



# Impact of Personality, Emotional Labour, and Core Self-Evaluations on the Mental Health of Bank Employees

Emilia Chisom Jude  
Fabian O. Ugwu

## Abstract

*The present study used a cross-sectional data to investigate the impact of personality, emotional labour and core self-evaluations on the mental health of employees (N = 212) from 14 different banks in Southeast Nigeria. The employees are comprised of 138 males and 74 females aged between 23 and 50 years, with a mean age of (M = 32.44; SD = 6.19). The results of the hierarchical regression analysis indicated that conscientiousness and neuroticism were negatively related positively to mental health; whereas agreeableness, extraversion and openness to experience were not related to employee mental health. The results equally showed that emotional labour had a significant negative impact on employees' mental health, while there was no relationship found between core self-evaluations and mental health. The implications of the findings on the organisations and employees were highlighted; the limitations of the study were discussed and suggestions were made for further studies.*

Received: 7<sup>th</sup> January, 2022  
Revised: 19<sup>th</sup> February, 2022  
Accepted: 28<sup>th</sup> February, 2022

## Affiliation

Department of Psychology  
Alex Ekwueme Federal  
University, Ndufu-Alike, Ebonyi  
State  
[fabian.ugwu@funaif.edu.ng](mailto:fabian.ugwu@funaif.edu.ng)

**Keywords:** Personality, Emotional Labour, Core Self-evaluations, Mental Health, Bank Employees

---

## Introduction

Over the years the Big Five personality has attracted large research attention, but only recently did scholars begin to consider its relevance among employees as they function in organisations (e.g., Albrecht & Marty, 2020; Hadziahmetovic & Mujezinovi , 2021). Despite the progress made in personality-health connection research (e.g., Iacovino et al., 2016), researchers tend to have ignored to explore the impact of personality on the mental health of employees, but on work engagement and commitment (e.g., Hadziahmetovic & Mujezinovi , 2021). One wonders why earlier studies should focus on such job outcomes of personality without sufficiently investigating its outcome on the mental health of employees bearing in mind that only mentally healthy employees can help an organisation. In addition, previous studies on the impact of personality on health were conducted in Western-European contexts (e.g., Bogg & Roberts, 2004; Colquitt et al., 2015; Hakulinen et al., 2015; Quevedo & Abella, 2011; Weston et al., 2015). Studies on the impact of personality, emotional labour, and core self-evaluation on mental health have not been conducted in Nigeria considering that several stressful factors characterize the Nigerian banking job environment such as long working hours, high workload, and pressures from customers due to policy changes, unpredictable economic circumstances, increase in robbery rate among others (Obikoya 2008; Oginni et al. 2013) all of which may overwhelm employees. Therefore conducting the current study in Nigeria is a contribution to knowledge especially as it concerns Bank workers.

Therefore, the current study is an attempt to explicate these strands of research by broadening the impact personality (the Big Five), emotional labour, and core self-evaluations (CSEs) on the mental health of Bank employees in Nigeria. However, across the workplaces, individual's job behaviour is influenced by their personality characteristics (Hadziahmetovic & Mujezinovi , 2021). Personality can be defined as individual's enduring, consistent, and distinctive patterns of individuals' thoughts, emotions, behaviours that represent their responses to situations. Our interest is on McCrae and Costa's (2008) Big Five personality disposition which earlier studies have implicated on individual health outcomes (e.g., Mitchell et al., 2021) and which is arguably the most influential aspect of personality. The impact of personality, emotional labour, and core self-evaluation on mental health is represented in the conceptual model shown below.

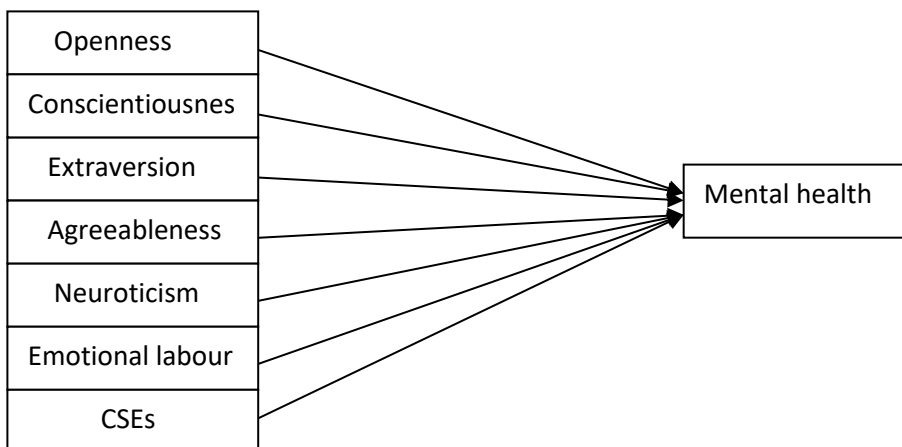


Figure 1. Conceptual model. Openness = Openness to experience, CSEs = Core self-evaluations

### *Personality and mental health*

Among all the models developed to interpret different personality profiles, the Big Five model (McCrae & Costa, 1987) appears to be the most influential (Matz et al., 2016). These dimensions are often represented by the acronym OCEAN – Openness to experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. Individuals with openness to experience are flexible and adaptable to various job situations and environments and often yearn for new strategies to complete tasks (Colquitt et al., 2015). Studies have found that openness to experience is not related to health (e.g., Turiano et al., 2012). Conscientious individuals tend to be committed to tasks and have high sense of self-discipline. Conscientiousness has been related to enhanced health (e.g., Bogg & Roberts, 2004), less negative affect reactivity (e.g., Leger et al., 2021), and better cognitive health (Wilson et al., 2015). Extroverts are usually outgoing, vigorous, excited people, and often ambitious for leadership positions (Colquitt et al., 2015). Quevedo and Abella (2011) suggested that individuals who have high scores on extraversion tend to display low levels of psychopathology and always conform to rules and procedures. Agreeableness entails nurturance, altruism, emotional support, and also associated with being cooperative, trustful, tolerant, and forgiving (Digman, 2003). Agreeable employees enjoy establishing new partnerships which contributes to a higher level of well-being and satisfaction (Aydogmus et al., 2015). Agreeable individuals treat other people with emotional concern and pursue others' well-being, treat others with consideration for their rights and preferences, and usually have favorable opinions about others (Soto, 2019). Agreeableness positively impacts the intuitive and reliant decision-making styles (El Othman et al., 2020). Low agreeable employees exhibit aggression, manipulate others, are cruel and strong-willed (Shehzad et al., 2020, 2021).

Empirical evidence on the relationship between agreeableness and health is mixed. Whereas some studies (e.g., Graham et al., 2017) found agreeableness to be linked to reduced mortality risk (e.g., Miller et al., 1996) found that indicators of low agreeableness such as hostility and the tendency to be angry are related to poor physical health, yet others (e.g., Turiano et al., 2012) found no association. Neuroticism is related to a range of harmful health outcomes, such as depression (Hakulinen et al., 2015), chronic disease (Weston et al., 2015), and mortality (Roberts et al., 2007), and related with greater negative affect reactivity (Leger et al., 2021). Following from the above, we state that:

*Hypothesis 1:* Openness will have a negative impact on mental health.

*Hypothesis 2:* Conscientiousness will have a positive impact on mental health.

*Hypothesis 3:* Extraversion will have a positive impact on mental health.

*Hypothesis 4:* Agreeableness will have a positive impact on mental health

*Hypothesis 5:* Neuroticism will have a negative impact on mental health.

### *Emotional labour and mental health*

Ever intensifying market competition has compelled organisations to introduce strange ways of doing business. It has become part of job requirements for employees to smile in very difficult moments or hide frustration (Ugwu et al., 2021) to make the customers feel appreciated. This is referred to as emotional labour and it has been linked to negative health implications (e.g., Ugwu et al., 2021). Emotional labour consists of two different displaying rules: surface acting and deep acting. Despite the impulsiveness, importance, and incontrovertible nature of emotions (Prentice, 2013), some of them are not often expressed in the workplace for organisational reasons (Grandey & Sayre, 2019; Richard & Converse, 2016), but display of these rules are encouraged among bank workers. During interactions with customers, bank workers might choose to hide their true emotions in

reaction to specific situations, in order to leave positive impression on the customers and to maintain a ‘caring’ image within the organisation (Frost, 2004). Engaging in emotional labour such as hiding frustration can initiate energy depletion process (Kammeyer-Mueller et al., 2012) and therefore lead to harmful health outcomes (e.g., Mesmer-Magnus et al., 2012; Yin et al. (2017). From the argument above we state that:

*Hypothesis 6:* Emotional labour will be negatively related to employees’ mental health.

### *Core self-evaluation (CSEs) and mental health*

Beyond emotional labour, CSEs appear to be an important variable that also deserve research attention among Nigerian bank employees. This is because banking job in Nigeria is characterized high workload (Amazue & Onyishi, 2016). CSEs defined as “the basic, fundamental appraisal of one’s worthiness, effectiveness, and capability as a person” (Judge et al., 2003, p. 304) appears to be essential in this circumstance. Previous studies have demonstrated that CSEs are related to job and life satisfaction (Rathi & Lee, 2018), happiness (Piccolo et al., 2005), motivation (Chang et al., 2012), subjective and psychological well-being (Rathi & Lee, 2018; Ugwu et al., 2021), and reduced work-family conflict (Boyar & Mosley, 2007). If CSEs are abundantly related to positive outcomes, it makes empirical sense to hypothesize that:

*Hypothesis 7:* Core self-evaluations will have positive impact on employees’ mental health.

## **Method**

### **Participants and Procedure**

Two hundred and twelve volunteer respondents drawn from 14 different commercial banks in Southeastern Nigeria participated in the study. The frontline desk officers and marketers only participated in the study. Our choice of these categories of employees is that they are often in contact with customers where emotional labour plays out and where employees are pressured most to deliver on the mandate issued to them. The participants consisted of 138 male and 74 female ( $M = 1.34$ ,  $SD = .48$ ) employees. Their ages ranged from 23 to 50 years ( $M = 32.44$  years,  $SD = 6.19$  years). Over all, a total number of 250 questionnaires were administered out of which 220 were returned representing a response rate of 88%. Eight (8) copies were discarded due to improper completion and only 212 copies of the questionnaire were used for data analysis.

### **Instruments**

Personality was measured using the short version of the Big Five Inventory-10 (BFI-10) developed by Gosling et al. (2003). The inventory contains 10 items that are rated on a 5-point Likert-type response pattern ranging from disagree strongly =1 to agree strongly = 5. The scale measures the five dimensions of personality traits which are: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. Sample item is: “I see myself as someone who is reserved” Cronbach’s alpha of the scales for the current study are as follows: Openness = 0.78, Conscientiousness = 0.75, Extraversion = 0.80, Agreeableness = 0.72, and Neuroticism = 0.77. Higher scores on the scale indicate high behaviours described by various personality dimensions.

---

Brotheridge and Lee's (2003) revised emotional labour scale that consists of 18 items was used to assess emotional labour. Respondents were asked to indicate how frequently they perform each of the statements following a 5-point Likert scale ranging from never =1 to always = 5. Sample item is: "Resist expressing my true feelings". Cronbach's alpha of .81 was established for the current study. Higher scores indicate high emotional labour.

The 12-item Core Self-Evaluations Scale (Judge et al., 2003) was used to assess CSEs. The instrument is scored along a 5-point Likert scale ranging from strongly disagree = 1 to strongly agree = 5, and with higher score denoting high CSEs. Sample item is: "I am confident I get the success I deserve in life". All the scores on the items were summed to represent individuals' CSEs. Higher scores indicate higher CSEs. Cronbach's alpha of .86 was obtained for the current study.

Mental health was assessed with the General Health Questionnaire-Short Form (GHQ-12; Goldberg & Williams, 1988). Participants were asked to indicate their experiences in the past two weeks by responding to the 12 items using a 4-point Likert scale ranging from not at all = 0 to much more than usual = 3. Sample item is: "Been able to concentrate on whatever you are doing". Cronbach's alpha of .78 was obtained for the current study. Higher scores indicate poor mental health.

## Results

Table 1: Mean, standard deviation and intercorrelations among study variables

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Mental health	19.14	4.11	-											
2. Gender	1.34	.48	-.03	-										
3. Age	32.44	6.19	.17**	-.31***	-									
4. Marital status	1.53	.51	.05	.07	.33***	-								
5. Job tenure	5.88	4.70	.14*	-.18**	.70***	.37***	-							
6. Org. tenure	6.04	4.82	.13*	-.18**	.65***	.38***	.55***	-						
7. Extraversion	6.16	1.73	.04	.05	-.02	-.07	-.11	-.12*	-					
8. Agreeableness	7.89	1.93	.01	.03	.00	.03	-.03	-.08	.08	-				
9. Conscientiousness	8.14	2.10	-.10	-.12*	.11	.15*	.11	.09	.02	.33***	-			
10. Neuroticism	7.09	2.09	-.16*	-.13*	.20**	.06	.12*	.10	.07	.32***	.32***	-		
11. Openness	6.67	1.50	-.03	-.05	-.09	.01	-.03	-.04	-.07	.24***	.07	.05	-	
12. Emotional labour	25.96	6.00	-.13*	.15*	.03	-.02	-.02	-.03	.10	.01	-.05	.05	.04	-
13. CSEs	43.27	6.74	-.06	.02	.13*	.07	.08	.04	.01	.22**	.28***	.29***	-.05	-.05

Key \* =  $p < .05$ ; \*\* =  $p < .01$ ; \*\*\* =  $p < .001$

Note: A total number of 212 employees participated in the study, Gender (1=Male, 2=Female), Age, marital status, job tenure, organisational tenure, and all the studied variables were scored as they were received. CSEs = Core self-evaluations, Org. tenure = Organisational tenure.

The results of the descriptive statistics presented in Table 1 above showed that among 5 control variables tested, only age ( $r = .17$ ,  $p < .01$ ), job tenure ( $r = .14$ ,  $p < .05$ ), and organisational tenure ( $r = .13$ ,  $p < .05$ ) were positively related to mental health. Neuroticism ( $r = -.16$ ,  $p < .05$ ) and emotional labour ( $r = -.13$ ,  $p < .05$ ) were negatively related to employee mental health.

Table 2. Hierarchical regression results

Variables	1	2	3	4	5	6	7	8
Gender	.03	.02	.02	.00	.01	.01	-.01	.00
Age	.16	.15	.15	.15	.12	.11	.10	.11
MS	-.02	-.02	-.02	-.00	.00	.00	.01	.01
JT	.04	.04	.04	.06	.07	.07	.07	.10
OT	-.00	.00	.01	-.00	-.01	-.01	-.00	-.03
E		.05	.05	.05	.04	.04	.03	.03
A			.01	.06	.01	.02	.20	.03
C				.15*	.18*	.18*	.18*	.16*
N					-.18*	-.18*	-.17*	-.19*
O						-.02	-.03	-.03
EL							-.11*	-.10
CSEs								-.09
R <sup>2</sup>	.00	.00	.00	.01	.01	.01	.01	.01
ΔR <sup>2</sup>	.00	.00	.00	.01	.01	.00	.00	.01
ΔF	F(5,206) =1.27	F(1, 205) =.48	F(1, 204) =.01	F(1, 203) = 3.82	F(1, 202) = 5.49	F(1, 201) = .09	F(1,200) = 2.53	F(1,199) = 1.45
F Value	F(5,206) = 1.27	F(6, 205) = 1.14	F(7, 204) = .97	F(8,203) = 1.34	F(9,202) =1.82	F(10,201) =1.65	F(11,200) =1.74	F(12,199) = 1.72

Key \* =  $p < .05$ . Note: MS = Marital status, JT = Job tenure, OT = Organisational tenure, E = Extraversion, A = Agreeableness, C = Conscientiousness, N = Neuroticism, O = Openness to experience, EL = Emotional labour, CSEs = Core self-evaluations.

The results of the hierarchical regression analysis presented in Table 2 above showed that extraversion and agreeableness were not statistically significant on employee mental health. These results failed to support the two hypotheses which predicted that both extraversion and agreeableness will have a positive impact on mental health. The results indicated a significant positive impact of conscientiousness on mental health ( $\beta = .15$ ,  $p < .05$ ). This supports the hypothesis that conscientiousness will have a positive impact on mental health. Neuroticism was found to have a negative impact on mental health ( $\beta = -.18$ ,  $p < .05$ ) supporting the hypothesized impact of neuroticism on mental health. Openness to experience did not impact on the employee mental health. This failed to support our prediction of its negative impact on mental health. Emotional labour was found to be negatively related to mental health ( $\beta = -.11$ ,  $p < .05$ ), hence, the hypothesis that emotional labour will positively impact on mental health was supported. CSEs had no significant impact on employee mental health; this is against the hypothesis of a positive impact on mental health.

## Discussion

The study aimed at exploring the impact of the Big Five personality dimensions, emotional labour and CSEs on the mental health of bank employees in the Southeast, Nigeria. The results of the hierarchical regression analysis showed that conscientiousness positively impacted on employee mental health. This finding is consistent with our hypothesis and is also in agreement with previous findings (e.g., Bogg & Roberts, 2004; Wilson et al., 2015). Neuroticism was found to negatively impact on mental health of employees. This also

supports our hypothesis and tends to be consistent with earlier studies that neuroticism leads to poor health (e.g., Hakulinen et al., 2015; Weston et al., 2015). Other dimensions of the Big Five (openness to experience, agreeableness, and extraversion) were not significant. Although the findings of non-significance of openness to experience and agreeableness did not confirm our hypotheses, they tend to be in line with previous studies. Turiano et al. (2012) found that both openness to experience and agreeableness have no relationship with health. The results of the study further indicated that emotional labour significantly and negatively impacted on employee mental health. This finding is in agreement with earlier studies which demonstrated that hiding frustration leads to harmful psychological consequences (e.g., Kammeyer-Mueller et al., 2012; Yin et al., 2017). Core self-evaluations did not produce any significant impact on employee mental health.

### *Implications of the findings*

This study has practical implications for management of commercial banks, employers of labour, and employees. As bank employees invest resources to perform their duties, their mental health may be compromised. Therefore, the management should identify the personality traits that have coping potentials with job demands and perhaps enact recruitment policy in this direction. Emotional labour indicates to lead to poor mental health. Thus, as these employees are compelled to hide their frustrations to improve the services they render, managers should find a way to provide support that will help these employees to cope with such difficult challenge. Furthermore, since CSEs did not impact on employees' mental health, it implies that management of Nigerian banks has to find a way to enrich the job tasks of these employees to find meaning in the work they perform.

### *Limitations and suggestions for further research*

The findings of the study should be considered in light of the limitations of the study which revolve primarily around sampling issues and the design employed. First, is that the study employed the cross-sectional survey research design with its outcome of inability to establish causation. This implies that the outcome variable tested could be bi-directional. Longitudinal design is needed in future research to take care of cause-effect relationship. Single source of data is another limitation because it often leads to social desirability bias. Use of multiple sources (e.g., colleague or supervisor report) is recommended for future studies to neutralize any inflated data that may arise from single source. Conclusively, we state that as organisations give mandate to employees to deliver, the management should in turn focus on protecting the mental health of these employees.

## **References**

- Albrecht, S. L., & Marty, A. (2020). Personality, self-efficacy and job resources and their associations with employee engagement, affective commitment and turnover intentions. *The International Journal of Human Resource Management*, 31(5), 657–681.
- Amazue, L. O., & Onyishi, I. E. (2016). Stress coping strategies, perceived organizational support and marital status as predictors of work–life balance among Nigerian bank employees. *Social Indicators Research*, 128, 147–159.
- Ashforth, B. E., & Humphrey, R. H. (1993). Emotional labor in service roles: The influence of identity. *Academy of Management Review*, 18(1), 88–115.
- Aydogmus, C., Ergeneli, A., & Camgoz, S. M. (2015). The role of psychological empowerment on the relationship between personality and job satisfaction. *Research Journal of Business Management*, 2, 251–276.



- Bogg, T., & Roberts, B. W. (2004). Conscientiousness and health related behaviors: A meta-analysis of the leading behavioral contributors to mortality. *Psychological Bulletin*, *130*(6), 887–919.
- Boyar, S. L., & Mosley, D. C., Jr. (2007). The relationship between core self-evaluations and work and family satisfaction: The mediating role of work family conflict and facilitation. *Journal of Vocational Behavior*, *71*, 265–281.
- Brotheridge, C. M., & Lee, R. T. (2003). Development and validation of the Emotional Labour Scale. *Journal of Occupational and Organizational Psychology*, *76*(3), 365–379.
- Chang, C.-H., Ferris, D. L., Johnson, R. E., Rosen, C. C., & Tan, J. A. (2012). Core self-evaluations: A review and evaluation of the literature. *Journal of Management*, *38*(1), 81–128.
- Colquitt, J., LePine, J. A., & Wesson, M. J. (2015). *Organizational behavior: Improving performance and commitment in the workplace*. New York, NY: McGraw-Hill Education.
- Digman, J. M. (2003). Personality structure: Emergence of the five-factor model. *Annual Reviews*, *41*, 417–440.
- El Othman, R., El Othman, R., Hallit, R., Obeid, S., & Hallit, S. (2020). Personality traits, emotional intelligence and decision-making styles in Lebanese universities medical students. *BMC Psychology*, *8*, 46. doi: 10.1186/S40359-020-00406-4
- Frost, P. J. (2004). Handling toxic emotions: New challenges for leaders and their organization. *Organizational Dynamics*, *33*(2), 111–127.
- Goldberg, D. P., & Williams, P. (1988). *A Users' Guide to the General Health Questionnaire*. London: GL Assessment.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, *37*, 504–528.
- Grandey, A. A., & Sayre, G. M. (2019). Emotional labor: Regulating emotions for a wage. *Current Directions in Psychological Science*, *28*(2), 131–137.
- Hadziahmetovic, N., & Mujezinovi, M. (2021). The role of the big five personality profiles in employee affective commitment and engagement: Case of small and medium enterprises. *International Journal of Business and Administrative Studies*, *7*(2), 74-88.
- Hülshager, U. R., Lang, J. W., & Maier, G. W. (2010). Emotional labor, strain, and performance: Testing reciprocal relationships in a longitudinal panel study. *Journal of Occupational Health Psychology*, *15*(4), 505–521.
- Iacovino, J. M., Bogdan, R., & Oltmanns, T. F. (2016). Personality predicts health declines through stressful life events during late mid-life. *Journal of Personality*, *84*(4), 536–546.
- Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2003). The core self-evaluations scale: Development of a measure. *Personnel Psychology*, *56*(2), 303-331.
- Kammeyer-Mueller, J. D., Rubenstein, A. L., Long, D. M., Odio, M. A., Broo, B., Zhang, Y., & Halvorsen-Ganepola, D. K. (2012). A meta-analytic structural model of dispositional affectivity and emotional labor. *Personnel Psychology*, *66*(1), 47–90.

- Leger, K. A., Turiano, N. A., Bowling, W., Burriss, J. L., & Almeida, D. M. (2021). Personality traits predict long-term physical health via affect reactivity to daily stressors. *Psychological Science, 32*(5), 755–765.
- Matz, S., Chan, Y. W. F., & Kosinski, M. (2016). Models of personality. In M. Tkalčič, B. De Carolis, M. De Gemmis, A. Odič, & A. Košir (Eds.), *Emotions and personality in personalized services: Models, evaluation and applications*. (pp. 35–54). New York, NY: Springer International Publishing.
- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology, 52*(1), 81-90.
- McCrae, R. R., & Costa, P. T., Jr. (2008). The five-factor theory of personality. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 159–181). The Guilford Press: New York.
- Mesmer-Magnus, J. R., DeChurch, L. A., & Wax, A. (2012). Moving emotional labor beyond surface and deep acting: A discordance-congruence perspective. *Organizational Psychology Review, 2*(1), 6–53.
- Mitchell, L. L., Zmora, R., Finlay, J. M., Jutkowitz, E., & Gaugler, J. E. (2021). Do big five personality traits moderate the effects of stressful life events on health trajectories? Evidence from the health and retirement study. *Journals of Gerontology: Psychological Sciences, 76*(1), 44–55.
- Obikoya, B. O. (2008). The impact of restructuring on the morale of Nigerian bankers. *Journal of Research in Business Management, 4*(4), 98–112.
- Oginni, B. O., Afolabi, G., & Erigbe, P. (2013). The place of job stress in labour turnover of the banking sector in the Nigerian Economy. *International Journal of Business and Management Invention, 2*(1), 93–99.
- Piccolo, R. E., Judge, T. A., Takahashi, K., Watanabe, N., & Locke, E. A. (2005). Core self-evaluations in Japan: Relative effects on job satisfaction, life satisfaction, and happiness. *Journal of Organizational Behavior, 26*, 965–984.
- Prentice, C. (2013) ‘Emotional labour and its consequences: the moderating effect of emotional intelligence. In W. J. Zerbe, N. M. Ashkanasy, & C. E. J. Härtel (Eds.), *Individual Sources, Dynamics, and Expressions of Emotion (Research on Emotion in Organizations, Volume 9)*, (pp.187–201, Emerald Group Publishing Limited, Bingley.
- Quevedo, R. J. M., & Abella, M. C. (2011). Well-being and personality: Facet-level analyses. *Personality and Individual Differences, 50*(2), 206–211.
- Rathi, N., & Lee, K. (2018). Core self-evaluations, worry, life satisfaction, and psychological well-being: An investigation in the Asian context. *International Journal of Learning and Change, 10*(1), 21–32.
- Richard, E. M., & Converse, P. D. (2016). An examination of within-person variance in contextual display rules and deviation from display rules. *European Journal of Work and Organizational Psychology, 25*(3), 412–429.
- Shehzad, K., Xiaoxing, L., Sarfraz, M., & Zulfiqar, M. (2020). Signifying the imperative nexus between climate change and information and communication technology development: a case from Pakistan. *Environmental Science and Pollution Research, 27*, 30502–30517.

- 
- Shehzad, K., Zaman, U., José, A. E., Koçak, E., & Ferreira, P. (2021). An officious impact of financial innovations and ICT on economic evolution in china: revealing the substantial role of BRI. *Sustainability, 13*, 8962. doi: 10.3390/SU13168962
- Soto, C. J. (2019). How replicable are links between personality traits and consequential life outcomes? The life outcomes of personality replication project. *Psychological Science, 30*, 711–727.
- Turiano, N. A., Spiro, A., III, & Mroczek, D. K. (2012). Openness to experience and mortality in men: Analysis of trait and facets. *Journal of Aging and Health, 24*, 654–672.
- Ugwu, F. O., Nwaosumba, V. C., Anozie, E. U., Ozurumba, C. K., Ogbonnaya, C. E., Akwara, F. A., Ogwuche, C. H., & Ibiam, O. E. (2021). Job insecurity and psychological well-being: The moderating roles of self-perceived employability and core self-evaluations. *Journal of Psychology in Africa, 31*(2), 153-158.
- Ugwu, F. O., Onyishi, I. E., Anyaegbunam, E. N., & Ugwu, L. E. (2021). Emotions at work: Implications for psychological well-being of prison officers in Nigeria. *International Journal of Work Organisation and Emotion, 12*(1), 64–85.
- Wilson, R. S., Boyle, P. A., Yu, L., Segawa, E., Sytsma, J., & Bennett, D. A. (2015). Conscientiousness, dementia related pathology, and trajectories of cognitive aging. *Psychology and Aging, 30*, 74–82.
- Yin, H., Huang, S., & Lee, J. C. K. (2017). Choose your strategy wisely: Examining the relationships between emotional labor in teaching and teacher efficacy in Hong Kong primary schools. *Teaching and Teacher Education, 66*(1), 127–136.s