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Predicting Innovative Work Behavior from Soft Skills and Emotional Demands–Abilities Fit in Knowledge Economy

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Abstract

In knowledge economy there is a shift from industrial work to innovation work. This study examines the influence of soft skills and emotional demands–abilities fit on innovative work behavior among Masters of Business Administration (MBA) students. In a cross-sectional survey, we purposely selected 130 MBA students working in various types of organizations. Data were collected by using structured psychological scales. Detailed data analysis was carried out using statistical techniques: Pearson moment correlation coefficient and multiple regression analysis. Both soft skills and emotional demands–abilities fit jointly accounted for 38.7% of the total variation in innovative work behavior. Soft skills and emotional demands–abilities fit showed independent statistically significant prediction on innovative work behavior. The findings have implication for human capital soft skills as essential in knowledge economy. Furthermore, fit perceptions expect that emotional demands of work match the skills and abilities of the human capital. Recommendations were made in line with management and sustainability development goals.

Keywords: Knowledge economy; Soft skills; Emotional demands–abilities fit; Innovative work behavior.

1. INTRODUCTION

Innovative work behavior is “the intentional creation, introduction and application of new ideas within a work role, group or organization, in order to encourage role performance, the group, or the organization” (Janssen, 2000). Innovative work behavior is a deliberate act to enhance performance (West and Farr, 1989) through new methods of work, new technologies, and skills and to achieve goals through new strategies.

Various theorists of creativity and innovation (Amabile, 1988; De Jong and Den Hartog, 2010; Janssen, 2000; Kanter, 1988; Scott and Bruce, 1994; West, 2002; West and Farr, 1989) purported that innovation involves four behavioral stages—opportunity exploration, idea generation, idea promotion, and idea realization. Opportunity exploration refers to the problem recognition, the identification of needs in one's work context that generates an opportunity for improvement. Next, idea generation is a stage that involves the combination of creation and suggestion of useful ideas for products or processes. The creation and suggestion is novel in solving the recognized opportunity that was previously identified. Idea generation operates at the individual level.

Idea promotion, which is the third stage of innovation, is about championing the ideas by convincing other employees to undertake responsibility and provide necessary support and resources. Idea promotion occurs at the work group level. The last stage, termed idea realization, involves experimenting with one's innovative idea, investigating and improving its adequacy, and planning its incorporation into organizational practice (Janssen, 2000; Messmann and Mulder, 2011; Scott and Bruce, 1994). Idea realization is implemented at the organizational level. The individual is crucial in all the four stages of innovation, be

it in identifying opportunity, generating ideas, promoting the idea among work group, and incorporating it into the organization.

Innovation may depend on the knowledge, skills, and expertise of individual employees (Verworn and Hipp, 2009), especially in the knowledge economy. Knowledge economy suggested by Drucker (1969), also known as information age (Djeflat, 2009), purported that human capital will utilize soft skills to produce ideas, knowledge, and information. Soft skills are those personal attributes that can be used within the wide range of working environments throughout our working lives (Fraser, 2001). Soft skills encompass personal habits, social graces, communication, and interpersonal skills that characterize one's relationships with other people (Padhi, 2014). Examples of soft skills are collaboration and teamwork, critical thinking, problem-solving abilities, leadership and responsibility, decision making, flexibility and adaptability, time management, initiative and self-direction, and social and civic competences (21st Century Skills, 2014). According to Söderlund and Maylor (2012), soft skills enable working through, with individuals and work groups.

Robins and Webster (1999) noted that just about anything outside the technical skills is soft skill whereas technical skills encompass knowledge content and disciplinary orientations of subject areas. Soft skills are more related to social intelligence and emotional intelligence (Devedzic *et al.*, 2018). Soft skills may complement technical skills. Although there is a technical skill requirement for each and every work/profession or occupation, employees could make use of emotional and social intelligence which may be pertinent to innovative work behavior. Consequently, researchers (Adams *et al.*, 2006) in their studies found that knowledge, skills, and expertise of employees influence innovative work behavior (Janssen, 2000).

Emotion is related to work, and thus most jobs may have emotional demands. Emotional demands refer to those aspects of the job that require sustained emotional effort. An individual employee makes interpersonal interaction with both clients (De Jonge and Dormann, 2003; Grandey, 2008) and other employees. While emotional demand can be intrapersonal for an employee (Grandey, 2008), it can also be interpersonal for clients and colleagues interacting (Grandey, 2008) with the employee. The concept of effectiveness of emotional demands is determined by an individual employee's ability to meet these demands (Arvey *et al.*, 1998).

The match between the requirements of the work and the individual employee's knowledge, skills and abilities is termed emotional demands–abilities fit. Emotional demands–abilities fit is a match between the emotional demands of the work and employee's abilities to meet those demands. Emotional demands–abilities fit is an example of fit perceptions. Emotional demands–abilities fit is a facet-level, work-based form of demands–abilities fit. Belief of an individual employee in one's ability to meet the emotional demands of one's work is important for fit perceptions.

Some individuals can easily handle the demands of work more than others (Adams *et al.*, 2006; Bakker *et al.*, 2004). This is because individuals differ in the level of skills and abilities that they can utilize when attempting to meet the emotional demands of their work. It is essential to manage one's emotional reactions to difficult, challenging, or unpleasant work circumstances (Adams *et al.*, 2006), including problem recognition requiring idea generation in innovation. Researchers Diefendorff *et al.* (2016) found that perceived emotional demands–abilities fit influence positive work outcomes.

2. LITERATURE REVIEW

The issue of innovation is germane to governance. Nigerian President Muhammadu Buhari proposed and encouraged creativity and innovation in a policy of change agenda (The Nation, 2015)—a policy that shifts toward knowledge-based economy. Going forward and keeping the tab, Yemi Osinbajo, the vice president of the Federal Republic of Nigeria, expressed the use of passion and skills on talents, resources, and age-old professions, by adding value through creativity and innovation. Passion is a likely synonym of emotion (Merriam-Webster Dictionary, 1928). Osinbajo (2015) reiterated the immense importance of new areas of job opportunities for job creation and wealth creation. Government policy that concentrates on knowledge economy is noted to envisage job prospects for its human capital that are necessary for economic development (Akinbobola and Iwese, 2016).

Knowledge economy is the trending economy in the 21st century (Jisong, 2008). Some work/professions such as consultancy, IT/software designing, advertising, accounting, engineering, architecture, investment banking, academia, and health care are classified as knowledge intensive (Hislop, 2005; Wickramasinghe

and Ginzberg, 2001). Even conservative professions, including law, (Osinbajo, 2020) have new areas of job opportunities. These knowledge-intensive work/professions are relevant due to the usage of human capital soft skills. There are concerns of how these relevant work/professions will be sustainable both in the 21st century and beyond.

In knowledge economy there is a shift from industrial work to innovation work and from technical skills to soft skills. There is also a shift in the amount of demands that are required for work. Specifically, emotional demands expectation from the human capital. The human capital is essential for innovative work behavior, invariably for the needed sustaining work/profession and the organization.

Previous studies at the individual level found that antecedents such as propensity for employability skills (Akinbobola and Adepeju, 2018); relevant skills and creativity skills (Amabile, 1988); risk-taking (Glassman, 1986); and self-confidence, autonomy, and openness (Kanter, 1988; West and Farr, 1989) influence innovation.

There is a dearth of studies on influence of soft skills and emotional demands–abilities fit on innovative work behavior. This study will look at soft skills and emotional demands–abilities fit as antecedents of innovative work behavior at the individual level.

To achieve this purpose the following hypothesis has been tested:

1. Soft skills and emotional demands–abilities fit will significantly, jointly, and singly predict the innovative work behavior.

3. METHOD(S)

3.1. Research Design

The design of this study is a cross-sectional survey utilizing an ex-post facto research design to examine the influence of soft skills and emotional demands–abilities fit on innovative work behavior among Masters of Business Administration (MBA) students from two Universities in South West Nigeria. This cross-sectional survey obtained its data from respondents at a single point in time. This study is a qualitative study (Otokiti, 2010). The independent variables are soft skills and emotional demands–abilities fit, age, and job tenure while the dependent variable is innovative work behavior.

3.2. Participants

The population of this study was MBA students two Universities in South West Nigeria. A two-stage sampling method was used to draw 130 MBA student respondents from two Universities in South West Nigeria. The MBA student respondents were workers and they had interpersonal interaction with staff and/or customers.

3.3. Instruments

A battery of psychological tests was used for data collection in a questionnaire booklet. The questionnaire comprised four sections. The sections measured demographic data such as age, gender, job tenure, soft skills, emotional demands–abilities fit, and innovative work behavior.

3.3.1. Soft Skills Inventory

Soft skills were measured by Goldsmith Soft Skills Inventory developed by Chamorro-Premuzic *et al.* (2010). The 15-item Soft Skills Inventory comprised self-management, communicational skills, interpersonal skills, team-working skills, the ability to work under pressure, imagination/creativity, critical thinking, willingness to learn, attention to detail, taking responsibility, planning and organizing skills, insight, maturity, professionalism, and emotional intelligence. The response format was a 7-point Likert-type scale (ranging from 1 = “not at all” to 7 = “extremely useful”). Authors reported reliability coefficient alpha of 0.92. This study reported that the overall scale has a good measure of internal consistency (Cronbach’s α) of 0.937 (mean = 93.71; SD = 9.88). The items’ mean scores ranged from 6.08 ± 0.84 to 6.39 ± 0.75 , an indication that the MBA students certainly experienced each item in the Soft Skill Scale, with items “Insight” and “Attention to detail” recording the lowest and highest response mean score, respectively.

3.3.2. Emotional Demands–Abilities Fit Scale

Emotional demands–abilities fit was measured by Perceived Emotional Demands–Abilities Fit Scale developed by Diefendorff *et al.* (2016), adopted from Cable and DeRue (2002). The 3-item Emotional Demands–Abilities Fit Scale. The response format is a 5-point Likert-type scale (ranging from 1 = “Strongly

Disagree” to 5 = “Strongly Agree”). Authors reported reliability coefficient alpha of 0.70. This study reported that the overall scale has a good measure of internal consistency (Cronbach’s α) of 0.827 (mean = 16.98; SD = 2.85). The items’ mean scores ranged from 5.48 ± 1.20 to 5.91 ± 0.94 , an indication that the MBA students certainly experienced each item in the Emotional Demands–Abilities Fit Scale. The items “The match is very good between the emotional demand of my job and personal skills” and “My ability to manage my emotion is a good fit with the requirement of my job” recorded the lowest and highest response mean score, respectively.

3.3.3. Innovative Work Behavior Scale

Innovative work behavior was measured by Innovative Work Behavior Scale developed by Janseen (2000), adopted from Scott and Bruce (1994). The 9-item scale was made up of three dimensions, namely, idea generation, idea promotion, and idea realization; each dimension had three items. The response format was a 7-point Likert-type scale (ranging from 1 = “Never” to 7 = “Always”). Authors reported reliability Cronbach’s α of 0.91. This study reported that the internal consistency (Cronbach’s α) of the dimensions ranged from 0.892 to 0.928, an indication that each dimension of the instrument had acceptable measure of internal consistency. Also, the dimensions’ mean scores ranged from 5.74 ± 1.07 to 5.98 ± 1.00 , an indication that the MBA students certainly experienced each items in the Innovative Work Behavior Scale, with item “Creating new ideas for difficult issues” having the lowest mean score of 5.74 ± 1.07 and item “Evaluating the utility of innovative ideas” having the highest mean score of 5.98 ± 1.00 . The overall scale had a good measure of internal consistency (Cronbach’s α) of 0.946 (mean = 52.73; SD = 8.14).

3.4. Procedure

The study used primary data that were obtained through a questionnaire. The questionnaires were administered to the MBA student respondents in the departments of their University. Around 130 questionnaires were collected and properly filled.

3.5. Ethical Consideration

Respondents were assured that the data they provided will be used for research purposes only. Participation was voluntary and anonymity was ensured; respondents were free to stop taking part in the research if they wish so.

3.6. Statistical Analysis

Data collected in this study were analyzed by Statistical Package for Social Sciences (SPSS). Pearson Moment Correlation Coefficient and Multiple Regression analysis were used for data analysis.

4. RESULTS

4.1. Demographic Characteristics of the Respondents

A total of 130 MBA students from two Universities, both in South West Nigeria, participated in the survey. The respondents’ background characteristics are presented in Table 1. Majority (68.5%) are at least 30 years of age (mean = 32.58 years; SD = 5.92) and more than half (52.3%) of them were male. The MBA students also worked in various types of organizations, from the financial sector (26.9%) to marketing (19.2%), manufacturing (14.6%), medical (9.3%), ICT (7.7%), and oil and gas (5.4%). It is also important to mention that 16.9% of the respondents are self-employed. Furthermore, more than half (56.2%) of the respondents have stayed for at least 5 years on their job (mean = 5.02 years; SD = 3.25).

4.2. Test of Hypothesis

4.2.1. Zero-Order Correlation Analysis

Prior to regression analysis, Pearson correlation was done. The inter-relationship among some of the respondent demographic characteristics such as age and job tenure and measured variables such as soft skills, Emotional Demands–Abilities Fit Scale, and innovative work behavior were examined using Pearson Moments Correlation Analysis as presented in Table 2. This was done to see how they correlated with one

Table 1. Respondents’ Demographic Characteristics.

Variables	Frequency (%)	Mean ± SD
Age (years)		32.58 ± 5.92
<30	41 (31.5)	
>=30	89 (68.5)	
Gender		
Female	62 (47.7)	
Male	68 (52.3)	
Type of Organization		
Marketing	25 (19.2)	
ICT	10 (7.7)	
Oil and gas	7 (5.4)	
Manufacturing	19 (14.6)	
Financial	35 (26.9)	
Medical	12 (9.3)	
Self-employed	22 (16.9)	
Job Tenure (years)		5.02 ± 3.25
<5	57 (43.8)	
>=5	73 (56.2)	

Table 2. Pearson Moment Correlation Coefficients (Zero-Order Correlation Analysis).

	Age	Job Tenure	Soft Skill	Emotional Demands–Abilities Fit	Innovative Work Behavior
Age	1.000				
Job Tenure	0.692*	1.000			
Soft Skills	0.095	–0.015	1.000		
Emotional Demands–Abilities Fit	0.333*	0.286*	0.434*	1.000	
Innovative Work behavior	0.436*	0.334*	0.517*	0.537*	1.000

*Significant at 5% level of significance.

another. Significant correlation coefficients at 5% level of significance are in shown asterisk (*), ranging from weak to moderate correlations. All the included variables age [r(129) = 0.436; p < 0.05], job tenure [r(129) = 0.334; p < 0.05], soft skills [r(129) = 0.517; p < 0.05], and emotional demands–abilities fit [r(129) = 0.537; p < 0.05] were found to be positively and significantly correlated with innovative work behavior (Table 2). However, age and job tenure did not show any significant correlation with soft skills.

Hypothesis: Soft skills and emotional demands–abilities fit will significantly, jointly, and singly predict the innovative work behavior.

Table 3. Multiple Linear Regression Analysis of Soft Skills and Emotional Demands–Abilities Fit Predicting Innovative Work behavior.

Model	Sum of Squares	Df	Mean Square	F	R ²	Adjusted R ²	p Value
Regression	3514.546	2	1757.273	40.112	0.387	0.377	<0.001
Residual	5563.762	127	43.809				
Total	9078.308	129					

Model	Beta	t	p Value
Constant	5.772	1.025	0.307
Soft Skills	0.294	4.535	<0.001
Emotional Demands–Abilities Fit	1.135	4.994	<0.001

4.2.2. Multiple Linear Regression Analysis Predicting Innovative Work Behavior

The scores of variables soft skills and emotional demands–abilities fit of the MBA student respondents on innovative work behavior are presented in Table 3 for the *hypothesis*. Multiple linear regression analysis was used to fit the models and significant predictors were evaluated at 5% level of significance. The predictors of the scores of respondents on innovative work behavior are variables soft skills and emotional demands–abilities fit that showed significant correlation with innovative work behavior. The result in Table 3 shows that an R² of 0.387, which indicates that the two predictors soft skills and emotional demands–abilities fit jointly accounted for 38.7% of the total variation in innovative work behavior of the MBA students. Also, Table 3 reveals that the analysis of multiple regression data produced a statistically significant F-ratio value [F (2, 127) = 40.112; p < 0.001].

Furthermore, Table 3 shows the independent contribution of soft skills and emotional demands–abilities fit. When observed individually, the two independent predictors soft skills ($\beta = 0.294$; $t = 4.535$; $p < 0.001$) and emotional demands–abilities fit ($\beta = 1.135$; $t = 4.994$; $p < 0.001$) shows statistical significant prediction of innovative work behavior of MBA students (Table 3). Hence the hypothesis which states that soft skills and emotional demands–abilities fit will significantly, jointly, and singly predict the innovative work behavior has been accepted.

5. DISCUSSION

The hypothesis that states that soft skills and emotional demands–abilities fit will significantly, jointly, and singly predict the innovative work behavior has been accepted. The finding that soft skills singly and significantly predict innovative work behavior corroborates the studies of Adams *et al.* (2006) and Verworn and Hipp (2009), which showed that innovative work behavior (Janssen, 2000) depends on the knowledge, skills, and expertise of employees. The findings of the zero-order correlation shows a positive association between soft skills and innovative work behavior. When the employee improves on soft skills, one exhibits more innovative work behavior. Majorly, soft skills complement technical skills of each profession or occupation. Soft skills or personal habits of the employee enable interaction with other staff and even customers to display innovative work behavior in information age, in any type of organization.

The findings that emotional demands–abilities fit singly and significantly predict innovative work behavior supports the research of Diefendorff *et al.* (2016) that perceived emotional demands–abilities fit significantly accounted for positive work outcomes such as innovative work behavior. The zero-order correlation findings show positive relationship between emotional demands–abilities fit and innovative work behavior. It means that as the emotional demands of the work/profession increases, the employee matches up with the required abilities. Emotional demands for interaction with oneself, other staff, customers, or work have emotional abilities that fit with the process of problem recognition, suggestion of novel ideas, championing the novel ideas among other staff, and incorporating one's novel idea into organizational practice.

6. CONCLUSION

The main purpose of this study is to find the predictive ability of soft skills and emotional demands–abilities fit on innovative work behavior among (MBA) students who are workers in various types of organizations. One hypothesis was tested and the finding indicated that soft skills and emotional demands–abilities fit significantly predict innovative work behavior among (MBA) students. This finding supports the theories of creativity and innovation that human capital is essential to the stages of innovation, especially in knowledge economy which emphasizes soft skills. The human capital is involved in creating ideas in all types of organization. The human capital requires soft skills to relate with other staff for implementation of new ideas. Soft skills are essential for innovative work behavior because identification of needs and creation of novel idea in one's work context is with human capital skills. Furthermore, the concept of fit perceptions suggests that emotional demands of work match the skills and abilities of the human capital. Emotional demands–abilities fit is important for innovative work behavior in the promotion of one's novel idea among other staff and implementation of the novel idea by the organization.

6.1. Recommendation

Innovative work behavior can change work perspective in the 21st century and beyond; thus work/profession should add value through soft skills and the emotional demands–abilities fit. Work/profession retains relevance due to usage of human capital soft skills. Human capital practice of soft skills is relevant to various work/professions such as financial sector, marketing, manufacturing, medical, ICT, and oil and gas plus self-employment. Human capital soft skills complement technical skills in conflict in Knowledge Economy therefore soft skills should be added to the scheme of things. Human capital owns the innovation process to create ideas, promote ideas among work group, and incorporate the ideas into organizational practice. The Human Capital Department should therefore train employees for required emotional abilities to fit the emotional demands of the work. The work should be redesigned alongside the emotional demand. In line with Sustainable Goal Development, especially Goal 8 and Goal 9 (UNDP, 2018a, 2018b), future works should be designed to foster innovation for sustainable economic growth.

6.2. Limitation of Study

This study made use of the MBA students as respondents; future studies can use case studies of the innovation process.

Conflict of Interest

There is no conflict of interest.

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