RESPONSIBLE CONSUMPTION AND PRODUCTION: THE EXIGENCY FOR ETHICAL INFRASTRUCTURE IN NIGERIAN MANUFACTURING COMPANIES

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Abstract: This research bordered on exploring the imperatives of ethical infrastructure in the responsible consumption and production practices of Nigerian manufacturing companies. The study was conducted on four selected manufacturing companies in South-South Nigeria, using the interpretative phenomenological analysis (IPA). The investigation adopted a qualitative methodology, with interviews as the instrument for collecting primary data. The underlying themes of the study were such that focused on the use of rewards in the reinforcement of ethical behaviour, the use of sanctions in the discouragement of unethical behaviour, and the role of ethical infrastructure in responsible consumption and production. The findings identify evidence of reward for ethical conduct as weak within the manufacturing companies, and even while sanctions were affirmed to be evident, these were also noted to be biased and selective in their application within the workplace. It was shown that ethical infrastructure, enhances the organisations' adoption of green policies, adherence to ethical practices and the quality of the organisation's values. It was recommended that the management and leadership of manufacturing companies integrate reward mechanisms for reinforcing ethical conduct and also adopt consistent sanction procedures, in line with bolstering the ethical infrastructure of the organisation.

Keywords: *Ethical infrastructure, ethical rewards, sanctions, responsible consumption, responsible production.*

INTRODUCTION

Sustainability is a global issue. Its concerns are such that extend to both developing and advanced countries, albeit such concerns as reflected in research, appear to focus more on developing nations (Geiger *et al*, 2018; Mio *et al*, 2020). This noted focus on developing nations is hinged on the observed environmental degradation and the extent of the impact of industrial operations on the well-being and living conditions of the citizenry in various regions and communities of these

countries (Chauhan *et al*, 2022). In Nigeria, Iheanachor *et al* (2023) identified problems such as environmental pollution, poor waste management, deforestation and lead exposure as a growing concern.

Hodal (2017) reported that over 240,000 barrels of crude oil are spilt every year in the Niger Delta; fouling farmlands and rivers in the region. Noting that approximately 32 million metric tonnes of waste is generated annually in Nigeria, and as a result of poor management, 30% of these are dumped at illegal sites, further compounding waste disposal challenges at various locations in the country; such as observed at the Lagos Lagoon (Iheanachor *et al*, 2023; Hodal, 2017). Hence, responsible consumption and production in Nigeria, pose a major bother to various stakeholders (Ezeanyim & Ezeanolue, 2021). Listed as one of the Sustainable Development Goals (SDG 12) by the United Nations (UN, 2015), responsible consumption and production is described as doing more with less. It focuses on resource and energy efficiency, the provision of basic services as well as improvement to the quality of life (UN, 2015; Bengtsson *et al*, 2018).

Research on responsible consumption and production has for decades stressed the role of activities such as Green Human Resource Management (GHRM) (Fapohunda *et al*, 2021; Jabbour *et al*, 2013; Teixeira *et al*, 2016) and organisational culture (Muhammad *et al*, 2019). However, these only offer a perspective that emphasizes structures and the outcome of decisions, but scarcely address the motives or the underlying ethical stance and values that shape behaviour and influence these decisions or structures; and which are also necessary for sustaining and driving decisions, plans or approaches put forward by the organisation. These motives or ethical positions are embedded in what is termed the ethical infrastructure of the organisation (Foote & Ruona, 2008; Ahadi, 2020; Yusra, 2017).

Ethical infrastructure involves all formal and informal means, by which behaviour is communicated, monitored, reinforced and when deviant, sanctioned in the work system (Ebitu & Beredugo, 2015). Ahadi (2020) described it as reflecting the will, and fundamental motive, for the behaviour, actions and choices of the organisation. The noted scantiness of studies addressing the role of ethical infrastructure in responsible consumption and production, occasions a gap, especially in the area of knowledge, concerned with the role ethical infrastructure plays in ensuring a sustained drive toward, and emphasis on responsible consumption and production by work systems, particularly Nigerian manufacturing work systems. This research paper addressed this gap, through its exploration of the nexus between ethical infrastructure and responsible consumption and production in manufacturing work systems in the South-South of Nigeria. The specific objectives of the study are designed to:

i.   Explore reward and sanction practices that evidence the ethical infrastructure of selected manufacturing organisations in South-South Nigeria
ii. Ascertain the role of ethical infrastructure in responsible consumption and production as an ongoing behaviour of selected manufacturing organisations in South-South Nigeria
iii. Proffer context-specific recommendations in line with addressing the challenges of engaging in responsible consumption and production by manufacturing work systems in South-South Nigeria

LITERATURE REVIEW

Utilitarianism Theory

The theoretical foundation for this research is the utilitarianism theory. Developed by Bentham in the late 18th century, the utilitarianism theory builds on the outcome of actions or behaviour as the basis for identifying what is suitable or appropriate (Ciulla, 2020; Foote & Ruona, 2008). Utilitarianism theory affirms the goodness, benefits and happiness derived from the outcome of actions as the basis for judging or determining the right course of action or what is more ethical (Ugoani, 2019). Within the context of work systems, utilitarianism offers a lens to identify right and wrong, and what is acceptable and what is not, based on the impact of such decisions on the environment, or stakeholders of the organisation. Thus, the theory emphasizes the consideration of stakeholders, directly impacted by related decisions and operations of the organisation (Ciulla, 2020).

The utilitarianism theory offers a framework for the understanding of ethics based on consequences. As such, its choices as the theoretical premise for this research, anchor on its relevance to the subject area of responsible consumption and production, and the extent to which organisational actions and operations are justified or qualified based on the impact of such on the context, environment or stakeholders (Ugoani, 2019). The theory therefore applies to the context of this research as it also clarifies related acts that mirror the ethical infrastructure of the organisation, and which serve to reinforce the sustainability position and goals of the organisation.

Ethical Infrastructure

Ethics describes the related principles of right and wrong (Ciulla, 2020). It prescribes moral conduct in relationships, stressing particularly on the treatment of others, especially based on accountability, responsibility, integrity and transparency. An organisational analytical level identifies ethics as the organisation's conduct and expressed morality in its dealings with various stakeholders, both internal and external (Karabay *et al*, 2018; Abiodun & Oyeniyi, 2017). Ezeanyim and Ezeanolue (2021) opined, organisations are composed of individuals and groups with different interests, values and beliefs. These individuals and groups, are more often, vying for their interests and in that sense, perceive the organisation as a vehicle or as the machinery through which their concerns are addressed. As such, the need for cohesion and coherence is critical in establishing a general posture, especially concerning the ethical position and conduct of the organisation and its members; hence the imperatives of ethical infrastructure.

Ethical infrastructure refers to the various policies, regulatory frameworks and approaches, formal or informal, devised and applied by the organisation in advancing behavioural standards and conduct in the organisation, as well as the discouragement of deviance in the organisation using sanctions or punishments (Chikeleze & Baehrend, 2017; Love *et al*, 2017). Foote and Ruona (2008) noted that ethical infrastructure enriches the work system, creating a more reliable and cohesive environment where members are consistently reminded and encouraged to act responsibly and honestly. Studies (Foote & Ruona, 2008; Cheng *et al*, 2019) link outcomes of administrative effectiveness, discipline and productivity to ethical infrastructure, with Ahadi

(2020) reporting that strong ethical infrastructure, controls for unethical practices and actions, curtailing fraud and corruption in the organisation.

Responsible Consumption and Production

Consumption and production, are two actions that are intertwined and at the same time inter-dependent (Wang *et al*, 2019; Mensah, 2019). Within the Nigerian manufacturing sector, organisations can engage in both consumption and production behaviour. Consumption in that they make purchases, and source raw materials and resources from their environment, necessary in their operations and daily running of the organisation; and production in that goods are advanced in line with addressing the needs of their various markets (Ezeanyim & Ezeanolue, 2021). The processes linked or associated with these actions of consuming and producing, as reported (Azowa & Tantua, 2020), impact the environment, and thus, hold significant implications for the relationship between organisations and their stakeholders.

The severity of the effect of these activities of manufacturing companies on the environment (consumption and production) is such that have necessitated the emphasis on improving related practices by the UN, and the listing of such as one of the SDGs (Brusseau, 2019). Govindan (2018) posited that the criticality of responsible consumption and production hinged on the importance of such to economic development and the general well-being of the members of the society. Thus, the management and control of the resulting waste, and other related toxic materials, generated in the production process, is important for the long-term sustainable operations of the organisation and the well-being of the environment.

Ethical Infrastructure, and Responsible Consumption and Production

Iheanachor *et al* (2023) identified corruption as a cultural and social epidemic; one with the capacity to negate and frustrate the efforts of sustainable or responsible consumption and production within the Nigerian manufacturing context. This follows Abiodun and Oyeniyi's (2014) assertion that not only has corruption distorted Nigeria's economic growth, but it has also contributed to the acceleration of its environmental degradation. Iheanachor *et al* (2023) posited that while there exists a widespread recognition of the ills resulting from the poor management of waste and toxic chemicals within the manufacturing sector, corruption, as Ezeanyim and Ezeanolue (2021) argued, has continued to undermine the activities of the government and other parties interested in advancing sustainable manufacturing practices within the sector.

Foote and Ruona (2008) posited that ethical infrastructure offers a conditioning of the internal system of the organisation; moulding values and attitudes in a way that ensures commitment to responsibility in actions and operations. This as Foote and Ruona (2008) posited, involves not only the establishment of ethical standards but also the training of staff in line with addressing the demands or expectations linked to professional behaviour. In another vein, Ahadi (2020) stated that ethical infrastructure provides organisations with the requisite will for not only initiating useful decisions and strategies but also ensures such decisions and strategies are offered the required support and follow-up based on the imbibing of ethical values that constantly fuel and drive the actualisation of preferred or expected outcomes.

METHODOLOGY

This research adopted an explorative approach in its investigation of the role of ethical infrastructure in responsible consumption and production in Nigerian manufacturing work systems. In this vein, an idiographic methodology, involving the use of the qualitative research method was used. The interpretative phenomenological analysis (IPA) was adopted as the research design (Berg & Lune, 2017). A total of eight referents were selected purposively in line with their occupations as key officers and decision-makers, within four manufacturing work systems from four sub-manufacturing industries, namely (a) food and beverage, (b) cement, (c) plastics and (d) aluminium in South-South Nigeria. Referents were sourced from the production/operations and human resource units of these selected manufacturing work systems. The interview was also adopted as the data collection instrument, and items were adapted based on the operational definitions from previous research (Foote & Ruona, 2008; Azowa & Tantua, 2020; Ahadi, 2020) and key concerns of interest to the research. The variety in the selection of the work systems was in line with enriching the data and also ensuring data saturation. A thematic analytical approach was adopted in the coding of the data; where three levels of coding were applied, namely: open coding, axial coding and selective coding. Presented in Table 1, are the code labels, including the number of references and sources for each.

Table 1: Open and axial codes for the study

S/N	Axial Codes	Open Codes	References	Sources
1	Use of Rewards in Reinforcement of Ethical Behaviour	Policy inconsistencies	5	3
		Lack of rewards for ethical conduct	7	5
2	Use of Sanctions in Discouragement of Unethical Behaviour	Sanctions for offenders	12	8
		Bias and selective punishment for deviance	6	4
3	The role of ethical infrastructure in responsible consumption and production	Reinforcement for green policies	3	2
		Adherence to ethical practices	3	3
		Quality of organisational values	3	2

DATA FINDINGS

The findings for the analysis of the data centred on the three sub-themes of this research, namely (a) the use of rewards in the reinforcement of ethical behaviour (b) the use of sanctions in the discouragement of unethical behaviour and, (c) the role of ethical infrastructure in responsible consumption and production. These sub-themes were adopted as the axial code for the study and primarily ensured consistency in the evidence and the objectives of the research.

Use of Rewards in Reinforcement of Ethical Behaviour

From the analysis, three open codes were generated for this theme. These are as follows:

    i.   Policy inconsistencies
    ii.   Lack of rewards for ethical conduct

Following the analysis of the data, it was observed that most of the participants admitted to their organisations as lacking in terms of support policies for ethical behaviour. They noted that implementation was the more challenging aspect when it comes to ethics-based policies. Some participants also pointed out that while there was a shared and collective position on ethical conduct and professionalism at the workplace, there were no rewards specifically designed or structured in line with reinforcing such behaviour or conduct in the organisation. One of the participants stated that:

> *No compensation or rewards are offered to workers who are ethical. It's just more of a regulatory position by management. Members even flaunt it on a daily basis, with hardly any repercussions* (Participant4)

This position agrees with that of another participant who observed that:

> *I think it's more of a personal thing. Like a recognition of oneself as an agent of the organisation and as such, accountable in terms of behaviour and conduct. You don't need to be rewarded for that. It comes with the role* (Participant7).

The analysis of the data, affirms the inconsistencies in policies addressing ethical conduct and behaviour in manufacturing companies. The evidence indicates a dominant position that identifies ethical behaviour as useful and a necessary component of the organisation, yet still, there exists no substantial reinforcement of such, especially concerning financial rewards or additional compensation. This resonates with Anyim *et al* (2018) observation of the lack or absence of practical actions aimed at encouraging and rewarding ethical conduct, ensuring that related actions reflecting integrity, accountability and trustworthiness, are emphasized and reinforced in the workplace. This also aligns with Abiodun and Oyeniyi's (2014) observation of the lack of sincerity in advancing a framework that recognises and admonishes ethical behaviour, thus presenting a weak disposition when it comes to the reinforcement of ethical behaviour in manufacturing companies.

Use of Sanctions in the Discouragement of Unethical Behaviour

The second axial theme anchored on two open codes; these are:

    i.   Sanctions for offenders
    ii.   Bias and selective punishment for deviance

The analysis of the evidence of the use of sanctions in curbing deviant behaviour showed that some of the participants emphasized their organisations' adoption of sanctions and other strict disciplinary measures in the curtailing of corruption, and unethical conduct within the organisation. One of them affirmed that:

> *We have had terrible experiences dealing with theft from within the organisation, corruption and the falsification of documents. We have had to make examples on several occasions, and are very much in support of the use of sanctions in ensuring workers' adherence to work ethics and standards* (Participant2).

However, following the analysis, it was observed that despite the shared position on the evidence of sanctions in the organisation, some participants yet identified such actions as biased and selective. This follows the position of one participant:

> *Yes, there is, but not everybody is affected. Some people are easily let off the hook. They use their connections and before you know what, their offences are swept under the carpet. Meanwhile, others would lose their jobs for the same offence* (Participant7).

This is corroborated by the observation of another participant that:

> *It is a flawed system. A lot of people get away with stuff that on a normal day, they shouldn't. It is only effective when convenient or as a tool for witch-hunting in the organisation* (Participant1).

While analysis of the evidence of ethical infrastructure within the manufacturing companies, as based on the data generated, is observed to be weak with regard to consistencies in policies, and the reinforcement of ethical behaviour, echoing Ezeanyim and Ezeanolue's (2021) position, on the related lapses in the ethical infrastructure of the companies, data nonetheless supports the evidence of sanctions and the use of punishment in the discouragement of unethical behaviour. Especially as the evidence, highlights only an aspect or facet of ethical infrastructure that emphasizes the use of fear and thus, offers a narrow perspective of ethical infrastructure within the companies. The findings, therefore corroborate the views of scholars (Chikeleze *et al*, 2017; Ebitu & Beredugo, 2015) on the weak and inconsistent disposition of most Nigerian manufacturing companies in light of their ethical infrastructure and ability to effectively, follow up on ethical practices and policies.

The role of ethical infrastructure in responsible consumption and production

This section addressed the analysis of the third axial theme for this research. Three open codes were generated in line with this axial theme. These are:

i. Reinforcement of green policies
ii. Adherence to ethical practices
iii. Quality of organisational values

The evidence for the analysis of the role of infrastructure in responsible consumption and production showed that the majority of the participants identified ethical infrastructure, particularly in line with the establishment of regulatory policies for ethical conduct, the reward for ethical behaviour, and the sanctioning of defaulters or deviant behaviour imperative in enhancing the responsible consumption and production practices of the manufacturing companies. Participants in this vein affirmed that such frameworks are useful and serve to strengthen and reinforce the organisation's position when it comes to the adoption of green

policies and practices. Participants also pointed out that related practices of ethical infrastructure, serve to enrich the organisation's quality of values; creating a more responsible and environmentally friendly approach to business operations. One participant noted that:

> *When there is motivation, as you mention, pay or reward. Workers will sit up. Even if it's not cash, but some practice that recognises and awards good conduct. It will help in the general conduct of people in the workplace. People's values will change for the better* (Participant3).

Evidence from the data, affirms to the imperatives of ethical infrastructure and its role in ensuring sustained responsible behaviour in the manufacturing companies. The finding aligns with the observations of previous scholars (Ebitu & Beredugo, 2015; Anyim *et al*, 2018), affirming to the need for such support and reinforcement advanced by the ethical infrastructure of the organisation, in driving the ethical behaviour of organisations and their responsible disposition toward the use of natural resources, energy and waste management. The findings also corroborate the position of Foote and Ruona (2008) that the ethical infrastructure provides the lens through which organisations can rightly perceive their place within the environment, and that way, engage in more meaningful, long-term rewarding and sustainable relationships.
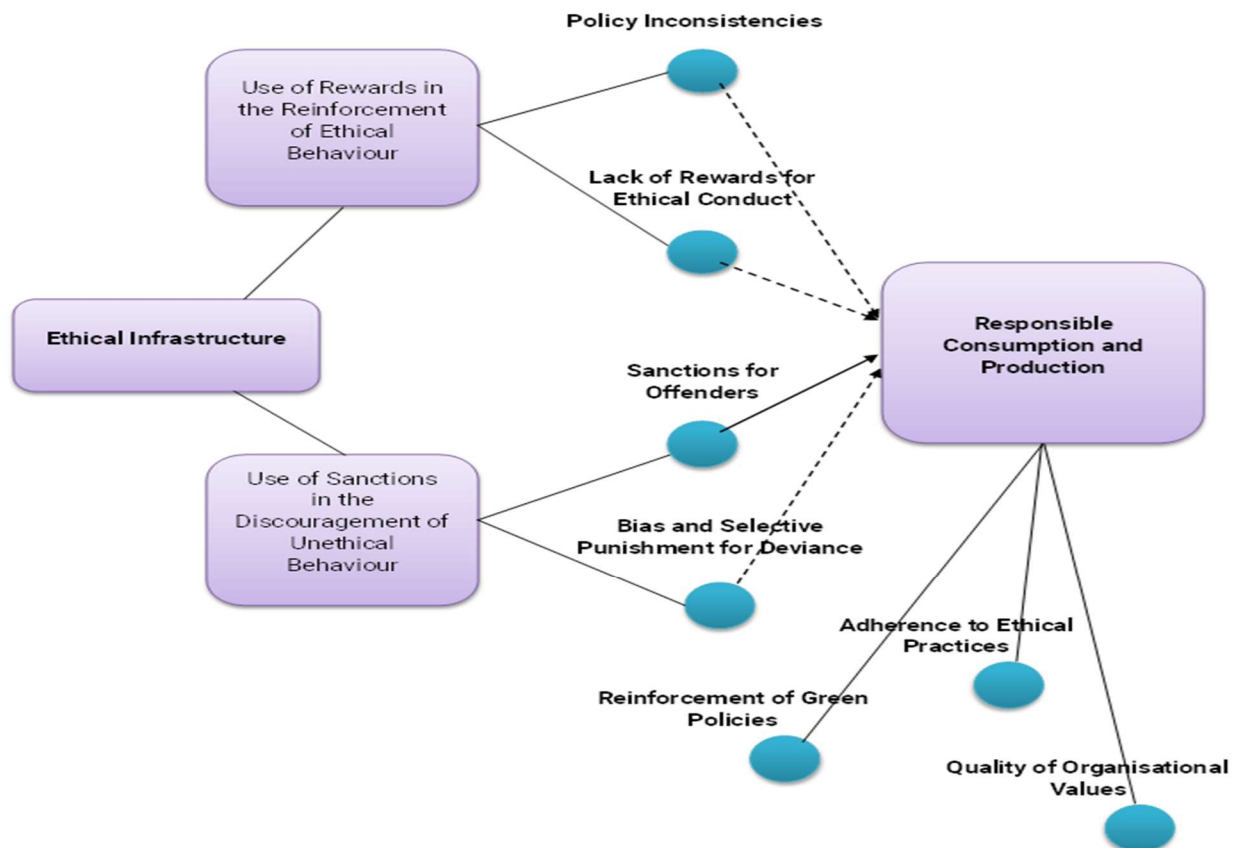

Figure 1: Nexus for ethical infrastructure dimensions and responsible consumption and production

The nexus between the dimensions of ethical infrastructure and the outcomes of responsible consumption and production, illustrated in Figure 1, affirms the existing lapses in the ethical infrastructure as a result of policy inconsistencies, the lack of rewards in the reinforcement of ethical behaviour, and bias and selective punishment for deviance; factors which poorly contribute to the responsible consumption and production of manufacturing companies in South-South Nigeria. The evidence shows that while these manufacturing companies, engage in the sanctioning of erring personnel, especially on ethical issues, such efforts are thwarted due to the bias involved. The result of the study, thus points to the imperatives of improved ethical infrastructure in driving the reinforcement of green policies, adherence to ethical practices and enhancing the quality of organisational values for the manufacturing companies in South-South Nigeria.

Discussion of Findings

The evidence generated in this research, offers clarity, not only on the specific position of most of the manufacturing companies in the South-South of Nigeria, when it comes to ethical infrastructure and the engagement or involvement of these firms in responsible consumption and production, but it also affirms to the imperatives of such infrastructure in ensuring sustaining and ensuring an enduring engagement in environmentally friendly practices and behaviour. The poor ethical disposition of these manufacturing firms, while discouraging, nonetheless, serves as a pointer to the management of these organisations to be more deliberate in their approach toward addressing the existing lapses in their regulatory policies and frameworks.

The findings thus enrich insight into the link between organisation and context, emphasized by Anyim *et al* (2018), who noted the strong tendencies for companies to mirror or reflect the overarching values and practices in their context. This corroborates Iheanachor *et al* (2023) position that corruption within the context of Nigeria stems from its capacity for innovation, crippling organisational development and deflating the creative ambitions of its various entrepreneurs, investors and business professionals. In this vein, the findings enrich knowledge on the extent to which the ethical dispositions of these manufacturing companies are directly linked to their engagement in responsible consumption and production, thus supporting theory development on the possibility of a link between improved ethical infrastructure and enhanced outcomes of responsible consumption and production by the manufacturing companies in South-South Nigeria.

CONCLUSION AND RECOMMENDATIONS

This research offers a position on the role of ethical infrastructure in the reinforcement and enhancement of responsible consumption and production in manufacturing companies in South-South Nigeria. Related ethical infrastructural facets of policy consistency, reward for ethical behaviour and the sanctioning of erring personnel are revealed to be useful in advancing quality work values and in ensuring sustained engagement in responsible consumption and production behaviour by manufacturing companies in South-South Nigeria. The study, owing to the evidence generated, affirms the significance of ethical infrastructure in the development and strengthening of the ethical disposition of the organisation, and by that, its adoption of practices that emphasize effective waste management, efficient energy and resource utilization and the engagement of

manufacturing companies in green manufacturing practices; actions and practices that demonstrate the responsible consumption and production posture of the manufacturing companies in South-South Nigeria. Following this conclusion, the research recommends as such:

i. The management and leadership of manufacturing companies in Nigeria, ought to adopt and integrate practices that identify and reward staff or personnel, who consistently engage in and express ethical conduct and behaviour in relations with other staff and with clients or customers of the organisation. Programs should be designed to encourage such staff, and thus promote and reinforce ethical values and a consciousness of responsibility and accountability to the organisation and its clients.

ii. The management and leadership of manufacturing companies in Nigeria, should strengthen their regulatory frameworks through leadership transparency and consistency in the treatment of all staff, especially in the areas of sanctions and the punishment of erring personnel. This is important in ensuring improved trust in the regulatory process and the effectiveness of such in the control and channelling of staff actions and behaviour in line with achieving ethical conduct.

iii. The leadership of decision-makers within manufacturing companies in Nigeria ought to bridge related lapses and short-comings associated with their weak ethical infrastructure in line with ensuring a more consistent and sustained posture toward green policies, ethical conduct and quality values, all directed at enhancing the responsible consumption and production within the industry.

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