



The moderating effect of benevolence on the impact of organisational culture on employee creativity[☆]

Samuel Ogbeibu^{a,*}, Abdelhak Senadjki^a, James Gaskin^b

^a Universiti Tunku Abdul Rahman (UTAR), Faculty of Business and Finance, Jalan Universiti, Bandar Barat, 31900 Kampar, Perak, Malaysia

^b Brigham Young University, Provo, UT 84602, USA

ARTICLE INFO

Keywords:

Trustworthiness
Creative ideas
Benevolence
Employee creativity
Organizational culture

ABSTRACT

Rooted in the Nigerian manufacturing industry experience, this study, investigates the effect of top management leaders' benevolence on the impact of organisational culture (OC) on employee creativity. Structural equation modelling (SEM) results indicated that top management leaders' benevolence, and adhocracy OC have positive and significant effects on employee creativity. Market and clan OC have significant negative effects on employee creativity, and hierarchy OC has no significant effect on employee creativity. Likewise, benevolence has no significant moderating effect on the impact of clan OC on employee creativity, and has a significant negative moderating effect on the impact of adhocracy OC on employee creativity. SEM results demonstrate that benevolence has a significant positive moderating effect on the impact of market OC on employee creativity, and a significant negative moderating effect on the impact of hierarchy OC on employee creativity. Policy implications and future directions are also discussed.

1. Introduction

Martha, Carolina, Joseph, Niels, and Pei-Chuan (2002) advocated that organisational culture (OC) is “the pattern of variations within a society, or, more specifically, as the pattern of deep-level values and assumptions associated with societal effectiveness, shared by an interacting group of people” (p. 276). Organisations across several countries have experienced diverse challenges as a result of applying an OC that is not supportive of the kind of values they require to engender employee creativity (Dong, 2002; Huston & Sakkab, 2006; Peterson, 2005). Several Nigerian manufacturing organisations are known to employ a predominant hierarchical OC (Gabriel & Kpakol, 2014), and studies (Gupta, 2011; Naranjo-Valencia, Jiménez-Jiménez, & Sanz-Valle, 2016) lament that this has a negative impact on employee creativity.

The Nigerian manufacturing industry is an integral part of the country's economic development – a catalyst for modernisation with propensities of creating multiplier effects (Akume & Abdullahi, 2013). However, some studies (Dimnwobi, Ekesiobi, & Mgbemena, 2016; Emeka, Ifeoma, & Emmanuel, 2015) have identified a growing deterioration in its innovation capabilities. This reflects a lack of an engendered employee creativity workforce, and the application of an unsupportive OC. Employee creativity in general feeds off of creative

ideas (Bai, Lin, & Li, 2016; Gilson & Litchfield, 2017). Nevertheless, creative ideas repeatedly get lost or repressed in Nigerian manufacturing organisations, as they sometimes appear to be unwelcomed by managers (Akume & Abdullahi, 2013). A parallel case is when top management leaders exhibit unreceptive attitudes to creative ideas employees share by exhibiting questionable, unkind or malevolent behaviours within Nigerian manufacturing organisations (Gabriel & Kpakol, 2014; John, 2011). Hence, there is need for top management leaders to consider becoming more benevolent, since it could have a rather positive effect on employee creativity (Zhou & George, 2003).

Employee creativity is an individual level phenomenon that mirrors the production of creative ideas, builds uniquely upon existing ideologies, and suggests novel approaches to create new solutions (Amabile & Pillemer, 2012; Ogbeibu, Senadjki, & Luen Peng, 2017). In order to engender employee creativity, top management leaders ought to recognise the role of organisational benevolence. The extent to which an individual is perceived to possess and display good intentions towards another is denoted as benevolence (Mayer, Davis, & Schoorman, 1995). By becoming more benevolent, organisations may be able to build strong resilience against a future of constant change (Castro, Gomes, & de Sousa, 2012). The need to have a benevolent top management leader who strongly expresses emotions that reflect goodwill, compassion, care, altruism and kindness towards employees in order to engender

[☆] A deep appreciation is given to Prof. Marko Sarstedt for his invaluable efforts in supporting and contributing towards the success of this research.

* Corresponding author.

E-mail addresses: ogbeibu.s@utar.my (S. Ogbeibu), abdelhak@utar.edu.my (A. Senadjki), james.gaskin@byu.edu (J. Gaskin).

employee creativity; is becoming a necessity for achieving successful innovative outcomes at the organisational level (Wang & Jap, 2017).

Through the demonstration of benevolence by top management leaders, a work environment characterised as humane, supportive, comfortable, trusting, and respectful could be created, and this likewise incites observable benefits for the common good of organisational members (Karakas & Sarigollu, 2012). Basically, benevolent top management leaders demonstrate genuine, and kind behaviours that have positive impacts on their employees around them (Lin, Ma, Zhang, Li, & Jiang, 2016). Demonstrating benevolence within an organisation, may require top management leaders to exhibit emotional ties and concerns for employees' career growth (Karakas & Sarigollu, 2012). Being benevolent may also mean becoming mentors or coaches to employees, and the creation of opportunities for correcting mistakes, and understanding why employees might be exhibiting behaviours that repels creativity engenderment (Wang & Jap, 2017; Zhou & George, 2003). This in turn instils a sense of care, and reciprocity in employees who may consequently feel obligated to exhibit positive behaviours, and desirable attitudes towards employee creativity initiatives (Wang & Cheng, 2010).

Considering the important role of benevolence in fostering employee creativity, an increasing wave of research has provoked several investigations into the impacts of top management leaders' benevolence (Lin et al., 2016; Wang & Jap, 2017). Equally, the work of extant research mirrors the impact of benevolence on organisational citizenship behaviour (Liang, Ling, & Hsieh, 2007), organisational commitment (Karakas & Sarigollu, 2012), and buyer-supplier exchange (Wang & Jap, 2017). Despite the increasing attention the benevolence paradigm has received over the years, Lin et al. (2016) accentuate that much is yet to be done to investigate the impact of benevolence on employee creativity, as this has so far been relatively understudied. Employee creativity is important for organisational development, and profit maximization (Mittal & Dhar, 2015). Mehlika, Ismai, and Mehmet (2014) also support that employee creativity is a prerequisite for achieving organisational competitive advantage. Likewise, extant research has also demonstrated a positive correlation between benevolence and employee creativity (Lin et al., 2016; Wang & Cheng, 2010).

Therefore, it is further espoused that when benevolence is displayed through strong emotional expressions, it is argued to have a positive effect on the creativity of employees (Chughtai, 2016; Zhou & George, 2003). These effects may however be unpredictable when benevolence is introduced under the strong influence of distinct OC dimensions. Therefore, top management leaders ought to take into consideration, the various OC dimensions in which their benevolence could help engender employee creativity. Additionally, Cameron (2008) proposed the clan, adhocracy, market and hierarchy OC dimensions. In Cameron and Quinn's (1999) competing values framework (CVF), the adhocracy OC reflects an entrepreneurial and creative workforce. It is comprised of organisational members who are mostly risk takers and who have a drive to commit towards innovations and scientific experimentations (Heritage, Pollock, & Roberts, 2014). Clan OC mirrors a responsive environment where employees share a lot of values with each other. This is due to an organisation operating as a family or set of best friends (Cameron, 2008). The market OC is mostly result oriented, and characterised by organisational managers that are defined by their productiveness, directive capabilities, competitiveness and focus. The Hierarchy OC reflects structured and formalised work systems, that often consist of already prescribed procedures, as well as strict rules and routines that govern employee behaviour.

The CVF has been employed in distinct studies to examine employee creativity (Naranjo-Valencia, Sanz-Valle, & Jimenez-Jimenez, 2010; Obenchain & Johnson, 2004). However, some of these studies mirror endogeneity issues by examining only two or three CVF dimensions, in empirical investigations (Naranjo-Valencia et al., 2010; Lau & Ngo, 2004). Likewise, conflicting perspectives regarding the effect(s) of OC on employee creativity has led to a growing debate among researchers (Einstein & Hwang, 2007; Mobarakeh, 2011). Several distinct results

of empirical studies (Gupta, 2011; Karamipour et al., 2015) have caused an on-going divide as to whether OC indeed has positive, negative or no effect at all on employee creativity. While focus has increased in an attempt to reach a congruence in the prior findings of extant research, the role of top management leaders' benevolence has been grossly understudied over the years (Wang & Cheng, 2010). Top management leaders' benevolence is arguably becoming a tool by which top management leaders may drive initiatives that engenders employee creativity (Castro et al., 2012; Lin et al., 2016). However, the degree and type of effect of benevolence in diverse OCs may vary due to dissimilar OC dimension features, and this occurrence is yet lacking adequate attention. Much still has to be done to provoke a congruence of diverse views of extant research results.

In an effort to further engender employee creativity Lin et al. (2016) stressed that even with the flourishing investigations of extant research, the impact of benevolence on employee creativity still lacks adequate consideration. This is in light of its positive effect on employee creativity (Wang & Cheng, 2010). Despite its espoused positive effect, diverse values embedded within diverse OCs could also cause varying changes in the outcome of demonstrated benevolence. Values that portray benevolence might either foster or collide against already established norms of organisational members who may embrace and adopt or instantly detest them. Therefore, in order to engender employee creativity, top management leaders ought to take into consideration, the probable effects benevolence might have under the influence of diverse OCs. Over the years OC, benevolence and employee creativity have respectively received increasing attention in diverse cultural contexts across the world (Mobarakeh, 2011; Lin et al., 2016). However, much is yet to be done to examine their collective undergirding under a similar cultural context. Hence, this study attempts to investigate the moderating effects of top management leaders' benevolence on the impact of OC on employee creativity in the Nigerian manufacturing industry.

2. Benevolence, OC and employee creativity within Nigerian manufacturing industry

From the 1950s to 1960s Nigeria was recognised to be at a similar innovative development level as countries like Brazil, Indonesia and even Pakistan. However, current reports indicate that, Nigeria is now ranked below them all (Cornell University, INSEAD, WIPO, 2015; Egbochuku, 2001). Even in Africa, Nigeria has fallen behind several countries like Ghana, Botswana, and even Mauritius, in terms of innovations and creativity capability (Cornell University; INSEAD; WIPO, 2016). Over the years, several initiatives have been employed to improve Nigeria's creativity and innovation prowess. Unfortunately, in the 2015 Global Creativity Index (GCI), Nigeria is not even among the 139 countries that were highlighted (Florida, Mellander, & King, 2015). Thus, Dimnwobi et al. (2016) strongly suggested that a key industry that is proficient in revitalising the creative economy of Nigeria is the Nigerian manufacturing industry. As an engine for national innovation growth, the Nigerian manufacturing industry has the propensity to foster national economic wealth (Ikemefuna & Abe, 2015). The Nigerian manufacturing industry mirrors a platform that ought to be equipped with resources for engendering employee creativity and improved innovativeness (Popoola & Fagbola, 2014). Regrettably, reports highlight in recent years that it has severely underperformed. The creativity prowess of the Nigerian manufacturing sector was ranked at 78% before late 1980s. Nonetheless, it has faced a constant decline and is evidenced to have decreased to about 29.3% over the years (Emeka et al., 2015). George and Olumide (2011), therefore stressed that Nigerian manufacturing organisations could learn from a country like Japan, which has established international recognition in engendering employee creativity.

However, since Nigerian manufacturing organisations are mostly encompassed by a hierarchical form of OC (Hofstede & McCrae, 2004),

top management leadership style is mostly autocratic. This leadership style is often devoid of attributes and benefits of benevolence. Ahiauzu and Asawo (2010) lament that the lack or display of poor levels of benevolence by top management leaders within Nigerian manufacturing organisations has resulted in organisational members' poor attitude to work. Studies (Ahiauzu & Asawo, 2010; George & Olumide, 2011) opined that top management leaders have failed to provide work environments that mirror a supportive OC that fosters the exchange of creative ideas, and this has further dampened employee commitment to engage in initiatives that engender employee creativity (Dimnwobi et al., 2016). Hence, George and Olumide (2011) convincingly asserted that top management leaders ought to consider exhibiting leadership styles that are not devoid of benevolence. Extant literature also espouses that within organisations, benevolence aids with inspiring feelings of belongingness in employees as they tend to become more open to challenges, risks, and personal creativity developments (Ahiauzu & Asawo, 2010).

3. Theoretical framework

As a guide, this study therefore draws on the Componential Theory of Individual Creativity (CTIC) (an individual level phenomenon) by Amabile (1997). This theory highlights that irrespective of employee domain and time, employees possess natural capacity and are capable of producing at least moderately creative efforts. This theory highlights three main dimensions: expertise, creativity skills and task motivation. Amabile (1997) stressed that expertise is a supporting dimension for all creative efforts and consists of memories of factual knowledge, technical proficiencies and excellent talents across several work domains. Creativity skills relate to intellectual processing styles by which problems are explored from several novel viewpoints or cognitive pathways. Extrinsic task motivation reflects a desire to fulfil set goals which are set apart from defined tasks. These goals may be publicity or promised rewards. Although expertise and creativity skills might determine an employee's capabilities within a particular domain, task motivation reflects the employee's actual behaviour. This theory proposes that OC can incongruently influence both the levels and occurrences of employee creative behaviour (Amabile, Conti, Coon, Lazenby, & Herron, 1996).

In the discourse of Amabile et al. (1996) and Amabile (1997), OC was highlighted as a factor that could be an obstacle and/or facilitator of employee creativity. However, the authors did not highlight the kind of OC that is, or could actually be a facilitator or an obstacle to employee creativity. Without an in-depth analysis of what type of OC is an obstacle or facilitator, organisations may be guided by the perceptions that OC as a whole is mainly a facilitator or an obstacle to employee creativity. This discrepancy further limits the degree of insights relevant to understand how OC impacts employee creativity. Although, this theory also relays valuable insights into the phenomenon of individual creativity, it failed to consider the concept of top management leader's benevolence (an individual level phenomenon) by Mayer et al. (1995) and its role in engendering employee creativity.

This study, seeks to make the following contributions to the existing literature and the CTIC.

First, this study seeks to investigate the probable effects of distinct OC dimensions on employee creativity. By examining the CVF, this study seeks to further contribute new insights into how employee creativity may or may not be engendered under dissimilar OC dimensions. Second, it attempts to bridge the gaps identified in the CTIC by employing concepts of the CVF in order to carefully determine what specific OC dimension actually engenders/inhibits employee creativity. Third, it seeks to investigate the role of top management leaders' benevolence and the likely effects it might have on employee creativity. Fourth, in an effort to bridge the growing discrepancy between OC and employee creativity, this study attempts to examine the moderating effect of top management leaders' benevolence on the impact of all OC

dimensions on employee creativity. With respect to the scope of this study, the highlighted aims would help to also shed more insights regarding the varying OC dimensions in which top management leaders' benevolence actually engender/inhibit employee creativity.

4. Empirical literature review and hypothesis development

Over the years, the arguments surrounding the paradigms of OC and employee creativity relationships suggest the controversies are yet to be systematically addressed. Several studies have found non-significant or negative relationships between OC (and its dimensions) and employee creativity (Hemmatinezhad, Shafiee, Sharari, & Hemmatinezhad, 2012; Mobarakeh, 2011; Yazdi, 2007). Conversely, several studies found significant and positive effects of OC (and its dimensions) on employee creativity (Amiri, Qayoumi, & Soltani, 2014; Einsteine & Hwang, 2007; Ghahreman, Tondnevis, Amirtash, & Kadivar, 2006; Karamipour et al., 2015). Furthermore, the study of Gupta (2011) reflects that an OC that is future-oriented and innovation centred has a positive effect on employee creativity. This shows that the conceptual underpinnings surrounding the OC and employee creativity relationship are yet a growing paradox that requires considerable attention.

4.1. The impact of adhocracy OC on employee creativity

Although, extant research may have addressed the relationship between OC and employee creativity, it yet remains unclear, because of mixed results from empirical studies (Gupta, 2011; Hemmatinezhad et al., 2012). Based on Cameron and Quinn's (1999) CVF, the features of adhocracy OC might cause one to deduce that it mirrors a high potential for increased creativity and innovativeness. Naranjo-Valencia et al. (2010) further stressed that adhocracy OC involves exploration of new opportunities and employee freedom to take calculated risks. Lau and Ngo (2004) also pointed out that this is the kind of OC that mirrors employee participation, shared responsibility, and creativity. Other studies (Gupta, 2011; Lau & Ngo, 2004) have emphasised that it must reflect a predisposition towards flexibility, constant learning, and an adequate degree of task autonomy. Naranjo-Valencia et al. (2010) further opined that an adhocracy OC encourages employee creativity. Hence, a strong support of an adhocracy OC could be required to engender employee creativity (Gupta, 2011).

H1. Adhocracy OC has a positive effect on employee creativity.

4.2. The impact of clan OC on employee creativity

The CTIC suggests that every employee is able to at least moderately exert creativity, in several domains (Amabile, 1997). However, because clan OC has a strong internal orientation focus, it is thus challenging to adopt values that encourage acquisition of creative ideas from the external environment (Cameron & Quinn, 1999; Gilson & Litchfield, 2017). Hence, Naranjo-Valencia, Jimenez-Jimenez, and Sanz-Valle (2017) accentuated that clan OC is negatively related to radical innovation, and radical innovation is a result of engendered employee creativity. Acar and Acar (2012) also supported that OCs that are internally oriented often prove disadvantaged (in terms of creativity) in comparison to externally oriented OCs. Likewise, as a result of strong internal focus, a homogeneous cluster could be created over time. This could repress the extent to which organisational members comprehend, critique, and implement novelty from very diverse perspectives (Tang & Byrge, 2016). It could also result in subsequent redundancy of shared ideas in homogenous clusters, and a lack of diversity of new ideas that are capable of challenging the current organisational status quo (Fernandes & Polzer, 2015). This could subsequently have a negative effect on employee creativity (Tang & Byrge, 2016).

H2. Clan OC has a negative effect on employee creativity.

4.3. The impact of market OC on employee creativity

Naranjo-Valencia et al. (2016) stressed that creativity is a feature that is absent in the market OC. The authors further pointed out that market OC values are not always sufficient to ensure organisational long term survival, and as such needs to be accompanied by other external conditions such as creativity. Values encouraged within a market OC often guide employees to become more focused on meeting strict targets, deadlines, and task accomplishments associated with organisational productivity (Lai & Lee, 2007). Hence, with a strong focus on organisational productivity, employee creativity may not be thoroughly engendered as little or no strong consideration is given to foster creativity initiatives that may result in cutting edge innovations (Sanz-Valle, Naranjo-Valencia, Jimenez-Jimenez, & Perez-Caballero, 2011). Therefore, Naranjo-Valencia et al. (2017) further highlighted that the market OC has a mechanistic orientation which does not favour employees' innovative behaviour. Hence, this study postulates that market OC would have a negative effect on employee creativity.

H3. Market OC has a negative effect on Employee Creativity

4.4. The impact of hierarchy OC on employee creativity

The hierarchy OC is basically known for its strict rules and tight control over employee actions and task processes. A dire mistake some top management leaders make is the application of hierarchy OC values to drive research and development (R/D) initiatives of their organisations (Gupta & Singh, 2012). Studies (Acar & Acar, 2012; Naranjo-Valencia et al., 2017) conclude that the hierarchy OC is known for its bureaucratic values, and these values are usually unsupportive of employee creativity. Extant research maintains that top management leaders should consider limiting strict rules to their lowest acceptable degree (Mittal & Dhar, 2015). This limitation is to promote a flexible control system within established sets of norms and procedures. Studies have espoused that unwarranted implementation of strict regulations and rules might actually suffocate employee creativity (Gupta & Singh, 2012; Wenxing, Pengcheng, Jianqiao, Po, & Jianghua, 2016). Therefore, as legalities and bureaucracies have a focus on operational efficiencies rather than task autonomy, it is anticipated that hierarchy OC may have a negative effect on employee creativity.

H4. Hierarchy OC has a negative effect on Employee Creativity

4.5. The moderating effect of benevolence on the impact of clan OC

Signs of benevolence may be easily observed via strongly exhibited benevolent acts of top management leaders towards organisational members (Mayer et al., 1995). Encompassed by strong clan OC features, and with a strong sense of top management leaders' benevolence towards employees, employees may feel a certain degree of autonomy to challenge the current status-quo. This act is argued to provoke initiatives such as employee involvement programs, employee-leaders' commitment and team work (Gupta & Singh, 2012). Initiatives such as these aid to inspire creative ideas that are imperative to engender employee creativity (Chughtai, 2016). However, a real challenge for top management leaders may subsequently be to find an acceptable balance that mirrors the extent that benevolence ought to help engender employee creativity, under a defined clan OC.

H5. Benevolence dampens the negative impact of clan OC on employee creativity.

4.6. The moderating effect of benevolence on the impact of adhocracy OC

One core challenge of top management leaders is often the development of organisational assumptions that can support a sustained OC,

and aid to achieve defined objectives (Hogan & Coote, 2014). In an adhocracy OC, organisational members constitute employees who are creative, innovative and entrepreneurial (Cameron & Quinn, 2006). Such employees are assets relevant for the growing global shift into an information age. In order to ensure the creativity of these employees is continually engendered, top management leaders may have to mirror a reputation that proves their benevolence (Wang & Cheng, 2010). This is in the wise of demonstrating emotions that reflect goodwill towards employees, thus motivating them to push themselves to become more creative and produce innovations. It is therefore espoused that benevolence have a positive effect on employee creativity (Castro et al., 2012; Lin et al., 2016).

H6. Benevolence strengthens the positive impact of adhocracy OC on employee creativity.

4.7. The moderating effect of benevolence on the impact of market OC

In order to maintain organisational effectiveness, top management leaders are faced with the challenge of constantly evolving in a growing competitive business environment. In a market OC the major focus is often on the external environment (such as suppliers and customers) rather than internal affairs (such as creativity development and innovative skills acquisition). This is mostly because the market OC operates mainly via economic market mechanisms (Cameron & Quinn, 2006). Thus, it may be even more challenging for top management leaders under a strong market OC, to develop values that drive organisations towards cutting edge innovations, which is mostly achievable through a workforce where employee creativity is strongly engendered (Jan & Hazel, 2013). This study postulates that the display of top management leader's benevolence might prove useful in aiding to develop shared values expedient for engendering employee creativity. Employees who strongly believe that their top management leaders care a lot about them, could be easily motivated to welcome and pick up new values introduced by top management leaders. Such values (if geared to foster innovative initiatives) may be relevant to engender employee creativity. In this regard, organisations under a market OC might be able to thrive and sustain their competitive edge.

H7. Benevolence dampens the negative impact of market OC on employee creativity.

4.8. The moderating effect of benevolence on the impact of hierarchy OC

It is one thing to embrace the opportunity and zeal to exercise authority and control. This is likely an everyday routine for top management leaders. However, it is another thing to be able to subject authority and control to an acceptable minimum. Likewise, this reflects a perpetual challenge for top management leaders under a strong hierarchy OC (Weibel, 2007). This challenge is often because values shared in order to achieve success, mirror standardised rules and procedures, accountability mechanisms, and lines of decision-making authorities. A strong experience of hierarchy OC tends to have a negative effect on employee creativity (Naranjo-Valencia et al., 2016). Nevertheless, a strong perception of top management leaders' benevolence may instil positive ideologies in employees, and thus, dampen old perceptions of forceful control and suffocation (Yang & Hung, 2015). This could promote a platform which further encourages the integration of values and effective exchange of creative ideas as employees relate an acceptable degree of benevolence towards each other (Castro et al., 2012).

H8. Benevolence dampens the negative impact of hierarchy OC on employee creativity.

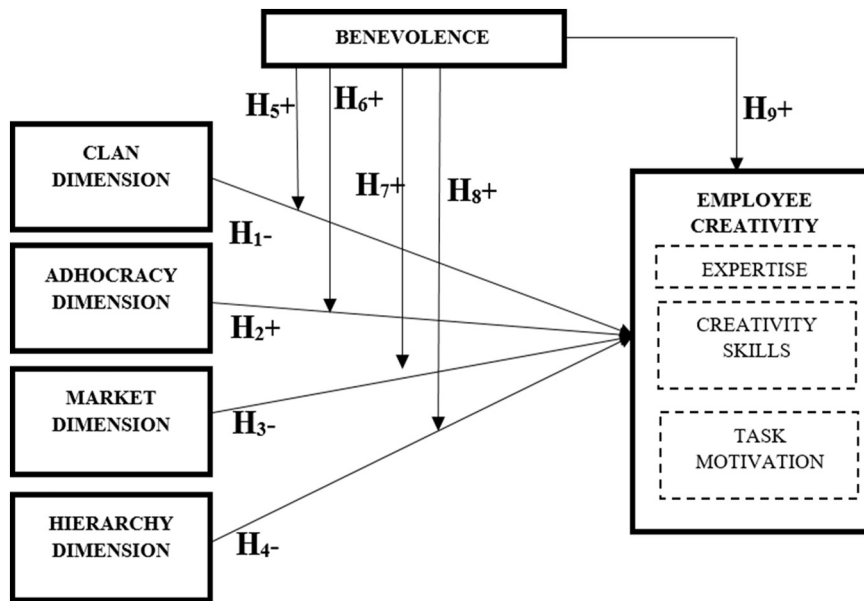


Fig. 1. Conceptual model.

4.9. Effect of benevolence on employee creativity

This study also accentuates the need for top management to not overlook the role benevolence plays in engendering employee creativity. This is such that a show of top management's kindness and goodwill towards employees may have a positive effect on employee creativity (Yang & Hung, 2015). Employees who perceive their top management leaders have good intentions towards them may rarely get scared or worried about sharing their creative ideas (Gilson & Litchfield, 2017). It is unlikely for employees to feel threatened when they perceive top management leaders as being benevolent towards them. Hence, employee creativity could be consequently engendered as a result of expressions of kind emotions exhibited by top management leaders towards their employees (Zhou & George, 2003).

H9. Benevolence has a positive effect on employee creativity.

The conceptual model, as illustrated in Fig. 1, outlines the moderating effect of benevolence on the impact of OC on employee creativity. A growing number of studies have examined employee creativity as either a multidimensional or unidimensional construct (Birdi, Leach, & Magadley, 2016; Martins & Terblanche, 2003; Wenxing et al., 2016). This discrepancy is due to a high lack of homogeneity of perceptions regarding the phenomenon of employee creativity (Kaufman & Beghetto, 2009; Merrotsy, 2013). This is also due to the diverse perceptions of the attributes which defines a creative employee or due to differences observed in the empirical examination of the employee creativity concept (Merrotsy, 2013; Mehlika et al., 2014). Consequently, with respect to the growing controversies rising within the primal concept of creativity, and for the sake of this study's overall aims and objectives, this study, examines the employee creativity concept as a unidimensional construct. This means that all distinct dimensions within the employee creativity construct are analysed, subsequently scored, and further integrated to reflect just one variable: employee creativity.

5. Research design

5.1. Measures

This study employed the use of a questionnaire which was prepared in English. A 7-point Likert scale ranging from strongly disagree to

strongly agree was employed. To investigate top management leader's benevolence, five statements were adapted from Mayer and Davis (1999). An example of the statements is, "top management of my organisation is very concerned about my welfare." Reliability for the items within this measurement scale ranges from 0.88 to 0.89 (Mayer & Davis, 1999).

A total of 24 items were adapted from Cameron and Quinn (1999) to measure organisational culture dimensions. Reliability for this measurement scale ranges from 0.71 to 0.80 (Heritage et al., 2014). Examples of these items include, "top management leaders of my organisation are generally perceived to be organizers, parental figures or mentors", and "my organisation is a very self-motivating and entrepreneurial place where employees are willing to participate in risk taking activities."

10 separate items were adapted from Kaufman (2012), Runco, Plucker, and Lim (2001), and Robinson et al. (2014) to measure employee expertise, creativity skills, and task motivation respectively. Birdi et al. (2016) reflect a Cronbach alpha of 0.76 for the expertise component, while intrinsic motivation is a 0.79 and creativity skills is 0.90.

5.2. Sample size and data collection procedure

The target population of this study is located in the headquarters of 21 manufacturing organisations in Nigeria. Despite the distinct locations of the target population, the same operating OC employed in each headquarter, is also applied in their respective branches nationwide (Ezirim, Nwibere, & Emecheta, 2010). Hence, this study's results can be generalised. The manufacturing organisations are located in 7 different states of Nigeria. They characterize a hub of manufacturing organisations in Nigeria (Usman & Amran, 2015; Uwalomwa & Jafaru, 2012). The 21 manufacturing organisations are also indexed in, and recognized by the Nigerian Stock Exchange commission (The Nigerian Stock Exchange, 2016). Use of the Nigerian Stock Exchange Commission to identify the list of the 21 manufacturing organisations is also considered appropriate by extant studies (Usman & Amran, 2015; Uwalomwa & Jafaru, 2012).

In order to aid in obtaining a stratified proportionate sampling of employees in each manufacturing company, we employed the Krejcie and Morgan (1970) determinant of sample size to guide the measurement of its sample size. Of the 510 questionnaires sent out, 439 were

Table 1
Sampling design, summary of descriptive statistics and reliability and validity of measurement model.

States	Companies	Questionnaires distributed	Questionnaires returned	Response rate 86%	% of population
Lagos	15	390/390	336	86	77
Rivers	1	26/26	22	84	5
Anambra	1	23/23	20	87	5
Gombe	1	19/19	16	84	4
Edo	1	20/20	18	90	4
Ogun	1	17/17	14	82	3
Sokoto	1	15/15	13	86	3
Total	21	510	439	439	100

Constructs	N	Mean	Standard deviation	CA	CR	AVE	VIF
Adhocracy	439	5.6317	1.42500	0.945	0.958	0.819	1.032
Benevolence	439	5.9071	1.57839	0.914	0.939	0.795	1.030
Clan	439	5.9176	1.58128	0.954	0.965	0.845	1.019
Creativity skills	439	5.2179	1.63729	0.939	0.950	0.731	Endogenous
Expertise	439	5.8960	1.57486	0.952	0.960	0.751	Endogenous
Hierarchy	439	5.9194	1.55818	0.935	0.956	0.878	1.009
Market	439	5.2916	1.76172	0.967	0.975	0.885	1.048
Task motivation	439	5.1944	1.65302	0.942	0.948	0.724	Endogenous
Valid N (listwise)	439						

Note: Sample (N); CA (Cronbach alpha); CR (composite reliability); AVE (average variance extracted); VIF (variance inflation factor).

completed, returned and also found suitable for analysis. This reflects an 86% response rate. This response rate is congruent with that of extant literature (Jubril, Raji, Banjo, & Olayinka, 2014; Maduka & Okafor, 2014). Table 1 indicates the number of distributed and returned questionnaires, and percentage rate of responses per state of manufacturing companies. Lagos state has the highest number of manufacturing companies in our study. This is because Lagos envelopes the highest concentration of manufacturing companies, and it is the major trading hub in Nigeria (Usman & Amran, 2015).

The respondents were aged between 20 and 60 years ($M = 2.07$, $SD = 0.86$). The total number of female respondents is 47.8%, compared to a total of 52.2% males. This reflects that males have not been overrepresented in this study. A slightly higher percentage of respondents (51.5%) are within the R&D departments as compared to 48.5% of respondents who are from IT departments. Qualifications of participants ranged from undergraduate degree holders (52.6%), master's degree holders (39.4%), Ph.D. holders (4%), to only 4% with a diploma or equivalent.

Three research assistants who were members of the Nigerian Institute of Social and Economic Research (NISER) were recruited for data collection, and were trained on the overall scope, aims and objectives of this study. Questionnaire items were evaluated by six senior researchers and experts. A pilot study was further initiated. Fifty employees were used to conduct the pilot study. This is congruent to the discourse of extant literature that have highlighted an appropriateness of 50 employees in a pilot test initiative (Artino, La Rochelle, Dezee, & Gehlbach, 2014). Pilot study data was collected from employees of 3 different branches of 3 different manufacturing companies. The results of the pilot test were analysed using SPSS software version 22. The results revealed that 15 items out of 59 items loaded below the recommended threshold of 0.70. Hence, they were dropped (Sarstedt, Ringle, Smith, Reams, & Hair, 2014; Yong & Pearce, 2013). This reduced the total number of indicator items to 44.

Furthermore, actual data collection processes for this study also involved contacts with respective Human Resources Managers (HRM) of each manufacturing organisation. Based on an official request to each HRM, employees were met by the research assistants for a five-minute briefing concerning the questionnaire aims, distribution and collection processes. The employees were each given an envelope containing a questionnaire. They were advised to complete all the sections and return the questionnaires in the sealed envelopes to the HRM accordingly. The sealed envelopes were subsequently collected by the research

assistants for further collation purposes.

5.3. Analysis

This study employed a Variance Based Structural Equation Modelling (VB-SEM) technique to also guide its analysis. Smart PLS 3 software was utilized in this study's exploratory and confirmatory factor analysis (EFA and CFA). The SPSS software version 22 was employed to analyse the descriptive statistics and demographics of this study. To prevent common method bias, participants were assured that their identities would remain entirely anonymous. Podsakoff, MacKenzie, Lee, and Podsakoff (2003) suggest that assurance of respondent's anonymity could cause them to be less likely to edit their responses and have less evaluation apprehension. Additionally, Kock (2015) recommends a noteworthy approach for examining common method bias for studies that employ PLS-SEM.

The occurrence of a VIF greater than 3.3 is proposed as an indication of pathological collinearity, and also as an indication that a model may be contaminated by common method bias. Therefore, if all VIFs resulting from a full collinearity test are equal to or lower than 3.3, the model can be considered free of common method bias (p.7).

Thus, at the factor level model estimation, the VIF was assessed in the collinearity diagnostics for values greater than the recommended threshold of 3.3 (Hair, William, Barry, & Rolph, 2010; Kock, 2015). Results indicated that all values are less than 3.3, indicating no common method bias (see Table 1). Therefore, it can be inferred that common method bias did not influence participants' responses. Participants were also educated employees with considerable expertise to answer the questionnaire items. Questionnaires distributed were duly structured and examined by experts to avoid vague concepts and were designed to provide answers about the current rather than retrospective state of OC, employee creativity and their perceptions of top management leaders benevolence. This helped to mitigate the issue of retrospective bias (Roese & Vohs, 2012). Hence, respondents were motivated to answer correctly and precisely (Podsakoff, MacKenzie, & Podsakoff, 2012). To test for non-response bias, late and early responses of respondents on principal constructs were compared. Early respondents (52%) were compared with those of late respondents (48%) using the independent sample t-test. Result revealed no significant difference on all variables. This suggests that responses are typical of target population (Armstrong & Overton, 1977).

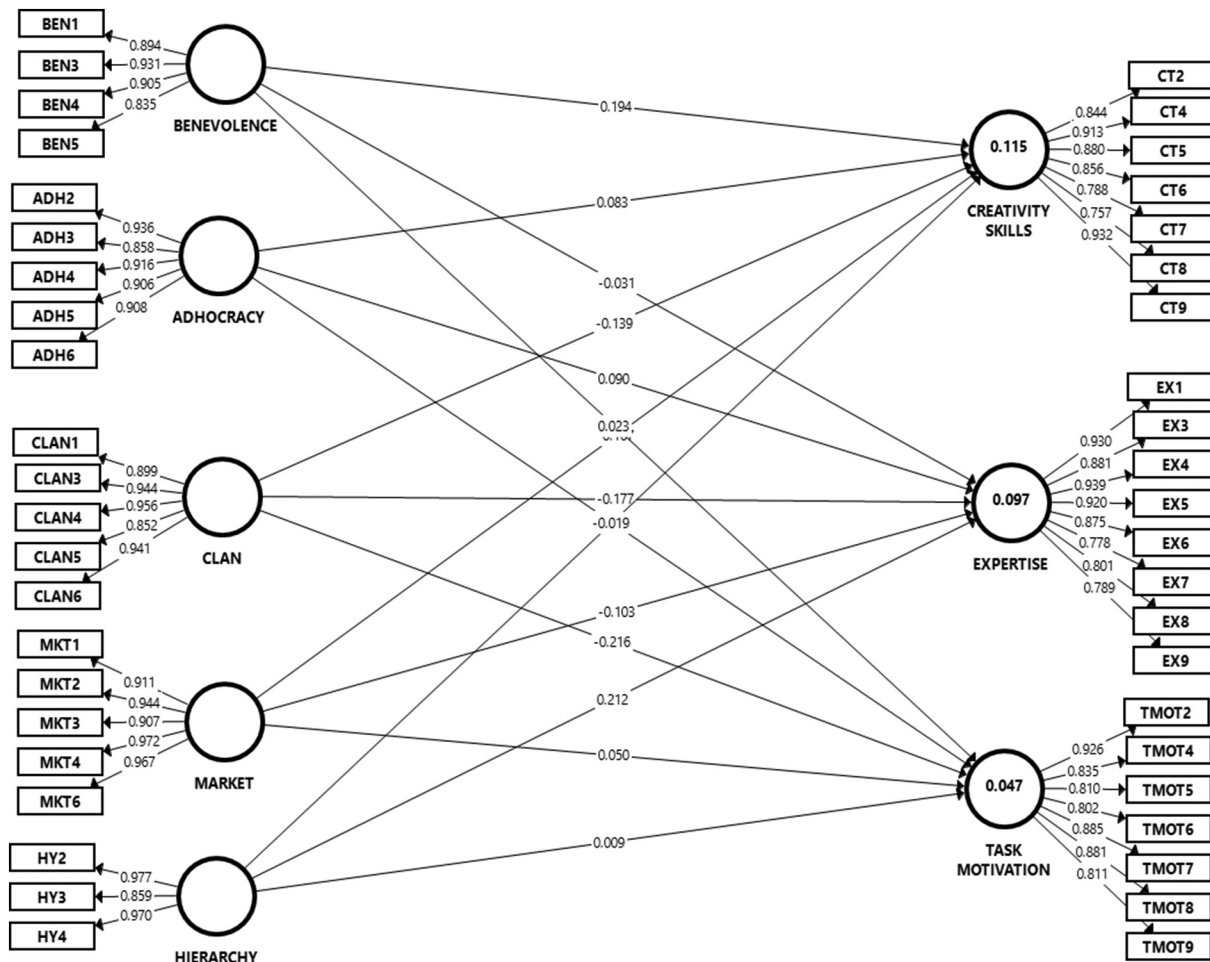


Fig. 2. Measurement model.

6. Empirical findings and discussion

The descriptive statistics in Table 1 shows the results of the mean and standard deviation (SD). The mean of 5.9 out of 7 indicates that a majority of the respondents mainly agree that their top management leaders are benevolent towards them. For SD, all the scores represented are relatively close to each other. There is not much of a difference between market and benevolence or adhocracy. It could be inferred that the constructs have been evenly dispersed, thus suggesting normality of data distribution.

In examining the measurement model, metrics of initial output were used to assess the outer model measurement characteristics as identified by the constructs and their measurement items. Fig. 2 highlights that all measurement items exceed the threshold of 0.7 (Sarstedt, Ringle, Smith, Reams, & Hair, 2014). This suggests that all the measurement items critically contribute to their individual constructs. As shown in Table 1, Cronbach's Alpha (CA) and Composite Reliability (CR) ranged from 0.91 to 0.96 and 0.93 to 0.97 for all eight constructs respectively. The results exceed the minimum requirement of 0.7, thus confirming the internal consistency and reliability of all constructs. The AVE for all constructs also exceeded 0.70, which is larger than the threshold of 0.50, thus demonstrating convergent validity for all the constructs (Hair, Sarstedt, Ringle, & Mena, 2012).

The VIF has also been examined to test for possible issues of multicollinearity (Table 1). A range of 1.009 to 1.048 of the VIF values for all the constructs confirms sufficient construct validity by a lack of multicollinearity. This is also because the values fall significantly below the minimum threshold of 9 (Yong & Pearce, 2013). In order to test for

discriminant validity, the Heterotrait-Monotrait Ratio (HTMT) has been applied. The HTMT developed by Henseler, Ringle, and Sarstedt (2015) is espoused to be a higher boundary criterion for examining discriminant validity. As an estimate for factor correlation, the HTMT should be significantly smaller than one (ideally < 0.850) in order to evidently distinguish between two factors (Henseler, Hubona, & Ray, 2016). The results of Table 2 show a range of 0.044 to 0.183. These figures fall significantly below the threshold of 1.0, hence indicating all constructs are explicitly independent of each other and that the criterion for discriminant validity has been met.

To assess for measurement model fitness, this study follows the guide of Henseler et al. (2016) to highlight the fitness of the measurement model. The authors recommend that researchers ought to examine the saturated model and Standardized Root Mean Square Residual (SRMR) at a 95% bootstrap quantile. They further advocate that the SRMR is the only approximate model fit criterion applied for PLS path modelling. Additionally, the d_G and the d_{ULS} (Dijkstra & Henseler, 2015) which are distance measures that relate more than one way to quantify the discrepancy between two matrices have also been accentuated to contribute to model fitness index in PLS (Henseler et al., 2016). Table 2 shows that the d_G and the d_{ULS} are 6.522 and 4.120 respectively. This reflects an indication of a well-fitting measurement model (Dijkstra & Henseler, 2015). Additionally, the SRMR is 0.065. This is below the cut-off of 0.08 (Hu & Bentler, 1999) implying that the measurement model fit this study.

Whilst the measurement model of this study mirrors an assessment of mainly reflective measurement scales (outer model), in the structural (inner) model examines employee creativity as a unidimensional

Table 2
Measurement model fit and heterotrait-monotrait ratio (HTMT) test.

	ADHO	BEN	CLAN	CS	EXP	HRY	MKT	TASK MOT	Items	Saturated model
ADHO									SRMR	0.065
BEN	0.134								d_{ULS}	4.120
CLAN	0.037	0.044							d_G	6.522
CS	0.139	0.225	0.181							
EXP	0.109	0.108	0.191	0.063						
HRY	0.022	0.074	0.059	0.055	0.183					
MKT	0.141	0.120	0.136	0.222	0.132	0.053				
TASK MOT	0.040	0.068	0.190	0.253	0.192	0.077	0.053			

Notes: ADHO (adhocracy); BEN (benevolence); CS (creativity skills); EXP (expertise); HRY (hierarchy); MKT (market); TASK MOT (task motivation).

construct. Since employee creativity is a formative latent construct, the approach for its analysis ought to be given careful considerations in order to allow for predictability of all the constructs represented in the measurement model (Hair, Ringle, & Sarstedt, 2013). Therefore, as recommended by Hair et al. (2013), this study employs the two-stage approach also advocated by Ringle, Sarstedt, and Straub (2012). Ringle et al. (2012) introduced an approach by which latent formative constructs may be examined. The first stage involves obtaining latent variable scores for all sub-constructs, but excluding the latent construct. The latent construct is only estimated in the second stage which contains the structural model. In the second stage, all sub-constructs are represented by their respective latent variable scores. Thus, the scores of the sub-constructs (in this case, employee creativity dimensions) distinctively serve as manifest variables of the latent construct (employee creativity). In this case, they are fully represented and mirrored to predict, and allow for the prediction of, employee creativity by other constructs of organisational culture and benevolence, respectively. Following from Fig. 2, the next line of action was to obtain respective Latent Variable Scores (LVS) for all constructs examined. Employee creativity is made up of results of the computed latent variable scores of all its sub-constructs and has been introduced in the structural model (Ringle et al., 2012).

To further examine the structural model, several empirical thresholds for statistical significance, effect sizes, and R^2 values ought to be taken into account. To examine the statistical significance of path coefficients, Hair, Ringle, and Sarstedt (2011) recommended a minimum threshold of 1.65 t -statistics values at $p \leq 0.1$ confidence interval. Likewise, Lowry and Gaskin (2014) espouse that effect sizes of 0.35, 0.15, and 0.02 indicate a large, medium, and small effect, respectively. Sarstedt et al. (2014) highlighted that R^2 values of 0.75, 0.50, and 0.25 reflect substantial, moderate, and weak values respectively. To attain the significance levels, the consistent PLS bootstrapping option was initiated using 5000 subsamples (Hair, Gabriel, & Patel, 2014)

In Fig. 3, an examination of the coefficient of determination (R^2) is also considered to comprise the degree of variance explained by all five exogenous constructs in this study. The result of R^2 in this study is 0.215, showing a weak degree of variance explained in employee creativity. However, recall that Hair et al. (2013) recommended that an acceptable R^2 level is contingent upon the kind of research in question. Despite the degree of variance explained, bootstrapping results from significance test of the R^2 value indicates that it is nevertheless, statistically significant (t -statistics, 2.721; $p \leq 0.01$). It thus suggests that all five exogenous constructs together reflect significant explanations of the variance in employee creativity and are therefore considered meaningful for purposes of further interpretation (Hair, Hult, Ringle, & Sarstedt, 2014).

In Fig. 3, adhocracy OC has the strongest positive impact and predictive capability on employee creativity followed by benevolence. However, market OC has the strongest negative impact on employee creativity, seconded by clan OC. Conversely, hierarchy OC is shown to have no impact on employee creativity. Results of respective levels of

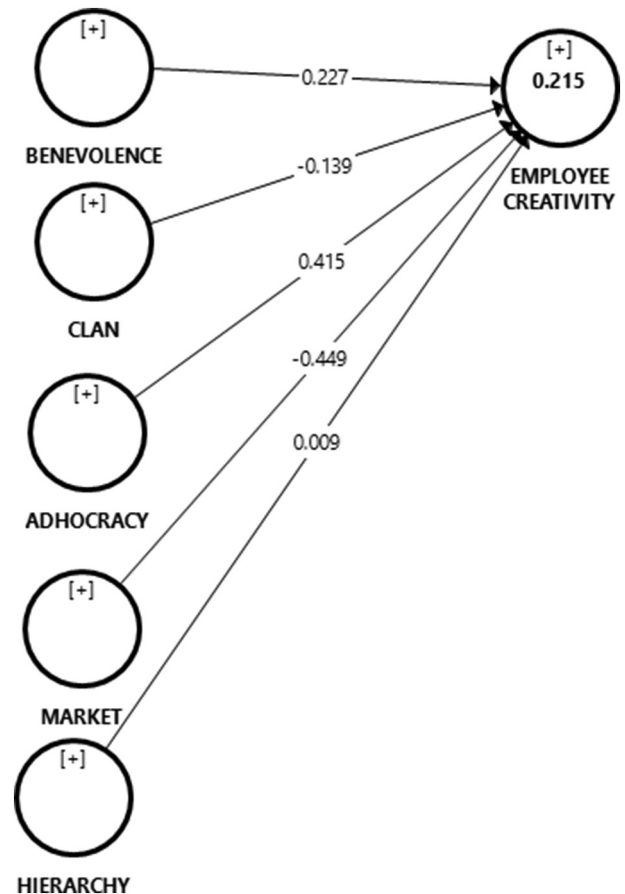


Fig. 3. Structural model and PLS-SEM estimates.

significance of path coefficients in Table 3 indicate that benevolence and adhocracy OC have significant positive effects on employee creativity. This confirms the initial predictions of H2 and H9 at $p \leq 0.05$ and $p \leq 0.01$ respectively. Clan OC has a significant negative effect on employee creativity. This also confirms the initial postulation of H1 at $p \leq 0.01$. Additionally, H3 is supported at $p \leq 0.01$, but H4 is not supported since it is not statistically significant.

To foster explicit understanding of the moderation interaction graphs, please note that the green, blue, and red lines in the interaction graphs of Figs. 4, 5, 6, and 7 signify the moderator's high, mean, and low positions, respectively. Results of Fig. 4 and Table 3 indicate that top management leaders' benevolence has no statistical significance and moderating effect on the relationship between clan OC and employee creativity. This result thus fails to support H5. Likewise, Fig. 5 suggests that top management leaders' benevolence inverts the positive relationship between adhocracy OC and employee creativity.

This also signifies that under an adhocracy OC, when benevolence is low, there is an increase in the level of employee creativity, as

Table 3
Structural model path analysis.

Constructs in structural model	PE	Effect size (f ²)	t-Statistics	p-Values @ < 0.1	Decision
Adhocracy → employee creativity		0.101	1.919	0.055	Supported
Benevolence → employee creativity		0.061	3.999	0.000	Supported
Clan → employee creativity		0.024	2.491	0.013	Not supported
Hierarchy → employee creativity		0.000	0.195	0.846	Not supported
Market → employee creativity		0.118	2.916	0.004	Supported
Moderating effects					
BEN (adhocracy-employee creativity) → employee creativity	-0.495	0.313	5.413	0.000	Not supported (-sign)
BEN (clan-employee creativity) → employee creativity	0.051	0.004	0.693	0.488	Not supported
BEN (hierarchy-employee creativity) → employee creativity	-0.211	0.075	3.554	0.000	Not supported (-sign)
BEN (market-employee creativity) → employee creativity	0.364	0.175	5.116	0.000	Supported

Notes: BEN (Benevolence); PE (Point Estimates)

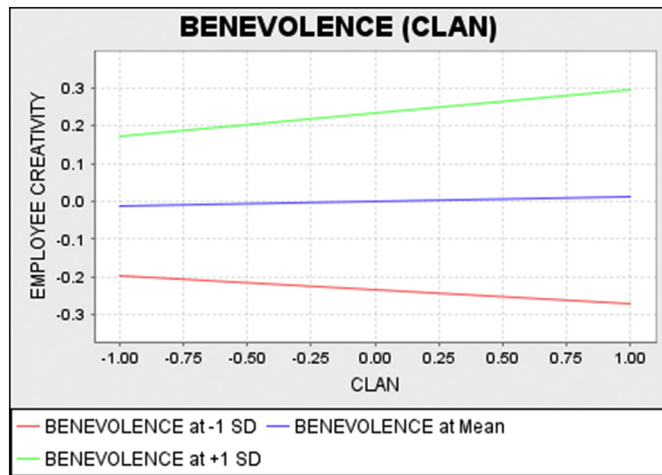


Fig. 4. Moderating effect of top management leader's benevolence on the impact of clan organisational culture on employee creativity.

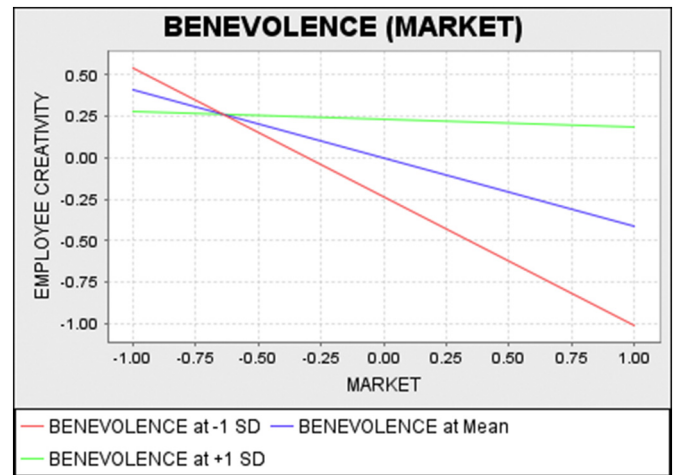


Fig. 6. Moderating effect of top management leader's benevolence on the impact of market organisational culture on employee creativity.

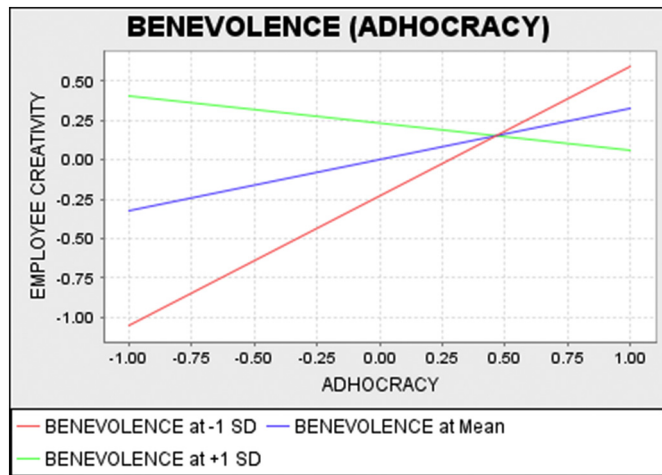


Fig. 5. Moderating effect of top management leader's benevolence on the impact of adhocracy organisational culture on employee creativity.

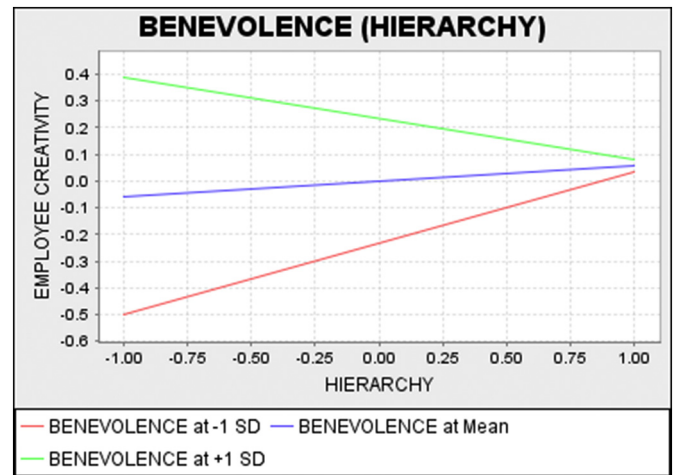


Fig. 7. Moderating effect of top management leader's benevolence on the impact of hierarchy organisational culture on employee creativity.

compared to a decrease in employee creativity when benevolence is high. Table 3 shows that the moderating effect of the size of benevolence on this impact is rather strong or large. This also indicates the amount of change that would occur in employee creativity if benevolence is increased by 1 and adhocracy OC remains constant. Nevertheless, H6 is not confirmed, in that benevolence is demonstrated as a significant negative moderator (Table 3). Conversely, Fig. 6 highlights that benevolence weakens the negative effect of market OC on employee creativity. The nature of this interaction suggests that under a

market OC, an increase in top management leaders' benevolence would mean an increase in employee creativity and vice versa. Table 3 indicates that benevolence has a significant and positive moderating effect on the impact of market OC on employee creativity. Likewise, it has a medium level of moderating effect, based on its effect size in Table 3. This thus confirms H7.

Initial predictions of H8 have not been confirmed, in that benevolence plays the role of a rather significant and negative moderator (Table 3). This is supported by the nature of interaction in Fig. 7. Given

a point estimate of -0.211 (Table 3), the nature of interaction suggests that benevolence inverts the positive relationship between hierarchy OC and employee creativity. Thus, under a hierarchy OC, an increase in top management leaders' benevolence would lead to a decline in employee creativity, as compared to an increase in employee creativity when benevolence is low. However, benevolence has a weak moderating effect as highlighted in Table 3. On this note, Lowry and Gaskin (2014) advocate that when using the product indicator approach (for moderation examination), even small effects indicate important model relationships. Furthermore, since the SRMR is the overall basis for model fitness in PLS SEM, the SRMR shows a value of 0.073 (t -statistics, 8.568; $p \leq 0.01$). This result consequently validates the overall model fit of this present study.

7. Summary and conclusion

7.1. Summary of findings

This study found that top management leader's benevolence, and adhocracy OC dimension have positive and significant effects on employee creativity. These results are in agreement with the discourse of several studies that have also explored the impact of benevolence and adhocracy OC dimension on employee creativity (Castro et al., 2012; Gupta, 2011; Yang & Hung, 2015). This further confirms this study's position, and prior argument raised by Lin et al. (2016), and Karakas and Sarigollu (2012). The authors emphasised that by being humane, supportive, caring, kind, and considerate, top management leaders might actually be able to engender employee creativity. This is with regards to this study's exemplified positive and significant impact of benevolence on employee creativity. This study's findings are also similar to the findings of Naranjo-Valencia et al. (2016) and Naqshbandi and Kamel (2017), which mirrored a significant positive relationship between adhocracy OC and employee creativity. Likewise, the CTIC also espoused that features such as employee autonomy, risk taking (which reflect the adhocracy OC) could aid to engender employee creativity. This is consistent with this study's findings which indicates that adhocracy OC has a positive and significant impact on employee creativity, thus, complementing the theoretical position espoused by the CTIC.

Similarly, Naranjo-Valencia et al. (2016) and Sanz-Valle et al. (2011) found no significant effect regarding clan and market OC. In contrast, our study demonstrated that clan and market OC display significant negative effects. Although, studies (Naqshbandi & Kamel, 2017; Naranjo-Valencia et al., 2016; Sanz-Valle et al., 2011) have found that hierarchy OC has a negative effect, results of this study support the findings of Yesil and Kaya (2013), which indicate that Hierarchy OC has no effect. This finding also supplements the theoretical viewpoint of the CTIC which highlights that stringent rules and control such as is found in the hierarchy OC, does weaken employee creativity, and therefore should be addressed with caution or avoided. Consequently, finding no impact of hierarchy OC on employee creativity in this study further indicates that it is not a recommended OC for engendering employee creativity. Likewise, this study demonstrated that benevolence has no significant moderating effect on the impact of clan OC dimension on employee creativity. Benevolence has been demonstrated to negatively moderate the impact of adhocracy and hierarchy OC on employee creativity. Based on Figs. 5 and 7, it could thus be inferred that top management leaders' high standards and high expectations from employees, may be a probable cause for the negative moderating effects.

Figs. 5 and 7 indicate that just at the slope of the mean, top management leaders were already exhibiting high level of benevolence. This might have emanated from a habit of often ensuring they are continuously perceived by employees as having high standards of benevolence in order to drive employee creativity initiatives. In retrospect of the debate of Karakas and Sarigollu (2012), and Lin et al. (2016), an increase of several benevolent characteristics in top

management leaders, may be able to help influence the perceptions of their employees who in turn might feel obligated to reciprocate the kindness, and commitment of top management leaders. Wang and Cheng (2010) further supported that employees may consequently increase their commitments towards exhibiting behaviours and attitudes that could help engender employee creativity, on account of reciprocity. Moreover, when exhibiting high standards of benevolent behaviours, top management leaders tend to expect their employees to uphold such high standards in themselves as well (Wenxing et al., 2016). However, studies (Baer, 2012; Zhou & George, 2003) argue that employee creativity may suffer certain consequences due to top management's high expectations and subsequent push on their employees. An example of this consequence could be increased workplace stress levels of employees. The increase in workplace stress could hinder and have an adverse negative effect on employee creativity (Thomas & Eileen, 2006). Employee workplace stress could also be a result of inappropriate demands that are expected to mirror employees' high benevolent standards, or demands that might often be expected to exceed employees' benevolent capabilities. Further, it may be perceived by employees to be detrimental to their job positions or beliefs, during and/or after the demand is fulfilled (Ren & Zhang, 2015).

These demands could reflect forms of strain. For example, tension, exhaustion, anxiety, anger, confusion, pressure, and lack of focus. Employees who are mentally unproductive cannot think creatively nor contribute towards employee creativity initiatives (Castro et al., 2012). It may happen that employees might not only remain passive, but further minimize their efforts by exhibiting withdrawal behaviours from employee creativity initiatives (Hon, Chan, & Lu, 2013). This could lead to a subsequent decline in employee creativity for a manufacturing organisation (Axtell, Holman, & Wall, 2006).

This study also shows that benevolence is quite important under a market OC. Given the negative impact of market OC as previously espoused in the findings of Dadgar, Barahouei, and Mohammadi (2013), it could be quite challenging for top management leaders to directly influence employee behaviours and subsequently engender employee creativity. Insights from empirical research (Hemmatinezhad et al., 2012; Naranjo-Valencia et al., 2016) have previously emphasised that features of the market OC are closely tied to productivity, competition, and increase of market shares. However, in view of the positive moderating effect of benevolence, employee creativity could be engendered via an increase in expressed emotions of goodwill and kindness towards employees. It takes a certain degree of employees' perceptions of top management leaders' benevolence to get an employee to exert certain creative behaviours and engage in creativity initiatives (Castro et al., 2012). A certain degree of benevolence is thus needed to cause employees to decide on being willing to share their creative ideas which could subsequently aid to engender employee creativity.

7.2. Contributions

This study is among the first to empirically investigate the moderating effect of top management leaders' benevolence on the impact of OC dimensions on employee creativity in Nigerian manufacturing industry. This study has therefore demonstrated that OC mirrors positive and negative, significant and insignificant effects on employee creativity. Several extant studies have examined the OC concept from a unidimensional perspective (Jan & Hazel, 2013) or in terms of mainly its descriptive characteristics (Hogan & Coote, 2014). Investigations of a growing body of literature (Deshpande, Farley, & Webster, 1993; Naranjo-Valencia et al., 2010, Lau & Ngo, 2004; Obenchain & Johnson, 2004) that has employed the CVF in order to examine OC effects on employee creativity, have notably resulted in question of endogeneity issues. This is due to a lack of not examining the four dimensions of the CVF. Although these approaches may have produced relevant findings, they are often limited to mainly a narrow view of the depth of what OC

really is. Hence, its several conflicting definitions. Therefore, it could be inferred that results obtained from these studies (Deshpande et al., 1993; Naranjo-Valencia et al., 2010; Lau & Ngo, 2004; Obenchain & Johnson, 2004) could both be limiting and/or misleading. This is because they failed to include the insights of all OC dimensions, and how these various dimensions impact employee creativity. It is deemed misleading as it may guide readers to develop a perception that organisational culture mainly demonstrates a particular kind of impact on employee creativity.

Therefore, this study has attempted to bridge these gaps. It contributes both theoretical and empirical insights by highlighting and profiling four distinct OC dimensions of the Nigerian manufacturing industry (based on the CVF). This study has also examined their various impacts on employee creativity, and this has led to its rather significant findings. This study also contributed to the theoretical insights by further confirming that the hierarchy OC dimension is an obstacle to employee creativity. Conversely, this study confirmed that the adhocracy OC is a facilitator, and can actually engender employee creativity. This finding was rather lacking in the theoretical undergirding espoused by the CTIC. Given the substantial negative effect of market OC on employee creativity (Table 3), this study demonstrated that top management leaders' benevolence dampens the substantial negative effect (Fig. 6). It gives further clarity into the insights of top management leaders' benevolence that may be too high or too low. This is with regards to the significant and negative moderating effects that benevolence also has on employee creativity, and with respect to the prevalent OC dimensions in which they manifest.

7.3. Implications

As a consequence of Fig. 5, this study demonstrated that under an adhocracy OC, top management leaders ought to be cautious of not exerting too high benevolence. This is because it tends to have significant negative effects on employee creativity. The negative effects may appear in the form of work stress, due to pressure employees may experience from top management leaders' expectations of them. As employees struggle with work stress, it could be challenging for them to become more productive in initiatives requiring an exhibition of creative behaviours. Hence, employee creativity may subsequently suffer a decline, and further become less engendered. This could dampen the possible growth of innovative prowess of manufacturing organisations which are expected to contribute immensely towards national economic growth. Since employee creativity resides at the centre of organisational innovation, policy makers ought to ensure it is continuously engendered and not overlooked. Likewise, top management leaders should try to avoid employing a hierarchy OC, to engender employee creativity. This study confirmed the findings of extant literature that espoused that it does not have any significant effect on employee creativity. Similarly, manufacturing organisations ought to note that hierarchy OC features, such as stringent rules and excessive control of employees does not help to engender employee creativity. With respect to already highlighted extant research, the hierarchy OC might otherwise mirror subsequent increase of employee work stress levels, and this could further inhibit anticipated innovative outcomes of manufacturing organisations. Considering the supposed substantial contributions of the Nigerian manufacturing industry towards economic growth, it is thus, relevant to institute strict policies that might help combat the application of stringent rules and excessive control among manufacturing organisations.

Manufacturing organisations that are interested in engendering employee creativity, but are already strongly influenced by a hierarchy OC, might have to consider finding an acceptable balance of top management leaders' benevolence or execute an adhocracy OC change entirely. Similarly, for organisations seeking to engender employee creativity under a predominant market OC, considerations could be tailored towards applying an acceptable degree of top management leaders'

benevolence. This is because benevolence reflect a positive and significant moderating effect that nullifies the significant negative impact of market OC on employee creativity.

Further, result of this study reflects that, when compared to market, clan, or hierarchy OC, manufacturing organisations with adhocracy OC would likely exhibit higher employee creativity. Adoption of the adhocracy OC could lead to production of novel results that can foster more innovations within Nigeria. Increase in innovations could aid to create new job opportunities, and richly foster wealth creation, which is needed to support Nigeria's economy. It could also boost Nigeria's global recognition for creativity and thus, attract more investors. Likewise, manufacturing organisations with benevolent top management leaders are quite likely to thrive in the long run and build stronger competitive edge when they give strong considerations and support to engender employee creativity. Moreover, there is also a need for the development of policies that supports and encourage creativity. Policy makers should therefore advance initiatives that can motivate organisational leaders to adhere to the adoption of an adhocracy form of OC in order to engender employee creativity. Policy makers may also consider instituting control measures and employee feedback systems so as to mitigate the negative moderating effects of top management leaders' benevolence.

7.4. Limitations and avenues for future research

Although the results of this study could be employed in similar contexts across Nigeria, it is not without limitations. With respect to this study's scope, the focus has been on an individual level. This may not relay sufficient information compared to examining this study from an organisational level perspective. Future studies should investigate the aims and objectives of this study from an organisational level perspective. A much broader insight into engendering employee creativity could be achieved since a view into an organisational level would mean introducing new constructs into the study. The use of a cross-sectional research design may have restricted the possibility of obtaining deeper insights into the OC and employee creativity relationship and the degree of top management benevolence. Hence, future studies might initiate a longitudinal research design in order to foster more collection of data. This may help to engender comparability of results, spanned across periodic empirical investigations.

Generalizability of this study's results should be addressed with caution, as information obtained during data collection processes did not originate from a specific manufacturing company across all 37 states of Nigeria. However, it is yet reliable as investigations were initiated in the headquarters of all 21 recognised manufacturing organisations. Each headquarter wholly represented and reflected the overall aims and objectives of this study. Examining employee creativity as a multidimensional construct rather than a unidimensional construct may also help to contribute significantly to the investigations and results of future studies. This study has been centred mainly on employee's perceptions. Future studies may investigate top management leaders' perception of their own creativity, organisational culture, and employees' benevolence. The focus of this study was on Nigerian manufacturing industry. Future studies may consider examining other industry sectors like mining, oil or services industry sectors within and across Nigeria. These sectors also have a potential of making positive significant contributions that stems from their plausible association to employee creativity.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

References

- Acar, Z. A., & Acar, P. (2012). The effects of organizational culture and innovativeness on business performance in healthcare industry. *Procedia - Social and Behavioral Sciences*, 683–692. <http://dx.doi.org/10.1016/j.sbspro.2012.09.1046>.
- Ahiazu, A., & Asawo, S. P. (2010). Altruistic love culture and workers' commitment in the Nigerian manufacturing industry: a study in workplace spirituality. *Journal of Management Policy and Practice*, 11(5), 97–105.
- Akume, A. T., & Abdullahi, Y. T. (2013). Challenges and prospects of effective industrial conflict resolution in Nigeria. *Journal of Social Science*, 36(2), 199–208.
- Amabile, T. M. (1997). Motivating creativity in organisations: On doing what you love and loving what you do. *California Management Review*, 40(1), 39–58.
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, 39(5), 1154–1184.
- Amabile, T. M., & Pillemer, J. (2012). Perspectives on the social psychology of creativity. *The Journal of Creative Behavior*, 46(1), 3–15.
- Armstrong, J., & Overton, T. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research*, 14, 396–402.
- Artino, A. R., La Rochelle, J. S., Dezee, K. J., & Gehlbach, H. (2014). Developing questionnaires for educational research: AMEE guide no. 87. *Medical Teacher*, 36, 463–474.
- Axtell, C., Holman, D., & Wall, T. (2006). Promoting innovation: A change study. *Journal of Occupational and Organizational Psychology*, 79, 509–516.
- Baer, M. (2012). Putting creativity to work: The implementation of creative ideas in organizations. *Academy of Management Journal*, 55(5), 1102–1119. <http://dx.doi.org/10.5465/amj.2009.0470>.
- Bai, Y., Lin, L., & Li, P. P. (2016). How to enable employee creativity in a team context: A cross-level mediating process of transformational leadership. *Journal of Business Research*, 69(9), 3240–3250. <http://dx.doi.org/10.1016/j.jbusres.2016.02.025>.
- Birdi, K., Leach, D., & Magadley, W. (2016). The relationship of individual capabilities and environmental support with different facets of designers' innovative behavior. *Journal of Product Innovation Management*, 33(1), 19–35.
- Cameron, K. (2008). A process for changing organizational culture. In C. G. Thomas (Ed.), *Handbook of organizational development* (pp. 429–445). Thousand Oaks, CA: Sage Publishing.
- Cameron, K. S., & Quinn, R. E. (2006). *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*. San Francisco: Jossey-Bass.
- Cameron, S. K., & Quinn, R. E. (1999). *Diagnosing and changing organizational culture based on values framework*. Addison: Wesley Publishing Company, Inc.
- Castro, F., Gomes, J., & de Sousa, F. C. (2012). Do intelligent leaders make a difference? The effect of a leader's emotional intelligence on followers' creativity. *Creativity and Innovation Management*, 21(2), 171–182. <http://dx.doi.org/10.1111/j.1467-8691.2012.00636.x>.
- Chughtai, A. A. (2016). Can ethical leaders enhance their followers' creativity? *Leadership*, 12(2), 230–249.
- Cornell University, INSEAD, WIPO (2015). *The global innovation index 2015: Effective innovation policies for development*. Geneva: World Intellectual Property Organisation.
- Cornell University; INSEAD; WIPO (2016). Innovation index - country rankings. Retrieved from http://www.theglobaleconomy.com/rankings/GII_Index/.
- Dadgar, H., Barahouei, F., & Mohammadi, M. (2013). The relationship between organizational culture, job satisfaction, organizational commitment and intention to stay of health personnel's of Zahedan University of Medical Sciences. *World Applied Sciences Journal*, 21(8), 1220–1228. <http://dx.doi.org/10.5829/idosi.wasj.2013.21.8.108>.
- Deshpande, R., Farley, J., & Webster, F. (1993). Corporate culture, customer orientation and innovativeness in Japanese firms: A quadrat analysis. *Journal of Marketing*, 57(1), 23–37.
- Dijkstra, T. K., & Henseler, J. (2015). Consistent and asymptotically normal PLS estimators for linear structural equations. *Computational Statistics and Data Analysis*, 81(1), 10–23. <http://dx.doi.org/10.1016/j.csda.2014.07.008>.
- Dimnwobi, S. K., Ekesiobi, C. S., & Mgbemena, E. M. (2016). Creativity, innovation and competitiveness in Nigeria: An economic exploration. *International Journal of Academic Research in Economics and Management Sciences*, 5(3), 29–52. <http://dx.doi.org/10.6007/IJAREMS/v5-i3/2242>.
- Dong, J. (2002, April 10). Palo Alto weekly online edition. Retrieved February 10, 2016, from http://www.paloaltoonline.com/weekly/morgue/2002/2002_04_10.hpway10.html.
- Egbochuku, S. (2001). Nigeria, unlocking the future. *Business confidential. Nigeria's Business Newsletter*, 27(35), 8.
- Einstein, P., & Hwang, K. P. (2007). An Appraisal for Determinants of Organizational Creativity and Impacts on Innovative Behavior. *Proceedings of the 13th Asia Pacific Management Conference* (pp. 1041–1055). Melbourne, Australia.
- Emeka, N. H., Ifeoma, A. J., & Emmanuel, O. I. (2015). An evaluation of the effect of technological innovations on corporate performance: A study of selected manufacturing firms in Nigeria. *The International Journal Of Business & Management*, 3(1), 248–262.
- Ezirim, C. B., Nwibere, B. M., & Emecheta, B. C. (2010). Organisational culture and performance: The Nigerian experience. *International Journal of Business and Public Administration*, 7(1), 40–57.
- Fernandes, C. R., & Polzer, J. T. (2015). Diversity in groups. *Harvard Business Review*, 1–13. Retrieved from http://www.hbs.edu/faculty/Publication%20Files/Diversity_in_Groups_EmergingTrends_57796940-b049-433d-b58b-832eccbcaa80.pdf.
- Florida, R., Mellander, C., & King, K. (2015). *The global creativity index 2015*. Martin Prosperity Institute.
- Gabriel, J. M., & Kpakol, A. G. (2014). Mediating role of power distance on the association of perceived managerial competency and employee trust in the Nigerian manufacturing industry. *International Journal of Managerial Studies and Research*, 2(10), 1–12.
- George, D. A., & Olumide, O. (2011). Evaluation of leadership and employee commitment to work in Nigeria bottling company. *Studies in Sociology of Science*, 2(2), 62–68. <http://dx.doi.org/10.3968/j.sss.1923018420110202.057>.
- Ghahreman, T. K., Tondnevis, F., Amirtash, A., & Kadivar, P. (2006). Relationship between organisational culture and creativity of faculty members in physical education departments in Iranian university. *Journal of Movement Science and Sports*, 3(6), 139–150.
- Gilson, L. L., & Litchfield, R. C. (2017). Idea collections: a link between creativity and innovation. *Innovations*, 19(1), 80–85. <http://dx.doi.org/10.1080/14479338.2016.1270765>.
- Gupta, B. (2011). Organisational culture and creative behaviour: moderating role of creative style preference. *Int. J. Innovation and Learning*, 10(4), 429–441.
- Gupta, V., & Singh, S. (2012). How leaders impact employee creativity: A study of Indian R&D laboratories. *Management Research Review*, 36(1), 66–88.
- Hair, J. F., Gabriel, M. L., & Patel, V. K. (2014). Amos covariance-based structural equation modeling (Cb-Sem): Guidelines on its application as a marketing research tool. *Brazilian Journal of Marketing*, 13(2), 44–55.
- Hair, J. F., Hult, G. T., Ringle, C., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks: Sage.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–151. <http://dx.doi.org/10.2753/MTP1069-6679190202>.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, 46, 1–12. <http://dx.doi.org/10.1016/j.lrp.2013.01.001>.
- Hair, J. F., Sarstedt, M., Ringle, C., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414–433.
- Hair, J. F., William, B. C., Barry, B. J., & Rolph, A. E. (2010). *Multivariate Data Analysis* (7th ed.). Pearson Prentice Hall.
- Hemmatinezhad, M., Shafiee, S., Sharari, M., & Hemmatinezhad, M. (2012). The relation between organizational culture and creativity: A case study on physical education experts in Education Administrations. *International Journal of Sport Studies*, 2(1), 69–78.
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: updated guidelines. *Industrial Management & Data Systems*, 116(1), 2–20. <http://dx.doi.org/10.1108/IMDS-09-2015-0382>.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.
- Heritage, B., Pollock, C., & Roberts, L. (2014). Validation of the organizational culture assessment instrument. *PLoS ONE*, 9(3), 1–10.
- Hofstede, G., & McCrae, R. R. (2004, February). Personality and culture revisited: Linking traits and dimensions of culture. *Cross-Cultural Research*, 38(1), 52–88. <http://dx.doi.org/10.1177/1069397103259443>.
- Hogan, S. J., & Coote, L. C. (2014). Organizational culture, innovation, and performance: A test of Schein's model. *Journal of Business Research*, 67(8), 1609–1621. <http://dx.doi.org/10.1016/j.jbusres.2013.09.007>.
- Hon, A. H., Chan, W. W., & Lu, L. (2013). Overcoming work-related stress and promoting employee creativity in hotel industry: The role of task feedback from supervisor. *International Journal of Hospitality Management*, 33, 416–424. <http://dx.doi.org/10.1016/j.ijhm.2012.11.001>.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55.
- Huston, L., & Sakkab, N. (2006). Connect and develop: Inside Procter & Gamble's new model for innovation. *Harvard Business Review*, 84(3), 58–66.
- Ikemefuna, & Abe, A. (2015). Technological environment and some selected manufacturing industry in Enugu State, Nigeria. *J Glob Econ*, 3(149), 2–5. <http://dx.doi.org/10.4172/2375-4389.1000149>.
- Jan, A., & Hazel, H. (2013). Organisational culture in knowledge creation, creativity and innovation: towards the Freiraum model. *Journal of Information Science*, 1–14.
- John, O. O. (2011). Factors constraining the growth and survival of SMEs in Nigeria. *Management Research Review*, 32(2), 156–171.
- Jubril, L. O., Raji, O. A., Banjo, H., & Olayinka, S. A. (2014). An exploratory study of relational capabilities and balanced scorecard in the Nigeria manufacturing firms. *Arabian Journal of Public Administration and Management*, 5(3), 215–226. Retrieved from www.arabianjbm.com/RPAM_index.php.
- Karakas, F., & Sarigollu, E. (2012). Benevolent leadership: Conceptualization and construct development. *Journal of Business Ethics*, 108(4), 537–553. <http://dx.doi.org/10.1007/s10551-011-1109-1>.
- Kaufman, J. C. (2012). Counting the muses: development of the Kaufman Domains of Creativity Scale (K-DOCS). *Psychology of Aesthetics, Creativity, and the Arts*, 6(4), 298–308.
- Karamipour, M. R., Mehraban, M., & Jahani, S. (2015). The effect of organizational culture on the employee's creativity. *SAUSSUREA Multidisciplinary International Peer Reviewed Journal*, 3(2), 40–53.
- Kaufman, J. C., & Beghetto, R. A. (2009). Beyond big and little: The four C model of creativity. *Review of General Psychology*, 13(1), 1–12.
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration*, 11(4), 1–10. <http://dx.doi.org/10.4018/ijec.2015100101>.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 1–4.

- Lai, M.-F., & Lee, G.-G. (2007). Relationships of organizational culture toward knowledge activities. *Business Process Management Journal*, 13(2), 306–322. <http://dx.doi.org/10.1108/14637150710740518>.
- Lau, C.-M., & Ngo, H. (2004). The HR system, organizational culture, and product innovation. *International Business Review*, 13, 685–703. <http://dx.doi.org/10.1016/j.ibusrev.2004.08.001>.
- Liang, S. K., Ling, H. C., & Hsieh, S. Y. (2007). The mediating effects of leader–member exchange quality to influence the relationships between paternalistic leadership and organizational citizenship behaviors. *Journal of American Academy of Business*, 10, 127–137.
- Lin, W., Ma, J., Zhang, Q., Li, J. C., & Jiang, F. (2016). How is benevolent leadership linked to employee creativity? The mediating role of leader–member exchange and the moderating role of power distance orientation. *Journal of Business Ethics*, 1–17. <http://dx.doi.org/10.1007/s10551-016-3314-4>.
- Lowry, P. B., & Gaskin, J. (2014). Partial least squares (PLS) structural equation modeling (SEM) for building and testing behavioral causal theory: When to choose it and how to use it. *IEEE Transactions on Professional Communication*, 57(2), 123–146.
- Maduka, E. C., & Okafor, O. (2014). Effect of motivation on employee productivity: A study of manufacturing companies in Nnewi. *International Journal of Managerial Studies and Research (IJMSR)*, 2(7), 137–147.
- Martha, L. M., Carolina, B. G., Joseph, J. D., Niels, G. N., & Pei-Chuan, W. (2002). Cultural dimensions at the individual level of analysis: The cultural orientations framework. *International Journal of Cross Cultural Management*, 2(3), 275–295.
- Martins, E. C., & Terblanche, F. (2003). Building Organisational Culture That Stimulates Creativity and Innovation. *European Journal of Innovation Management*, 6(1), 64–74.
- Mayer, C. R., Davis, H. J., & Schoorman, D. F. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709–734.
- Mayer, R. C., & Davis, J. H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of Applied Psychology*, 84(1), 123–136.
- Mehlika, S., Ismail, I. E., & Mehmet, E. (2014). A study of the relationship between person-organization fit and employee creativity. *Management Research Review*, 37(5), 479–501.
- Merroty, P. (2013). A note on Big-C creativity and little-c creativity. *Creativity Research Journal*, 25(4), 474–476.
- Mittal, S., & Dhar, R. L. (2015). Transformational leadership and employee creativity. *Management Decision*, 53(5), 894–910.
- Mobarakeh, S. N. (2011). The relation between the organizational culture and creativity of managers and experts of Khuzestan physical education organization. *Procedia-Social and Behavioral Sciences*, 15, 3648–3650.
- Naqshbandi, M. M., & Kamel, Y. (2017). Intervening role of realized absorptive capacity in organizational culture–open innovation relationship: Evidence from an emerging market. *Journal of General Management*, 42(3), 5–20. <http://dx.doi.org/10.1177/0306307016687984>.
- Naranjo-Valencia, J. C., Jiménez-Jiménez, D., & Sanz-Valle, R. (2016). Studying the links between organizational culture, innovation, and performance in Spanish companies. *Revista Latinoamericana de Psicología*, 48(1), 30–41. <http://dx.doi.org/10.1016/j.rlp.2015.09.009>.
- Naranjo-Valencia, J. C., Jimenez-Jimenez, D., & Sanz-Valle, R. (2017). Organizational culture and radical innovation: Does innovative behavior mediate this relationship? *Great Innov Manag*, 26, 407–417. <http://dx.doi.org/10.1111/caim.12236>.
- Naranjo-Valencia, J. C., Sanz-Valle, R., & Jimenez-Jimenez, D. (2010). Organizational culture as determinant of product innovation. *European Journal of Innovation Management*, 13(4), 466–480.
- Obenchain, A., & Johnson, W. (2004). Product and process innovation in service organizations: The influence of organization. *Journal of Applied Management and Entrepreneurship*, 9(3), 91–113.
- Ogbeibu, S., Senadjki, A., & Luen Peng, T. (2017). The diffusion of creative ideas: A dark side perspective of trustworthiness perception. *The 19th Malaysian Finance Association Annual Conference (MFAC)* (pp. 70–88). Perak: Universiti Tunku Abdul Rahman (UTAR).
- Peterson, C. H. (2005). Employee retention: The secrets behind Wal-Mart's successful hiring policies. *Human Resource Management*, 44(1), 85–88.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <http://dx.doi.org/10.1037/0021-9010.88.5.879>.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539–569.
- Popoola, S., & Fagbola, O. (2014). Innovation capability of managers in Nigerian large-scale manufacturing companies. *SA Journal of Information Management*, 16(1), 1–10. <http://dx.doi.org/10.4102/sajim.v16i1.593>.
- Ren, F., & Zhang, J. (2015). Job stressors, organizational innovation climate, and employees' innovative behavior. *Creativity Research Journal*, 27(1), 16–23. <http://dx.doi.org/10.1080/10400419.2015.992659>.
- Ringle, C. M., Sarstedt, M., & Straub, D. W. (2012). Editor's comments: a critical look at the use of PLS-SEM in MIS quarterly. *MIS Quarterly*, 36(1), iii–xiv.
- Robinson, G. F., Switzer, Galen E., Cohen, E. D., Primack, B. A., Wishwa, K. N., Seltzer, D. L., & Rubio, D. M. (2014). Shortening the work preference inventory for use with physician scientists: WPI-10. *Clinical and Translational Science*, 7(4), 324–328.
- Roese, N. J., & Vohs, K. D. (2012). Hindsight bias. *Perspectives on Psychological Science*, 7(5), 411–426. <http://dx.doi.org/10.1177/1745691612454303>.
- Runco, M. A., Plucker, J. A., & Lim, W. (2001). Development and psychometric integrity of a measure of ideational behavior. *Creativity Research Journal*, 13(3–4), 393–400.
- Sanz-Valle, R., Naranjo-Valencia, J. C., Jimenez-Jimenez, D., & Perez-Caballero, L. (2011). Linking organizational learning with technical innovation and organizational culture. *Journal of Knowledge Management*, 15(6), 997–1015. <http://dx.doi.org/10.1108/13673271111179334>.
- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair, J. F. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of Family Business Strategy*, 5, 105–115. <http://dx.doi.org/10.1016/j.jfbs.2014.01.002>.
- Tang, C., & Byrge, C. (2016). Ethnic heterogeneous teams outperform homogeneous teams on well-defined but not ill-defined creative task. *Journal of Creativity and Business Innovation*, 2, 20–30.
- The Nigerian Stock Exchange (2016). Retrieved April 14, 2016, from www.nse.com.ng <http://www.nse.com.ng/Issuers-section/listed-securities>.
- Thomas, C. M., & Eileen, H. M. (2006). Workplace stress. *Journal of Workplace Behavioral Health*, 21(2), 89–97. <http://dx.doi.org/10.1300/J490v21n02.07>.
- Usman, A. B., & Amran, N. A. (2015). Corporate social responsibility practice and corporate financial performance: evidence from Nigeria companies. *Social Responsibility Journal*, 11(4), 749–763. <http://dx.doi.org/10.1108/SRJ-04-2014-0050>.
- Uwalomwa, U., & Jafaru, J. (2012, July). Corporate environmental disclosures in the Nigerian manufacturing industry: A study of selected firms. *African Research Review: An International Multidisciplinary Journal*, 6(3), 71–83.
- Wang, A.-C., & Cheng, B.-S. (2010). When does benevolent leadership lead to creativity? The moderating role of creative role identity and job autonomy. *Journal of Organizational Behavior*, 31, 106–121. <http://dx.doi.org/10.1002/job.634>.
- Wang, Q., & Jap, S. (2017). Benevolent dictatorship and buyer-supplier exchange. *Journal of Business Research*, 78, 204–216. <http://dx.doi.org/10.1016/j.jbusres.2016.12.016>.
- Weibel, A. (2007). Formal Control and Trustworthiness: Shall the Twain Never Meet? *Group & Organization Management*, 32(4), 500–517.
- Wenxing, L., Pengcheng, Z., Jianqiao, L., Po, H., & Jianghua, M. (2016). Abusive supervision and employee creativity. *Management Decision*, 54(1), 130–147.
- Yang, J.-S., & Hung, H. V. (2015). Emotions as constraining and facilitating factors for creativity: companionate love and anger. *Creativity and Innovation Management*, 24(2), 217–230. <http://dx.doi.org/10.1111/caim.12089>.
- Yazdi, M. H. (2007). The relationship between organizational culture and creativity of employees in the branches of National Bank of North Khorasan. *Quarterly of Scientific-research, Educational research letter of Islamic Azad University Branch Bojnourd*, 189–209.
- Yesil, S., & Kaya, A. (2013). The effect of organizational culture on firm financial performance: Evidence from a developing country. *Procedia - Social and Behavioral Sciences*, 81, 428–437. <http://dx.doi.org/10.1016/j.sbspro.2013.06.455>.
- Yong, G. A., & Pearce, S. (2013). A beginner's guide to factor analysis: focusing on exploratory factor analysis. *Tutorial in Quantitative Methods for Psychology*, 9(2), 79–94.
- Zhou, J., & George, J. M. (2003). Awakening employee creativity: The role of leader emotional intelligence. *The Leadership Quarterly*, 14, 545–568.

Samuel Ogbeibu is currently a Doctor of Philosophy (PhD) Candidate of the Faculty of Business and Finance, Universiti Tunku Abdul Rahman (UTAR), Malaysia. He obtained his Master of Business Administration (Project management) in 2012, from University of Wales (Prifysgol Cymru), Cardiff, United Kingdom. His current research is focused on the effects of trustworthiness on the impact of organisational culture on employee creativity. His research interests include organisational change, creativity, innovation, time management and career development. He is currently a reviewer for the Market Forces Journal and an associate member of the Institute of Strategic Management, Nigeria.

Abdelhak Senadjki is an Assistant Professor of Economics at the Faculty of Business and Finance, Universiti Tunku Abdul Rahman (UTAR), Malaysia. He obtained his PhD from Universiti Sains Malaysia (USM). His research interests include Energy Economics, Economic Development focusing on the issues of Income Inequalities, Poverty and Vulnerability, Poverty in Islamic Economics, Risk Management and Coping Strategies, and Social Protection. He has been involved in various research grants and has published widely in several refereed journals. He is an Editor-in-Chief for the Quarterly Journal of Econometrics Research and an Advisory Board member for the Market Forces Journal.

James Gaskin is an Associate Professor of Management Information Systems at Brigham Young University, Utah. He received his PhD in MIS from Case Western Reserve University. He currently has 90 peer-reviewed articles published in top journals and conferences, including MISQ, ISR, JAIS, ISJ, CHB, JBR, IEE, among others. His research interests include human computer interaction, healthcare IS, and research and teaching methodologies. James is an associate editor at *Frontiers in Psychology*, in the *Organizational Psychology* section, and a regular track chair, session chair, and associate editor for ICIS and AoM. James advises scholars and practitioners worldwide through correspondence stemming from his SEM YouTube videos, StatWiki, and SEM Boot Camps. As an untenured scholar, he was recognized as an outstanding contributor to the field through the AIS early career award in 2015.