Behavioural Change Policies and Strategies for Quality Regulation in Nigeria's Education Sector

Adebukola Daramola, Nigerian Institute of Social and Economic Research, Nigeria
Iyabo Olanrele, Nigerian Institute of Social and Economic Research, Nigeria
Oluwatotosin Ilevbare, University of Ilesa, Nigeria
Sebil Oshota, Nigerian Institute of Social and Economic Research, Nigeria
Antonia Simbine, Nigerian Institute of Social and Economic Research, Nigeria
Folarin Gbadebo-Smith, Centre for Public Policy Alternatives, Nigeria

Abstract

Efforts at tackling the phenomenon of corruption in Nigeria date back several decades, but success and progress have been minimal due to the conventional approach of technical fixes using the law- and-order approach. Consequently, the Nigerian Institute of Social & Economic Research (NISER) in the last couple of years has curated a body of knowledge on the Behaviour Change Approach to Corruption Control in Nigeria. This paper explores the outcome of a Participant Observation (PO) study conducted within the Joint Admission and Matriculation Board (JAMB); a regulatory body responsible for overseeing admissions into all tertiary institutions in Nigeria. The board was purposively selected as a model agency, based on a prior lived experience story collection exercise involving 614 respondents from Nigeria's public sector offices. The stories highlighted JAMB's exemplary practices, prompting its selection for in-depth analysis. Findings from the study were analysed using a hybrid framework which fuses the COM-B framework (Capability, Opportunity and Motivation influences on Behaviour) and the SOCSIT framework (Situation Analysis of Behaviour). The findings reveal that modelling and signaling (from the board's highest office) are the most critical success factors that influence positive behaviour of staff at JAMB. Other behavioural change principles deployed include (i) physical environment restructuring (ii) knowledge shaping and (iii) Motivations. NISER, based on the pilot study is working at a sustainability plan for JAMB as well as a scale up plan for other educational regulatory agencies in Nigeria.

Keywords: Behaviour Change, Quality Regulation, Education Sector, Participant Observation, Nigeria

iafor

The International Academic Forum
www.iafor.org

Introduction

Unethical practices and behaviour in the Nigeria's education sector is a significant challenge, particularly with respect to the admission process. Entrance exams for tertiary institutions are often not based on merit but influenced by factors such as bribery, nepotism, and political patronage (Idiong et al., 2023) due to weak regulatory and institutional quality. This corrupt practice undermines the integrity of the educational system, leading to the admission of less qualified candidates and a misallocation of educational resources (Mgboji et al., 2024). Such practices distort the selection process, perpetuate inequality, and contribute to the overall decline in the quality of education.

Although, efforts at tackling the phenomenon of unethical behaviour in Nigeria's public sector, (including the educational regulatory space) date back several decades, successes and progress have been minimal. Consequently, MacArthur Foundation, in re-imagining the phenomenon, proposed a different approach to the challenge, namely *A BEHAVIOUR CHANGE APPROACH*, which focuses on addressing the root causes of corrupt behavior rather than relying solely on traditional law-and-order solutions. This underscores the emergence of the Nigerian Institute of Social and Economic Research (NISER) use of the Macarthur grant funds to provide research support for corruption control through behaviour change. Our research seeks to understand corrupt and unethical behavior, why people act the way they do and what factors exist to changing these behaviors. Thus, this study seeks to institutionalize behavioral change approaches for reducing corrupt behaviour using a pilot case of a success story recorded at one of Nigeria's educational regulatory Institutions- the Joint Admission and Matriculation Board (JAMB).

The Joint Admissions and Matriculation Board (JAMB) is an agency of the Nigerian Federal Ministry of Education. The primary mandate of JAMB is to streamline, coordinate and harmonize the admission of candidates into Nigeria's higher institutions.[1] This involves several processes including having a robust registration and application process, conducting the matriculation examination and ultimately having an efficient admission system. The legal instrument establishing the Board was promulgated by the Act (No. 2 of 1978) of the Federal Military Government on 13th February 1978. By August 1988, the Federal Executive Council amended Decree No. 2 of 1978. The amendments have since been codified into Decree No. 33 of 1989, which took effect from 7th December 1989. The Board is headed by a Registrar and its management team consisting of Directors heading Departments and Zonal office Directors across the 36 states of the country.

For a long period of JAMB's existence, the board had underperformed in discharging its responsibilities and fulfilling its mandate. Thus, limiting the board's ability "to be a world class matriculation, assessment and admissions board through equal opportunity and transparent services", as envisioned. The board's underperformance culminated into several cases of misdemeanor, including under-remittance to the government treasury (Figure 1). For instance, before 2016, the Board is documented to have remitted about 45 million naira cumulatively to the government coffers, but within the first year of a new leadership's tenure, (mid 2016–2017), about 7.8 billion naira was remitted to the government treasury. Subsequently, in the last five years, the Board has remitted over 40 billion naira to the Federal Government treasury, an extraordinary feat which has recently made the Board a reference point for probity, integrity and accountability. Since the inception of the

---

administration that started in mid-2016 at JAMB, a plethora of reforms and initiatives have been implemented with the main goal of positively changing the attitude and behaviour of its employees for efficient and corrupt-free service delivery. Consequent upon these reforms, JAMB stands tall among Nigeria's public service agencies as a reference point of effectiveness for ethical and behavioural change interventions.
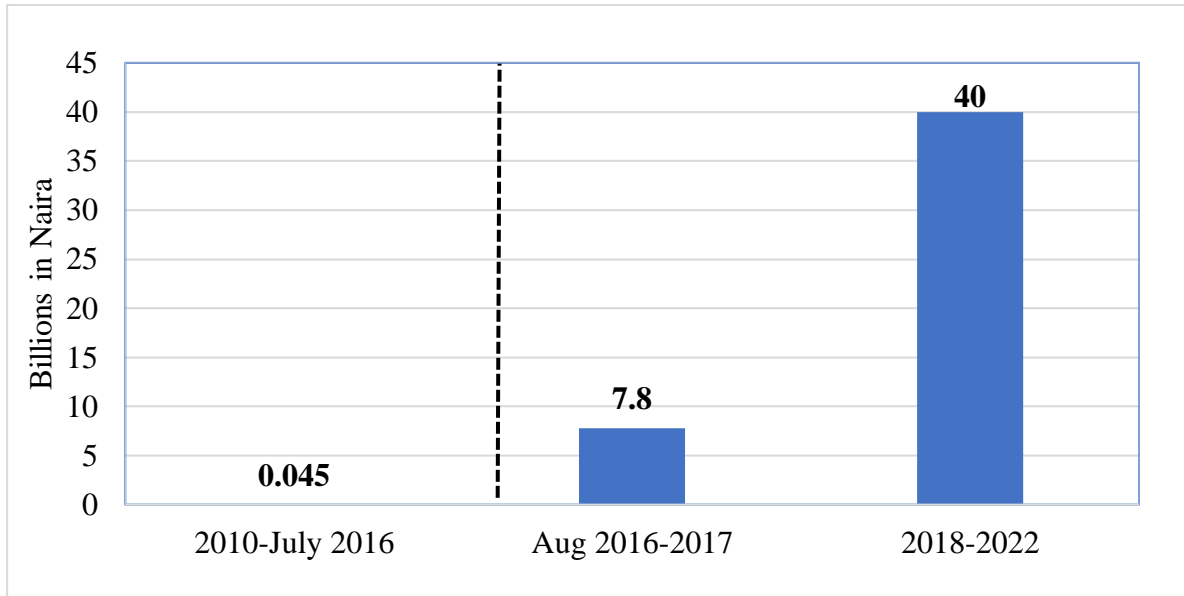
Note: A new leadership took over at the Board in mid-2016

Figure 1: JAMB's Remittance to Government Treasury: Pre & Post 2016

Against this background, NISER interrogated the JAMB success story to identify the behaviour change principles that were employed by the new leadership in tackling corrupt behaviour which was endemic in the Institution. Specifically, the study pursued two objectives (i) analyze the combination of factors influencing positive behaviour change at Nigeria's Joint Admissions Matriculation Board (JAMB) and (ii) map out strategies for institutionalizing and scaling behavioural change interventions for quality regulation in Nigeria's educational sector.

As a key regulatory body overseeing tertiary admissions, JAMB's practices provide a valuable case study for understanding how behavioural change interventions can improve and sustain governance and regulatory quality. By analyzing the behavioural change approach employed at JAMB, this paper identifies effective policies and strategies that could be scaled to other educational regulatory agencies in Nigeria. The goal is to demonstrate how the adoption of behavioural change principles can foster integrity and enhance the effectiveness of regulatory framework in the education sector. Thus, the understanding that emerges from this paper is to enable us design effective behavioral change interventions, based on the purpose of institutionalizing behavioural change as stated in the project deliverables.

Literature Review

Conceptual Underpinning

The conceptual foundation for this study is the Pathways of Change (PoC) framework by Vogel and the UK Department for International Development (Vogel/DFID, 2012). In

essence, the Pathways of Change (PoC) framework is a theoretical orientation and general guide to behavioral change policies and strategies to enhance quality regulation through identifying and addressing contexts, opportunities, barriers, and possibilities for applying actionable approaches to reform. It focuses on understanding the existing structures, institutions, and incentives to identify low-hanging fruits and lines of least resistance for implementing reforms with minimal resistance and maximum impact. In other words, it aims to analyze patterns of the given society, organizations, or state that will help to find which issues or approaches are likely to meet with least resistance from the target community and can thus be changed without much opposition to bring about maximum results. This approach mainly focuses on self-organisation of participants to achieve regulatory objectives including compliance, anticorruption, and institutional responsibility. In addition to this, PoC shall still embrace monitoring and evaluation to achieve incrementalism that enhances sustainability and context-appropriate shifts in the regulatory framework. The PoC thus serves as a pivotal lens for driving the desired behavioral shifts necessary for quality regulation in Nigeria's education sector.

Empirical Perspective

Regarding the empirical focus, research on behavioural change interventions lays high importance on the practical implementation of theoretical models including; COM-B model, Behavior Change Wheel (BCW), Theoretical Domains Framework (TDF), and Intervention Mapping. Collectively, these researches provide useful information on how structured and systematic approaches can be useful in directing the process of designing and implementing interventions that can help realize the intended behaviours in different settings.

Toro-Troconis and colleagues (2021) analyze the behavioral factors concerning use and implementation of learning design approaches in United Kingdom higher education. Employing COM-B and BCW frameworks via structured interviews, their studies identify interventions such education, persuasion, incentivization, training, restriction, environmental restructuring, modeling, and enablement as critical for effectively decreasing adoption barriers. Engaging learning technologists and academic staff through these strategies enabled the advocated behaviour change on the integration of learning design methodologies into higher learning education. In the same manner, Wang et al. (2021) purposively and iteratively constructed a school-based intervention for increasing physical activity engagement among children in China. Based on the BCW and TDF frameworks, the study found that some of the interventions needed to enhance children's physical activities include: education, persuasion, environmental restructuring, modeling, enablement, training, and incentivization. It sought to embrace multiple aspects of behaviour including knowledge, skills, and opportunities to foster sustainable behavioral change.

In another development, Hankonen and colleagues (2020) explored a stepwise process to develop interventions for physical activity (PA) and sedentary behaviour (SB) among vocational school students. Using Intervention Mapping and the BCW, they determined target behaviours of self-regulation skills, outcome expectancies, and environmental opportunities. The authors called for future strategies to reduce sedentary behaviour and promote physical activity to consider individual and contextual factors, in particular to foster self-regulation and exploit opportunities in the environment.

Collectively, these studies demonstrate the flexibility and utility of behaviour change frameworks in a variety of contexts. They demonstrate that knowledge from behavioural

sciences show how interventions addressing education, environmental restructuring, self-regulation and incentivization, to name a few, can be instrumental in overcoming behavioural barriers and making change happen.

Methodology and Analytical Framework

Methodology

This research involved a mixed data collection approach. Specifically, an In-Depth Interview (IDI) and the Participant Observation (PO) data collection methods were utilized. The IDI was conducted among 41 senior, middle, and junior staff members at JAMB. These interviews aimed to understand how the staff of the agency behave, especially with respect to compliance or otherwise to rules at the board, and the factors responsible for observed behaviour patterns. Finally, Participant Observation involved sending a researcher to the board to observe the internal processes and interactions within the office environment. The researcher was tasked with understudying the agency's procedures to capture firsthand insights into how corrupt and unethical behaviors manifest in daily operations. This method allowed the researchers to identify real-time dynamics and systemic weaknesses (Shin & Miller, 2022; Sirris et al., 2022) that could enable unpleasant practices. During participant observation, the researcher works to play two separate roles at the same time: subjective participant and objective observer. This was the case in our study. Participant observation became eminent since designing a bespoke behavioral intervention for behavioural change in public agencies requires a baseline understanding of their daily processes, exchanges with citizens, and peculiar challenges. Bearing the limitations of other qualitative data collection methods in mind, especially the fact of a potential for subjective responses tweaked towards social desirability, participant observation presents with an opportunity to spot behaviour in its true form.

Analytical Framework

The study used an analytical framework called *COM-B* in SOCSIT (Michie et al. in 2011). The framework is a hybrid of two frameworks namely Social Situation Analysis (SOCSIT) Framework and Capabilities, Opportunities and Motivation-Behaviour (COM-B) diagnosis framework. COM-B presents a categorization of factors that influence behaviour. Each of the three COM categories have two main sub-divisions (shown in Figure 2).

Figure 2: COM-B IN SOCSIT

Undertaking a COM-B diagnosis enables us to identify what combination of Capabilities, Opportunities and/or Motivation needs to be targeted to achieve the desired behaviour change. SOCSIT also known as (Situation Analysis of Behaviour) has nine elements- **S**pace, **A**ctors, **A**ctivities, **A**ctions, **F**eelings, **O**bjects, **G**oals, **E**vents, **T**ime.

Our working hypothesis is that there are interaction paths across elements in the two frameworks that can be mapped. Consequently, our expectation is that COM-B influences interact with social situational influences to produce the behaviours observed within a system boundary. In order to change behaviour therefore, both COM-B factors and SOCSIT factors should be moderated. This framework resembles the Behaviour Change Wheel (BCW). However, it does not yet have elements of intervention design and policy options which form the middle and outer layers of a BCW. This is because our findings from the analysis here is what we intend to take forward to intervention design. The framework here, succinctly summarized in figure (2), enables us to have a merged understanding of factors influencing behaviour change at the board.
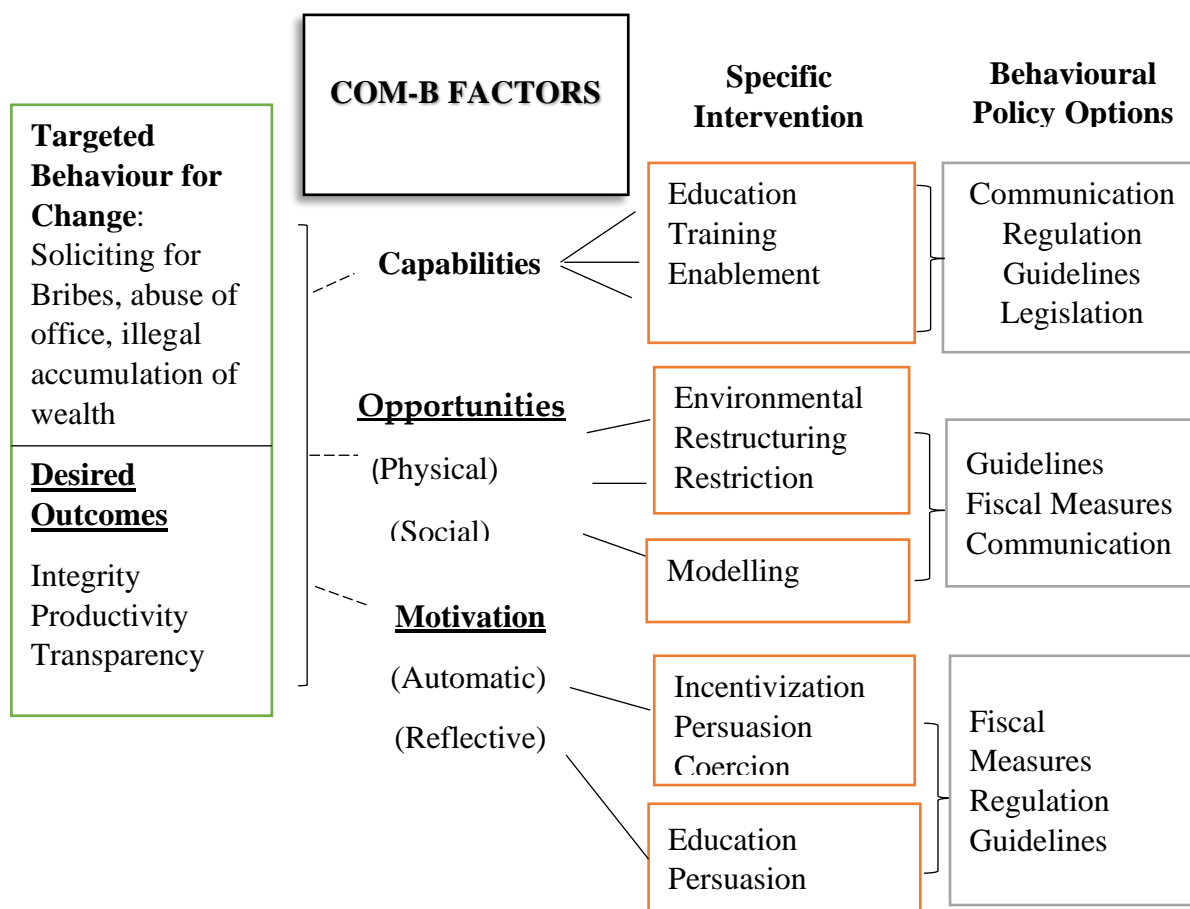
Figure 3: Pathways of Behaviour Change
(*Source: Authors' depiction based on COM-B Framework)*

Discussion of Findings

Results From In-Depth Interview (IDIs)

With respect to IDIs, staff of the board at the junior, mid-level and senor cadres were engaged as respondents. The respondents were required to define corrupt behaviour in the general sense and respondents from JAMB described this as actions that are '*against due process*'. In response to what qualifies as unethical practices within their workspace, respondents from the office highlighted *bribery, abetting malpractice, result manipulation, lack of accountability and embezzlement*; of these, abetting malpractice was identified as most common. Junior staff were identified as being more involved in the most common corrupt behaviour of abetting malpractice.

In the opinion of respondents, the critical motivational factors fueling unethical behaviour were *price-income disparity, greed,* and *materialism***.** The enabling systemic factor for these behaviours relate to the warped value orientation pervasive among civil servants and the institutional lapses which create loopholes that are easily explorable. In the opinion of respondents, a sufficient monitoring system and the institutionalization of a *"No Cash Policy"* will lead to reduced opportunities for unethical practices and thus create barriers to

same. They advocated *right socialization (value reorientation)* as a strategy for overall deterrence to negative behaviour and opine that all cadres of staff (Junior, medium and top level) should be targeted for intervention design.

Results From Participant Observation

Findings from the Participant Observation study are documented along the lines of the Capability-Opportunity-Motivation (COM-B) and Social Situation Analysis (SOCSIT) frameworks.

Capabilities—Actors/Activities/Objects Interactions

The actors in this observational study are JAMB officials, candidates, parents/guardians, Computer Based Test (CBT) centres' officials, service providing agencies, Ministry of Education, and Universities' officials. However, the main stakeholders in this study are JAMB officials, which comprise all members of staff of the Board, across the 12 departments with respective divisions and units. The departments have clear line of activities and schedule of duties assigned to each member of the department. The respective activities are closely monitored, and regular quarterly assessment is carried out by the quality assurance department.

In terms of rules and principles, the Board is observed to have clear and unambiguous norms and rules guiding activities and actions in the organization. These norms have been reinforced over the years, using precedence and social cues. At JAMB, there is a culture of consistent and smooth flow of unambiguous information through regular communication and meetings. In addition, there is a weekly bulletin circulated among members of staff detailing updates, critical information and weekly financial inflow and outflow of the institution (transparency and openness). Also, the Board has a code of conduct manual, detailing context specific rules and regulations from the Public Service Rule (PSR), which staff are expected to adhere to. The Board's Code of conduct manual is a simplified form of the public service rule. There is also adequate knowledge of the rules and guidelines through regular sensitization facilitated by the ACTU unit of the Board. To drive compliance to the rules and guidelines in the manual, all staffs are made to append their signature upon receipt of the manual.

Opportunities—Space/Time/Actors

At the Board, structures and systems are put in place to restrict opportunities for corrupt behaviour and unethical acts. One of such is the transition to Computer-based test in 2013 which has been further strengthened in 2016. The computer-based exam has largely reduced human intervention and inappropriate acts in examination conduct and marking of scripts. The new system is principally automated with the goal of reducing human interference and improving effective service delivery. Deviant acts such as impersonation and other unethical behaviour which used to be prevalent at special centres have been curbed, as all candidates are biometrically verified during registration and on the exam date. The exam is also closely monitored through CCTV, while video clips are reviewed after exams by the Information Technology Service (ITS) officials.

The admission process itself is now technology driven with the introduction of an electronic platform known as the Central Admission and Processing System (CAPS). This technology reduces human interactions and thus reduces opportunities for soliciting bribes or patronage.

There is also no physical exchange of cash on admission transactions including at the Computer Based Test (CBT) centres. Any CBT centre found erring on any stated guidelines is flagged and delisted immediately.

Furthermore, opportunities for laxity, absenteeism and lateness to work is largely controlled as the office environment is self-sufficient with basic facilities such as Automated Teller Machine, Canteen, Vending machine, Staff Bus and well-equipped staff clinic. It is evident to state that the Board has enshrined core values, amongst which are discipline, punctuality, orderliness, honesty, probity, and integrity. Majority of staff also asserted that before the present leadership of the Board, corrupt behaviours were rampant with cases such as misappropriation of funds, embezzlement forging of signature, admission racketeering and candidates' extortion, leakage of exam questions, lateness to work and negative attitude towards work. With the inauguration of a new leadership in 2016, the occupant in the Board's highest office created a visible social opportunity for staff to emulate positive behaviour, by showing positive examples.

Interactions With Stakeholders.

At the Board, interactions with external stakeholders are systematically restricted and this helps to positively manage opportunities for gate keeping, patronage, inducements and incentivization for service delivery. Consequently, the physical opportunities for corrupt behaviour are limited. Service delivery is technologically monitored and complaints are expected to be resolved within two hours of submission (this speaks to leveraging the Time component of the social situation at the Board for efficient behaviour of actors), except it requires management's approval. Routines are well laid out and enforced- resumption time, lunch time bracket, closing time, all reduce opportunities for idleness.

In the Board's dealing with external stakeholders such as Candidates, Parents, CBT centre, a secluded environment is arranged for clients approaching the Board for complaints as there is no form of undue interactions with other members of staff aside the SERVICOM staff who handles the complaints under CCTV monitoring. This is to prevent extortion of candidates and other corrupt influence. Consequently, majority of clients are satisfied with the services provided as the services are fast, transparent and seamless. This strategy to a restructuring of the physical space for reducing opportunities to engage in corrupt behaviour. The procedure for raising complaint is free from bureaucratic hitches and closely monitored for orderliness and excellent service delivery. Clients are guided to raise tickets through a self-help mechanism on an online platform to lodge their complaints which are promptly attended to. Majority of complaints are related to corrections on profile information and inability to access JAMB online platform. To prevent corrupt acts, only corrections are allowed on candidates' profile and not replacement of details. Furthermore, departmental tasks are inter-connected to ensure checks and balances. To further check the activities of members of staff, financial transactions are made through bank and online payments, thereby limiting staff's contact with physical cash. Also, the premise is covered by Close Circuits Television (CCTV), thereby moderating the actions and behavior of staff.

Admission Process.

One of JAMB's key responsibilities is the coordination of admission guidelines and procedures in collaboration with tertiary institutions. Since 2017, a new electronic admission system was launched known as CAPS, Central Admission Processing System. The CAPS,

which is a virtual space has replaced the physical spaces where admission processes would have been undertaken; thus, the physical opportunities for corrupt behaviour, which are related to admission racketering has been minimized. The electronic system was created to reduce human interaction and by extension, unethical acts in the admission process, to block loopholes that hitherto encouraged unethical and corrupt acts. The benefits of CAPS include: faster processing, reduced bureaucracy, transparent process. The electronic system is closely monitored for checks and balances. It was created in such way that only educational institutions have the power to give admission while JAMB approves and disapproves if anomaly is observed. With this platform, admission officers at tertiary institutions do not have physical contact with JAMB officials, thereby blocking opportunities for admission racketeering and candidates' extortion. The admission process for tertiary institutions is clearly stated and documented in an operational manual. Another system/platform built around the admission process is IBASS (Integrated Brochure and Syllabus System). This is another virtual space substitute for a service that would have transpired in physical space. The substitution naturally reduces interaction and opportunities for rent seeking. The IBASS platform has significantly improved service delivery during the registration process, it enables eligibility check and reduces the common error of wrong subject combination during registration. It is an interactive platform that engages major stakeholders (JAMB, Tertiary Institutions and other regulatory bodies in the tertiary education sector).

Gifting Policy.

An intriguing area of interest is the enforcement of government policy on gifting. From anecdotal evidence, corruption does not often start with a direct bribe at the outset. It often begins with unsolicited and seemingly unassuming monetary inducements. In JAMB, gifts from external stakeholders are treated with caution, when a staff receives such from an individual, he/she is expected to pay the money through REMITA into the government account, furthermore, an accompanying report is submitted by the staff to the Head of Department who then reports to the Board Registrar. The researcher on participant observation at the Board further interrogated the underlying principle of this act. She was made to understand that this procedure is explicitly stated in the Public Service Rule (PSR) and code of ethics manual, and all staff are aware. A direct observation of a refund case of such nature showed a receipt generated through Remitta to return an unsolicited gift of 30,000 naira back into the government account. It was deduced that members of staff largely comply because there are checks and monitoring systems in place. There is also the awareness that such gifts could be an institutional set-up from candidates/guardian/other stakeholders. Majority of staff opined that the checks and balances which exist as a result of the systems and structures put in place largely drives compliant behaviour at the Board.

Motivation- Actions/Feelings/Goals

Motivations come in the form of pecuniary and non-pecuniary incentives. Incentives provide a spur or zeal in the employees for better performance. These incentives provoke feelings of patriotism and commitment to the system among staff. It also provokes actions that conform to the rules among other stakeholders such as organizations in the tertiary education sector. Therefore, a hope for a reward is a powerful incentive to motivate employees. As part of measures to sustain and reinforce positive attitude and ethical behaviour among members of staff at JAMB, some of the incentives introduced especially since the 2016 administration has been geared towards efficient service delivery by prioritizing motivation to employees. Incentives such as daily free lunch, sponsored medical expenses for members of staff and

their immediate family members, provision of staff buses, payment of 13th month salary, provision of examination allowance (paid annually in the month of July) and establishment of well-equipped staff clinic. Staff adduced to the fact that since the introduction of these initiatives, there has been significant drop in the number of corrupt acts such as exam questions leakage and other vices related to the services provided by the Board. The motivation of staff through improved welfare provision goes a long way in boosting staff's sense of belonging and commitment to service delivery. The institution clearly has internal documented policies to drive staff commitment and productivity.

At the Board, there are clear policy documents stating what is considered appropriate, unethical and illegal. Apart from the code of conduct manual, banners are placed along the walkways and around the premises to serve as prompts to staff. Asides motivating internal stakeholders, the Board also has mechanisms in place to motivate external stakeholders such as tertiary institutions. In the last few years, a system of annual award to tertiary institutions (Universities, Polytechnics, Colleges of Education) for various award categories was introduced. Categories such as "Most Compliant institution", "Most Improved Institution in Gender Balance", "Institution with the Most First Choice Candidates," among others.

Sustainability Concerns

Behaviour change occurs within a system boundary and is often forged by champions. Regardless of how sterling the achievements of a champion are, the public service by design, will not retain a person in headship position indefinitely. This concern was interrogated by the research team. While it is apparent to note that a willing and diligent leader is critical for reform; findings indicate that the sustainability of the innovative reforms introduced at JAMB will require systems and structures built around the institution and not an individual. The present orientation and positive attitude will likely endure through steady and regular value re-orientation, mentorship and continuous training on ethical conduct and behavior and also importantly, enforcement of penalties for inappropriate behavior.

Conclusion

The need to institutionalize behavioral change approaches within the Nigerian educational sector necessitates undertaking this research. Specifically, the study examines the combination of factors influencing positive behaviour in JAMB and mapped out strategies for scaling interventions for quality regulation in the Nigerian educational sector. Using a mixed method data collection approach through IDI and PO, the study finds that negative behaviours are largely motivated by a desire to outpace others in a competitive environment, as well as systemic factors such as low salaries, weak institutional frameworks, and insufficient monitoring. The study also underscored that unethical behaviors are more prevalent in environments that lack adequate checks and balances, such as in offices with poor supervision and enforcement of ethical conduct. However, significant strides have been made in JAMB, where reforms, including the transition to Computer-Based Testing (CBT) and the establishment of the Central Admission Processing System (CAPS), have minimized opportunities for unethical practices, reduced human interference, and increased transparency. Also, staff motivation through improved welfare provision goes a long way in boosting sense of belonging and commitment to service delivery. Despite these positive changes, challenges remain, especially in entrenching sustainability and addressing deeper cultural and value-oriented issues. Nevertheless, JAMB case study provides some useful learning for behavioural change intervention design, which are pertinent for institutionalizing

and scaling behavioural change interventions for quality regulation in Nigeria's educational sector.

Acknowledgements

References

Hankonen, N., Absetz, P., & Araújo-Soares, V. (2020). Changing activity behaviours in vocational school students: the stepwise development and optimised content of the 'let's move it' intervention. *Health Psychology and Behavioral Medicine*, 8(1), 440–460. https://doi.org/10.1080/21642850.2020.1813036

Idiong, S. P., Ukulor, D. C. & Aladejana, A. J. (2023). Corruption; A Major Virus to Quality of Education in Nigeria. *Journal of Humanities and Social Policy, 9*(3).

Kabiru, S. A. (2019). Causes of Corruption in Nigeria: Implication for National Development. *Journal of Management and Economic Studies, 1*(4), 20–27. DOI: 10.26677/TR1010.2019.115

Matorera, D. (2022). Corruption: Drivers, Modes and Consequences culled from "Corruption - New Insights" DOI:10.5772/intechopen.106826

Mgboji, C. C., Uzoegwu, C. R., & Onah, B. I. (2024). Corruption in Tertiary Institutions: Redeeming the Future. *Nigerian Journal of Curriculum Study, 2*(71).

Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation science, 6*(2011): 1–12.

Roberts F O N et al. (2021) working paper literature on corruption in Nigeria. Working Paper (unpublished), NISER/MacArthur Grant Project.

Shin, S. Y., & Miller, S. (2022). A Review of the Participant Observation Method in Journalism: Designing and Reporting. *Review of Communication Research*, *10*. 114–145 https://doi.org/10.12840/ISSN.2255-4165.035

Sirris, S., Lindheim, T., & Askeland, H. (2022). Observation and Shadowing: Two Methods to Research Values and Values Work in Organisations and Leadership. In: Espedal, G., JelstadLøvaas, B., Sirris, S., Wæraas, A. (eds) Researching Values. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-90769-3_8

Toro-Troconis, M., Voce, J., Alexander, J., Vasant, S. & Frutos-Perez, M. (2021). Using Behaviour Change as a Critical Frame of Reference to Understand the Adoption of Learning Design Methodologies in Higher Education. doi:10.5430/wje.v11n2p1

UNODC & NBS. (2019). Corruption in Nigeria: Patterns and Trends. Second survey on corruption as experienced by the population. Retrieved from https://www.unodc.org/documents/data-and-analysis/statistics/corruption/nigeria/Corruption_in_Nigeria_2019_standard_res_11MB.pdf

Vogel, I. (2012). Review of the Use of 'Theory of Change' in International Development: Review Report. UK Department for International Development (DFID). Retrieved from https://www.theoryofchange.org/pdf/DFID_ToC_Review_VogelV7.pdf

Wang, H., Blake, H. & Chattopadhyay, K. (2021). Development of a School-Based Intervention to Increase Physical Activity Levels Among Chinese Children: A Systematic Iterative Process Based on Behavior Change Wheel and Theoretical Domains Framework, Frontiers in Public Health, 9. https://doi.org/10.3389/fpubh.2021.610245

Contact email: bukidaramola@yahoo.co.uk