Cultural Intelligence and Organisational Performance among the Staff of Federal Polytechnic, Ilaro, Ogun State

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Abstract: This study investigates the impact of cultural intelligence (CI) on organisational performance among the staff of the Federal Polytechnic, Ilaro, Ogun State, Nigeria. The research targeted all 989 staff members, with a sample size of 278, determined via Cochran's formula and selected through simple random sampling.

Data was collected through a structured questionnaire using a 4-point Likert scale and disseminated via Google Forms. The instrument demonstrated high validity and reliability, with a Cronbach's Alpha of 0.880. Multiple linear regression analysis performed with SPSS indicated that CI, especially its cognitive and metacognitive dimensions, significantly affects organisational performance, shown by an R-squared value of 0.542. Cognitive intelligence enhances problem-solving, innovation, and adaptability, while metacognitive intelligence fosters reflective practices and teaching effectiveness. The study underscores the significance of CI in diverse educational settings and recommends tailored CI training and ongoing professional development to foster an inclusive and high-performing workplace

Keywords: Cultural, intelligence, Organisational performance

I. Introduction

In today's globalised world, employees need to navigate diverse and multicultural environments effectively. This highlights the importance of cultural intelligence (CI). Introduced by Christopher and Soon in 2003, CI is the ability to adapt and communicate well in different cultural settings. Like IQ, CI helps individuals work efficiently with various groups and avoid misunderstandings and conflicts. It involves knowing cultural norms and being flexible in behaviour and communication styles. This improves interpersonal skills, empathy, and adaptability (Tom, 2023; Hanrahan, 2023). CI has become highly relevant in organisational behaviour, particularly due to the increased global operations and diverse workforces within companies. Research shows that employees with high CI positively impact collaboration, customer interactions, and decision-making, which, in turn, supports overall organisational performance (Udokwu et al., 2023). High CI allows individuals to make informed judgments and interpret new behaviours accurately, fostering organisational effectiveness. However, achieving high job performance in a culturally diverse setting requires organisations to be inclusive regarding language, cultural norms, religion, ancestry, and social class.

Organisational performance is about achieving objectives effectively, measured through both financial and non-financial metrics such as productivity, customer satisfaction, innovation, and employee engagement. Success in this area requires efficient resource management and the alignment of processes with organisational goals. Organisations that invest in developing Cultural Intelligence (CI) tend to perform better in diverse and interconnected environments. In a culturally rich country like Nigeria, which is home to over 250 ethnic groups and various religious affiliations, developing CI is particularly valuable. The Nigerian context demonstrates both the opportunities and challenges that come with cultural diversity, emphasising CI's role in fostering innovation, productivity, and customer satisfaction (Onuoha, 2020; Pardung et al., 2023; Nooh, 2023).

Public tertiary institutions are recognising the importance of cultural intelligence (CI) in fostering global citizenship and improving institutional effectiveness, thanks to their culturally diverse student populations. However, despite its advantages, CI is still underutilised in many Nigerian organizations and public institutions, which struggle with managing cultural differences. While much research has concentrated on the impact of CI on employee performance, there has been less focus on its broader organisational effects, including long-term sustainability and growth (Onwuzu & Nnamani, 2023).

Researchers have identified four dimensions of cultural intelligence (CI): cognitive, metacognitive, motivational, and behavioural. Previous studies have primarily focused on employee performance, particularly among expatriates, and have shown that CI can enhance expatriate performance (Chen et al., 2024). However, there is a need for more comprehensive studies to assess CI's impact on overall organizational performance. This study will examine the cognitive and metacognitive dimensions of CI among the academic staff at The Federal Polytechnic Ilaro, Ogun State, with the aim of addressing existing research gaps

Research Objectives

i.   To examine the effect of cognitive intelligence on organisational performance.

ii.   To determine how metacognitive intelligence affects organisational performance.

II. Literature Review

Conceptual Review

Cultural intelligence (CI) is a theoretical construct that pertains to the aptitude of a person or an organisation to comprehend and adjust to diverse cultural environments. This encompasses the capability to identify, interpret, and effectively react to cultural disparities across various circumstances. Several researchers have described and conceptualised cultural intelligence (CI) in diverse manners. For instance, Karuppannan et al. (2022) defined CI as the capacity to navigate and perform successfully in contexts marked by cultural differences. Cultural intelligence refers to the capacity to effectively adapt and navigate across many cultural environments, highlighting the significance of adaptation and flexibility (Livermore & Ang, 2018). Peterson and Hunt (2021) assert that cultural intelligence encompasses the capacity to engage proficiently with individuals from diverse cultural origins. This underscores the significance of efficient communication and interpersonal aptitude in the context of cultural intelligence.

Cultural intelligence (CI) encompasses the capacity to comprehend, interpret, and traverse cultural disparities, conventions, principles, and conducts in a manner that cultivates favourable cross-cultural engagements and partnerships (Peterson, 2018). Cultural intelligence extends beyond a basic understanding of many cultures, including empathy, effective communication, adaptability, and a receptive mindset within cross-cultural environments. Cultural intelligence (CI) is an invaluable resource for people and organisations seeking to flourish in an ever more interconnected and diverse global landscape. Cultural intelligence is a comprehensive construct that includes a range of cognitive, emotional, physical, and behavioural aptitudes and competencies. Both individuals and organisations are increasingly acknowledging the importance of navigating and thriving in global and multicultural environments.

Cognitive intelligence

Cognitive intelligence, or general intelligence or the "g-factor," encompasses an individual's ability to engage in reasoning, learning, problem-solving, comprehending intricate concepts, and efficiently adjusting to novel circumstances (Henderson, 2020). The concept encompasses cognitive functions such as perceptual processes, attentional mechanisms, memory systems, logical reasoning abilities, comprehension skills, and analytical thinking processes. Additionally, intelligence is assessed using IQ (Intelligence Quotient) tests, regarded as a critical component of human cognitive abilities. Assam and Emele (2020) assert that cognitive intelligence significantly impacts organisational performance by facilitating problem-solving and decision-making. This intelligence aids in the analysis of intricate problems, the evaluation of various options, and the formulation of well-informed decisions. Additionally, cognitive intelligence contributes to learning and adaptation, thereby enabling employees to swiftly comprehend new information and concepts, and effectively adjust to evolving business environments.

Furthermore, cognitive intelligence fosters innovation, creativity, and strategic thinking, empowering individuals to comprehend the long-term implications of their actions and align them with organisational objectives. In Nigerian tertiary institutions, possessing cognitive intelligence is crucial for academic personnel involved in research, teaching, and administrative roles. This attribute enables them to think critically, problem-solve, and innovate. Furthermore, the significance of these skills extends to administrative personnel responsible for decision-making, resource management, and proficient communication.

Metacognitive Intelligence

Metacognitive intelligence pertains to the ability to engage in introspection and control one's cognitive processes, encompassing activities such as problem-solving, learning, and decision-making. Its significance within tertiary institutions is considerable, as it contributes to achieving academic accomplishments and fostering continuous learning throughout one's lifetime (Efklides, 2021). The use of self-awareness techniques may be advantageous for students as it facilitates the development of cognitive self-awareness, allowing individuals to recognise their own cognitive aptitudes and limitations. Moreover, it enables students to manage their learning methods and adapt them accordingly to various tasks.

Additionally, self-awareness aids in establishing explicit learning objectives and formulating efficient study schedules, which can be effectively monitored during the learning process. According to Akpan and Inyang (2022), using technology may facilitate reflective thinking, enabling individuals to evaluate their previous learning experiences and identify opportunities for improvement. According to Efklides (2021), including metacognitive intelligence can potentially improve the performance of lecturers. This improvement is achieved by facilitating a deeper comprehension and regulation of their teaching processes through self-reflection. This self-reflection involves actively seeking feedback from peers or educational experts and engaging in professional development opportunities specifically focused on teaching and pedagogy. Ultimately, integrating metacognitive intelligence can enhance lecturers' performance, elevate student outcomes, and foster a sustainable working environment.

Organisational performance

Organisational performance pertains to the degree to which an organisation successfully attains its strategic goals and accomplishes its purpose while efficiently using its resources. Richard et al. (2019). This is a thorough assessment of an organisation's achievement in attaining its objectives, including financial results and non-financial metrics such as customer happiness, staff engagement, innovation, and market share. The idea of organisational performance is multifaceted, including several dimensions related to an organisation's functioning, effectiveness, and efficiency (Neely, 2019). Within higher education institutions, the

evaluation of organisational performance encompasses a range of aspects. These dimensions include but are not limited to academic quality, student happiness, financial sustainability, research excellence, and community involvement. Numerous academics have researched the notion of organisational performance within the framework of higher institutions. Aroklaraj (2022) posits that the fundamental components of organisational effectiveness within higher education are teaching, research, and service.

Similarly, Madaan (2021) posits that organisations' success in higher education is distinguished by their capacity to manage and reconcile the conflicting requirements of maintaining academic superiority, ensuring financial viability, and demonstrating social adaptability effectively. According to the research conducted by Ang and Van Dyne (2018), Cultural Intelligence may be delineated into four discrete elements, namely metacognitive, cognitive, motivational, and behavioural. The metacognitive component pertains to an individual's capacity to comprehend cultural biases and their impact on perceptions and behaviours. The cognitive component encompasses an individual's knowledge and comprehension of diverse cultures. The motivational component encompasses an individual's inclination and readiness to adapt to various cultural norms. Lastly, the behavioural component encompasses an individual's ability to modify their behaviour to align with cultural contexts.

Cultural Intelligence and Organisational Performance

Significant research has been conducted in recent years on the relationship between cultural intelligence and organizational effectiveness. An organisation that fosters a culture that appreciates and supports cultural intelligence may offer a number of indisputable advantages (Sanders, 2018). For instance, a staff member who understands cultural differences can better cooperate internationally and successfully interact with clients and stakeholders from various cultural backgrounds. This may increase client happiness and broaden the market, both of which benefit financial success. Additionally, since they may access a wider variety of viewpoints and ideas, teams with more excellent CI tend to exhibit better levels of creativity and invention. According to a research by Adebayo (2019), businesses that value and foster cultural intelligence among their staff members are more efficient, productive, and globally competitive. Srivastava (2022) stated that Cultural Intelligence is especially crucial for organisations operating in various cultural settings, provides more evidence for the link between Cultural Intelligence and organisational performance. They contend that companies that can successfully handle cross-cultural contacts are more likely to forge close bonds with local partners, which may enhance commercial results.

Theoretical Review

Social Learning Theory

Theoretical literature highlights the importance of cultural intelligence in enhancing organisational performance, especially for those operating in diverse cultural contexts. By fostering cultural intelligence among employees, organisations can navigate cross-cultural interactions more effectively, leading to increased profits and competitiveness (Ali et al., 2023). This study examines the Social Learning Theory proposed by Canadian psychologist Albert Bandura, which posits that people learn behaviours by observing others. Therefore, employees can enhance their cultural intelligence by mimicking the behaviours of coworkers who exhibit higher levels of it.

Social Identity Theory

According to Zafar, M. (2024), British social scientists Henri Tajfel and John Turner developed the Social Identity Theory in the 1970s. They said that people's sense of self and group identity comes from their position in different social groups, like their country, race, or gender, and that this social identity affects how they act and what they think about themselves. Social identity theory says that in an organisation, workers who strongly connect with their organisation are more likely to work well with colleagues from different cultures, (Simbula, S., et al, 2023). When people meet people from other cultural groups, they may feel a "threat to their cultural identity," which can lead to harmful attitudes and actions between groups. On the other hand, people with high CI are better able to deal with cultural identity threats because they are more aware of their own cultural biases and can better change how they act in different cultural settings, (Arli, D., et al 2023).

Empirical Review

Ukponmwan and Okocha (2022) conducted a study on Cultural Intelligence and Organisational Productivity in Nigeria's Security and Safety Industry. The objective of this research was to identify the role of cultural intelligence in security and safety management. The study adopted the survey design method; a questionnaire was used to collect data from 434 respondents, and the data was analysed and interpreted using descriptive statistics. The findings of the study revealed that there is insufficient cultural intelligence skills among people in Nigeria. They recommended, among others, that individuals in both private corporate organisations should give cultural intelligence prominence. Akpan & Inyang (2018) researched Academic Staff Cultural Intelligence and Job Performance in Nigerian Universities. The study examined the effect of cultural intelligence (CI) on the job performance of academic staff in tertiary institutions in Nigeria. The cultural intelligence dimensions studied were metacognitive, cognitive, motivational, and behavioural. Data were collected from a convenient sample size of 837 academic staff of four public universities in the Niger Delta Region of Nigeria using an adapted questionnaire that was earlier developed and applied by different scholars. Descriptive and inferential statistics provided the basis for the analysis, and the study revealed that cultural intelligence significantly affects job performance.

III. Methodology

The study used a poll research methodology, and the teaching staff at Federal Polytechnic, Ilaro (FPI), Ogun state, Nigeria, was the study area and target group. The study area was chosen because FPI is a government school located in a not-very-famous neighborhood but very welcoming to Nigerians from all over the country. Despite its location, it has been named Nigeria's best and number one polytechnic. The institution has five Schools (Faculties): School of Communication and Information Technology, Engineering, Environmental, Pure and Applied Science, and Management Studies. Each school has several departments. At the time this study was done, the total population was 989 (487 academic and 502 non-teaching staff) were working for the FPI and the sample size for this study is 278.

Schools and the number of staff

S/NO	School	No of Staff
1	School of Communication and Information Technology (SCIT)	193
2	School of Engineering (SOE)	182
3	School of Environmental (SOEnv)	168
4	School of Pure and Applied Science (SPAS)	255
5	School of Management Studies (SMS)	221
	TOTAL	**989**

Source: Institution's Payroll and Tax Matters Unit

Cochran's formula for sample size determination of a finite population was used to determine a sample size of 278 respondents to represent the population, and a simple random sampling technique was adopted in selecting the respondents. A 4-point Likert scale questionnaire and Google forms of strongly agree (4) to strongly disagree (1) were used to gather necessary data. In contrast, the data was analysed by means of multiple linear regression with the aid of SPSS. The validity and reliability of the instrument were confirmed through component factor analysis. However, the validity and reliability of the pilot study were conducted in ICT Adegbenro Polytechnic, Itori Ogun state.

IV. Result and Findings

Reliability Statistics	
Cronbach's Alpha	N of Items
.880	15

This study used Cronbach's Alpha to assess the instrument's reliability. The Cronbach's Alpha for the 15 survey items was 0.880. When an instrument's Cronbach's Alpha score exceeds 0.7, it is considered reliable, and its items have a reasonably high level of internal consistency.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.736[a]	.542	.533	1.84408
a. Predictors: (Constant), MEI, COI				

The model summary shows a R value of 0.736, R Square of 0.542, and Adjusted R Square of 0.533. This suggests that the independent variable (cultural intelligence) can explain 54% of the variance in organisational performance.

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	406.997	2	203.498	59.841	.000[b]
	Residual	343.465	101	3.401		
	Total	750.462	103			
a. Dependent Variable: OP						

b. Predictors: (Constant), MEI, COI

With a significance (Sig) value of 0.000, the F value is 59.841. Cultural intelligence (MEI, COI) significantly predicts organisational performance, as indicated by the model's statistical significance (Sig value <0.05). This implies that the null hypothesis is rejected at 5%

Coefficients[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.210	.668		1.811	.073
COI	.400	.084	.379	4.776	.000
MEI	.493	.085	.462	5.820	.000
a. Dependent Variable: OP					

The t-value were 4.776 and 5.820, and the significance (Sig) values were 0.000 and 0.000. The unstandardised coefficient (B) for COI and MEI was .400 and .493, respectively. Given that the Sig value is smaller than 0.05, the predictors (COI and MEI) were statistically significant in predicting organisation performance.

V. Conclusion

In a world that is quickly becoming more globalised, the idea of cultural intelligence (CI) has become a crucial part of organisational success, especially in mixed places like Nigeria. This study examined how cognitive intelligence (CI) and metacognitive intelligence (MI) affect the success of teaching staff in Southwest Nigerian educational schools. The results show how vital cognitive and metacognitive skills are for improving how well an organisation does its job.

First, cognitive intelligence, which includes problem-solving, logical thought, and the ability to change, significantly impacts an organisation's performance. Staff members with higher cognitive intelligence can better deal with complex problems, encourage new ideas, and help their schools be the best they can be.

Second, metacognitive intelligence, which includes knowing yourself and controlling your thoughts, is just as important. It allows academic staff to think about how they teach, get feedback through professional development, and eventually improve their performance. This self-awareness and constant improvement help teachers and students improve in the long run.

Recommendations

Based on the findings of this study, the following recommendations are proposed to enhance organisational performance in Nigerian tertiary institutions, with a specific focus on academic staff:

Cultural Intelligence Training: Educational institutions should consider training their teaching staff in cultural intelligence. These programmes should cover both the cognitive and metacognitive parts of cultural intelligence. This will help staff members understand and react to different cultural settings.

Constant Professional Development: Urge academic staff to take advantage of opportunities for constant professional development in teaching and training. This can lead to better teaching methods, better student results, and a more secure workplace.

Promoting cultural diversity: Make sure that educational schools have an atmosphere that values and welcomes the different cultures of their students. This means being aware of and following different cultural norms, values, and views and helping kids from different cultures.

Integration of Cultural Intelligence: Include cultural intelligence in the larger curriculum and educational programmes so students can learn how to be culturally intelligent. Also, work with international institutions and organisations to help academic staff and students have cross-cultural exchanges and experiences, further improving their cultural intelligence.

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