THE MODERATING ROLE OF PERCEIVED SUPERVISOR SUPPORT IN FACE CULTURE AND CREATIVITY RELATIONSHIP

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Abstract

Creativity is admitted to be the lifeblood of the majority of the most successful organizations and highlighted as the key ingredient for long-term organizational sustainable development. The latest research in the field reveals that creativity includes two stages: idea generation and idea implementation, in which the latter stage could be significantly limited because of the effect of face culture. This is because members in face culture avoid creativity-related activities, such as "rocking the boat" and risking failure in the public. This paper focuses on a new perspective regarding the moderator role of perceived supervisor support (PSS) in mitigating the effect of face on creativity. It concludes that PSS mitigates the negative effect of face culture on creativity. In addition to the theoretical contribution, the paper also suggests implications to create an environment for creativity by emphasizing the perception of supervisor’s support on both task and relationship-oriented aspects, creating a cooperative atmosphere among coworkers and considering workers’ positions while promoting creativity.

Keywords: Creativity, Face culture, Organizational behavior, Perceived supervisor support

1. Introduction

Nowadays, fast-paced changing environments lead to increasing complexity and make creativity and innovation become important sources of competitiveness (Nouri et al., 2014). In 2000, Ng Aik-Kwang published a book named “Why Asians are Less Creative than Westerners”. Since then, there have been fruitful scientific gains in the relationship between culture and creativity, and innovation (Erez et al, 2015). However, there are inconsistent findings on the effect of culture on creativity (Nouri et al, 2014). A huge range of research supports the argument that cultural values influence creative performance (Jaquish & Ripple, 1984; Harzing & Hofstede, 1996; Goncalo & Staw, 2006; Niu, Zhang, &
Yang, 2007). On the contrary, Chen et al (2002), Niu & Sternberg, 2002; Nouri et al (2013), and Riquelme (2002) find that there are no significant effects of culture on creativity. These inconsistencies motivate researchers to submit a call to search for the missing piece of the puzzle, the moderators of the culture-creativity relationship in order to overcome stereotypes about culture and creativity and enable identifying working conditions that enhance or attenuate the effect of culture on creativity (Nouri et al, 2014; Erez et al, 2015).

The research on the social context at work as a moderating factor on creativity has emerged for the recent period of time since the call from the Journal of Organizational Behavior (2015), there are several findings representing different levels of analysis from the most micro-level of the individual to the most macro-level of the country, to answer the question: to what extent social context can variate the effect of culture on creativity (Erez et al., 2015). They indicate that such relationships can be manipulated by the working context of power distance and the presence of a supervisor (Nouri et al, 2015). These include face logic endorsement (Spektor et al, 2015), foreign experiences (Morris, 2015), different models of negotiation (Gelfand, 2015), and other important elements of the working context. The majority of the researchers admit the importance of social context at work because it is likely to activate the shared cultural values and norms that guide appropriate behaviours (Nouri et al, 2015). Particularly in this research authors focus on investigating the moderating role of perceived supervisor support, which is an important aspect of social context at work, in the relationship between culture and creativity. This element has been concluded to affect an individual’s creativity (Amabile et al., 1996; Andrews, 1967; and Oldham & Cummings, 1996). In addition, perceived supervisor support create a general organizational climate that enhances positive perspectives and mitigate the destructive side of culture (Fass & Tubman, 2002; Feldman, 2007; Mattanah, Lopez, & Govern, 2011; Robbins et al., 2009; Oldham and Cummings, 1996).

Besides, regarding a particular perspective of culture, it is not as diverse research examining the relationship of creativity and culture, particularly, on the perspectives of face culture. The differentiation of face logic is regarded as a critical feature of West and East culture (Kim & Nam, 1998 cited in Miron-Spektor, 2015). Research shows that people in all cultures want to be respected by others (Earley, 1997; Ting-Toomey, 1994). However, individuals across cultures vary in their endorsement of face logic; also, motivation to preserve their own face and others’ differentiates among cultures. According to Kim and Nam (1998), the logic of face is predominately endorsed in East Asia but less so in Western cultures.

In this paper, we will examine if face culture can influence creativity and whether or not perceived supervisor support would play as a moderator of that relationship.
1.1. The relationship between Face Culture and Creativity

Creativity has been defined in various ways throughout history (Boorstin, 1992; Dudek, 2003). Amabile (1983, 1996) is among the most popular scholars to recognize the process of creativity. This scholar described employee creativity as the creation of new and useful combinations regarding products, services, processes, and procedures. Since then, creativity has been re-examined many times. Michael Mumford suggested: "Over the course of the last decade, however, we seem to have reached a general agreement that creativity involves the production of a novel, useful products" (Mumford, 2003). Sternberg (2011) defined creativity as the production of "something original and worthwhile". Another definition given by Torrance (1974) describes creativity as a process of becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, disharmonies, and so on, identifying the difficulty; searching for solutions, making guesses, or formulating hypotheses about the deficiencies: testing and retesting these hypotheses and possibly modifying and retesting them; and finally communicating the results. In a nutshell, the authors agree that creativity involves the process of the early-cycle including creative-oriented behaviors of ideas generation regarding either product, services, processes, procedure, and late-cycle related to implementation-oriented behaviors of ideas implementation.

"Face" is acknowledged as a human universal; however, the salient level of concern for face varies across cultures. The role of the face or its equivalent can be used to explain the East West cultural differences (Kim & Nam, 1998). While face-saving culture is well known in Asian social norms as Face (Mianzi, 面子) in China, Maruah in Malaysia and Thế diên in Vietnam; it seems to have less effect in Western culture (Kim & Nam, 1998). However, according to Miron-Spektor et al. (2015), recent findings suggest that face also exists in Western cultures (Liu et al., 2012; Mak et al., 2009). The extent to which people endorse face logic affects the way they respond to insults and aggressive behaviors (Severance et al., 2013), friendly gestures (Leung & Cohen, 2011), and other judgments about themselves (Kim & Cohen, 2010; Kim et al., 2010).

Despite important contributions to the understanding of face as presented, little is known about the effect of face culture on creativity. Available literature and critical thinking suggest that face culture will have a negative effect on creativity.

Goncalo and Staw (2006) state that creative ideas are often deviant (Moscovici, 1976) when first raised, and thus can be ridiculed and rejected (Baer, 2012; Mainemelis, 2010; Torrance, 1995). For this reason, most people are reluctant to express themselves because of the fear of receiving negative evaluations from other group members (Diehl & Stroebbe, 1987). In other words, people who are concerned with their face may feel reluctant to engage in creativity (Miron-Spektor et al., 2015). Miron-Spektor et al., (2015) argue that
Face culture is established upon "the 3 H's", three related cultural components: hierarchy, humility, and harmony respectively. Different levels in the hierarchical system require people from these levels to maintain each other's face, especially the face of a higher level. Any attempt to over-claim face, which means to claim a higher status than one is perceived to deserve poses a threat to the hierarchical social structure and may result in punishment and social sanctions (Kim et al., 2010). Individuals should, thus, comply with the criteria of humility by not over-claiming face. In addition, face culture asks members within it to maintain a harmonious atmosphere by avoiding causing other people to lose face, from direct conflicts and carefully adhering to formalities (Leung & Cohen, 2011). In order to maintain the 3 H's foundation, members in face culture avoid creative-related activities, like "rocking the boat" and risking failure in public. They tend to follow socially common norms and always behave in ways compatible with their social roles (Choi & Lee, 2002; Hwang et al., 2003). They are more likely to preserve their own and others' face by engaging in solidarity, approbation, and tacit; and going against conflicts (Cocroft & Ting-Toomey, 1994). Research has shown that highly face-concerned individuals are more likely to stand on the other side and more willing to conform and adopt the views of the other party. Also, they have a strong desire to be socially accepted, and a greater sensitivity to others' perceptions of them (Liu et al., 2012).

However, this tendency to follow the face culture by conforming to social expectation has long been regarded as contradictory to original thinking and creativity. Research has revealed that individuals, who are more afraid of risking their social image were less willing to raise and promote a different point of view and engage in innovation (Yuan & Woodman, 2010). They generate fewer and less creative ideas when interacting with others (Camacho & Paulus, 1995). In order to generate new ideas, individuals need to challenge existing paradigms, norms, stereotypes, and others’ assumptions, as well as think differently and uniquely (Kim et al., 2012). Creative individuals are willing to face the pressure from the majority (Oldham & Cummings, 1997), to handle conflicts and disagreements (Janssen, 2003), and to discover the answer to the suspicion towards their ideas. On the contrary, people who endorse face logic are less willing to share their ideas because of fear of being wrong and being seen by others as ignorant (Huang et al., 2008). They are less likely to ask questions and search for feedback, which exposes the individual to different perspectives, fuels original thinking, improves creative ideas, and promotes innovation, due to the fear of embarrassment (Hwang et al., 2003).

Thus, it is proved that Face culture and creativity have a negative relationship. The more face people hold, the less creative they are. In this paper, the authors are going to re-examine whether there is such a relationship between Creativity and Face culture.

**Hypothesis 1:** Employees that possess a higher level of face culture demonstrate lower levels of creativity.
1.2. The moderating role of Perceived Supervisor Support in the Environment of Face Culture and Creativity

According to Eisenberger et al. (2002), Perceived Supervisor Support (PSS) is originated at organizational support theory and is defined as the degree to which employees form impressions that their supervisors care about their well-being, value their contributions, and are generally supportive. It is noted that in the leader behavior literature the term “support” is considered relationship-oriented behaviors only. Meanwhile, regarding creativity literature, several authors including Oldham & Cummings (1996), Scoot & Bruce (1994), and Fleishman (1953) in his two-factor theory of leadership, supervisor support is perceived to consist of both task and relationship-oriented behaviors. The former present actions relating to merely jobs: clarifying job descriptions, planning projects, instructing the work, and managing time and resources. The latter connect to leader-subordinate relationships: showing concern for subordinates’ feelings, acting friendly, and personally supportive to subordinates, and being considerate to their welfare. In our paper contributing to the creativity literature, we mention “support” with the second boarder usage.

A slowly expanding body of literature over the past thirty years has documented the importance of perceived leader support for subordinate creativity. At the level of teams, some studies have demonstrated that team members’ collective view of support from a leader is associated with the team’s success in creative endeavors. Amabile et al. (1996) on the intra-organizational foundations of innovation – creative project work by teams of individuals. The study concludes that supervisory encouragement, which is one of the stimulants to creativity, is related to team creativity, in which higher levels of creativity correspond with higher levels of supervisor support and lower levels of creativity correspond with lower levels of supervisor support. Consistent with the above result, the study of Amabile & Conti (1999) suggests that during downsizing supervisory encouragement perceived by workers plays a particularly important role in project team creativity. The interviewee’s comments largely reinforced the view that the supervisor support deteriorates during the downsizing “Supervisory support? None, zero – has gone from bad to worse... They’re in limbo too.” Declined perceived supervisor’s support is accompanied by uncertain and chaotic changes, bad consequences on every aspect, and negative trends of creative team performance.

At the level of individuals, there is evidence of a connection between subordinates’ general perceptions of their leaders and the individual creativity of those subordinates. Classic studies on this topic are of Amabile et al. (1996), Andrews (1967), and Oldham & Cummings (1996) showing that overall perceived leader support is a significant aspect of the work environment for creativity. A few studies of individual creativity have investigated particular areas of leader support, such as the team leader’s tendency to provide both clear strategic direction and procedural autonomy in carrying out the work (Pelz & Andrews,
1976) as well as supportive, non-controlling supervision (Oldham & Cummings, 1996). Amabile (2004), then, supports such results and extends those findings with evidence on day-by-day leader support. Tierney, Farmer & Graen (1999) suggest a potential impact of leader-member exchange, which permits risk-taking, operational autonomy, and the freedom to deviate from the status quo, on creativity that is measured by supervisor ratings, invention disclosure forms, and research reports.

Taken together, these studies present the important impact of perceived supervisor support on creative performance. Subordinates are discovered to be more creative when they perceive their immediate supervisors as being supportive to them and their work. Whereas, Face culture is shown to be a negative environment for creativity. Oldham and Cummings (1996) demonstrate that supportive supervision makes a significant contribution to decreasing Face logic’s effects on the workers. Other scholars claim the encouraging acts from social partners, such as advisors, mentors, and colleagues as the key factors to enhance knowledge learning, self-development by creating a comfortable, autonomic sharing environment (Fass & Tubman, 2002; Feldman, 2007; Mattanah, Lopez, & Govern, 2011; Robbins et al., 2009). Thus, we predict that Perceived supervisor support strengthens individuals’ Creativity in the Face culture.

**Hypothesis 2:** Perceived supervisor support moderates the relationship between face culture and creativity by mitigating the impact of face culture on individual creativity.

**2. Method**

**2.1. Sample and Procedure**

The author conducted the survey during the periods of time from the first week of February and to the first week of March 2018. The authors send both online questionnaires presented by Google Form via email and hard copies in person in two start-up companies. The first one is an insurance joint venture in Vietnam, in which the primary ownership belongs to the governmental Military Bank. The other one is a technology start-up in Norway which is based in Oslo and founded by a Norwegian team. The purposes of the research are discussed with CEO from these two star-ups. After agreeing to participate in the survey, two top managers introduce us to heads of departments, who in turn distribute questionnaires to their employees. To choose the sample size, the authors used convenient sampling and snowball sampling methods. We collected data from 260 out of 350 sent out questionnaires, which suggest the response rate of approximately 74%. Among the returned questionnaires, \( N = 245 \) (Vietnam, \( N = 121 \); Norway, \( N = 124 \)) were valid for further statistical analysis. Out of the workers, the respondents’ ages ranged from 25 to 45 years old. Of which, 11% of them are middle managers and top managers, 89% are normal employees. 48% of them have over 5 years of working experience. 99% obtained graduate and postgraduate degrees. Gender distribution simultaneously was 47% male and 53% female. The participants are
oblivious of the research hypotheses, but aware of the general purpose of the study – to discover the relationship between creativity and face culture and how perceived supervisor support can moderate such relationship.

2.2. Measurement

The authors conducted the survey to quantitatively measure three variables: Creativity, Perceived Supervisor Support, and Face Culture. Unless otherwise indicated, all items were measured by a Likert-type scale anchored at 1, indicating “strongly disagree” and 7, indicating “strongly agree”.

Creativity

The participants self-report their creativity level based on creativity scales developed by Zhou and George (2001). The scale consists of 13 items, of which three items were adopted from Scott and Bruce (1994, cited in Zhou and George, 2001). According to Zhou and George (2001), all items are averaged out (α = 0.96). The questionnaire includes items like “You often suggest new ways to achieve goals or objectives.”, “You often search out new technology, processes, techniques, and/or product ideas.”, and “You often have a fresh approach to problem.”

Perceived Supervisor’s Support (PSS)

The participants then give the ratings for Perceived Supervisor Support Scale, which consists of four items (α = 0.88) from the original one developed by Eisenberger, Huntington, Hutchison, and Sowa (1986, cited in Skerlavaj et al., 2013). This shortened scale was validated in studies by Pazy and Ganzach (2009), and Kuvaas and Dysvik (2010). The four items that we used focus more on personal relationships than specific resources, which is supported by the Job Demands-Resources model (Demerouti et al., 2001) regarding PSS as a resource at the interpersonal level. Also, Ng, Lam, & Feldman (2013) state that assistance and resource allocation frequently originates at the embeddedness of employees with their colleagues and their supervisor (Ng, Lam, & Feldman, 2013), which suggests that such a relationship-based point of view may be appropriate (Skerlavaj, Cerne, and Dysvik; 2013).

2.3. Control variables

Contextual and individual factors that could be expected to influence both motivation and creativity will be controlled. These factors include age, gender, education, working experience, working position, creativity requirement, and task independence. Studies have indicated age affects creativity, but differently across various domains (cf. Jones & Weinberg, 2011). Also, researchers have pointed toward large differences in the creative achievement of men and women in many fields (cf. Baer & Kaufman, 2008), as well as for employee education (cf. Fasko, 2001) and work experience. Work experience is a valuable
control variable because employees who have performed a particular task for a longer period of time may perceive its difficulty or reactivity differently (Amabile, 1998), and direct task experience leads to higher levels of creativity (Gino et al., 2010).

3. Results

3.1. Descriptive statistics and Confirmatory Factor Analysis

Descriptive statistics (means, standard deviation, and correlations) for the key study variables appear in Table 1. Also, we notice that while running an additional t-test for two sample groups of Vietnamese employees and Norwegian employees, the discovered significant level is 0.292, which is greater than the 0.05 level. Thus, we can conclude that cultural differences might be not due to geographic differences between Vietnam and Norway.

We begin by examining the factor structures of the three focal variables: Creativity, Perceived supervisor support (PSS), and Face culture. We carry out a confirmatory factor analysis using STATA software version 15 with maximum-likelihood estimation procedures (e.g., Kline, 1998). The three-factor solution displays an adequate fit with the data ($\chi^2[489] = 1226.05$, $CFI = 0.89$, $SRMR = 0.073$). All factor loadings are statistically significant and ranged from 0.77 to 0.83 for the Creativity items, from 0.66 to 0.80 for PSS items, and from 0.45 to 0.70 for Face culture items. We test all alternative nested models to examine whether a more parsimonious model achieved equivalent fit. Chi-square difference tests, which are presented in Table 2, show that our model achieved a significantly better fit.

3.2. Testing H1: Employees that pose a higher level of face culture demonstrate lower levels of creativity

We conduct linear regression and square regression to examine the relationship between Face culture and Creativity. In the former, obtained adjusted R Square is 0.405, which indicates that Face culture variable can explain 40.5% of Creativity variable. The causal relationship is statistically significant $p = 0.000$ in both ANOVA and coefficient variable. In the latter, obtained adjusted R Square equals 0.115, thus the squared Face culture variable explains Creativity less than the Face culture variable. The linear relationship, hence, is more relevant and is demonstrated in Table 3. To facilitate the interpretation of the interaction between face culture and creativity, we plot the linear regression of such relationship. The result, which is plotted in Figure 1, suggests that consistent with hypothesis 1, face culture negatively impacts individual creativity, which means hypothesis 1 is approved. To test this interpretation, we statistically compare the slopes to zero, obtained a standardized coefficient ($\beta = -0.240$) smaller than zero. Thus, higher level of face culture significantly predicts a lower level of creativity. This result initially supports our first hypothesis that Face culture has negative effect on Creativity variable. Workers working in an environment possessing a higher level of face culture or they possess higher level of face
are predicted to have lower capability to be creative. Although this finding is encouraging in forecasting level of workers’ creativity, the explaining power of face culture toward creativity is not remarkably high. Thus, it is important to test our mediating hypotheses about Perceived supervisor support variable as an explanatory mechanism for the relationship between face culture and creativity.

3.3. Testing H2, involving the moderating role of PSS in Face Culture and Creativity Relationship

To examine hypotheses in the working environment with the appearance of supervisors, we conducted hierarchical ordinary least square (OLS) regression analyses. We follow the moderated regression procedures recommended by Aiken and West (1991), entering the control variables in step 1, adding Face culture variable in step 2, PSS variables in step 3, and interaction between PSS and Face culture in step 4. As a results, the adjusted R square remarkably increases to 0.958 in the final model (adjusted R square is 0.403 in the first model, 0.405 in the second one). Literally, the full model is able to explain 96% of the dependent variable – Creativity.

Table 4 depicts the results of our moderated regression analyses. Model 4, which includes all the variables (Face culture, Creativity, PSS) and PSS’s interactions with face culture, enhances the result in the previous part. Standardized coefficient of face culture (β = -0.464) is smaller than 0. Thus, the negative effect of face culture on creativity is emphasized.

Model 4’s results support hypothesis H2 “Perceived supervisor support moderates the relationship between face culture and creativity by facilitating the impact of face culture on individual creativity.” To test this interpretation, we compare the standardized coefficient of the interaction between PSS and face culture variable to zero. Calculated β = 0.501 is greater than 0. Thus, the PSS possesses the moderating role toward the relationship between face culture to creativity by weakening the effect of face culture. Hypothesis H2 is approved. Literally, workers, who are well supported by supervisors and better perceive this, can reduce the effect of face culture to have higher levels of creativity. On the contrary, worker, who cannot fully perceive supervisor’s support, reduce the effect of face culture to a smaller degree. Plus, workers, who are not supported by supervisors or cannot perceive this (PSS = 0), lie under the same effect of face culture and do not obtain the improvement in their creativity.

Besides, the relationship between control variables and creativity in researched context also revealed in Step 1 with adjusted R square 0.403, indicating that with the only appearance of control variables, 40.3% of creativity variables is explained. Among eight examined control variables four variables, including country, working experience, working position, task independence, are is significant in impacting creative performance at p-value
smaller than 0.05. Especially, the requirement for creativity in work variable is remarkably significant at p-value equal to 0. These results are consistent with the conclusion of Jaquish & Ripple (1984), Harzing & Hofstede (1996), Goncalo & Staw (2006), Niu, Zhang, & Yang (2007) about culture and creativity; findings of Amabile (1998), Gino et al. (2010) regarding working experience and creativity. Meanwhile, gender, age, education level show no impact on individual’s creativity level.

To sum up, on the quantititative approach of conducting the survey by using linear regression, we employ linear regression analyses and conclude that face culture has a bad effect on individual creativity. Working environments with a higher level of face culture decreases workers’ capability of being creative, while at workplace with a lower level of face workers are more motivated to be creative. Hierarchical ordinary least square (OLS) regression analyses have shown that face culture’s effect can be moderated by individual perceived supervisor support. Our statistic results support hypothesis H2. Literally, perceived supervisor can mitigate face culture effect on creativity.

4. Discussion and conclusion

4.1. Theoretical contributions

Although face culture is pervasive in East Asia and in multicultural work context, the influence of face has gained little attention of researchers in managerial field (Kim & Nam, 1998; Miron-Spektor, 2014). Our research contributes to the emerging body of work on cultural logics (Kim & Cohen, 2010; Kim et al., 2010; Leung & Cohen, 2011) that have explained inter-and intra-cultural differences in creativity and innovation (Leung et al., 2014). Our first result testing hypothesis 1 is consistent with earlier research on the negative effect of face culture on creativity (Oldham & Cummings, 1997; Yuan & Woodman, 2010; Kim et al., 2012; Miron-Spektor et al., 2015). Employees with a higher level of face are discovered to be less creative than the ones with the lower level. An interesting novel point discovered in our research is that there is no significant difference in face culture level between Norwegian and Vietnamese companies. Suggested causes might be stronger organizational culture and personal characteristics.

Furthermore, the authors answer the call to find reasons for inconsistent results researching cultural differences in previous creativity studies (Erez & Nouri, 2010). Besides already explored manipulation, such as power distance and the presence of a supervisor (Nouri et al, 2015), face logic endorsement (Spektor et al, 2015), foreign experiences (Morris, 2015), different models of negotiation (Gelfand, 2015), subtle differences in creativity might be manipulated by situational context of the extent to which how workers perceived supervisors support. Our findings suggest that the moderating role of perceptions about support from others at work, supervisor particularly, should be considered when exploring the possible effect of face culture on creativity. Consisting with previous research
of Oldham & Cummings (1996) and componential theory of Amabile et al. (1988, 1996) that prove the critical positive impact of PSS on creativity, the effect of face culture on creativity is weaker or negligible when employees feel better support from supervisor. The finding suggests that PSS can curb the appropriate reflexive response to enhance one’s image following a threat caused by face culture (Schmeichel & Vohs, 2009); thus, workers could be more creative even under the impact of face.

4.2. Practical contributions

The effect of face culture on creativity might be shifted due to the work environment (Nouri et al., 2014; Zhou & Su, 2010), which could be attributed by PSS. The practical implications of our study, therefore, will focus on suggesting novel ways to improve the work environment through PSS to promote creativity and, simultaneously, mitigate the influence of face culture. Innovative ideas need more resources (time, energy, attention, support, etc.) for their implementation (Škerlavaj et al., 2014). If the managers want to enhance the creativity in both quantity and quality of the ideas, they need to create a suitable environment for it (Zhou & George, 2001). Thus, both instrumental and socio-emotional support from supervisors needs to be highlighted and widely recognized throughout the company.

4.3. Limitations and Direction for Future Research

First, prior works including ours have largely neglected the ability to observe the qualitative mechanism behind moderating roles of perceived support from supervisors in the environment, possessing different levels of face culture, for creativity. These works mainly rely on the precision of quantitative research that likely does not reflect the realities of subjective feelings of worker’s perception and qualitative characteristic of creativity. Also, the use of the survey captures only variance about if PSS can moderate other processes rather than exploring how these elements can interfere with the others. Thus, we submit a call to investigate this mechanism quantitatively under diverse points of view from different levels of managers and followers.

Second, our sample might not fully demonstrate face culture differentiation on the scope of country. In these two chosen companies, employees have some commons that decrease the representativeness of the sample. For example, the majority of workers are at the age in between 25 and 45 years old; plus, most of them have at least bachelor degree. As proved in prior research, age (Jones & Weinberg, 2011) and education (Fasko, 2001) can influence the level of face culture. Moreover, these two companies include also international workers. Therefore, workers in these two countries hardly present face culture in Eastern and Western countries. Also, both sample companies are start-up with open and flat initial organizational culture. Study’s statistics notice that there is no significant difference between creativity levels between Western and Eastern countries. Thus, the samples might have
stronger effect of organizational culture than geographic culture. This raises the opportunities for further research to look at a more concrete sample serving the purpose of investigating culture on the scope of countries.

Finally, because of the proven effect of face culture, workers might not honestly rate their creativity level in the questionnaire and in the interviews. They did not want to underestimate their abilities or lost their image under the interviewers’ eyes or at least in their mind. Future research should employ a more objective method to estimate the creativity level, for instance: supervisors’ or colleagues’ ratings.

Table 1. Means, Standard Deviations, and Correlations among the research variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Creativity</td>
<td>4.90</td>
<td>1.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 PSS</td>
<td>4.65</td>
<td>1.03</td>
<td>0.434**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Face culture</td>
<td>4.0</td>
<td>0.97</td>
<td>-0.240**</td>
<td>-0.230**</td>
<td>-0.41</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed)**

Table 2. Chi-square difference test among alternative model

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>CFI</th>
<th>SRMR</th>
</tr>
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<tbody>
<tr>
<td>Expected three-factor model</td>
<td>1226.05</td>
<td>0.892</td>
<td>0.073</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creativity and Face culture on the same factor model</td>
<td>842.684</td>
<td>0.761</td>
<td>0.093</td>
</tr>
<tr>
<td>PSS and Face culture on the same factor model</td>
<td>1638.87</td>
<td>0.684</td>
<td>0.124</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One-factor model</td>
<td>2777.63</td>
<td>0.371</td>
<td>0.168</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
Table 3. Linear Regression Analyses Presenting Relationship between Face culture and Creativity

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized B</th>
<th>Coefficients Std. Error</th>
<th>Standardized coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>5.912</td>
<td>0.270</td>
<td></td>
<td>21.884</td>
<td>0.000</td>
</tr>
<tr>
<td>Face culture</td>
<td>-0.251</td>
<td>0.85</td>
<td>-0.240</td>
<td>-3.856</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*Dependent Variable: Creativity*

Figure 1. Linear Regression of Face Culture and Creativity variables
<table>
<thead>
<tr>
<th>Variable</th>
<th>Step 1</th>
<th></th>
<th></th>
<th>Step 2</th>
<th></th>
<th></th>
<th>Step 3</th>
<th></th>
<th>Step 4</th>
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<tbody>
<tr>
<td></td>
<td>b</td>
<td>s.e.</td>
<td>β</td>
<td>t</td>
<td>b</td>
<td>s.e.</td>
<td>β</td>
<td>t</td>
<td>b</td>
<td>s.e.</td>
</tr>
<tr>
<td>Country</td>
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a. N =245. Values in bold are relevant to test of hypotheses *p<.05 **p<.01
5. Reference


