results.
I am under pressure to generate innovative ideas in doing my job at my company.
I must carry out tasks creatively in order to succeed at my company.
I feel a high level of pressure to demonstrate originality in my work at my company.
Career success at my company highly depends on creative performance.
My superior will judge negatively if my work is not creative.

Table 3. Organizational Creativity Pressure Items and Factor Loadings

Items	Factor Loadings	
	Study 4	**Study 9**
Management constantly pushes me to develop novel ideas to achieve goals at my company.	.79	.80
The pressures for creative performance are high at my company.	.87	.90
I am under pressure to generate innovative ideas in doing my job at my company.	.81	.83
Career success at my company highly depends on creative performance.	.89	.84

Table 4. Correlations and Descriptive Statistics (Study 4)

	Mean	SD	1	2	3	4	5
1. Organizational Creativity Pressure	2.54	.89	(.86)				
2. Performance Pressure	3.39	.93	.39**	(.86)			
3. Leader Expectations for Creativity	2.48	1.03	.63**	.20*	(.89)		
4. Perceived Organizational Support for Creativity	3.07	.90	.66**	.26*	.51**	(.86)	
5. Promotion Focus	3.51	.73	.33**	.27**	.34**	.31**	(.88)

Table 5. Results of χ^2 difference tests between organizational creativity pressure and related constructs (Study 4)

Comparison of 1- vs. 2-factor models									
	One-factor model				Two-factor model				Difference
Measurement Models	X^2	df	CFI	SRMR	X^2	df	CFI	SRMR	$\Delta\chi2$
OCP and Performance Pressure	209.121	20	.61	.17	29.646	19	.98	.06	179.475
OCP and Leader expectations for creativity	118.103	20	.83	.09	35.246	19	.97	.04	82.857
OCP and Organizational Support for Creativity	82.092	.85	.88	.07	24.403	19	.99	.04	57.689
OCP and Promotion Focus	276.860	65	.69	.14	86.242	64	.97	.05	190.618

Table 6. Descriptive Statistics and Correlations (Study 5)

	M	SD	1	2	3	4	5	6
1. Male	.53	.50						
2. Age	36.82	6.44	-.20					
3. Marital status	.45	.50	-.08	.17				
4. Work experience	16.92	7.43	-.18	.86	.10			
5. Industry tenure	9.70	6.49	-.10	.64	.03	.56		
6. Creativity values	4.10	1.17	.16	.01	.22	.03	-.06	
7. Non creativity values	5.11	.76	.00	-.07	.10	.04	-.13	.47

N= 125. Values greater than |.17| are significant at $p < 0.05$, and values greater than |.22| are significant at $p < 0.01$.

Table 7. Descriptive Statistics and Correlations (Study 8)

	M	SD	1	2	3	4	5	6
1. Organizational creativity pressure	2.76	.85						
2. Male	.49	.50	.05					
3. Work engagement	3.81	.71	.20	-.17				
4. Family to work stress	1.79	.82	.12	.10	-.17			
5. Work hours	38.54	5.44	.13	.14	.09	-.02		
6. Overtime	1.74	.80	.12	.04	.19	.01	.10	
7. Performance pressure	3.37	.85	.25	-.04	.14	.15	.17	.13

N= 300. Values greater than |.10| are significant at $p < 0.05$, and values greater than |.14| are significant at $p < 0.01$.

Table 8. Regression results with work engagement as the dependent variable (Study 8)

	Model 1: Main effect, without controls			Model 2: Main effect, controls			Model 3: Interaction effect		
	b	***se***	***p***	***b***	***se***	***p***	***b***	***se***	***p***
Control Variables									
Family to work stress				-.18	.05	.00	-.17	.05	.00
Work hours				.00	.01	.68	.01	.01	.30
Overtime				.14	.05	.01	.14	.05	.00
Performance pressure				.08	.05	.09	.07	.05	.13
Independent Variables									
Organizational Creativity Pressure	.17	.05	.00	.15	.05	.00	.02	.06	.71
Men							-1.06	.26	.00
Organizational Creativity Pressure x Men							.30	.09	.00
Constant	3.33	.14	.00	3.07	.32	.00	3.37	.32	.00
R^2		.04			.12			.18	

Table 9. Descriptive Statistics and Correlations (Study 9)

	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Organizational Creativity Pressure	3.50	0.90											
2. Men	0.47	0.50	.06										
3. Challenge appraisal	3.89	0.72	.47	.02									
4. Work engagement	4.26	0.60	.20	-.15	.51								
5. Importance of creativity in the industry	3.72	1.14	.52	.14	.34	.23							
6. Performance Pressure	3.57	0.89	.39	.10	.12	.06	.15						
7. Family to work stress	2.33	1.16	.23	.17	-.12	-.34	.02	.20					
8. Work Hour	39.91	10.91	.05	-.02	.05	.19	.11	.19	-.06				
9. Overtime	2.17	1.12	.21	.11	.08	.20	.33	.21	.07	.13			
10. Hindrance Appraisal	2.42	1.16	.25	.19	-.15	-.31	.03	.36	.74	-.02	.10		
11. Age	41.62	9.49	-.05	.04	-.06	-.06	.01	-.18	-.11	.12	.04	-.15	
12. Conscientiousness	4.28	0.77	-.11	-.24	.20	.46	-.08	-.01	-.58	.16	.00	-.51	.10

N= 150. Values greater than |.16| are significant at $p < 0.05$, and values greater than |.22| are significant at $p < 0.01$.

Table 10. Regression Results with Work Engagement as the Dependent Variable (Study 9)

	Model 1: Main effect, without controls			Model 2: Main effect, controls			Model 3: Interaction effect		
	b	***se***	***p***	***b***	***se***	***p***	***b***	***se***	***p***
Control Variables									
Importance of creativity in the industry				.04	.04	.32	.05	.04	.22
Performance pressure				-.05	.06	.34	-.02	.06	.68
Family to work stress				-.03	.06	.66	-.04	.06	.50
Work hours				.01	.00	.16	.00	.00	.22
Overtime				.07	.04	.07	.07	.04	.06
Hindrance appraisal				-.08	.06	.17	-.09	.06	.13
Age				-.01	.00	.03	-.01	.00	.02
Conscientiousness				.31	.07	.00	.28	.07	.00
Independent Variables									
Organizational Creativity Pressure	.13	.05	.02	.18	.06	.01	.29	.08	.00
Men							.81	.38	.04
Organizational Creativity Pressure x Men							-.21	.10	.05
Constant	3.79	.20	.00	2.43	.41	.00	2.04	.45	.00
R^2		.04			.38			.40	

Table 11. Regression results with challenge appraisal as the dependent variable (Study 9)

	Model 1: Main effect, without controls			Model 2: Main effect, controls			Model 3: Interaction effect		
	b	***se***	***p***	***b***	***se***	***p***	***b***	***se***	***p***
Control Variables									
Importance of creativity in the industry				.10	.06	.07	.11	.05	.06
Performance pressure				-.01	.07	.84	.02	.07	.78
Family to work stress				-.01	.07	.91	-.03	.07	.71
Work hours				.00	.00	.91	-.00	.00	.96
Overtime				-.02	.05	.74	-.02	.05	.67
Hindrance appraisal				-.11	.07	.11	-.13	.07	.06
Age				-.01	.01	.17	-.01	.01	.09
Conscientiousness				.16	.08	.06	.15	.09	.08
Independent Variables									
Organizational Creativity Pressure	.38	.06	.00	.38	.08	.00	.56	.11	.00
Men							1.01	.47	.04
Organizational Creativity Pressure x Men							-.31	.13	.02
Constant	2.57	.21	.00	2.03	.52	.00	1.53	.56	.01
R^2		.22			.31			.40	

APPENDICES

Appendix A: Manipulation materials

Instruction

You will read a short passage about a company called Alco. Please read the passage carefully as you will be asked questions about the company afterwards.

High organizational creativity pressure condition:

At Alco, thinking and acting creatively is highly expected for employees. Creativity is considered the most desired quality for performing well. Senior management constantly pushes employees to develop creative solutions to organizational problems. Thus, the pressures for creative performance are high and increasing. To succeed at Alco, one must carry out tasks creatively.

Low organizational creativity pressure condition:

At Alco, thinking and acting creatively is not always expected for employees. Creativity is considered a useful, but not the most desired quality for performing well. Senior management does not see the need to push hard on employees to develop creative solutions to organizational problems. Thus, the pressures for creative performance are not high. To succeed at Alco, one must adhere to some well-established ways to carry out tasks.

High performance pressure condition:

At Alco, producing good quality results is expected for employees. The ability to achieve high level of performance is the most desired quality. Senior management constantly pushes employees to achieve good results. Thus, the pressures for

performance are high and increasing. To succeed at Alco, one must produce at high levels.

Control condition:

Alco is based in London and was founded in 2010. Alco provides a variety of services to clients and for the last decade, it has worked with a diverse mix of companies. Alco responds to client inquiries via website, phone, and email within 24 hours. Working hours at Alco are 9 am to 5:30 pm Monday to Friday.

Appendix B: List of Measures: Key Study Variables

Challenge appraisal (Drach-Zahavy & Erez, 2002)

Adapted for experimental studies

1. Working at Alco would make me feel challenged in a positive way.
2. Working at Alco would provide opportunities to exercise my skills.
3. Working at Alco would provide opportunities to overcome obstacles.
4. Working at Alco would provide opportunities to strengthen my self-esteem.

Survey items

1. The pressure for creativity at work makes me feel challenged in a positive way.
2. The pressure for creativity at work provides opportunities to exercise my skills.
3. The pressure for creativity at work provides opportunities to overcome obstacles.
4. The pressure for creativity at work provides opportunities to strengthen my self-esteem.

Hindrance appraisal (Adapted from Drach-Zahavy & Erez, 2002)

Adapted for experimental studies

1. Working at Alco would make me feel threatened.
2. I would be worried that working at Alco might reveal my weaknesses.
3. Working at Alco seems tiresome.
4. I would be worried that working at Alco might threaten my self-esteem.

Survey items

1. The pressure for creativity at work makes me feel threatened.
2. I'm worried that the pressure for creative performance at work might reveal my weaknesses.
3. The pressure for creativity at work seems tiresome.
4. I'm worried that the pressure for creativity at work might threaten my self-esteem.

Work engagement 1 (Schaufeli, Bakker, & Salanova (2006)

Adapted for experimental studies

1. At Alco, I would feel bursting with energy.
2. At Alco, I would feel strong and vigorous.
3. I would be enthusiastic about my job.
4. My job would inspire me at Alco.
5. When I get up in the morning, I would feel like going to work.
6. I would feel happy when I am working intensely at Alco.
7. I would be proud of the work that I would do at Alco.
8. I would be immersed in my work at Alco.
9. I would get carried away when I am working at Alco.

Work engagement 2 (Rich, Lepine, & Crawford, 2010)

Physical engagement

1. I would work with intensity on my job at Alco.
2. I would exert my full effort to my job at Alco.
3. I would devote a lot of energy to my job at Alco.
4. I would try my hardest to perform well on my job at Alco.

5. I would strive as hard as I can to complete my job at Alco.
6. I would exert a lot of energy on my job at Alco.

Emotional engagement

7. I would be enthusiastic in my job at Alco.
8. I would feel energetic at my job at Alco.
9. I would be interested in my job at Alco.
10. I would be proud of my job at Alco.
11. I would feel positive about my job at Alco.
12. I would be excited about my job at Alco.

Cognitive engagement

13. At Alco, my mind would be focused on my job.
14. At Alco, I would pay a lot of attention to my job.
15. At Alco, I would focus a great deal of attention on my job.
16. At Alco, I would be absorbed by my job.
17. At Alco, I would concentrate on my job.
18. At Alco, I would devote a lot of attention to my job.

Task Uncertainty 1 (adapted from Colquitt, LePine, Piccolo, Zapata, & Rich, 2012)

1. There would be a lot of uncertainty at Alco**.**
2. Many things would seem unsettled at Alco.
3. If I think about working at Alco, I feel a lot of uncertainty.
4. I would not be able to predict how things will go at Alco.

Task Uncertainty 2 (Adapted from Hochwarter, Ferris, Zinko, Arnell & James ,2007)

1. I would be unclear regarding what is expected of me at Alco.
2. There would be a great deal of ambiguity in my job at Alco.
3. I would get mixed messages from different people concerning what I am supposed to do at Alco.

Overall Fairness Perception 1 (Ambrose & Schminke, 2009)

1. Overall, I would be treated fairly by Alco.
2. In general, I would be able to count on Alco to be fair.
3. In general, the treatment I receive at Alco would be fair.
4. Usually, the way things work in Alco would be not fair.
5. For the most part, Alco would treat its employees fairly.
6. Most of the people who work at Alco would say they are often treated unfairly.

Overall Fairness Perception 2 (Adapted from Kim & Leung, 2007)

1. In general, I would be fairly treated at Alco.
2. All in all, Alco would treat me fairly.
3. Overall, I believe that I would receive fair treatments from Alco.