emeraldinsight

Management Decision

Exploring the impact of being perceived as a socially responsible organization on employee creativity

Moustafa Abdelmotaleb, Abdelmoneim Bahy Eldin Mohamed Metwally, Sudhir K. Saha,

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

Exploring the impact of being perceived as a socially responsible organization on employee creativity

Moustafa Abdelmotaleb
*Department of Business Administration,
Faculty of Commerce, Assiut University, Assiut, Egypt*
Abdelmoneim Bahy Eldin Mohamed Metwally
Accounting Department, Faculty of Commerce, Assiut University, Assiut, Egypt, and
Sudhir K. Saha
*Faculty of Business Administration,
Memorial University of Newfoundland, St John's, Canada*

Abstract

Purpose – The purpose of this paper is to provide insight into the emotional or affective mechanisms that underlie the relationship between employees' perceptions of corporate social responsibility (CSR) and employee attitudes and behaviors. Drawing on affective events theory (AET), this study examines a sequential mediation model in which CSR perceptions influence positive affect (PA) at work which leads to employee engagement in the creative process that, in turn, affects employee creative behaviors.

Design/methodology/approach – Two-wave data were collected from a sample of employees working in the telecommunication sector in Egypt ($N = 208$). The collected data were analyzed using structural equation modeling.

Findings – The study found a positive association between CSR perceptions and employee creative behaviors. The results also showed that CSR perceptions have induced PA, which, in turn, led to greater level of engagement in the creative process and eventually led employees to exhibit creative behaviors.

Originality/value – This is one of the first studies to use AET as a conceptual framework to explain the positive association between CSR and employee positive work outcomes (i.e. creativity). By integrating AET with CSR and employee outcomes literatures, this study contributes to the available knowledge regarding the affective or emotional mechanisms through which CSR perceptions could affect employee work behaviors.

Keywords Creativity, Developing countries, Corporate social responsibility, Positive affect

Paper type Research paper

1. Introduction

This paper reports on how positive emotions and feelings generated by an organization's corporate social responsibility (CSR) perceptions can lead to positive influence on employee attitude (creative process engagement (CPE)) and employee behavior (creativity). Drawing on the affective events theory (AET), this study investigates and explains how antecedents and consequences of affective experiences at work will have explanatory role to the relationship between internal CSR (i.e. CSR activities directed toward internal stakeholder such as employee groups) and employee creativity. AET proposes that work environment characteristics influence the occurrence of certain events. These events, in turn, stimulate different affective reactions and thus influence employee work behaviors (Weiss and Cropanzano, 1996).

Over the past decade, many studies have been conducted to discern the relationship between an organization's CSR perceptions and employee outcomes such as job satisfaction (e.g. Barakat *et al.*, 2016; Glavas and Kelley, 2014), organizational commitment (Kim *et al.*, 2010), and citizenship behaviors (e.g. Gao and He, 2017). Most of these investigations found that CSR perceptions were positively associated with employee outcomes. Furthermore, some

studies analyzed the process through which an organization's CSR perceptions evoke positive employee outcomes. These studies had exclusively relied on mechanisms such as employees' perceptions of their organizations' justice and employee identification (e.g. De Roeck *et al.*, 2014) and their attitudes toward them (e.g. organizational trust; Wang *et al.*, 2013). Most recently, De Roeck *et al.* (2016) found that CSR perceptions interact with overall justice to predict organizational identification through the mediation of perceived external prestige and organizational pride.

Based on the literature review conducted for the current study, there are only a few conceptual frameworks had been used by researchers to explain the relationship between organization's CSR perceptions and employee attitudes and behaviors. Glavas and Kelley (2014) highlighted that the gab exists in the literature in regards to the association between CSR and employee work outcomes, and encouraged researchers to clarify some of the mechanisms that make this association possible. However, even though CSR is believed to lead to positive affective experiences (Moon *et al.*, 2014), very little attention has been given to affect-based theories as a theoretical mechanism to understand the positive association between CSR perceptions and employee outcomes. Consequently, the current study aims to fill this gap by adopting AET as a theoretical framework that could explain the relationship between CSR perceptions and employee creative behaviors.

Moreover, most of CSR studies were western centered. Having said this, little is known about how CSR is implicated and instantiated in less developed countries (LDCs) like Egypt. Hence, CSR literature in western context offers rich insights into how CSR evokes positive employee outcomes (e.g. Ditlev-Simonsen, 2015; Hofman and Newman, 2014; De Roeck and Delobbe, 2012; De Roeck *et al.*, 2014; Stites and Michael, 2011), it is somewhat surprising to see that little attention has been paid to studying CSR in LDCs. CSR is more important in developing countries, considering the lower amount of social provision in such contexts. The current study will shed light on the role that cultural differences play in shaping the relationship between perceived CSR and both employees' attitudes and behaviors.

Accordingly, our analysis needed geopolitical understanding as corner stone in the theoretical framing as an interesting new insight that the current study incorporates. Geopolitics is crucial for our interpretations as it focuses on place and how a sense of a place produces a collective identity that filters what certain communities accept or reject to explore how communities and identities dictate actions and facilitate understanding (Flint, 2006; Knox and Marston, 1998). Much literature exists on institutional theory and geopolitics that reflect how sense-making, cognition, community, and identity influence actions (e.g. Lounsbury, 2007; Marquis and Lounsbury, 2007; Marquis and Battilana, 2009; Greenwood *et al.*, 2010; Gioia *et al.*, 2013; Glynn, 2008; Kraatz and Block, 2008); such influences are crucial to understand specific underlying effects of CSR and creativity interactions.

Consequently, given the absence of any comprehensive attempt to study CSR practices as a "situated practice" in geopolitical peripheries (*vis-à-vis* a particular community culture and geopolitical identity that frame and filter organizations' reactions), this study explores the link between CSR perceptions and employee creative behaviors in a different context with different traits and understanding. This study contributes to the available literature on the psychological mechanisms through which employee CSR perceptions could affect employee work behaviors. Specifically, our objective is to develop a sequential model that would help explain how CSR perceptions in a geopolitical periphery (i.e. an Egyptian subsidiary that follows the orders of a multinational parent) influence employee creativity.

2. Geopolitical and contextual ramifications

The section concentrates on the country's geopolitical reactions and how it produced a unique geopolitical community. Technically, geopolitics is part of human geography

(Flint, 2006) – the branch of geography dealing with describing and synthesizing a region's physical and social aspects. Knox and Marston (1998, p. 3) offered a definition: "[It is the] systematic study of what makes places unique and the connections and interactions between places." Such uniqueness derives from the politics and spaces available for indigenous people within the place's political games (Flint, 2006), while place "provide[s] the settings of people's daily lives" (Knox and Marston, 1998, p. 3). Indeed, places are sites of employment, education, and conversation. As they are unique with particular characteristics, they produce different experiences and understandings. These cause different reactions based on a certain community's previous experiences (Lee and Lounsbury, 2015; Marquis and Battilana, 2009). Accordingly, this study proposes that the use of geopolitical understanding will help in reflecting the uniqueness of the place and how it may affect employees' perceptions of organization's CSR efforts.

Based on this, our main assertion is how the Egyptian employees understand and react to such changes imposed from the multinational parent, and how the place particularity plays a vital role in the process of understanding and action. More specifically, we need to explore and explain whether community identity will affect employees' reactions to the western policies. Accordingly, the study hypotheses in the next section will try to test whether the Egyptian market which is different in culture, religious, and social relations will produce different/same reactions to the CRS perceptions?

3. Literature review and hypotheses

Literature on creativity contains many studies with complex relations and different definitions which may give an unclear understanding about what we are studying. Accordingly, two main clarifications are needed. First, what CPE means for the sake of this study. Second, differences between individual and organizational creativity.

First, according to Woodman *et al.* (1993), creativity can be viewed as "the creation of valuable, useful new product, service, idea, procedure, or process by individuals working together in a complex social system" (p. 293). They believed that in order to understand organizational creativity, it is crucial to concentrate on several aspects, such as the creative process, the creative product, the creative person, and the creative situation, as they interact with each other producing creativity. Previous studies (e.g. Amabile, 1983; Gilson and Shalley, 2004) have argued that it is compelling to investigate the role of CPE to have a comprehensive understanding of creativity. CPE is usually time consuming and demanding awareness (Ford, 1996; Gilson and Shalley, 2004). It involves activities such as problem identification and solution generation (Zhang and Bartol, 2010). Zhang and Bartol (2010) defined CPE as "involvement in creativity-relevant methods or process, including (a) problem identification, (b) information searching and encoding, (c) idea and alternative generation" (p. 108). In our model that will be detailed in later sections will use CPE as a one of the two steps through which creativity is produced.

Second, creativity has different levels within an organization: individual level and organizational level. Creativity at the organizational level refers to the extent to which the organization constantly looks for new ways of operating and experiments with new ideas and solutions. Prior work investigates the impact of individual factors on organizational creativity (e.g. Giustiniano *et al.*, 2016). In a sample of 362 employees from multinational corporations, Giustiniano *et al.* (2016) found that individuals' orientation toward learning from others positively impacts organizational creativity. However, the current study is concentrated primarily on individual creativity or employee creative behaviors. Individual creativity is the foundation of organizational creativity and innovation. Individuality and the creativity of the person is a product of their culture, religious, communal relations, and education. These issues for us represent the geopolitical identity of the community.

3.1 CSR perceptions and positive affect (PA)

Affect is a subjective of emotions and feelings by an individual. According to Barsade and Gibson (2007), PA can be defined as an individual's tendency to be energetic, cheerful and experiencing positive emotions, feelings, and moods across different time and situations (Barsade and Gibson, 2007). PA reflects an individual's level of enjoyable engagement with the environment (Watson *et al.*, 1988). Within the organizational context, a longitudinal research done by Staw *et al.* (1994) indicated that employee who tends to meet work obstacles with a positive mood tends to attain more favorable outcomes. However, there is a stream of research that investigated the positive consequences of PA at workplace (e.g. Barsade and Gibson, 2007; Mostafa, 2017). The results of these studies indicated that PA was an important indicator to predict positive employee outcomes that concern managers in organizations. We, however, also found that very few studies had investigated the antecedents of PA on the organizational level of analysis.

According to the literature, there are two different factors might have an impact on employee positive or negative affect at work: individual factors and organizational factors. Regarding the individual factors, McCrae and Costa (1991) suggested that agreeableness and conscientiousness should facilitate more positive emotions and experiences in social and achievement situations. In the same vein, DeNeve and Cooper (1998) suggested that neuroticism predisposes individual to experience negative affect. Following these suggestions, empirical studies began to investigate the potential association between personality traits and affect (i.e. positive and negative affect). Fleeson *et al.* (2002) found that there is a positive relationship between the trait of extraversion and PA. Later, Wilt *et al.* (2012) confirmed the positive association between extraversion and PA. In a study of the relationship between positive and negative affect and the Big Five Personality Factors conducted recently by Zanon *et al.* (2013) found that neuroticism was the most important predictor of experiencing both PA and negative affect, followed by conscientiousness and extraversion. Thus, personality traits were shown to be important predictors of affects.

On the organizational level, a number of empirical studies attempted to examine the effects of organizational climate and work features on employee PA. For instance, Basch and Fisher (2000) revealed that participation in decision-making process and recognition given to employee development contributed to positive affective reactions. Further, Wegge *et al.* (2006) found that there was a positive relationship between employee perceptions of supervisory support and opportunities for participation and employee positive affective responses. Studies on PA reviewed here have contributed to our understanding of the concept. But, scholars suggest that more research is needed for a more complete understanding of the organizational policies and practices upon the development of PA (Mostafa, 2017). None of the previous research had related PA at work to organization's internal CSR. The current study aims to fill this gap by examining the relationship between employee perceptions of internal CSR practices and employees' PA at work.

It is worth mentioning that previous studies have focused primarily on investigating employee perceptions of the external CSR practices (i.e. CSR activities directed toward external stakeholders). The current study focuses on the internal CSR practices. It is quite understandable that employees will be very interested in the kind of socially responsibility an organization shows toward its own employee welfare. Internal CSR refers to organization's CSR efforts which are directly related with the physical and psychological working environment of employees (Turker, 2009). This can take the form of providing safety work environment, show concern for employees' training and development, diversity at the workplace and equal opportunity for employees.

Internal CSR, as a set of management practices, is commonly believed to help organizations in communicating its values to employees. According to Turker (2009), internal CSR underscores the importance of treating employees as valued individuals.

Hence, such practices are highly favored by employees and are likely to result in an experience of PA (Moon *et al.*, 2014). Based on a literature review concerning the AET, this study argues that employees' perceptions of organization's internal CSR would be positively related to employees' PA. CSR efforts have a tendency to promote positive emotions and feelings by creating favorable events such as good work and life balance for employees, diversity at the workplace, health and safety, and equal opportunity for employees. Accordingly, it is hypothesized that:

    H1. Internal CSR perceptions are positively related to the development of PA.

3.2 PA and CPE

Affective events framework predicts that PA will lead to desirable outcomes (Weiss and Cropanzano, 1996). There is a stream of research investigations that was undertaken to determine the impacts of PA on employee attitudes and behaviors. Previous studies confirmed a positive association between PA and employee desirable work outcomes such as job satisfaction (Thoresen *et al.*, 2003), organizational citizenship behaviors (Williams and Shiaw, 1999), and a negative relationship with intention to leave (Thoresen *et al.*, 2003). We may, therefore, make an inference that employees who have experienced positive emotions and feelings (i.e. PA) in their work environment are likely to be more engaged to their organizations. The current study argues that there is a link between employee experience of PA at workplace and employee engagement, and particularly, their engagement in the creative process. CPE has been defined as "employee involvement or engagement in creativity relevant cognitive processes" (Zhang and Bartol, 2010, p. 112). This study expects that a high degree of employee PA will lead to high level of engagement in the creative process.

    It has been suggested that creativity is strongly influenced by PA because PA leads to sort of cognitive variation that stimulates creativity. Fredrickson (1998) proposed that positive emotions and feelings broaden an individual's available repertoire of cognitions and actions. She also suggested that when an employee experiences positive emotions, the number of cognitive elements available for association is increased impacting upon a problem-solving task. According to Amabile *et al.* (2005), enhanced attention and cognition due to the experiences of positive emotions should lead to a greater engagement in the creative process and thus increase the probability of creativity. Based upon the research conducted by Fredrickson (1998) and Amabile *et al.* (2005), the current study argues that when an employee experiences positive feelings and emotions that will lead to enhance employees' engagement in the creative process. Accordingly, this study submits the following hypothesis:

    H2. PA is positively related to CPE.

The current study proposes that employee perceptions of internal organizational practices (i.e. internal CSR practices) will not automatically lead to employee positive work attitude and performance. An employee needs to have a PA in his/her relationship with an organization in order for internal CSR perceptions lead to employee creativity. Weiss and Cropanzano (1996) stated that "Things happen to people in work settings and people often react emotionally to these events. These affective experiences have direct influences on behaviors and attitudes" (p. 11). In other words, Weiss and Cropanzano advanced the thesis that congenial organizational atmosphere would produce positive emotions and feelings, which, in turn, will have a positive influence over employee work attitudes and behaviors. Based on Weiss and Cropanzno assumption, this study proposes that when an employee perceives his or her organization as a socially responsible entity that would lead to boost employee positive emotions and feelings at work, which, in turn, positively

influence the degree of employee engagement in the creative process. Accordingly, the next hypothesis is formulated:

H3. The relationship between internal CSR perceptions and CPE is mediated by PA.

3.3 CPE and employee creative behavior

Previous researchers have pointed out several individual psychological constructs (e.g. intrinsic motivation and regulated identity) and also offer verity of underlying mechanisms that lead to increase employee creativity (e.g. Amabile, 1983). According to Amabile's (1983) multi-dimensional conceptualization of creativity, not only the motivational factor (intrinsic motivation) is necessary for enhancing employee creativity behaviors, but also the degree of employee engagement in creative activities has an effect. Amabile's assumption stresses the importance of employee involvement/engagement in creativity as a first step toward creativity. Later, Zhang and Bartol (2010) confirmed this assumption. Using survey data from professional employees working in the information technology sector in China, Zhang and Bartol found that employee engagement in the creative process had a positive influence on employee creative behaviors. Similarly, Harris *et al.* (2014) revealed that CPE can be a predictor of creativity in general settings among the newcomers. Based on Amabile's research, and the empirical findings of previous studies by Zhang and Bartol (2010) and Harris *et al.* (2014), the following hypothesis is developed:

H4. CPE is positively related to employee creative behaviors.

From *H2* and *H4*, it is expected that CPE plays a meditating role in the relationship between PA and employee creative behaviors. The current study argues that positive emotions and feelings generated by an organization's CSR perceptions would first strengthen employee engagement in the creative process, which, in turn, positively influences their creative behaviors. Hence, from all of the above, the final hypothesis is proposed:

H5. The relationship between PA and creative behaviors is mediated by CPE.

Based on the above hypotheses, the subsequent conceptual model is shown in Figure 1.

4. Research methodology

4.1 Participants and procedure

Our empirical research was conducted within the telecommunication sector in Egypt. We selected a multinational telecommunication company in Egypt. This company is frequently included in the Egyptian CSR index. Participants were professional managers and employees whose work required considerable degree of creativity in order to be effective. A snowball approach was adopted for collecting the data. Participation in the study was voluntary and no incentives were offered for participation. We administrated our surveys at two time periods four-week apart (Podsakoff *et al.*, 2003). This approach to data collection avoids common method bias problems and helps provide some evidence that could support the assumption that internal CSR perceptions have influence on PA and employee creativity. Since the survey was conducted in Egypt, using Brislin back translation approach the study survey was translated from English into Arabic and then back translated into English (Brislin, 1970). Both versions of the questionnaire were then compared.

At time period one, the questionnaire that measures employee perceptions of internal CSR have been distributed. In the last section of this questionnaire, respondents were requested to

Figure 1.
Study model

Internal CSR Perceptions → Positive Affect → Creative Process Engagement → Creative Behaviors

provide some demographic information such as gender, age, and organizational tenure. Out of 400 questionnaires distributed (at time one), the researchers collected 263 completed questionnaires. The effective response rate was 65 percent. A month later, we launched the second wave of investigation by distributing questionnaires that measured PA and CPE among those employees who had responded to our survey in the time period one. From among the 263 employees who completed the first questionnaire, only 219 did participate in the second round and filled the survey questionnaires. At the second wave of data collection, managers of the corresponding employees were asked to make an assessment of the creative behaviors of employees under each manager's supervision. Regarding how managers assessed employees' creativity, this was done by giving managers forms which had the employees' names on it. This was not done without employees consent. As we got employees consent that they add their names to the forms. They agreed as they were convinced that this is for research purpose only and will not affect their incentives, bonuses, or salaries. However, after a careful examination of the responses, 11 questionnaires have been eliminated because of significant missing data. In total, the researchers have collected 208 valid and fully completed surveys resulting into a response rate of 52 percent.

Concerning the demographic profile of the surveyed employees, 71.6 percent were male and 28.4 percent were female. As for the ages of employees, half of the employees (47.1 percent) were between 20 and 30 of age, (41.2 percent) were between 31 and 40 and the rest were above 40. With regard to the subjects' organizational tenure, the following breakdown of the sample was obtained: approximately 17 percent had less than one year of tenure, 46 percent had tenure between one to five years; 33 percent had tenure between five to ten years, and rest had tenure over ten years. Thus, employees participating in this research investigation were mostly young males who had a reasonably long tenure (i.e. five to ten years working with their organization).

Moreover, the first and second authors conducted informal structured interviews with 12 participants from the company under study to get more clarifications regarding our statistical results and to reflect more on geopolitical aspects. Hence, such place and communal relations needs face-to-face conversations in order to clarify why the employees and managers selected certain answers in the questionnaires. These interviews were conducted in December 2017 and January 2018. Interviews ranged from 30 minutes to 1 hour. From these interviews, our understanding and explanation was enriched about some statistical results (i.e. extraversion) through seeing the results from a geopolitical dimension.

4.2 Measures
CSR – the current study used Turker's (2009) scale of CSR. This scale comprised of five statements that measured CSR initiatives directed toward internal stakeholder (i.e. employee). As example, the internal CSR items included "my company implements flexible policies to provide a good work & life balance for its employees." PA – positive affect at work was assessed by utilizing Warr's (1990) scale of job-related affect, which includes emotional states corresponding to activated pleasant affect at work. The employees rated how often, over the last month, working in that organization had made them feel "cheerful," "enthusiastic," and "optimistic."

CPE – employee's engagement in the creative process was measured using 11 items scale developed by Zhang and Bartol (2010). An example of the scale's items is: "I generate a significant number of alternatives to the same problem before I choose the final solution." Participants indicated for each item how often they engaged in the behaviors mentioned in the scale over the past one month. Creative behaviors – employee creative behaviors were measured using a scale developed by Zhou and George (2001). This scale was designed for supervisors to assess employee creativity data. Sample item is "this employee exhibit creativity on the job when given the opportunity to."

Controls – previous studies have demonstrated that employee' age and tenure are related to employee behaviors (e.g. Sarker *et al.*, 2003). The results of these studies found that extraverts had higher baseline levels of mood (Lucas and Baird, 2004). Lucas and Baird found that there was a strong correlation between extraversion and PA. Accordingly, we controlled for the effects of employees' gender, education, and organizational tenure on the outcome variable. We also controlled for the effect of extraversion on PA. However, results obtained from a statistical analysis of the data collected in the present investigation showed that the control variables did not have any impact upon the outcomes variable. Consequently, we dropped the control variables from any further consideration regarding our main findings. We have reported the results "control free," this is consistent with recent recommendations of previous studies (Williams *et al.*, 2009).

4.3 Data analytical strategy

The empirical analysis for the current study aimed at testing the effects of internal CSR perceptions on employee creative behaviors through PA and CPE. For this type of analysis, structural equation modeling (SEM) has been recommended as the most appropriate analytical technique (Byrne, 2010; Hair *et al.*, 2010). Based on this recommendation, SEM was undertaken with AMOS 23. Maximum likelihood estimation, which is the most commonly used method of estimation in SEM, was used. Anderson and Gerbing's (1988) two-step approach was followed. This approach involves estimating the measurement model before considering the structural model.

5. Results

5.1 Overall measurement model

The four focal constructs: internal CSR, PA, CPE and employee creative behaviors were entered into a confirmatory factor analysis (CFA) to assess their psychometric properties. To determine model adequacy, the normed (χ^2/df) and root mean square error of approximation (RMSEA) were utilized in the current study as absolute fit indices, and the comparative fit index (CFI) and Tucker-Lewis index (TLI) were used as incremental fit indices, which are the most widely recommended indexes in SEM research (Kline, 2011). However, the results of CFA indicated a satisfactory fit (χ^2/df = 2.34, CFI = 0.931, TLI = 0.924, RMSEA = 0.062).

Further, all items loaded on their predicted factors, and the factor loadings were all statistically significant, ranging from 0.55 to 0.73 for internal CSR perceptions, 0.75 to 0.85 for PA, 0.80 to 0.84 for CPE, and 0.79 to 0.87 for creative behaviors. For each latent variable, composite reliability (CR) score was greater than 0.70, and average variance extracted (AVE) exceeded 0.50, revealing that each variable possessed high internal consistency. Based on Fornell and Larcker's (1981) approach, all study variables achieved discriminant validity, as the square root of their AVE estimates exceeded their corresponding inter-construct correlations. Table I presents the means, internal consistency estimates (CR scores), square root of the AVE, and inter-correlations among the variables included in the study.

Construct	1	2	3	4
1. Internal CSR	*0.71* (0.80)*			
2. PA	0.37**	*0.80* (0.85)		
3. CPE	0.34	0.59	*0.82* (0.86)	
4. Creative behavior	0.38	0.55	0.53	*0.84* (0.95)

Notes: *Diagonal entries (in italic) are the square root of AVE, and values in brackets are the composite reliability scores. Sub-diagonal entries are the latent construct inter-correlations. **All correlations are significant at $p < 0.001$

Table I.
Inter-construct correlations, CR, and the square root of AVE

5.2 Structural model

The proposed structural model provided an adequate fit to the data (χ^2/df $= 2.41$, CFI $= 0.913$, TLI $= 0.914$, RMSEA $= 0.063$), thus the proposed theoretical model of the study was supported. The hypothesized model was compared with two other models. The first of these models positions PA and CPE in a fully mediating role between internal CSR perceptions and employee creative behaviors. The second model is a "direct effects model" which includes only direct effects of internal CSR, PA, and CPE on employee creative behaviors. Table II compares the fit indices of the two models with the hypothesized model.

As shown in Table II, the fit indices of the hypothesized model (the partial mediation model) are better than the fit indices of the two alternative models, suggesting that the partially mediated model provides the best fit for the data. The hypothesized structural model did explain variance in PA ($r^2 = 33.2$ percent), in CPE ($r^2 = 30.5$ percent), and in employee creative behavior ($r^2 = 38.3$ percent). All of the path coefficients have been estimated (see Figure 2). The analysis provided support for *H1*, predicting that perceived internal CSR would be positively related to PA ($\beta = 0.58$, $p < 0.01$). In addition, PA was a significant predictor of CPE ($\beta = 0.34$, $p < 0.01$), supporting *H2*. CPE was positively associated with creative behaviors, providing support for *H4* ($\beta = 0.40$, $p < 0.05$). Taken together, the SEM results in Figure 2 provide evidence that there is some mediation, supporting *H3* and *H5*, which posit that the relationship between internal CSR perceptions and CPE is mediated by PA and that the relationship between PA and employee creative behavior is mediated by CPE.

5.3 Mediation analysis

As shown in Figure 2, all the direct relationships were supported. Next, mediation tests of the indirect relationships were conducted using the SEM framework for mediation analysis, as it is more suitable inference framework for mediation analysis of attitudes and behaviors (Gunzler *et al.*, 2013). Mediation analysis was made on AMOS with bootstrapping of 5,000 with 95 percent biased corrected percentile method (Meeker and Escobar, 1998). The outcomes from the bootstrap show that the indirect effect of internal CSR on CPE via PA is 0.20, obtained by multiplying the path coefficients of internal CSR to PA ($\beta = 0.58$) and PA to CPE ($\beta = 0.34$).

Model	χ^2	CFI	TLI	RMSEA
Hypothesized model	2.41	0.913	0.914	0.063
Alternative model (1)	2.537	0.890	0.901	0.081
Alternative model (2)	3.275	0.884	0.866	0.100

Table II.
Comparison of models fit indices
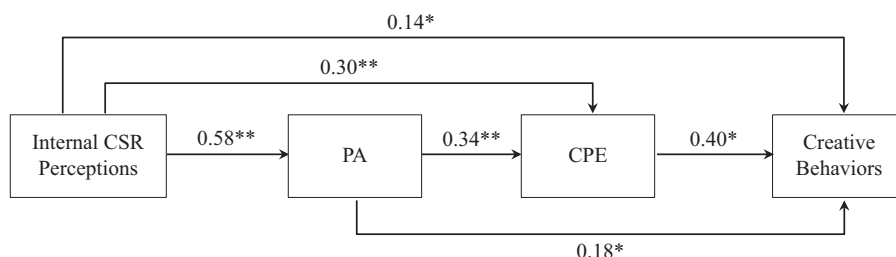
Notes: Values represent standardized estimates. *$p < 0.05$; **$p < 0.01$ (two-tailed tests)

Figure 2.
Structural equation modeling results

This indirect effect is significant ($p < 0.01$, 95% CI: 0.01, 0.22). Moreover, the indirect effect of PA on creative behaviors via CPE is 0.14. This indirect effect is significant ($p < 0.05$, 95% CI: 0.07, 0.32). The direct relationship between internal CSR perceptions and employee creative behavior was statistically significant ($\beta = 0.14$, $p < 0.05$). In sum, the presented outcomes confirm that PA and CPE partially and sequentially mediated the positive relationship between internal CSR perceptions and employee creative behaviors.

6. Discussion

The literature review conducted for this investigation revealed that this study could be one of earliest insights to investigate the relationship between organization's internal CSR and affects at work. The direct positive relationship between internal CSR perceptions and PA is consistent with AET, which suggests that specific work features stimulate different affects. Internal CSR promotes PA by creating favorable work environment. The results also reveal that PA has a positive influence on employee attitude (i.e. CPE), which is also consistent with prior research findings (Barsade and Gibson, 2007). When employees experience positive feelings and emotions, they are more likely to be engaged in the creative process. This is also consistent with AET, which argues that employees' affective reactions are likely to influence work-related attitudes (Weiss and Cropanzano, 1996). The current study confirms the AET assumption by indicating that PA at work is associated with higher level of employee engagement in the creative process.

Even though the association between organization's CSR and employee attitudes and behaviors is well established, less is known about the affective mechanisms that underlie this positive association. This study sought to address this issue by proposing that internal CSR perceptions would positively and indirectly influence employee creativity through PA. In examining the proposed relationships, this study relied on AET, a theory that explains the causes and consequences of affective experiences and reactions. As predicted, results of current study demonstrated that employee perceptions of internal CSR have induced PA, which, in turn, lead to greater level of engagement in the creative process and eventually lead employees to exhibit creative behaviors at workplace. As such, the study results provide support for the assumption of AET that "the consequences of affective experiences are both attitudinal and behavioral" (Weiss and Cropanzano, 1996, p. 12). The current study suggests AET as a new mechanism through which the relationship between organization's CSR and employee positive work behaviors would be explained.

Not only individual traits can enhance individual creativity, but also organizational factors play an important role in enhances employee creativity. The literature acknowledges the importance of the "context" to support employee creative performance. Previous studies indicated that an organization can boost employee creativity by creating a supportive work environment (Dul and Ceylan, 2011). The perceived internal CSR serves as a signal to employees about their care and respect. The ethical culture of a work environment boosts the positive behavior of employees (Valentine and Barnett, 2003). In line with the findings obtained from previous studies results found from our investigation supported the hypothesis that internal work environment would be positively related to employee positive work outcomes.

As mentioned earlier, past investigations such as those conducted by De Roeck *et al.* (2016), Dögl and Holtbrügge (2014), in CSR-employee outcomes had concentrated mainly on measuring the effect of employee perceptions of external CSR. These studies did not focus upon the important effect of the internal side of CSR on employee work outcomes. Considering this issue, the current investigation has extended our knowledge of both internal and external CSR upon employee behaviors.

Finally, the geopolitical identity of the place was found to have no effect on previous results as the results were consistent with western studies. Thus, we found statistical

differentiations regarding the effect of extraversion as a personality dimension that may derive positive effect. Extraversion was mainly affected by the place and the communal relations in the Egyptian context. Hence, the Egyptian community "revolves around the family, and family concerns often assume greater significance than business relationships" (Wilson, 2011, p. 69). In other words, it is a common sense in the Egyptian culture that the individuals are socially related and that informalities penetrate the formalities of the work life. Consequently, extraversion was not found to have direct or indirect relation with positive effect and creativity. This result especially is different from what was concluded in western studies. Hence, in western setting many studies (e.g. Charles *et al.*, 2001) concluded that extraversion is an important aspect that impacts individual's PA. On the contrary, our results suggest the opposite, this plea for more research on the effect of contextual geopolitical ramifications, and their effect on both PA and creativity.

7. Theoretical contribution

This study has provided support for several unique relationships and therefore, has made important contributions to the literature. First, it has been suggested in the CSR literature that more research was needed on the psychological mechanisms underlying the positive association between CSR perceptions and employee work outcomes (Glavas and Kelley, 2014). The current study extends the available literature on CSR-employee outcomes relationships by throwing light on the psychological process underlying this relationship. This study contributes to the CSR literature by examining and confirming PA as a psychological process through which organization's CSR ultimately influences employee creativity.

Second, it is worth to mention that most of the literature on creativity has concentrated primarily on investigating the relationship between individual factors and individual's creativity (e.g. Tan *et al.*, 2016). A considerable amount of research has investigated the antecedents of creativity at the individual level of analysis. Existing studies underline a variety of conditions necessary for developing individual creativity in general (Woodman *et al.*, 1993; Shalley, 1995); specifically they suggest four individual factors for creativity of members within organizations: expertise, creative-thinking skill, creative self-efficacy, and intrinsic task motivation. While recognizing the contribution of this group of studies, there remains a need for more research on the effect of workplace environment and organizational practices on the development of creativity. We believe that when studying the antecedents of individual's creativity at work, not only the individual characteristics should be examined but also the characteristics of organizational context should be included (Khalili, 2016).

8. Practical implications, limitations, and future directions

In an attempt to enrich the understanding of the antecedents of employee creativity, this study offers several suggestions for practitioners and HR managers open to establishing a clear route to increase their employees' levels of creativity at work. At a practical level, these findings suggest that organizations can make planned use of their internal CSR portfolio to enhance employees' positive attitudes and behaviors. The relationship between CSR, PA, CPE, and employee creative behaviors uncovered in this study suggest the relevance of the former in boosting employees' creativity at work. Thus, managers should pay more attention to organization's internal CSR performance and develop CSR strategies that contemplate employees' needs and expectations regarding business responsibility. Additionally, managers should invest in internal communication on the organization's CSR portfolio. This will allow employees to develop a more informed perspective about organization's stance regarding CSR. HR managers may consider providing employees with regular updates by e-mail and/or publication of organization Newsletter as to the company's involvement in CSR initiatives, and clearly communicate to new recruits the extent of the company's CSR activities in employee orientation and socialization programs. And, as the

MD

current study shows, the more employees perceive organization's efforts of internal CSR, the more CPE and creative they will be in the workplace. This will probably contribute for a better organizational performance in the uncertain and competitive global economy that exists today.

As with most research of this nature, the results of this investigation should be interpreted with consideration of a few limitations. First, although the half-longitudinal (the semi-longitudinal) design employed in this investigation is better than cross-sectional designs when investigating causality between variables. We recommend future studies to use a full longitudinal design. A full longitudinal research would have helped provide more valid appraisals of causality. This study utilized a sampling method that was not random sampling method. Data were collected from employees utilizing a convenience sampling method. Thus, the results of the current investigation cannot be generalized to all telecommunication companies in Egypt or any other business sectors in the country. Results are limited to the sample that had been investigated. We also recommend that further research should be undertaken in Egypt and in other developing countries including the middle-eastern countries. Additional research is needed on this topic in other geographical locations to better understand the generalizability of the results from the current investigation. Despite the limitations discussed above, the findings of the current investigation made an important contribution to both CSR and creativity literatures by studying the interrelationships among CSR, PA, CPE, and creative behaviors.

9. Conclusion

This study extends our understanding of the positive relationship between organization's CSR and employee creativity. Results from the current study showed that positive emotions and feelings which an employee would have because of his/her perception of organization's internal CSR led to enhance employee creativity. It is to be hoped that this finding stimulates more empirical investigations regarding the role of organizational human resources practices and workplace environment on the development of PAs and creative behaviors.

References

Amabile, T.M. (1983), "The social psychology of creativity: a componential conceptualization", *Journal of Personality and Social Psychology*, Vol. 45 No. 2, pp. 357-377.

Amabile, T.M., Barsade, S., Mueller, J. and Staw, B. (2005), "Affect and creativity at work", *Administrative Science Quarterly*, Vol. 50 No. 3, pp. 367-403.

Anderson, J.C. and Gerbing, D.D. (1988), "Structural equation modeling in practice: a review and recommended two-step approach", *Psychological Bulletin*, Vol. 103 No. 3, pp. 411-423.

Barakat, S.R., Isabella, G., Boaventura, J.M. and Mazzon, J.A. (2016), "The influence of corporate social responsibility on employee satisfaction", *Management Decision*, Vol. 54 No. 9, pp. 2325-2339.

Barsade, S.G. and Gibson, D.E. (2007), "Why does affect matters in organizations", *Academy of Management Perspectives*, Vol. 21 No. 1, pp. 36-59.

Basch, J. and Fisher, C.D. (2000), "Affective events – emotion matrix: a classification of work events and associated emotions", in Ashkanasy, N.M., Hartel, C.E.J. and Zerbe, W.J. (Eds), *Emotions in the Workplace: Research, Theory and Practice*, Quorum Books, Westport, CT, pp. 36-48.

Brislin, R.W. (1970), "Back-translation for cross-cultural research", *Journal of Cross-Cultural Psychology*, Vol. 1 No. 3, pp. 185-216.

Byrne, B.M. (2010), *Structural Equation Modeling with Amos: Basic Concepts, Applications, and Programming*, 2nd ed., Routledge Academy, New York, NY.

Charles, S.T., Reynolds, C.A. and Gatz, M. (2001), "Age-related differences and change in positive and negative affect over 23 years", *Journal of Personality and Social Psychology*, Vol. 80 No. 1, pp. 136-151.

De Roeck, K. and Delobbe, N. (2012), "Do environmental CSR initiatives serve organizations' legitimacy in the oil sector? Exploring employees' reactions through organizational identification theory", *Journal of Business Ethics*, Vol. 110 No. 4, pp. 397-412.

De Roeck, K., El-Akremi, A. and Swaen, V. (2016), "Consistency matters! How and when does corporate social responsibility affect employees' organizational identification", *Journal of Management Studies*, Vol. 53 No. 7, pp. 1141-1168.

De Roeck, K., Marique, G., Stinglhamber, F. and Swaen, V. (2014), "Understanding employees' responses to corporate social responsibility: mediating roles of overall justice and organizational identification", *International Journal of Human Resource Management*, Vol. 25 No. 1, pp. 91-112.

DeNeve, K.M. and Cooper, H. (1998), "The happy personality: a meta-analysis of 137 personality traits and subjective well-being", *Psychological Bulletin*, Vol. 124 No. 2, pp. 197-229.

Ditlev-Simonsen, C. (2015), "The relationship between Norwegian and Swedish employees' perception of corporate social responsibility and affective commitment", *Business & Society*, Vol. 54 No. 2, pp. 229-253.

Dögl, C. and Holtbrügge, D. (2014), "Corporate environmental responsibility, employer reputation and employee commitment: an empirical study in developed and emerging economies", *International Journal of Human Resource Management*, Vol. 25 No. 12, pp. 1739-1762.

Dul, J. and Ceylan, C. (2011), "Work environments for employee creativity", *Ergonomics*, Vol. 54 No. 1, pp. 12-20.

Fleeson, W., Malanos, A.B. and Achille, N.M. (2002), "An intra-individual process approach to the relationship between extraversion and positive affect: is acting extraverted as good as being extraverted?", *Journal of Personality and Social Psychology*, Vol. 83 No. 6, pp. 1409-1422.

Flint, C. (2006), *Introduction to Geopolitics*, Routledge, New York, NY.

Ford, C.M. (1996), "A theory of individual creative action in multiple social domains", *Academy of Management Review*, Vol. 21 No. 4, pp. 1112-1142.

Fornell, C.D. and Larcker, F. (1981), "Evaluating structural equation models with unobservable variables and measurement errors", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.

Fredrickson, B.L. (1998), "What good are positive emotions?", *Review of General Psychology*, Vol. 2 No. 3, pp. 300-319.

Gao, Y. and He, W. (2017), "Corporate social responsibility and employee organizational citizenship behavior: the pivotal roles of ethical leadership and organizational justice", *Management Decision*, Vol. 55 No. 2, pp. 294-309.

Gilson, L.L. and Shalley, C.E. (2004), "A little creativity goes a long way: an examination of teams' engagement in creative processes", *Journal of Management*, Vol. 30 No. 4, pp. 453-470.

Gioia, D.A., Patvardhan, S.D., Hamilton, A.L. and Corley, K.G. (2013), "Organizational identity formation and change", *The Academy of Management Annals*, Vol. 7 No. 3, pp. 123-193.

Giustiniano, L., Lombardi, S. and Cavaliere, V. (2016), "How knowledge collecting fosters organizational creativity", *Management Decision*, Vol. 54 No. 6, pp. 1464-1496.

Glavas, A. and Kelley, K. (2014), "The effects of perceived corporate social responsibility on employee attitudes", *Business Ethics Quarterly*, Vol. 24 No. 2, pp. 165-202.

Glynn, M.A. (2008), "Beyond constraint: how institutions enable identities", in Greenwood, R., Oliver, C., Suddaby, R. and Sahlin-Andersson, K. (Eds), *The Sage Handbook of Organizational Institutionalism*, SAGE Publications, London, pp. 413-430.

Greenwood, R., Diaz, A.M., Li, S.X. and Lorente, J.C. (2010), "The multiplicity of institutional logics and the heterogeneity of organizational responses", *Organization Science*, Vol. 21 No. 2, pp. 521-539.

Gunzler, D., Wu, T. and Zhang, H. (2013), "Introduction to mediation analysis with structural equation modeling", *Shanghai Archives of Psychology*, Vol. 25 No. 6, pp. 390-394.

Hair, J.F., Blacj, W.C., Babin, B.J. and Anderson, R.E. (2010), *Multivariate Data Analysis: A Global Perspective*, 7th ed., Pearson, London.

Harris, T.B., Wendy, R.B., Zhang, X. and Xie, Z. (2014), "Getting what's new from newcomers: empowering leadership, creativity, and adjustment in the socialization context", *Personnel Psychology*, Vol. 67 No. 3, pp. 567-604.

Hofman, P.S. and Newman, A. (2014), "The impact of perceived corporate social responsibility on organizational commitment and the moderating role of collectivism and masculinity: evidence from China", *The International Journal of Human Resource Management*, Vol. 25 No. 5, pp. 631-652.

Kim, H., Lee, M., Lee, H. and Kim, N. (2010), "Corporate social responsibility and employee-company identification", *Journal of Business Ethics*, Vol. 95 No. 4, pp. 557-569.

Khalili, A. (2016), "Linking transformational leadership, creativity, innovation, and innovation-supportive climate", *Management Decision*, Vol. 54 No. 9, pp. 2277-2293.

Kline, R.B. (2011), *Principles and Practices of Structural Equation Modeling*, Guilford, New York, NY.

Knox, P.L. and Marston, S.A. (1998), *Places and Regions in Global Context: Human Geography*, Prentice Hall, Upper Saddle River, NJ.

Kraatz, M.S. and Block, E.S. (2008), "Organizational implications of institutional pluralism", in Greenwood, R., Oliver, C., Suddaby, R. and Sahlin-Andersson, K. (Eds), *The Sage Handbook of Organizational Institutionalism*, SAGE Publications, London, pp. 243-275.

Lee, M. and Lounsbury, M. (2015), "Filtering institutional logics: community logic variation and differential responses to the institutional complexity of toxic waste", *Organization Science*, Vol. 26 No. 3, pp. 847-866.

Lounsbury, M. (2007), "A tale of two cities: competing logics and practice variation in the professionalizing of mutual funds", *Academy of Management Journal*, Vol. 50 No. 2, pp. 289-307.

Lucas, R.E. and Baird, B.M. (2004), "Extraversion and emotional reactivity", *Journal of Personality and Social Psychology*, Vol. 86 No. 3, pp. 473-485.

McCrae, R.R. and Costa, P.T. (1991), "The NEO personality inventory: using the five-factor model in counseling", *Journal of Counseling and Development*, Vol. 69 No. 4, pp. 367-372.

Marquis, C. and Battilana, J. (2009), "Acting globally but thinking locally? The enduring influence of local communities on organizations", *Research in Organizational Behavior*, Vol. 29 No. 3, pp. 283-302.

Marquis, C. and Lounsbury, M. (2007), "Vive la résistance: competing logics and the consolidation of US community banking", *Academy of Management Journal*, Vol. 50 No. 4, pp. 799-820.

Meeker, W. and Escobar, L. (1998), *Statistical Methods for Reliability Data*, Wiley Series in Probability and Statistics. Applied Probability and Statistics, Wiley, New York, NY and Toronto.

Moon, T., Hur, W., Ko, S., Kim, J. and Yoon, S. (2014), "Bridging corporate social responsibility and compassion at work: relations to organizational justice and affective commitment", *Career Development International*, Vol. 19 No. 1, pp. 49-72.

Mostafa, A.M. (2017), "High-performance HR practices, positive affect and employee outcomes", *Journal of Managerial Psychology*, Vol. 32 No. 2, pp. 163-176.

Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method biases in behavioural research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.

Sarker, S.J., Crossman, A. and Chinmeteepituck, P. (2003), "The relationships of age and length of service with job satisfaction: an examination of hotel employees in Thailand", *Journal of Managerial Psychology*, Vol. 18 No. 7, pp. 745-758.

Shalley, C.E. (1995), "Effects of coaction, expected evaluation, and goal setting on creativity and productivity", *Academy of Management Journal*, Vol. 38 No. 2, pp. 483-503.

Staw, B.M., Sutton, R.I. and Pelled, L.H. (1994), "Employee positive emotion and favorable outcomes at the workplace", *Organization Science*, Vol. 5 No. 1, pp. 51-71.

Stites, J.P. and Michael, J.H. (2011), "Organizational commitment in manufacturing employees: relationships with corporate social performance", *Business & Society*, Vol. 50 No. 1, pp. 50-70.

Tan, C.S., Lau, X.S., Kung, Y.T. and Kailsan, R.A. (2016), "Openness to experience enhances creativity: the mediating role of intrinsic motivation and the creative process engagement", *The Journal of Creative Behavior*, November, available at: https://doi.org/10.1002/jocb.170

Thoresen, C.J., Kaplan, S.A., Barsky, A.P., Warren, C.R. and De Chermont, K. (2003), "The affective underpinnings of job perceptions and attitudes: a meta-analytic review and integration", *Psychological Bulletin*, Vol. 129 No. 6, pp. 914-945.

Turker, D. (2009), "How corporate social responsibility influences organizational commitment", *Journal of Business Ethics*, Vol. 89 No. 2, pp. 189-204.

Valentine, S. and Barnett, T. (2003), "Ethics code awareness, perceived ethical values, and organizational commitment", *Journal of Personal Selling and Sales Management*, Vol. 23 No. 4, pp. 359-367.

Wang, Y., Tsai, Y. and Lin, C. (2013), "Modeling the relationship between perceived corporate citizenship and organizational commitment considering organizational trust as a moderato", *Business Ethics: A European Review*, Vol. 22 No. 2, pp. 218-233.

Warr, P. (1990), "The measurement of well-being and other aspects of mental health", *Journal of Occupational Psychology*, Vol. 63 No. 3, pp. 197-217.

Watson, D., Clark, L.A. and Tellegen, A. (1988), "Development and validation of brief measures of positive and negative affect: the PANAS scales", *Journal of Personality and Social Psychology*, Vol. 54 No. 6, pp. 1063-1070.

Wegge, J., Dick, R., West, M. and Dawson, J. (2006), "A test of basic assumption of affective events theory (AET) in call centre work", *British Journal of Management*, Vol. 17 No. 3, pp. 237-254.

Weiss, H.M. and Cropanzano, R. (1996), "Affective events theory: a theoretical discussion of the structure, causes and consequences of affective experiences at work", *Research in Organizational Behavior*, Vol. 18 No. 1, pp. 1-74.

Williams, L.J., Vanderberg, R.J. and Edwards, J.R. (2009), "Structural equation modeling in management research: a guide for improved analysis", *Academy of Management Annals*, Vol. 3 No. 1, pp. 543-604.

Williams, S. and Shiaw, W.T. (1999), "Mood and organizational citizenship behavior: the effects of positive affect on employee organizational citizenship behavior intentions", *Journal of Psychology*, Vol. 133 No. 6, pp. 656-668.

Wilson, S. (2011), *Culture Shock! A Survival Guide to Customs and Etiquette: Egypt*, 4th ed., Marshall Cavendish, Tarrytown, NY.

Wilt, J., Noftle, E.E., Fleeson, W. and Spain, J.S. (2012), "The dynamic role of personality states in mediating the relationship between extraversion and positive affect", *Journal of Personality*, Vol. 80 No. 5, pp. 1205-1236.

Woodman, R.W., Sawyer, J.E. and Ricky, W.G. (1993), "Toward a theory of organizational creativity", *The Academy of Management Review*, Vol. 18 No. 2, pp. 293-321.

Zanon, C., Bastianello, M., Pacico, M. and Hutz, C. (2013), "Relationships between positive and negative affect and the five factors of personality in a Brazilian sample", *Paideía*, Vol. 23 No. 56, pp. 285-292.

Zhang, X. and Bartol, K.M. (2010), "Linking empowerment leadership and employee creativity: the influence of psychological empowerment, intrinsic motivation, and creative process engagement", *Academy of Management Journal*, Vol. 53 No. 1, pp. 107-128.

Zhou, J. and George, J.M. (2001), "When job dissatisfaction leads to creativity: encouraging the expression of voice", *Academy of Management Journal*, Vol. 44 No. 4, pp. 682-692.

Further reading

Choi, J.N., Anderson, T.A. and Veillette, A. (2009), "Contextual inhibitors of employee creativity in organizations: the insulating role of creative ability", *Group & Organization Management*, Vol. 34 No. 3, pp. 330-357.

Kim, S. (2006), "Public service motivation and organizational citizenship behavior in Korea", *International Journal of Manpower*, Vol. 27 No. 8, pp. 722-740.

Appendix

Study variables	Statements of scale
Internal CSR perceptions	Please indicate the extent to which you agree or disagree with the following statement 1. Our company implements flexible policies to provide work and life balance for its employees 2. Our company policies encourage the employees to develop their skills and careers 3. The management of our company is primarily concerned with employees' needs and wants 4. Our company supports employees who want to acquire additional education 5. Our company policies provide a safe and healthy working environment to all its employees
PA	How often, over the last month, working in that corporate had made you feel: 1. "cheerful," 2. "enthusiastic," and 3. "optimistic"
CPE	
Problem identification	1. I spend considerable time trying to understand the nature of the problem 2. I think about the problem from multiple perspectives 3. I decompose a difficult problem/assignment into parts to obtain greater understanding
Information searching	1. I consult a wide variety of information 2. I search for information from multiple sources (e.g. personal memories, others' experience, documentation, internet, etc.)
Idea generation	3. I retain large amounts of detailed information in my area of expertise for future use 1. I consider diverse sources of information in generating new ideas 2. I look for connections with solutions used in seeming diverse area 3. I generate a significant number of alternatives to the same problem before I choose the final solution 4. I try to devise potential solutions that move away from established ways of doing things 5. I spend considerable time shifting through information that helps to generate new ideas
Creative behaviors	1. This employee suggests new ways to achieve goals or objectives 2. This employee comes up with new practical ideas to improve performance 3. This employee searches out new technologies, processes, techniques, and/or product ideas 4. This employee promotes and champions ideas to others 5. This employee exhibits creativity on the job when given the opportunity to 6. This employee have new and innovation ideas 7. This employee comes up with creative solutions to problems 8. This employee is a good source of creative ideas 9. This employee develops adequate plans and schedule for the implementation of new ideas 10. This employee often has new and innovative ideas 11. This employee often has a fresh approach to problems 12. This employee suggests new ways to increase quality 13. This employee suggests new ways of performing work task

Table AI.
Scales of study variables

Corresponding author
Moustafa Abdelmotaleb can be contacted at: m.abdelmotaleb@aun.edu.eg