The Influence of Organizational Tightness-Looseness, Self-Monitoring, and Performance Standards on Creativity.

Sampoorna Nandi

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Committee Chair: Dr. Logan L. Watts

Department of Psychology

The University of Texas at Arlington

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Abstract

My research study seeks to experimentally investigate the main effect of cultural tightness-looseness within organizations on employees' creative performance in terms of the *criteria* of the specific creative process (idea generation versus evaluation). Specifically, I hypothesized that employees in tight (versus loose) organizational cultures will be better at generating more useful (versus original) ideas. Furthermore, employees in tight (versus loose) organizational cultures were hypothesized to be stronger at idea evaluation (marked by number, depth, specificity, and usefulness) and employees in loose (versus tight) organizational cultures are expected to be stronger at idea generation (marked by fluency, originality, and quality). Furthermore, this research examined if explicit performance standards (innovative versus operative) and employee self-monitoring (high versus low) interacted with organizational tightness-looseness to predict differences in creative performance. The study found that high self-monitoring employee generated significantly more creative ideas. No other main or interaction effects were found to be significant. Theoretical and managerial implications for this research are discussed.

Keywords: organizational tightness-looseness, idea generation, idea evaluation, creativity, self-monitoring, performance standards.

Table of Contents

1. **Introduction**……1
    a. Theoretical Background……5
    b. Conceptualizing Creativity…….....5
        i. *Process Models of Creativity*……5
        ii. *Creativity as Idea Generation*…….....6
        iii. *Creativity as Idea Evaluation*……...6
    c. Cultural Tightness-Looseness……..8
        i. *Tightness-Looseness within Organizational Cultures*……..10
        ii. *Organizational Tightness-Looseness and Creative Performance*…...11
        iii. *Performance Standards*…..……...15
        iv. *Role of Employee Self-Monitoring*……...……...17
2. **Method**……21
    a. Design……...21
    b. Sample……..22
    c. Procedures……22
    d. Independent Variables……..23
        i. *Cultural Tightness-Looseness at the Organizational level*……..23
        ii. *Performance Standards*……23
        iii. *Employee Self-Monitoring*……24
    e. Manipulation Checks……24
    f. Dependent Variables…….....25
    g. Covariates……26
        i. *Timed Covariates*……26
        ii. *Untimed Covariates*……27
    h. Analytical Procedures……..28
3. **Results**……29
    a. Table 1……..30
    b. Table 2……..32
    c. Figure 1……..……..…33
    d. Figure 2……..……..33
    e. Figure 3……..……..34
4. **Discussion**……..……..34
    a. Theoretical Implications…….……..34
    b. Managerial Implications…….……..35
5. **Limitations and Future Research**……..…….……..36
6. **References**……..…….…….…..38
7. **Appendix A**……..……..…….……..…..51
8. **Appendix B**……..……..…….……..…..52
    a. Table 1……..……..…….……..…..52
    b. Table 2……..……..…….……..…..52
    c. Table 3……..……..…….……..…..53
    d. Table 4……..……..…….……..…..53

The Influence of Organizational Tightness-Looseness, Performance Standards, and Self-Monitoring, on Creativity

In 2014, the well-known online shoe retailer, Zappos, announced its introduction of "holacracy," a kind of organizational culture characterized primarily by self-management and self-organizing among its employees (Bernstein et al., 2016; Gelfand, 2018). A holacracy style of working eschews traditional hierarchical structures and consists of circular structures and fluid task roles to allow for new collaborations among different members of the organization (Kumar & Mukherjee, 2018; Robertson, 2006). Employees of Zappos also have more control over the way they perform their jobs and over final decisions and outcomes. Zappos' relatively "loose" culture was initially hailed as a triumph in terms of allowing employees to be innovative and open-minded, and providing an environment where employees feel free and unafraid to be their creative selves (Holland, 2016; White, 2015). However, within the first few years of launching holacracy, Zappos lost 18% of its employee who cited the self-management-centric culture of the company as providing an unstable work environment and very little guidance and reliability in terms of clear performance standards and roles (Lam, 2016). Realizing the negative effects of an overly loose culture, Zappos has now inched away from a fully self-management-based culture and has established a set of more clear rules, more role clarity, and introduced more management involvement (Groth, 2020).

In contrast, consider United Airlines, whose organizational culture is characterized by a high degree of rules and strict rule adherence. United expects its employees to abide closely to all its norms and stick to established ways of operating, with very little autonomy or flexibility in employee task performance (Gelfand, 2018). This type of culture is considered critical to ensure clarity and reliability in terms of operations, while providing the much-needed standards to guide task performance. However, in 2017, the company faced a

PR nightmare when its employees were caught on video forcing a passenger out of a plane (Yan et al., 2017). Those familiar with the incident mentioned United's "rule-book" based culture, and discussed how "deviating from the rules is frowned upon; employees can face termination for a foul-up" (Khan, 2017). Furthermore, United's culture led to a static work environment that left little to no room for flexibility and creative thinking (Gelfand, 2018). Since then, United has worked on changing its overly "tight" culture by setting up customer support teams to help triage unique issues that customers may face (united.com, 2017).

Observing the cases of Zappos and United, it is clear that a) organizational cultures often differ in terms of tightness-looseness, or the degree of norm strength and the degree of punishment for perceived or real deviance (Gelfand, 2006), and b) the degree of cultural tightness-looseness within organizations may be beneficial or harmful for employees in relation to important employee outcomes, such as the ability and willingness to be creative.

Examining the antecedents of creativity continues to be relevant given employee creative performance remains one of the most significant metrics of organizational success across a variety of tasks, roles, and industries (McLean, 2005). Many organizational and individual-related factors have been established as interacting with one another to help or hinder creative performance (Anderson et al. 2004; Shalley & Gilson, 2004; Tesluk et al., 1997). The bulk of the research in this area has highlighted the negative role of organizational culture variables such as structure (e.g., centralization and formalization), on employee innovation (Amabile et al., 1996; Damanpour, 1991; Kanter, 1988; McLean et al. 2005). However, a closer look reveals that organizational structures may encourage certain types and stages of innovation and creativity. For example, Damanpour's (1991) meta-analysis found that while technical innovations (relating to product/process technology) benefit from less formalization and centralization, administrative innovations (relating to task structure, management protocol), benefit from more formalization and centralization. Additionally,

organizations with more diverse task structures *initiated* more innovations (e.g., generated more original solutions) but those with formalized and centralized structures *implemented* more innovations (e.g., adopted solutions based on usefulness). Furthermore, innovation was more common in organizational cultures characterized by managerial positive attitude towards change, and less common in organizational cultures characterized by supervisor close monitoring (Damanpour, 1991; Zhou et al., 2003). Hence, several organizational cultural factors serve as boundary conditions to predict positive versus negative effects on employee creativity and innovation.

Despite evidence existing regarding the differential impact of organizational culture variables on innovation, causal evidence regarding these relationships remains limited. Hence, the contribution of the present study lies in examining organizational tightness-looseness in predicting differences in creative performance. In introducing organizational tightness-looseness, the present research moves beyond centralization, hierarchy, and formalization and conceptualizes organizational culture in terms of the *strength of social norms and differences in organizational sanctioning*.

In examining the impact of organizational tightness-looseness on employee creativity, this research draws from process models of creativity (Lubart, 2001). According to this model, creativity is judged with respect to multiple criteria and creative process involves more than just idea generation. For individuals to be seen as being creative, they are not only required to *generate* original solutions to ill-defined problems, but also *evaluate* these solutions as being useful in nature, that is, selecting those solutions that can be successfully implemented and lead to innovation (Amabile et al., 1996; Mumford & Gustafson, 1988; Mumford et al., 1991). Drawing from the process model understanding of creativity, this research expects tighter culture to provide a more suitable environment for *idea evaluation*, whereas more loose cultures are expected to be better suited for *idea generation*.

Recognizing the role of variables beyond organizational culture, prior research has also found that creativity and innovation may improve as a result of specific *standards* tied to creative performance. Recent work by Medeiros et al. (2014; 2018) has shown that imposing organizational constraints in the form of performance standards benefitted all the creative processes. Similarly, Watts et al. (2019) demonstrated how originality versus usefulness performance standards positively impacted idea formulation and refinement. Hence, the present research study also examines how innovative (originality) versus operative (usefulness) standards may predict differences in creative performance while also interacting with organizational tightness-looseness to predict differences in creative performance (Mumford et al., 2002).

Research has also shown how individual differences such as openness to experience and need for cognition predicts differences in creative performance (McLean, et al., 2005; Watts et al., 2017). However, research is yet to examine if sensitivity to cultural and social cues may predict creative performance. Those who care more (versus less) about behaving in socially appropriate ways may be more (versus less) likely to internalize social norms and performance standards, which may constrain (versus encourage) creative thought. Hence, this research effort additionally examines if self-monitoring predicts differences in creative performance. The study also examines if self-monitoring interacts with organizational tightness-looseness and performance standards to paint a more complete picture in predicting employee creative performance.

Therefore, drawing from an interactionist perspective (Hirst et al., 2009; Scott & Bruce, 1994; Woodman et al., 1993), this research will:

I. Examine the potential differential causal impact of organizational tightness-looseness on two creative processes—namely, idea generation and idea evaluation.

II. Examine the potential main effects of employee self-monitoring and performance standards on creative performance and examine the interactive effects of employee self-monitoring and performance standards on the relationship between organizational tightness-looseness and creative performance.

Theoretical Background

Conceptualizing Creativity

Creativity is traditionally conceptualized as the generation of potentially viable solutions to complex, ill-defined problems measured in terms of the solution's originality/novelty, usefulness, and elegance (Amabile, 1996; Mumford & Gustafson, 1988). Hence, it is worth noting that not all problems require creative solutions. Creativity can be operationalized in terms of *fluency*, referring to the number of creative ideas generated, and *flexibility*, referring to the number of cognitive categories explored during idea generation (Amabile, 1983; De Dreu, Nijstad, & Baas, 2008; Guilford, 1967). Creativity can also be measured in terms of *elaboration*, referring to the enrichment or extension of responses (Runco & Sakamoto, 1999; Torrance, 1966), and *elegance*, referring to the refinement and seamless flow of components within a solution (e.g., Besemer & O'Quinn, 1999; Cropley & Cropley, 2008). An original and novel idea that is implemented is referred to as innovation (Amabile, 1996).

Process Models of Creativity

According to the process model approach, creativity is conceptualized as encompassing different processes and not as a standalone task performed by employees and teams within an organization (Amabile, 1996; Mumford et al., 1991, Lubart, 2001). The most comprehensive of process models has been Mumford et al.'s (1991) framework that examines creative problem-solving as eight interactive processes that involve early, middle, and late stages. These processes include (a) problem identification, (b) information gathering, (c) idea

selection, (d) conceptual combination, (e) idea generation, (f) idea evaluation, (g) implementation planning, and (h) solution monitoring. Hence, successful implementation of ideas rests on the proper appraisal, selection and refinement of these ideas.

Creativity as Idea Generation

Central to the conceptualizations of creativity is the idea *generative* component involved in creative problem solving. Dating back to the works of Dewey (1910), creative thought has been considered the foundation for most studies on creativity. For example, Mumford (2003) noted that "if we do not know how people generate new ideas, it is difficult to place observations about motives, dispositions, situations, and developmental change in context" (p. 111). Even now, the bulk of the research on creativity continues to be measured terms of idea generation, thereby highlighting the importance of this process to creative problem solving (e.g., Griffith et al., 2018; Lam & Chiu, 2002; Partlow, 2016; Paulus, 2000; Valacich et al., 2006; Vosburg, 1998).

Identified as a crucial process in creative problem solving, idea generation is often synonymous with the concept to brainstorming. Brainstorming entails a process wherein individuals have free reign in producing as many ideas as possible without fear of evaluation, to maximize ideational output (Osborn, 1953). In recognizing the importance of idea generation in creative problem solving, it is worth noting that not all problem solving is creative in nature. The *creative* element in creative problem solving universally involves generating *original* and high *quality* ideas (Oldham & Cummings, 1996; Runco & Jaeger, 2012; Sternberg & Lubart, 1999). Originality refers to how uncommon or novel the idea is, whereas quality refers to how useful, appropriate, effective or feasible the idea is (Runco & Jaeger, 2012).

Creativity as Idea Evaluation

Idea evaluation broadly refers to "the contextual assessment of the consequences of idea implementation" (Lonergan et al., 2004, p. 233). Mumford et al. (2002) established idea evaluation as involving three key operations. The first operation is forecasting, referring to the prediction of likely outcomes of implementing an idea or solution within the constraints of a particular context (in this case, certain organizational constraints). The effectiveness of forecasting depends on how many potential outcomes of idea implementation are examined and how many contextual variables are considered. The second operation is appraisal, referring to the assessment of the resulting consequences, or projected outcomes against a set of performance standards applicable particular to the context. These performance standards can differ in their focus (Hershey et al., 1990). For example, creative ideas may be evaluated based on *innovative* standards or *operative* standards. Innovative standards focus on how creative the idea or solution whereas operative standards focus on efficient and implementable the idea or solution. The final operation is idea refinement wherein tests of viability in terms of specific situational constraints will either lead to idea implementation, idea rejection, or idea refinement. These operations show that idea evaluation, through a thorough examination of constraints and potential outcomes, fills an important gap between generating solutions and implementing those solutions (Watts et al., 2019).

The identification of the *evaluative* component in creative performance can be traced to Wallace (1926) who discussed idea "verification" as the evaluation or refinement of ideas that follows "illumination" or idea generation (Lubart & Guignard, 2001). In similar vein, Guilford (1950) elaborated on the importance of verifying or appraising one's creative idea against some criterion before implementing the idea. Furthermore, Amabile (1996) recognizes response validation as a step in which ideas need to be assessed against certain criteria to allow for idea refinement and for subsequent idea implementation. Since then, a few empirical studies have demonstrated how specific idea evaluation processes are part of

the creative problem solving effort. For example, Lubart and Guignard (1994) found that those who evaluated their ideas closer to when they are generated produced more creative products (i.e., stories, drawings), relative to those who did not. Similarly, Mumford et al. (2003) found that evaluative operations like searching for key facts and concept mapping led to producing more original and high quality ideas to a set of policy and management related issues requiring creative solutions. Additionally, Lonergan et al. (2004) showed how when asked to evaluate advertising campaigns in terms of specific standards (innovative versus operative), undergraduates produced better final campaign ideas and overcame deficiencies in their initial ideas. Many studies have specifically demonstrated the role of forecasting given idea evaluation is "ultimately based on a situated appraisal of forecasted outcomes" (Mumford et al. 2002, p. 23). For example, in a series of studies to measure divergent thinking, that is, the ability to generate creative ideas by combining diverse types of information in novel ways, Guilford and colleagues revealed the consistent emergence of a forecasting factor in their confirmatory analyses, where respondents exhibited an ability to project different potential consequences of new solutions or ideas to different contexts. (Guilford, 1967; Mumford et al. 2002). Despite the importance of idea *evaluation* in creative problem solving, the bulk of creativity research has focused on the originality and usefulness of idea *generated* (Cropley, 2006; Osborn, 1950). In recognizing the need to empirically examine the applicability of variables that affect idea generation and evaluation, this research examines the differential influence of tightness-looseness within organizations on these two processes of creativity.

Cultural Tightness-Looseness

In examining cross-cultural factors that influence group behaviors, Gelfand (2006) conceptualized *cultural tightness-looseness* as a construct that refers to the strength of social norms and the degree of sanctioning within societies (Gelfand et al. 2006). The strength of

social norms refers to how clear and pervasive norms are within certain cultures and societies. The strength of sanctioning refers to the degree of tolerance for deviance from norms and the likelihood of getting punished for perceived and actual breaking of norms in the same cultures and societies. The social psychological implications for this theory lie in how the degree of tightness-looseness within any system will manifest a set of behaviors and mindsets among those inhabiting it. As an example, Gelfand (2008) points to Singapore as being a tight culture characterized by well-developed rules, monitoring systems and strict punishment for deviance. Consequently, individuals in tight cultures experience a *higher felt accountability*, that is, the potential of being evaluated and punished or rewarded based on their behavior (Tetlock, 1987; Frink & Klimoski, 1998). These individuals also exhibit *higher cognitive accessibility* to the norms and rules within their culture. In attempting to avoid sanctions and being constantly aware of societal norms, individuals in tighter cultures will exercise greater cautiousness, stronger self-regulation of behavior, have a greater *prevention focus*, and engage in higher conformity (Gelfand et al., 2011; Harrington & Gelfand, 2014).

In loose cultures such as Israel and Brazil, there are fewer social norms regarding appropriate behaviors and a wider range of acceptable behaviors. In the face of few established rules, loose cultures are a lot less likely to punish individuals for new or different ways of thinking and/or behaving. Consequently, individuals in loose cultures tend to exhibit *lower cognitive accessibility* of how they are supposed to behave and tend to have a *promotion focus,* where they experience freedom to act in new and different ways. Furthermore, given individuals in loose cultures don't apprehend any punishment for being or acting differently, they also exhibit a *lower felt accountability* (Gelfand, 2018).

Although conceptualized as a cross-cultural construct, the theory of cultural tightness-looseness sheds light on the psychological science of social norms and is applicable across multiple levels of human organizing (Gelfand et al., 2017). Research has demonstrated its

usefulness for explaining cultural differences across countries, religions, states, as well as class systems, with tightness-looseness having similar predictors (e.g., environmental threat) and psychological consequences (e.g., regulatory focus) among individuals across levels of analysis (Jackson et al., 2017). More importantly, literature in the social sciences and management sheds light on the implications that social norm strength and sanctions for deviance have for behaviors in multiple different settings. For example, cultural tightness-looseness was seen to predict voter behavior differences in the 2016 US Elections (Gelfand et al., 2016), GDP growth and political instability (Harrington et al., 2015), and religious fundamentalism and extreme group behaviors (Yustisia et al., 2020). Tightness-looseness has also been shown to be related to impression management on social media (Liu et al., 2018), consumer preferences and branding (Li et al., 2017; Lin et al., 2017; Torelli & Rodas, 2017), and differences in death rates across countries due to the COVID-19 global pandemic (Gelfand et al., 2021).

Tightness-Looseness within Organizational Cultures

In addition to the aforementioned national culture implications, Gelfand (2006; 2018) discusses the importance of examining tightness-looseness within organizational cultures. For example, after the failed merger of DaimlerChrysler attributed to the companies' conflicting tight and loose cultures (Daimler, leaning tight and Chrysler leaning loose), Lin et al. (2017) found significant financial costs of cross-border mergers and acquisitions due to such cultural incongruities. On similar lines, Gelfand (2018) discusses the harmful consequences of extreme tightness/looseness in organizational cultures. For example, employees at Samsung's tight organizational culture in South Korea compared their onboarding process to a military bootcamp, where sleep-deprived trainees have to master "nunchi" or the ability to memorize every detail of the firm's corporate culture, without which they risk getting fired. Contrarily, Uber, known for its "anything goes" ultra-loose culture where there was little to no

accountability for actions, was exposed by New York Times for several scandals involving illegal ordinances, harassment claims, and other abusive behaviors.

Furthermore, several empirical studies have begun to demonstrate the promise of applying the tightness-looseness construct to the level of organizational culture. For example, Gelfand et al. (2004) demonstrated how norms strength and control in organizations is related to organizational accountability. In the sphere of organizational leadership, Aktas et al. (Aktas) found that organizational tightness-looseness predicts differences in perceptions of leadership effectiveness. In the diversity and inclusion literature, Lee and Kramer, (2016) demonstrated how diversity strategies in tight cultures are more likely to foster distinct organizational cultures than those found in loose cultures. A study by Üstün & Kılıç (2017) found a positive relationship between loose organizations and firm performance. Examining the role of cultural tightness-looseness on creativity, Chua et al. (2015) showed how cultural tightness at the national level attenuates employee innovation in the context of crowdsourcing work. Authors of this study found that individuals from tight cultures are less likely than loose culture-counterparts to engage in and succeed at foreign creative tasks; this effect was strengthened as the cultural distance between the innovator country and the audience's country increased. Additionally, tight cultures were found to be less receptive to foreign creative ideas.

Chua et al's (2015) findings are the first among a few research studies that specifically highlight the role of national tightness-looseness on employee creative performance. The present research effort will add to this stream of literature by investigating the causal influence of organizational tightness-looseness on specific creative organizational outcomes.

Organizational Tightness-Looseness and Creative Performance

The central role of environmental or situational characteristics within the workplace in predicting employee innovation is well-documented (McLean, 2005). Organizations

characterized by vertical hierarchical structures, a high degree of centralization and formalization have a clear impact on the firm's innovation. This relationship is moderated by the nature and process of innovation, with early stages of the creative process and more radical and technical types of innovation benefitting from less structure, and later stages of the creative process and more incremental and administrative types of innovation benefitting from more structure (Damanpour, 1991; McLean et al., 2005; Mumford et al., 1997; Ilgen & Hollenbeck, 1991; Shalley & Gilson, 2001). Although one can argue that tightness-looseness incorporates elements of centralization and hierarchical structures, and that several studies already examine the effects of these structures on organizational innovation, three significant gaps in research remain. First, the tightness-looseness construct goes beyond structure and captures the effects of social norms and sanctioning on individuals. Tightness-looseness theory also sheds light on the antecedents (e.g., threat) and the psychological adaptations (e.g., regulatory focus) that underlie differences in social norm strength and sanctioning (Gelfand, 2006), elements not captured theories of organizational structure (Damanpour, 1991). Second, most of the work demonstrating this relationship use survey data and provide no experimental evidence related to cultural tightness-looseness within organizations; research is yet to demonstrate whether the strength of social norms and the degree of sanctioning within organizational cultures is *causing* differences in creative performance. Third, it is yet to be examined if organizational tightness can be *beneficial* for certain creative processes, such as idea evaluation. Thus, in attempting to demonstrate this relationship, this research examines if tightness-looseness in the context of organizational cultures can affect employee creative idea generation and idea evaluation.

According to Gelfand's (2006) propositions, tight organizational cultures will be characterized by a well-developed set of rules that employees are expected to know and follow (higher control), an emphasis on hierarchical structures, well-developed performance monitoring

systems, a high degree of conformity, and standardization of practises. Whereas, loose organizational cultures will allow a wider range of acceptable behavior (higher flexibility) characterized by a lack of rules, more collaboration, and an encouragement of thinking and acting in new and different ways. Hence, employees in tight cultures will be apprehensive of potential sanctions for deviance, be constantly aware of the rules they have to follow, and feel highly accountable for their actions. Due to these factors, employees in tight organizational cultures may develop a *prevention focus* mindset, where they will avoid thinking and acting differently or taking risks (Gelfand et al. 2006). Primed with this mindset, employees from tight cultures will be motivated to generate solutions that are considered more viable and less prone to failure or punishment. Moreover, due to the normative requirement of tight organizational cultures to stick to tried and tested methods, employees in these cultures are expected to produce less creative solutions to problems (George & Zhou, 2001; Neuberg & Newsom, 1993). This is expected because the presence of many norms, monitoring systems, and the possibility for punishment will manifest in an employee mindset that reduces their willingness and ability to be flexible, to take risks, and to do things differently. In contrast, employees in loose organizational cultures will experience the presence of fewer norms, a wider acceptability of behaviors, an absence of performance monitoring systems, and fewer possibilities and apprehensions with regards to punishment. Thus, they will experience more freedom to think and behave differently. Thus, primed with a promotion focus, these employees will feel encouraged to explore the unknown due to which they will explore more creative solutions to problems.

Idea generation usually entails coming up with new ideas to ill-defined problems. Additionally, new ideas are usually untried and relatively poorly articulated given they are part of the brainstorming stage (Mumford et al., 2002). Hence, idea generation may benefit from a lack of any constraints in the form of performance monitoring, norms, and fear of

punishment that may inhibit the cognitive flexibility, freedom and psychological safety needed for this process (Hu et al., 2018). Consequently, employees in loose organizational cultures, facing a lack of established rules, little fear of punishment for non-conformity, a promotion focus, higher flexibility, and a low cognitive accessibility to social norms, will be better able to generate creative ideas than those in tight cultures.

However, the requirement of organizational constraints, in the form of specific rules, standards may be integral for successful idea evaluation (Mumford et al., 2002; Lonergan et al., 2004). As discussed earlier, idea evaluation requires forecasting and appraising the constraints of a situation that may influence the successful implantation of an idea. To do this, employees need to be aware what various constraints and standards are. In a tight organizational cultures, employees have the benefit of a higher cognitive accessibility to all the social norms which provides ready information regarding the constraints and standards of performance (Gelfand, 2006). Employees can thereby use this information as standards against which they can effectively forecast, appraise, and refine their creative ideas. Contrarily, an absence of such standards and norms may operate as a hindrance to employees in loose cultures, who do not know what kind of situational constraints and performance standards to evaluate their ideas against, leading to poorer idea evaluation. Consequently, this research argues that employees in tight cultures will focus on the usefulness of the ideas and engage in better idea evaluation. On the other hand, employees in loose organizational cultures who will engage in poorer idea evaluation due to an absence of fewer standards or rules and wider flexibility in what is considered acceptable. Against this background, the following hypotheses are proposed:

H1a: *I predict a main effect of organizational tightness-looseness on employee creative idea generation, such that those in the loose organizational culture condition will be better at generating creative ideas compared to those in the tight organizational culture condition — marked by the fluency, originality, and quality of ideas.*

H1b: *I predict a main effect of organizational cultural tightness-looseness on idea evaluation, such that those in the tight organizational culture condition will exhibit higher quality idea evaluations compared to those in the loose organizational culture condition—marked by the number, depth, specificity, and usefulness of critiques.*

Performance Standards

In determining whether an idea will work or not, that is, in forecasting the success and implementation of an idea, research has demonstrated the importance of taking specific performance requirements and performance standards or performance standards into account (Hershey et al., 1990; Smith et al., 1990). Thus, if the standard is generating a high quantity of original ideas in a short span of time, finding one perfect idea after a long time may not work in such a situation. Lending support to the importance of performance standards, Rietzschel et al. (2014) established that providing explicit performance standards or instructions to generate original ideas, that is, stressing on creative task standards to guide task performance, led to the generation of more novel ideas during a brainstorming session, whereas the default solutions or ideas generated are less creative in nature. In contrast, providing instructions or performance standards to generate solutions relevant or useful solutions suited to the nature of the problem, that is, emphasizing operative performance standard to guide task performance, led to the generation of ideas that were less original, because people tended to stick with non-risky or workable ideas that came to mind easily. Furthermore, Mumford et al. (2004) demonstrated that the operation of innovative (original) versus operative (feasible) standards differentially impacted creative performance in that innovative standards predicted more creative ideas relative to operative standards. Hence, being provided explicit performance standards to use in the generation and evaluation of ideas impacts the nature of creative performance.

Drawing from these findings, this research expects that explicit instructions to be innovative will be more likely to benefit creative idea generation relative to explicit instructions to be operative. Furthermore, this research also expects that, in the face of explicit innovative standards, idea generation will be even stronger among employees from loose cultures because explicit instructions to be original in one's task performance, while being part of an environment that allows wider acceptability of behavior, will amplify employees' sense of freedom in thinking creatively. However, idea generation will also improve among employees from tight cultures because explicit instructions to be creative will serve as the standards and norms guiding behavior for employees in tight cultures. Contrarily, in the face of explicit operative standards idea evaluation will be even stronger among employees from tight cultures, who will find the explicit or operative standards to be congruent with the tried and tested, feasibility-focused approach to task performance typical in a tight culture. However, idea evaluation will also improve among employees from loose cultures, who will now be forced to critique ideas in terms of whether they are implementable or feasible. Against this background, the following hypotheses are proposed:

H2a: *I predict a main effect of performance standards on creative idea generation, such that those in the innovative performance standards condition will be better at generating creative ideas compared to those in the operative performance standards condition — marked by the fluency, originality, and quality of ideas.*

H2b: *I predict a main effect of performance standards on creative idea evaluation, such that those in the operative performance standards condition will exhibit higher quality evaluations compared to those in the innovative performance standards condition — marked by the number, depth, specificity, and usefulness of critiques.*

H3a: *I predict a two-way interaction effect of organizational tightness-looseness and performance standards on idea generation such that in the face of innovative standards, those in the loose organizational culture condition will be better at generating creative ideas compared to those in the tight organizational culture condition, and that in the face of operative standards, those in the tight organizational culture condition will be worse at generating creative ideas compared to those in the loose organizational culture condition — marked by the fluency, originality, and quality of ideas.*

H3b: *I predict a two-way interaction effect of organizational tightness-looseness and performance standards on idea evaluation such that in the face of innovative standards, those in the loose organizational culture condition will exhibit lower quality idea evaluations compared to those in the tight organizational culture condition, and that in the face of operative standards, those in the tight organizational culture condition will exhibit higher quality idea evaluations compared to those in the loose organizational culture condition — marked by the number, depth, specificity, and usefulness of critiques.*

Role of Employee Self-Monitoring

Self-monitoring refers to the degree to which people differ in what they can and do to observe and control their expressive behavior and self-presentation (Snyder, 1979). Relatedly, a high self-monitoring individual has a high concern for situational and interpersonal appropriateness of his or her social behavior as a result of being sensitive to the norms, if any, in a given social situation. Such individuals use these situational cues as guidelines for monitoring (that is, regulating and controlling) his or her own verbal and nonverbal self-presentation. Contrarily, the low self-monitoring individual is not highly vigilant to social information (norms, etc) and consequently does not use such information as cues to guide their behavior to behave in a socially appropriate way.

In the organizational context, high self-monitoring employees can be expected to care more about fitting in with their work environment and aligning their behaviors with the prevalent organizational norms relative to low self-monitoring employees. Therefore, if low self-monitors act based on what they think and feel, contextual factors such as culture and performance standards are less likely to influence their performance significantly. Indeed, De Vet et al. (2006) showed that those highly sensitive to others' opinions of them were poorer at creative tasks. Hence, when high self-monitoring employees are part of a tighter organizational culture, they can be expected to exhibit higher cognitive accessibility to all the norms and standards part of their organizational culture (relative to a low self-monitoring employee), which they will use as guides for their behavior. Drawing from this understanding, we can argue that a high self-monitoring employee will be poorer at creative idea generation relative to a low self-monitoring employee. Furthermore, a high self-monitoring employee, if part of a tight organizational culture, will be much more likely to conform to situational norms and avoid presenting oneself as deviating from acceptable behavior in a situation, relative to a low self-monitoring employee. Thus, high self-monitoring employees in tight organizational cultures will be even more acutely aware of what norms guide behavior and be more apprehensive of being punished for deviating from those norms. Consequently, high self-monitoring will feel more inhibited to think and act freely, leading to the generation of even fewer ideas, relative to low self-monitoring employees in tight organizational cultures (Gong et al., 2012; Liu et al., 2016). For the same reasons, high self-monitoring employees in tight organizational cultures will benefit from ready access to organizational norms and standards and their own sensitivity to those norms and standards, all of which they will utilize to be more effective at idea evaluation, which includes the processes of idea/solution forecasting, appraisal, and refinement, relative to low self-monitoring employees.

Based on this argument, low self-monitoring individuals in loose organizational cultures will be the most effective at idea generation because they are not only free from operating under rules and social norms that would otherwise serve as constraints, but they are also less concerned with the correct ways of behaving, thus allowing for maximum flexibility in how to think and act. However, a lack of sensitivity to rules and norms among low self-monitoring employees will interact with the actual lack of rules and norms in loose organizational cultures to predict the least effective idea evaluation; neither is the organizational environment providing any information on the standards to evaluate an idea/solution against, nor is any employee characteristic predisposing them to identify the normative cues in an environment that may be used as standards to evaluate an idea/solution. Against this, the following hypotheses are proposed:

H4a: *I predict a main effect of self-monitoring on creative idea generation, such that those low in self-monitoring will be better at generating creative ideas compared to those high in self-monitoring — marked by the fluency, originality, and quality of ideas.*

H4b: *I predict a main effect of self-monitoring on creative idea evaluation, such that those high in self-monitoring will exhibit higher quality idea evaluations compared to those low on self-monitoring — marked by the number, depth, specificity, and usefulness of critiques.*

H5a: *I predict a two-way interaction of self-monitoring and organizational cultural tightness-looseness on creative idea generation, such that those low in self-monitoring in loose organizational cultures will be better at generating creative ideas compared to those low in self-monitoring in tight organizational cultures, and that those high in self-monitoring in loose organizational cultures will be better than those high in self-monitoring in tight organizational cultures — marked by the fluency, originality, and quality of ideas.*

H5b: *I predict a two-way interaction of self-monitoring and organizational cultural tightness-looseness on creative idea evaluation such that those high in self-monitoring in tight cultures will exhibit higher quality idea evaluations compared to those high in self-monitoring in loose cultures, and that those low in self-monitoring in loose organizational cultures will exhibit poorer quality idea evaluations compared to those low in self-monitoring in tight organizational cultures — marked by the number, depth, specificity, and usefulness of critiques.*

Relatedly, this research expects that, if specifically asked to generate original/novel ideas, low self-monitoring employees in loose cultures will be even stronger at idea generation relative to high self-monitoring employees given low self-monitoring employees are being explicitly asked to be creative and engage in free-thinking. However, explicit innovative standards will improve creative idea generation even among high self-monitoring employees in both loose and tight organizational cultures because high self-monitoring employees will use any standards present in an environment (in this case, explicit innovative performance standards) as cues to guide appropriate behavior. In contrast, if specifically asked to generate useful/feasible ideas, high self-monitoring employees in tight cultures, who are already primed to go with safer and viable options, will be even stronger at idea evaluation relative to low self-monitoring employees. However, explicit operative standards will improve creative idea evaluation even among low self-monitoring employees in both loose and tight cultures given they are being provided with explicit standards (in this case, operative standards) to evaluate their ideas against.

H6: *I predict a three-way interaction of organizational tightness-looseness, performance standards, and self-monitoring on creative idea generation, such that:*

H6a: *In the face of innovative performance standards, low self-monitoring individuals in loose cultures will be the best at idea generation and high self-monitoring*

individuals in tight cultures given operative standards will be the worst at idea generation. Furthermore, being given innovative (versus operative) performance standards will improve idea generation among high self-monitoring individuals in the loose organizational culture condition. Finally, being given innovative (versus operative) standards will improve idea generation among high in self-monitoring individuals in the tight organizational culture condition.

H6b: *In the face of operative performance standards, high self-monitoring individuals in tight organizational cultures will be the best at idea evaluation and low self-monitoring individuals in loose cultures given innovative standards will be the worst at idea generation. Furthermore, being given operative (versus innovative) performance standards will improve idea evaluation among low self-monitoring individuals in the tight organizational culture condition. Finally, being given operative (versus innovative) standards will improve idea evaluation even among low self-monitoring individuals in the loose organizational culture condition.*

Research Question: *How might organizational tightness-looseness, performance standards, and self-monitoring interact to predict differences in creativity in individuals' final plans — marked by quality, originality, and elegance?*

Method

Design

The study was conducted using a 2 (cultural tightness vs. looseness) x 2 (innovative vs. operative standards) between-subjects experimental design with an additional individual differences factor (employee self-monitoring) measured as a continuous variable. This study will modify the theoretical conceptualization of cultural tightness-looseness as a spectrum and, instead, treat the variable as dichotomous (tight vs. loose) for the purposes of developing

the experimental manipulation. The study was hosted as a survey on the online platform of Qualtrics.

Sample

A power analysis was conducted and revealed a required sample size of 300 to detect small to medium-sized effects. 304 undergraduates from the UTA SONA pool signed up and completed participation in this study. Participants received one credit in exchange for completing the study. No other incentives were provided for completing the study. To ensure high quality data, the study utilized some attention check items and a self-reported measure of attention, all of which were embedded throughout the survey. Out of the 304 participants, 66 participants failed the attention checks and their responses were dropped from our final analysis. We had a final sample size of 238 participants, out of which 37.3% participants identified as Spanish or Latino, 26.6% as White, 23.8% as Asian, 17.2% as African American, and .8% as American Indian or Alaska Native. 76.2% participants identified as female, 23% as male, and the remaining identified as "other". The majority of the participants were freshmen (57.8%), with sophomores, juniors, and seniors comprising 20.9%, 12.7%, and 8.2% of the sample, respectively. The average age of the participant was 20.6 years.

Procedure

The experimental task used in this study was adapted from the experimental tasks developed by Medeiros et al. (2018) and Watts et al. (2019). A product development task was used to allow for the expression of creative problem solving. The task focused on creativity in advertising of consumer-packaged goods to measure idea generation and evaluation in a domain familiar to undergraduates. To improve the realism of the study, participants were provided with a cover story as part of the recruitment effort, where an advertisement will frame this research study as a project for a fictional PR and advertising consulting firm

named Lumineers that is providing an exciting opportunity to undergraduates to join their research and development team for a mini (one-hour) project.

Once consent for participation was received, the survey began requiring participants to respond to a set of survey measures. Next, participants received background information about Lumineers as a PR consulting firm as well as details on their job roles. Following this, participants encountered the organizational tightness-looseness manipulation, the details of which are provided under Appendix A. Next, participants began the experimental task as part of which they received details of the advertising campaign project tasks. For the first task, participants were asked to generate ideas for an advertising campaign for a sustainable coffee brand. For the second task, participants were asked to do a comprehensive evaluation of their own ideas for the advertising campaign. In the final task, participants provided a final plan for the advertising campaign to be "reviewed" by the head of PR and the company board. After completing the experimental task, participants responded to a set of demographic measures. Finally, participants were debriefed and thanked for their participation. The whole survey took approximately an hour to complete.

Independent Variables

Cultural Tightness-Looseness at the Organizational Level

Participants encountered a brief description about the company Lumineers that can help them familiarize themselves with the organization's culture and what kind of rules/norms/work styles are prevalent as part of the organizational culture. Although framed as a motivation to familiarize participants regarding the company culture, this information differed in terms of the experimental manipulation of the study. Participants were informed that they are either part of a "tight" or a "loose" organizational culture based on a few differing facets.

Performance Standards

The performance standard manipulation was embedded in each of the two tasks (first, during the idea generation task, and second, during the idea evaluation task), encountered by the participants. This was in the form of explicit references to use "innovative" standards or "operative" standards) for idea generation and idea evaluation. When reading the first task description, participants were told that the PR Head had indicated the new campaign "must demonstrate usefulness[or originality], and must be comprehensive and useful [or novel/original and unexpected]." When reading the second task description, participants were once again asked to "remember that at Lumineers, implementing ideas of high usefulness[or newness/originality] is of the utmost importance."

Employee Self-Monitoring

Self-monitoring conceptually refers to the degree to which people in terms differ in what they can and do to observe and control their expressive behavior and self-presentation Snyder (1974; 1979). To measure employee self-monitoring, the modified version of Snyder's (1974) Self-Monitoring Scale by Lennox & Wolfe (1984) was used. The scale consists of 13 items (1 = Strongly Disagree; 5 = Strongly Agree) and suits the purposes of this study due to the establishment of improved evidence of this refined scale's reliability (α = .75) The scale operationalizes self-monitoring as a two-dimensional construct consisting of 1) ability to modify self-presentation (7 items), and 2) sensitivity to expressive behaviors of others (6 items). High scores indicate high self-monitoring. The scale's reliability in this study was acceptable (α = .77).

Manipulation Checks

To validate the efficacy of the cultural tightness-looseness manipulation, a six-item Likert scale (1 = Strongly Disagree; 5 = Strongly Agree) developed and validated by Gelfand et al. (2011) to measure organizational tightness-looseness at the cross-country level was adapted to the organizational context. The original scale measures the degree to which social

norms are pervasive, clearly defined, and reliably imposed within societies. The items on this scale assess the clarity and number of social norms, the degree of tolerance for norm violations, and overall compliance with social norms in each nation. In terms of reliability, Gelfand et al. (2011) found high within-country agreement in every country (within-group α = .85) and high between-country variability (ICC(1) = .13); the scale also has good reliability at the country level (α = .87). For the purposes of this study, the items were modified to fit the organizational culture context. Sample items include "people in this organization almost always comply with social norms." The scale's reliability in this study was acceptable (α = .75). The efficacy of the performance standards manipulation were checked with a multiple choice question following participants' completion of the experimental task: Lumineers specifically asked for an advertisement campaign that was high in _____." Potential answer choices included *quality* or *originality*.

Dependent Variables

Amabile's (1982) consensual assessment technique, a well-validated methodology for measuring creativity, was used to code creativity variables. The inter-rater reliabilities for this technique range from .72 to .93 and involve training a set of judges to code participants' ideas and plans for the advertisement campaign task (Baer & McKool, 2009). Three trained judges who were blind to the true purpose of this study's objectives and experimental conditions were asked to code participants' initial ideas, critiques, and final plans for a range of variables bearing on generation and evaluation processes. The coders were trained for three hours and were given a document that provided detailed operationalizations and rating guidelines for all the dependent variables. Judges practiced applying the scale measures to a set of sample responses and then met to discuss their ratings and resolve discrepancies. Disagreements among coders were resolved based on discussions. A set of benchmarks rating scales and example responses were established for the dependent variables (Bernardin &

Buckley, 1981). Acceptable levels of inter-rater agreement were established using the rwg statistic. Variable agreement attaining equal to or more than 70% were considered acceptable levels of inter-rater agreement.

Idea *generation* was measured in terms of the following variables applied to participants' initial idea lists: a) number of total ideas generated, b) quality of ideas, and c) originality of ideas (Oldham & Cummings, 1996; Runco & Jaeger, 2012; Sternberg & Lubart, 1999; Torrance, 1966). The variables for idea *evaluation* were adapted from Watts et al. (2019) and applied to participants' critiques of their ideas. These variables included: a) number of critiques (pros/cons), b) depth, c) specificity, and d) usefulness focus of critique (Lonergan et al., 2004). Participants' final plans were coded for quality, originality, and elegance, which are the variables in terms of which creativity is operationalized (Amabile, 1996; Besemer & O'Quinn, 1986; Mumford & Gustafson, 1988). All variables were rated on a 5-point Likert scale (1 = Low; 5 = High). (LeBreton et al., 2005; Lindell & Brandt, 1999). Table 3 under Appendix B provides the rwg (agreement) statistics for all the dependent variables.

Covariates

Timed Covariates

Divergent thinking fluency. Divergent thinking, although not considered synonymous with creativity, is considered a key cognitive ability that facilitates the generation of creative ideas (Guilford, 1956; Runco 1993). Since their established correlation, divergent thinking and creativity idea generation have been simultaneously examined in several studies related to creativity (Guilford, 1959; Mumford, 2001). Hence, this construct was measured using the Consequences Test which was established and validated by Christensen et al. (1953). Evidence of inter-reliability for this measure has been provided by Furnham et al. (2009; $\alpha = .80$), Medeiros et al. (2018; $\alpha = .70$) as well as Watts

et al. (2019; α = .87). Work by Merrifield et al. (1961) and Mumford et al. (2008) point to evidence of this divergent thinking measure's construct validity. The test consists of five questions, and participants were asked to generate as many responses as possible to each question level. Participants were given two minutes to respond to each question. Drawing from Hocevar (1980), the number of ideas were summed to create a single fluency score for each participant. A sample question is, "What would be the results if people no longer needed or wanted sleep?"

Intelligence. Participants' intelligence was assessed given creativity is a cognitively demanding activity and has shown a moderate positive relationship with creative performance (Kim, 2005; Mumford & Gustafson, 1988). To measure intelligence, participants completed the verbal reasoning scale of Ruch and Ruch's (1980) Employee Aptitude Survey. In this 30-item measure, participants were given five minutes to work through six sets of facts, each accompanied by a set of conclusions, and mark whether each conclusion is "true," "false," or "uncertain" given the presented facts. The measure produces acceptable test–retest reliability and internal consistency coefficients of above .80 (Crites, 1963). Grimsley et al. (1985) and Ruch & Ruch (1983) provide evidence for this measure's construct and predictive validity in accurately measuring general mental ability.

Untimed Covariates

Need for Cognition. The motivation to think deeply or in a complex fashion about an issue, also known as need for cognition, has been shown to reliably predict the quality, originality, and elegance of solutions generated to complex problems (Watts et al., 2017). This study used Cacioppo et al.'s (1984) 18-item measure of the need for cognition which will ask participants to rate the extent to which they agree or disagree with a set of statements (using a 5-point Likert scale). The authors of this measure reported an internal consistency reliability of .90 and most studies using the 18-item scale report reliabilities exceeding .85

(Dollinger, 2003). Evidence for the scale's construct validity was provided by Tolentino et al. (1990), with individuals high in need for cognition preferring activities that reflect high cognitive effort. The scale's reliability in this study was acceptable (α = .78). A sample item on this scale includes "I prefer complex to simple problems."

Self-Reported Cultural Tightness-Looseness Orientation. Participants' personal preference for a society or culture that has highly developed structures and norms and desire to punish deviance may influence participants' reactions to the tightness-looseness manipulation. To control for their own cultural tightness-looseness orientation, participants responded to the following items on a 5-point Likert scale (1= Strongly Disagree; 5 = Strongly Agree). The items for this scale were modified and adapted from Gelfand et al.'s (2011) scale on cross-cultural tightness-looseness and its reliability was acceptable for this study (α = .72). The scale demonstrated high convergent validity with expert ratings, unobtrusive measures, and survey data from representative samples; is able to adequately discriminate between cultural regions. This variable was measured after self-monitoring is measured, and before the tightness-looseness manipulation is administered. Sample items include "It is very important to always comply with social norms."

Demographic Variables. Data on demographic variables such as age, gender, etc, was collected to ensure the sample is accurately represented in terms of the required sample characteristics (See Table 1 for descriptive statistics).

Analytical Procedures

A set of hierarchical regression tests were conducted on idea generation and idea evaluation, wherein the main effects and interactions were interpreted as statistically significant if they evidence a *p* value < .05, and as approaching significance if the *p* value is between .05 and .10. Additionally, the eta squared statistic was utilized to interpret effect sizes of the main and interaction effects. Furthermore, if any of the two-way or three-way

interactions attained statistical significance, a follow-up simple slopes test was conducted to investigate the pattern of interactions. On performing simple slopes tests with employee self-monitoring as a continuous variable, potential interactions with this variable were probed by creating a dummy variable based on + or – 1 standard deviations relative to the mean on the self-monitoring scale.

Results

Means, standard deviations, and correlations for all variables are presented in Table 1. An examination of the correlational evidence revealed the following. The type of performance standard was significantly and negatively correlated with the number of ideas generated (r = -.14, p < .05), with those explicitly asked to come up with original ideas, generating a higher number of ideas, relative to those given operative standards. Self-reported self-monitoring was significantly and positively correlated with final plan elegance (r = .14, p < .05) , with those higher (versus lower) in self-monitoring generating more elegant plans. To test if those encountering the tight organizational culture condition significantly differed from those encountering the loose organizational culture condition, an independent-samples t-test was conducted. Although the assumption of normality was met, the assumption of equal variances was not met, $F(1, 236) = 23.16$, $p < .001$. Given the two groups did not have equal sample sizes, a Welch's t-test was conducted. The overall test was significant, $t(1, 225.26) = 14.23$, CI [1.27, 1.70], $p = < .001$, *Glass's delta* = 1.62, with a very large effect size (Cohen, 1988). Those exposed to the organizational tightness condition reported significantly higher perceived organizational tightness (M = 3.91, SD = .68), compared to those exposed to the organizational looseness condition *(*M = 2.43, SD = .91). Hence, the manipulation check for the organizational tightness-looseness variable was effective. To test the effectiveness of the innovative versus operative standards manipulation, a Chi-Square Test of Association was conducted. The overall test was significant, $\chi^2(1) = 142.29$, $p < .001$, w = .77, with a large

Table 1

Descriptive Statistics and Correlations

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Age	20.61	5.70	1															
2. Gender	1.25	.45	-.01	1														
3. NFC	3.14	.34		-.09	(.78)													
4. Idea generation fluency	2.80	1.83	.05	.01	.01	1(.95)												
5. Idea generation quality	2.30	1.02	-.04	.00	-.06	.68**	1(.80)											
6. Idea generation originality	2.40	1.01	-.05	-.01	-.06	.67**	.86**	1(.86)										
7. Idea evaluation fluency	1.90	1.16	.13*	-.09	-.09	15*	.14*	.13*	1(.87)									
8. Idea evaluation depth	2.10	.98	.04	-.04	-.05	.15*	-.17**	.20**	.70**	1(.76)								
9. Idea evaluation specificity	2.17	.99	.03	-.05	.02	.16*	.19**	.22**	.68**	.94**	1(.70)							
10. Idea evaluation usefulness	2.30	.98	-.002	-.07	-.04	.15*	.19**	.20**	.69**	.91**	.91**	1(.68)						
11. Final plan originality	2.40	.95	-.08	-.02	-.01	.49**	.54**	.53**	.07	.04	.06	.88**	1(.71)					
12. Final plan quality	2.30	.98	-.06	-.05	-.02	.49**	.57**	.51**	.08	.05	.06	.06	.91**	(.80)				
13. Final plan elegance	2.30	1.08	-.05	.06	-.03	.49**	.54**	.50**	.09	.05	.08	.91**	.90**	.95**	1(.80)			
14. Self-Monitoring	3.78	.57	.17**	.001	.07	.10	.09	.07	-.01	-.05	-.03	-.02	.16	.14*	.031	1(.77)		
15. CTL	.52	.57	.032	-.01	-.08	.02	.02	.02	-.01	-.04	-.01	-.05	-.01	.01	-.01	-.09	1	
16. Performance Standard	.47	.50	.00	-.02	.05	-.14*	-.07	-.02	-.07	-.02	.02	.03	-.10	-.09	-.09	-.06	.00	1

Note. SD = Standard Deviation, N = 238, $^{**}p < .01$, $^{*}p < .05$, $^{\dagger}p < .10$; Values within parentheses = reliability coefficient value.

effect size (Cohen, 1988). A significantly higher percentage of those exposed to the innovative performance standard condition (87%; n = 115), correctly recognized their performance standard as being innovative and a significantly higher percentage of those exposed to the operative performance standard condition (91%; n = 96) correctly recognized their performance standard as being operative.

To examine if there were any main, two-way or three-way interaction effects of organizational tightness looseness, performance standards, and self-monitoring on idea generation, a hierarchical linear regression was conducted. The regression results are presented in Table 2. Given age, gender, need for cognition, as well none of the other covariates were significant in the regression model, they were dropped from all further analyses.

There was a significant main effect of self-monitoring on idea generation fluency [b = .96, $t(236)$ = 1.80, p = .03 η^2 = .010], such that those higher (versus lower) on self-monitoring generated more (versus less) ideas (Fig. 1). Although the main effect of performance standards on idea generation fluency was not statistically significant [b = 1.15, $F(1, 236)$ = .25, p = .135, η^2 = .021], the pattern of means revealed that those given innovative performance standards (M = 3.00; SD = 1.87) generated slightly more ideas those given operative standards (M = 2.60; SD = 1.74) (Fig. 2).

Additionally, despite the interaction effect of organizational tightness looseness and self-monitoring on idea generation not reaching statistical significance [b = 4.17, $F(1, 236)$ = 2.70, p = .102, η^2 = .012], the pattern of results indicated that high self-monitors in tight cultures generated marginally more creative ideas than low self-monitors. In loose cultures, there was no difference between high and low self-monitors in terms of number of ideas generated (Fig. 3). There were no significant main effects or two-way or three-way interaction effects on any of the other idea generation or idea evaluation variables.

To determine if any of the hypothesized main or interaction effects attained significance when we remove responses for those who failed the performance standard manipulation check, another set of hierarchical regressions were performed. After removing the failed manipulation check cases, the sample size was reduced from 238 to 211 participants. The main effect of organizational tightness looseness approached significance [b = 4.10, $t(211)$ = 1.90, p = .064; η^2 = .02], such that those in the loose culture condition generated marginally more creative ideas than those in the tight culture condition. The interaction effect of organizational tightness looseness and self-monitoring on idea generation approached statistical significance, [b = 1.05, $F(1, 211)$ = 3.74, p = .063, η^2 = .02]. The pattern of results indicated that high self-monitors in tight cultures generated marginally more creative ideas than low self-monitors. In loose cultures, there was no difference between high

Table 2

Hierarchical Regression Results

	Idea Generation						Idea Evaluation							
Independent Variables	Fluency		Originality		Quality		Fluency		Depth		Specificity		Usefulness	
Main Effects	*B*	*SE*	*B*	*SE*	*B*	*SE*	*B*	*SE*	*B*	*SE*	*B*	*SE*	*B*	*SE*
Organizational CTL	4.165	2.55	.578	1.43	-.24	1.44	-.57	1.61	.46	1.36	-.12	1.38	-.88	1.36
Performance Standard	1.15	2.54	1.60	1.43	1.26	1.44	-.70	1.63	1.21	1.40	.83	1.4	-.15	1.38
Self-Monitoring	.96*	.53	.28	.30	.22	.30	-.05	.34	-.10	.29	.06	.29	-.11	.30
Interaction Effects		.												
Organizational CTL x Performance Standard	-2.42	3.38	-2.42	1.90	-.40	1.64	1.86	2.15	-.87	1.82	.17	1.84	.89	1.82
Organizational CTL x Self-Monitoring	-1.08†	.66	-.12	.37	.16	.32	.12	.42	-.15	.35	-.00	.35	.16	.35
Organizational CTL x Self-Monitoring x Performance	.66	.88	.62	.50	.44	.50	-.44	.56	.26	.47	.01	.50	-.15	.47

Note. A hierarchical regression was conducted. CTL = Cultural Tightness-Looseness *;B* = unstandardized coefficient; *SE* = standard error; $n = 238$. †$p \leq .10$; *$p < .05$; **$p < .01$

and low self-monitors in terms of number of ideas generated. The significant main effect of self-monitoring on idea generation fluency was replicated in the new sample size. Hence, there was no difference in the means or pattern of results for the new sample compared to the previous sample size.

To examine if organizational tightness-looseness, performance standards, or self-monitoring had any main or interaction effects on employees' final plan creativity, a set of hierarchical linear regressions were performed. There were no significant main effects or two-way or three-way interaction effects of cultural tightness looseness, performance standards, and self-monitoring on creative idea evaluation or final plan creativity.

To probe the pattern of any significant simple effects for the three-way interaction results, the interactions were plotted for each of the dependent variables related to creativity. However, none of the simple effects were significant or approached **s**ignificance for any of the dependent variables. Hence they are not discussed further as part of the study's results.

Figure 1

Main Effect of Self-Monitoring on Idea Generation Fluency

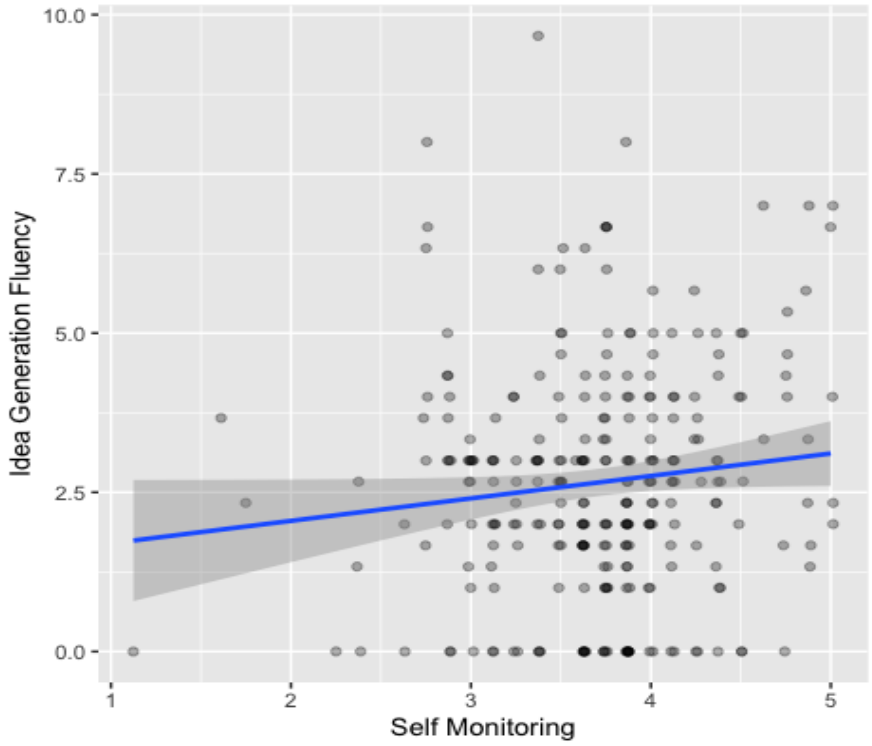


Figure 2

Main Effect of Performance Standards on Idea Generation Fluency

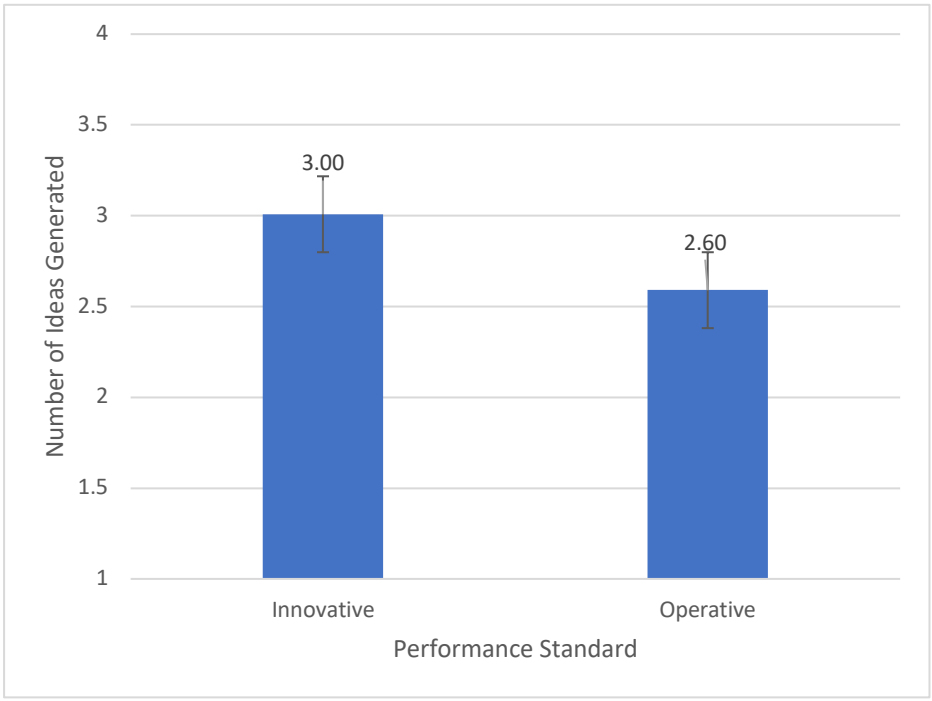
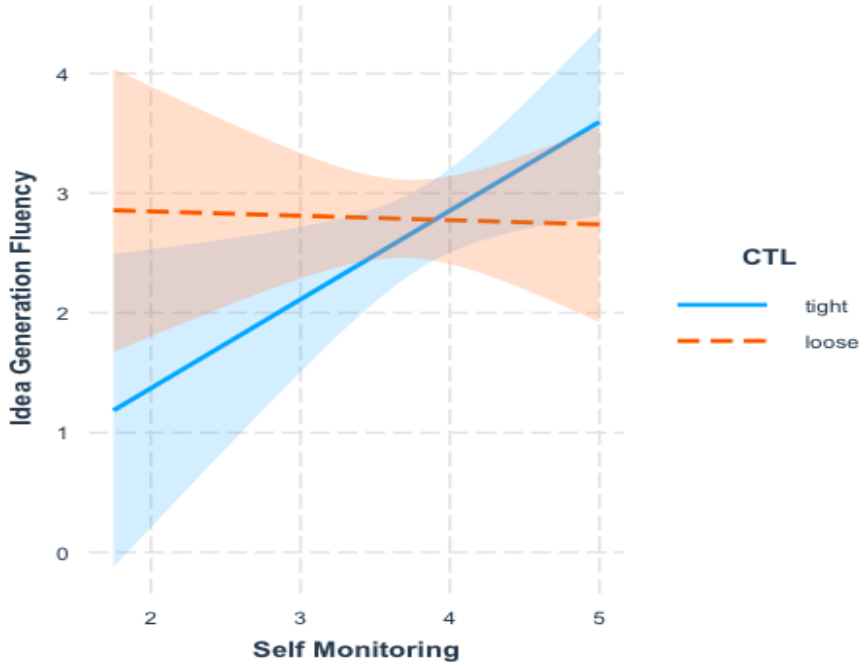


Figure 3

Interaction Effect of Cultural Tightness-Looseness and Self-Monitoring on Idea Generation Fluency



Discussion

Theoretical Implications

In terms of theoretical contributions, this research study examines the role of cultural tightness-looseness in the organizational setting and answers the call by Gelfand and colleagues (2006) to examine "specific organizational context factors" that are built around structure, flexibility, norms, and punishment for deviance (Gelfand et al., 2006; p. 1235). One may argue that a large body of research already recognizes the role of centralization and formalization within organizations as constructs that capture how structure and culture can differentially impact innovation (Amabile et al., 1996; Damanpour, 1991). However, the construct of organizational tightness-looseness goes beyond conceptualizing elements of organizational structure and can predict effects of actual or anticipated punishment embedded within the systems of organizational cultures on employee mindsets and behaviors. This research study is the first to *experimentally manipulate* tightness-looseness within the

organizational context, thus paving the way for exploring causal implications of organizational tightness-looseness.

This research also finds that high self-monitoring individuals are outperforming low self-monitoring individuals with regards to generating a higher *number* of creative ideas. Prior literature on the role of self-monitoring in creativity provides mixed research findings; despite self-monitoring being established as *improving* creative performance when individuals are given feedback regarding their performance, it has been shown to *weaken* creative performance when individuals are asked to think about their creative solutions out loud (De Vet et al., 2006). Although these earlier studies explore the interactive role of self-monitoring on creativity, this study is the first to explore the direct impact of self-monitoring on creativity, keeping other variables constant. Additionally, this study finds that for high self-monitoring employees, tight cultures may help creative idea generation whereas in loose cultures, the effect of self-monitoring becomes non-significant for idea generation.

Finally, this research study finds some support for prior empirical work that demonstrates the beneficial impact of innovative performance standards (over operative performance standards) on creative idea generation (Rietzschel et al., 2014; Watts et al., 2019). Hence, for organizational problems that require generating *a high quantity of creative ideas*, employees may benefit from requesting clear instructions from their supervisors to focus on the innovativeness of the solutions they generate, instead of relying on unspoken organizational norms of behavior.

Managerial Implications

Managers may find it challenging to significantly alter their team's or department's tightness-looseness. However, they may have control over how they *frame performance standards* in their teams and departments. Furthermore, selection specialists can use findings of this research study in hiring suitable candidates. High self-monitors may be a better

recruitment fit for performing creative tasks in cultures governed by strong norms due to their heightened focus on contextual cues and task goals, relative to low self-monitors.

Limitations and Future Research

This research selects an experimental approach to address the research questions and study objectives. Although a laboratory experiment allows us to isolate any causal effect, the findings of the study may not generalize to organizations that may be a mix of tight and loose, instead of being entirely tight or loose. It is also worth noting that the organizational tightness-looseness manipulation may be low in salience in a lab setting, relative to real organizations where the effects of culture are more pervasive and influential. Additionally, the average levels of all the dependent variables related to creativity (i.e., the mean values) were universally low. Evidence of low mean values and the absence of any incentives besides providing research credit suggests a potential lack of participation motivation, which may have influenced the study results. Furthermore, the study consists of undergraduates, and not creative or marketing professionals, who were only given a total of 60 minutes to complete the entire study. Despite the experimental task allowing for greater control over extraneous variables that may impact "real-world" creative efforts, the project task is also limited in terms of the range of creative processes examined and the time provided to complete them. Along these lines, creative work in organizations normally occurs over several months or years. Hence, a study of longer duration, with multiple measurement time points (e.g., Medeiros et al., 2017), may reveal a more nuanced and dynamic relationship between these processes.

Therefore, future research in this area can look at the following: First, the research questions in the study can be addressed by a quasi-experimental design, wherein real organizations provide the cultural context of tightness versus looseness and actual employee creativity (belonging to these organizations) can be measured. This approach contributes

towards improving realism given real organizational cultures and their effects on employee creativity are being examined. Second, a cross-sectional survey design can supplement the findings of experimental research; a large scale survey can be conducted with employees in multiple organizations where they respond to measures related to their perceptions of organizational tightness-looseness as a result of belonging to that particular organizational culture. Supervisor ratings on employee creative idea generation and evaluation can be obtained to serve as the dependent variable.

Prior research has demonstrated how individuals apply a cognitive flexibility or a cognitive persistence pathway to solve creative problems (Nijstad et al., 2010). Similarly, prior research has also shown that those primed with a promotion (versus prevention) focus are more likely to utilize a cognitive flexibility (versus a cognitive persistence) pathway in creative problem-solving (Baas et al., 2011). Hence, additional empirical work can explore if loose (versus tight) organizational cultures trigger cognitive flexibility (versus cognitive persistence), given their promotion (versus prevention) focus, thus allowing for the exploration of more (versus fewer) cognitive categories. Finally, future research can also measure psychological safety to examine this construct's role in predicting any differences in creative idea generation versus evaluation. Higher psychological safety has been shown to predict better creativity (Hu et al., 2018). Drawing from these findings, it is worth exploring if psychological safety mediates the relationship between organizational tightness-looseness and creativity, such that those in tight organizational cultures report feeling lower psychological safety and thereby perform worse on creative tasks relative to those in loose organizational cultures who report higher psychological safety.

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Appendix A

Experimental Manipulation for Cultural Tightness-Looseness in Organizations

Tight Organizational Culture
"Before we get started on the project, we wish to provide some key information regarding our company culture. This information should help clarify what we expect from our employees and what our employees can expect from us. Our organization believes that order and predictability allow for maximum efficiency and therefore we have clearly defined policies and norms that guide employee performance. To operate smoothly within our work environment, we encourage our employees to become well-versed with and closely adhere to our rules and norms. Therefore, Lumineers hosts a three-hour quarterly orientation session that we encourage all employees to attend to help stay updated on company policies. At Lumineers, we recognize that employees can greatly benefit from receiving frequent work evaluations. Hence, we make sure to provide regular feedback on their performance through our quarterly evaluation system and our bi-weekly supervisor and self-evaluation forms. In our organization, we also urge our employees to take any form of deviance and misconduct seriously. Therefore, we make sure to closely monitor any recurring mistakes and inconsistencies, thereby improving employee efficiency, and providing opportunities to avoid any company sanctions. We usually employee the "three-strike rule," according to which, after having received more than three sanctions for deviance, employees may be dismissed from employment. We also wish to ensure minimal wastage of work hours and resources due to which our employees have clearly defined work roles and an established chain of command for discussing work-related issues. Finally, to prevent doing things that may potentially endanger our company's everyday operations and to avoid any unpleasant surprises, we recommend that our employees stick to using the "tried and tested" methods of doing their jobs."

Loose Organizational Culture
"Before we get started on the project, we wish to provide some key information regarding our company culture. This information should help clarify what we expect from our employees and what our employees can expect from us. Our organization believes in providing autonomy and flexibility to all our employees. We find protocols stifling and therefore we have very few rules and norms that employees are asked to follow. Just to ensure our employees are not completely without guidance, Lumineers holds a 30-minute annual orientation session to help employees get socialized into their work environment. At Lumineers, we also believe in treating our employees like adults and therefore discourage any and all forms of micromanagement. Employees have autonomy over how they want to do their jobs as long as the work assigned to them gets completed. In this organization, employees are also encouraged to solve problems in novel ways, and not by following a script or looking at how problems have been previously solved. We also do not have any formalized or prescribed way of monitoring performance and employees are invited to participate in decisions regarding how they would like their work to be evaluated. Furthermore, there is no established chain of command in this organization and you may approach anyone you wish to speak with to discuss work-related issues. Finally, our organization values free-thinking and urges employees to develop and explore new ideas and skills. At Lumineers, we do not punish employees for doing things differently, we celebrate it."

Appendix B

Table 1

Scale for Measuring Cultural Tightness-Looseness at the Organizational Level.

Items
1. There are many social norms that employees are supposed to abide by in this organization.
2. In this organization, if someone deviates from the prescribed way of doing things, others will strongly disapprove or want to punish this deviance.
3. People in this organization almost always comply with social norms.
4. This organization has very clear expectations regarding how people should act in most situations.
5. People agree upon what behaviors are appropriate versus inappropriate in most situations in the organizations.
6. People in this organizations have a great deal of freedom in deciding how they want to behave in most situations. (R)
7. In this organization, employees are not disapproved of or punished for deviating from the prescribed way of doing things. (R)
8. In this organization, employees and staff strongly support sanctioning any behavior that is perceived as being against company rules.
9. In this organizations, deviating from accepted ways of behaving is not tolerated.
Note: Items rated on a 5-Point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree)
(R) = Reverse coded items.

Table 2

Scale for Measuring Employee Self-Monitoring.

Dimension and Items
Ability to modify self-presentation
1. In social situations, I have the ability to alter my behavior if I feel that something else is called for.
2. I have trouble changing my behavior to suit different people and different situations. (R)
3. I have found that I can adjust my behavior to meet the requirements of any situation I find myself in.
4. Even when it might be to my advantage, I have difficulty putting up a good front. (R)
5. Once I know what the situation calls for, it's easy for me to regulate my actions accordingly.
Sensitivity to expressive behavior of others
6. I am often able to read people's true emotions correctly through their eyes.
7. In conversations, I am sensitive to even the slightest change in the facial expression of the person I'm conversing with.
8. I am not very good at understanding others' emotions and motives during conversations. (R)
9. If someone is lying to me, I usually know it at once from that person's manner of expression.
Note: Items rated on a 5-Point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree)
(R) = Reverse coded items.

Table 3

Scale for Measuring Self-Reported Cultural Tightness-Looseness Orientation.

Items
1. Citizens should always abide by the rules and norms part of their society.
2. If someone deviates from the prescribed way of doing things in their society, such behavior is deviant and should be punished.
3. It is very important to always comply with social norms.
4. There should be very clear expectations for how people should act in most situations.
5. Everyone should agree upon what behaviors are appropriate versus inappropriate in most situations in a society.
6. People should have a great deal of freedom in deciding how they want to behave in the societies they are part of. (R)
7. Citizens of a society should not be punished for deviating from the prescribed way of doing things. (R)
Note: Items rated on a 5-Point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) *(R) = Reverse coded items.*

Table 4

Reliability and Agreement Statistics for all Dependent Variables

	Reliability (CA)	**rwg**
Need for Cognition	.78	
Self- Monitoring	.77	
Tightness-Looseness Orientation	.72	
Cultural Tightness-Looseness	.75	
Idea Generation Fluency		.95
Idea Generation Originality		.86
Idea Generation Quality		.73
Idea Evaluation Fluency		.87
Idea Evaluation Depth		.76
Idea Evaluation Specificity		.70
Idea Evaluation Usefulness		.68
Final Plan Originality		.71
Final Plan Quality		.80
Final Plan Elegance		.80

Note. CA = Cronbach's Alpha (0 to 1); rwg = agreement statistic (0 to 100)