

Volume 7, Issue 1, Pages 112-122, January-March 2023

### Factors Influencing Professional Project Management Ethical Practices in Building Construction

Odukoya, Abdul Jubreel Babatunde<sup>1\*</sup>, Sakdan, Mohd. Fo'ad<sup>2</sup>, Azmin, Adi Anuar<sup>3</sup> & Ibrahim, Fazdliel Aswad<sup>4</sup>

<sup>1</sup>Faculty of Applied & Human Sciences, Universiti Malaysia Perlis (UniMAP), Perlis, Malaysia.
<sup>2</sup>Professor & Deputy Vice Chancellor, Students Affairs & Alumni, Universiti Malaysia Perlis (UniMAP), Perlis, Malaysia.
<sup>3</sup>Faculty of Applied & Human Sciences, Universiti Malaysia Perlis (UniMAP), Perlis, Malaysia.
<sup>4</sup>Faculty of Civil Engineering & Technology, Universiti Malaysia Perlis (UniMAP), Perlis, Malaysia.
Corresponding Author (Odukoya, Abdul Jubreel Babatunde) - tundeodukoya@yahoo.com\*



DOI: https://doi.org/10.38177/ajast.2023.7110

**Copyright:** © 2023 Odukoya, Abdul Jubreel Babatunde et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Article Received: 26 January 2023

Article Accepted: 28 February 2023

Article Published: 22 March 2023

#### ABSTRACT

Ethical practices are essential to providing quality work which cut across every sector. In building construction, adherence to project management ethical standards is essential to providing quality services that can stand the test of time. However, many building projects have been constructed with standards that are far below the professional ethics. This is evident in the cases of building failure reported throughout the country. The study examines the factors that influences project management ethical practices in Nigeria and specifically in Lagos. A total of 384 samples were selected from project stakeholders and construction professionals. A well-structured 25 items questionnaire was designed to elicit for response on ethical practices and factors that influences ethical practices. The results indicated that ethical practices in project management are influenced by various factors, including the project environment and stakeholder's impact as organizational factors. The major project-related factors that affect ethical practices are project scope and complexity, project financing, project risk, and project stakeholders, while project managers' technical skills, qualifications, and personal values have significant impacts on adherence to ethical practices. The influencing factors could be related to the organization, the project, or the professional, but in most cases, they are a combination of these factors. Therefore, it is recommended that thorough assessments are conducted before, during, and after construction, and different professionals should be assigned to ensure transparency and compliance with standards.

Keywords: Ethical Practice; Project Management; Stakeholders; Personal values; Standards; Building failure.

# 1.0. Introduction

The word "ethics" refers to a methodical investigation of the standards and principles that relates to people or business conduct. Ethical practices are essential to providing quality work which cut across every sector. According to Burrows (2021), project management ethical practices are expected to reflect in the place of responsibility, safety and the environment, data protection, regulations and legal requirements, respect, cultural consideration, negotiation etc. The term ethical practices is centered on the fact that actions and attitudes held by trained professional and employees are considered professionally and morally acceptable and accountable (Usman et al., 2018). Within the context of this study, ethical practices involves but not limited to standard practices, lawfulness, honesty, responsibility and accountability (Buba et al., 2020). Ethics includes fairness, honesty, integrity, objectivity, and dependability are the moral traits that one must consciously acquire in order to be ethical. Research in respect to factors influencing ethical ideas in construction is hardly focused on.

Project management ethics are the principles and ideals that direct the conduct of project managers and the members of their teams as they complete projects. Project success depends on ethical standards because they foster sustainable results, ensure accountability, and help to establish trust and confidence.

To advance ethical standards in project management, it is crucial to comprehend the various aspects that can affect how project managers and their teams behave ethically. A significant issue that might affect project management ethics is organizational culture. Project managers and their teams can benefit from an ethical corporate culture that fosters a culture of trust, accountability, and openness (Brams, 2018).





# Asian Journal of Applied Science and Technology (AJAST) Volume 7, Issue 1, Pages 112-122, January-March 2023

Project management is a crucial aspect of organizational development and success. It involves the planning, organization, and execution of projects within an organization with the aim of achieving specific goals and objectives. One important aspect of project management is the ethical considerations involved. Project management ethics refers to the moral and ethical values that guide the behavior of project managers and stakeholders involved in a project. The success of a project depends not only on technical and managerial skills but also on the ethical conduct of project participants. Some of this ethical conducts include leadership style, organizational culture, project complexity, stakeholder pressure, legal and regulatory environment personal values etc.

Conflict of interest remains a major key area in project management ethics. Conflicts of interest can arise in a variety of contexts, such as when a project manager has a financial interest in the outcome of a project, or when a contractor has a personal relationship with a client. These conflicts can create ethical dilemmas for project managers, who must balance their obligations to their stakeholders with their own personal interests. For instance, Zhai, Wang, and Zhang (2020) discovered project managers who were more focused on meeting project goals were more likely to overlook ethical considerations, suggesting that there is a need for greater awareness and education around project management ethics. In addition to these specific areas, there are a number of broader ethical principles that are relevant to project management, such as honesty, integrity, and respect for human dignity. These principles are reflected in various codes of ethics and standards for project management, such as the Project Management Institute's Code of Ethics and Professional Conduct (Liu, Zou & Chen, 2015).

The issue of sustainability in projects particularly in building projects has been a major concern of project managers. Sustainable project management involves taking a long-term view of projects and considering the social, environmental and economic impacts of project activities. This approach is becoming increasingly important as businesses and governments are being held accountable for their impact on the environment and society (Silvius, Schipper and Planko, 2017). The importance of sustainability in buildings cannot be overemphasized in the development of societies majorly because they are structures that serves as shelters for man and enhances production and development at different levels. Howbeit, this could be a nightmare if standard procedures and practices are not adhered (Wasiu, 2014). Project management professional certification suggests a rigorous examination on the understanding of business ethical practices before certification and project management practices. However, this has not been the case as many of the project coordinators or managers have shown little or no understanding of the ethical practices involved in building construction which is evident in the building performance.

The building project is a complex and dynamic environment in which expert project management is critical to project success. But the sector still has ethical issues, with complaints of unethical behavior like corruption, bribery, and conflicts of interest coming from all around the world and particularly in Nigeria. Despite the existence of ethical standards and codes of conduct, it is still unclear whether professional project management ethics are actually being adhered to in building projects. In order to improve ethical behavior and advance sustainable project management techniques in the industry, the goal of this study is to identify the factors that influence professional project management ethical practices in the building construction business. Considering time and financial constraints the study is delimited to Lagos state. A major consideration is that fact that there are more records of





building construction failures in the state compared to other parts of Nigeria. It therefore serves as a good representative data for the study.

### 2.0. Literature Review

### 2.1. Project Management Ethical Practices

The word ethics remains the heart of professionalism and it helps create culture, transparency and trust. The word ethical practice is often used to refer to the application of ethical values in organizational behaviour. In other words, it applies to all aspects of organizational conduct which includes but not limited to corporate governance, employment practices, sales techniques, stakeholder relations, accounting practices, and issues of product and corporate responsibility (Melanie & Russell, 2017). Professionals like project managers are often blamed for shortcomings when ethical standards are not adhered because they are meant to oversee and ensure that these standards are maintained at all stages of construction. Ethical practices essentially include ethical behaviours which are moral codes that guides the behaviour of managers and employees with respect to the standards of the organization.

Burrows provided a list of some of the important project management practices was provided by Burrows (2021) which include: responsibility, health and safety, regulations and legal requirement, bribery, fraud and corruption.

(i) Responsibility: Project managers have many responsibilities which must be upheld towards the expectations of the project stakeholders and effectively manage the project ream. In other words, ethical consideration surrounding responsibility of having to deal with people and resources must be upheld (Bronte-Stewart, 2015).

(ii) Health and Safety: Project managers take decisions that are in the best interest of people, society, public safety and health of the environment. Throughout the project life-cycle, the project manager must ensure that a continuous evaluation of the effect of the project is done so as to be sure that the people and environment are not negatively affected.

(iii) Regulations and Legal Requirement: Legal requirements that guides the project must be upheld at all time. This applies to all legal requirements that applies to the working environment.

(iv) Bribery, Fraud and Corruption: This has been a major problem that affects the quality of projects and the outcome in total. Project management must ensure that there is zero tolerance for bribery, fraud and corruption which can be detrimental to project performance.

### 2.2. Ethical Practices and Building Construction

Building trust and demonstrating a high degree of competence are two reasons why ethical construction practices are crucial. According to Daniel, Oshineye, and Oshodi (2018), building projects earn trust when the foreman or building designer show competency in their work, which is proportionate with the price paid for their services. Contractors are obliged to use high-quality building materials in accordance with plans, and the site manager is responsible for rigidly enforcing any requirements for worker quality. Atanda & Olukoya, (2019) were also of the opinion that poor building performance is caused by engaging unqualified workforce and professionals who have little or no understanding of the principles, guidelines and ethical standards that guides the projects. Standard





Asian Journal of Applied Science and Technology (AJAST) Volume 7, Issue 1, Pages 112-122, January-March 2023

practice is required from construction professionals for qualitative construction project. It requires qualified workforce, willingness to execute standard construction work and standard materials (Atanda & Olukoya, 2019).

Integrity, fairness, relevance, objective and valid evidence of professional advice shall be uphold and maintained by professionals (IES, 2016). Okagbue, *et al.*, (2018) and Hillebrandt (2017) assert that building professionals should discharge their professional duties with utmost compliance to professional ethical standards, or to be honest and accountable in their dealings with clients and other stakeholders. Hillebrandt (2017) analyzed primary opinions on dishonesty and unfair conduct from key stakeholders in building projects such as: (1) architects believe that contractors are not always honest when following contractualspecifications, and that they commonly use cheap and inferior alternatives; (2) contractors believe that the tendering adjudication process is unfair and that there exist a bias in professionals' acts when clients greatly intervene in the process and (3) quantity surveyors believe that contractors always repeatedly over-claim in the project construction phase.

Honesty as one of the project management ethical virtues is a practical conceptualization of public expectations in respect of responsibilities, willingness to serve public interest with high competencies (Hillebrandt, 2017). The common bond that links the building industry and the various public sustains its existence through the privilege of the public to demand honest and good quality services from industry practitioners. Sharpe (2019) posits that dishonesty among construction practitioners has result to criticisms from the public about the professionalism of building construction professionals as regards professional ethics. Thus, practitioners in building industry need to be honest in their practice. Honesty is manifested in the conduct of professional ethics, which is the justification of standards of behavior against practical tasks, not necessarily limited to technologies, transactions, activities, pursuits and assessment of institutions. It rather involves practical conceptualization of public expectations in the interest of responsibilities, willingness to serve public interest with high competencies (IES, 2016). Building experts must follow accepted ethical standards in order to complete quality construction projects. It calls for a skilled labor force, the readiness to carry out conventional construction work, and standard building supplies (Atanda & Olukoya, 2019). According to Mahamid (2016), building managers' misunderstanding of effective project management practices and the lack of awareness among construction industry professionals are to blame for the failure and collapse of a number of structures in Nigeria. Table 1 shows some of the building construction cases in Nigeria. It is obvious that many of the building construction failed because ethical standards were not upheld while in some cases the main cause of the building failure were not revealed.

#### 2.3. Factors influencing Ethical Practices in Building Construction

Attempts have been made be some researchers to identify the factors that affect ethical business practices. For instance, Mahamid (2016) was of the opinion that non-adherence to ethical standards of building construction could be the project stakeholders reluctance to pay consulting fees, some potential building owners tend to avoid the right/qualified consultants. In similar submission Babalola, *et al.*, (2015) ascribed the failure and collapse of various structures in Nigeria to the ignorance of building managers and the lack of awareness of the standards required among construction professionals in the proper management of construction projects.

Omenihu, Onundi, & Alkali (2016) revealed that non-adherence of project managers or employees to ethical practices in Nigeria are caused by employing unqualified workforce and professionals. Some prospective building





Asian Journal of Applied Science and Technology (AJAST) Volume 7, Issue 1, Pages 112-122, January-March 2023

owners tend to avoid the right professionals because of unwillingness to pay consultancy fees. Instead, the prospective builders would engage the services of quacks that are willing to accept lesser fees. The designs by these quacks are usually approved by the local planning authorities who are believed to be in collusion with the quacks (Odeyemi, Giwa, & Abdulwahab, 2019). Whenever any accident happens on site, the customer blames the consultants and the contractor. It is apparent that customers' common attitude to cut corners is one of the problems that impact building performance.

Leadership style has a significant impact on project management ethics. According to a study by Fry, Krambia-Kapardis, and Kouchouli (2011), ethical leadership is a crucial factor that promotes ethical behavior among project participants. Leaders who practice ethical leadership have a positive impact on the ethical behavior of their subordinates, which in turn contributes to the success of the project. A study by Oyedele, Anigbogu, and Adetola (2015) also showed that ethical leadership leads to increased trust and collaboration among project participants, which enhances project success. Kim and Lee (2013) attributed the factors influencing project management ethics to organizational culture. According to them, organizations with a positive ethical culture are more likely to have ethical project managers and stakeholders. In such organizations, project participants are more likely to adhere to ethical values, which contribute to the success of the project. On the other hand, organizations with a negative ethical culture are more likely to have project failures.

Wang, Jiang and Li (2017) showed that complex projects are also more likely to face ethical challenges. In essence, if projects become very complex, there is possibility of drifting away from laid down standards. Project participants may be faced with difficult ethical decisions that can impact the success of the project. The complexity of a project can also increase the stakeholder pressure on project participants, leading to unethical behavior (Ofori and Addo, 2017).

Studies have also identified that legal and regulatory environment can influence project management ethics. Liu, Wang and Li (2019) identified that legal and regulatory environment can create an ethical framework that guides project management organization creating a positive regulatory environment while on the other hand organizations operating in an unfavorable legal and regulatory environment are more likely to have project participants who engage in unethical behavior. Arora, Prasad, and Reddy (2021) also opined that personal values could also play a crucial role in shaping the ethical behavior of project participants. Personal values which are beliefs that an individual hold about what is good or bad could influence ethical behaviour. Personal values are shaped by factors such as cultural background, education, life experience, etc. They include honesty, integrity, respect, compassion, loyalty etc. Project managers and stakeholders who have strong personal values are more likely to engage in ethical behavior, which contributes to the success of the project.

### 3.0. Methods

The quantitative research method was employed in this study. The population used for this study was building construction professionals (builders, civil engineers, quantity surveyors and town planners) in Lagos State, Nigeria which was estimated to be 8519 in all. A total of 384 samples were selected for this study using the stratified random sampling technique. The study gathered information from professionals who were associated with the





Nigerian institutes of Builders, Civil Engineers, Quantity Surveyors, and Town Planners, specifically those who were affiliated with the Lagos state branches of these organizations. The professionals who participated in the study were the primary subjects of analysis, and the data collected from them was used to draw conclusions about the factors that influence professional project management ethical practices in building construction.

The sample includes project stakeholders (48 samples) and construction professionals (civil engineers, quantity surveyors and town planners) (300 samples). The sample was selected to ensure that a balance is created in ascertaining the factors that influences project management adherence of ethical standards from the perspective of the professionals and also the stakeholders.

A well-structured 25 items questionnaire was designed to elicit for response on ethical practices and factors that influences ethical practices. The reliability of the instrument was tested using the test-retest method. A correlation coefficient of 0.73 was obtained which was considered high enough for the study. Data obtained were analyzed using both descriptive and inferential statistics. Means and standard deviations were computed to ascertain the most influencing factor and analysis of variance (ANOVA) at 0.05 level of significance.



Figure 1. Map of the Study Area (Lagos State) indicating the LGAs

SOURCE: The Lagos State University Cartography Department (2018)

# 4.0. Results

Result in Table 1 on organizational and regulatory environment factors influencing project management ethical practices revealed that project environment (63.5%) and stakeholder's influence (53.6%) were major organization and regulatory environment factors influencing project management ethical practices while organizational culture and legal and regulatory framework might not be influencing factors. The mean value (2.35) obtained indicates that organisational environment might be a factor influencing project management ethical practices in building projects in Lagos.





Factors	Agreed	Disagree	Mean	SD
	(%)	(%)		
Organizational Culture	48.3	51.7		
Organizational Environment	63.5	36.5	2.35	0.582
Legal and Regulatory Framework	31.3	68.7	2.33	0.382
Stakeholder's Influence	53.6	46.4		

Table 1. Organizational Factors influencing Project Management Ethical Practices

Survey, 2022

Table 2 on project related factors influencing project management ethical practices revealed that majority of the respondents agreed that project complexity/score (61.2%), project financing (73%), project risk (69.3%) and project stakeholders (66.3%) were all major factors that could influence project management ethical practices. This could be by imposing expectations, values and requirements or create conflict of interests that pose serious threat to ensuring ethical practices among project managers. The mean value (3.18) also revealed that project related factors are high at influencing project management ethical practices.

Table 2. Project Related Factors Influencing Project Management Ethical Practices

actors	Agreed	Disagree	Mean	SD	
	(%)	(%)			
Project Complexity/Scope	61.2	38.8			
Project Financing	73.0	27.0	2 10	1.077	
Project Risk	69.3	30.7	3.18	1.077	
Project Stakeholders	66.3	33.7			

Survey, 2022

In Table 3, results on project manager related factors that influences project management ethical practices revealed that technical skills (89.7%), personal values (71.4%), leadership style (59.6%) and communication (56.3%) appears to be factors that influences project management ethical practices. The technical skills which are required for the project manager to adequately handle the project and also personal values like honesty, loyalty, respect etc. were major project manager related factors that influences project management ethical practices in building constructions. In addition, the mean value obtained (3.44) revealed that project manager related factors are high at influencing project management ethical practices.

Table 3. Project Manager Related Factors Influencing Project Management Ethical Practices

Factors	Agreed	Disagree	Mean	SD
	(%)	(%)		
Leadership Style	59.6	40.4	3.44	1.152
Communication	56.3	43.7		
Technical Skills	89.7	10.3		
Personal Values	71.4	28.6		

Survey, 2022





In Table 4, result presented on the project manager socio-economic variables influence on project management ethical practices revealed that qualification (F(2, 383)=2.58, p<.05) independently influence adherence to project management ethical practices in building construction while gender (F(1, 383)=.868, p>.05), and age (F(3, 383)=.430, p>.05) do not significantly influence adherence to project management ethical practices in building construction (F(3, 383)=2.30, p<.05) interactively influence adherence to project management ethical practices while gender and qualification (F(3, 383)=.293, p>.05), and age and gender (F(2, 383)=.297, p>.05) have no interactive influence on adherence to project management ethical practices in building construction.

Variables	SS	df	MS	F	Prob.
Age	494.14	3	164.71	.430	.477
Gender	332.69	1	332.69	.868	.619
Qualification	1911.25	2	955.63	2.589	.007
Age*Gender	219.64	2	109.82	.297	.822
Gender*Qualification	325.17	3	108.39	.293	.611
Age*Qualification	2557.13	3	852.37	2.30	.020
Error	66114.03	369	0.67		
Total	71954.05	383			

Table 4. ANOVA summary table on Project Manager Socio-economic Background and Project Management

----

### 5.0. Discussions

Findings showed that organizational and regulatory factors revealed that the project environment and stakeholders' influence account for the major regulatory factors influencing project management ethical practices. This finding is in line with Kim and Lee's (2013) study, which found that organizations with positive ethical cultures attract project managers who take project management ethics seriously. They, therefore, tend to adhere to ethical values required to deliver sustainable building projects. Findings on the project-related factors highlight the importance of factors such as project scope and complexity, project financing, project risk, and project stakeholders as influencing factors. For instance, if a building project is under-financed or underfunded, this might force the project manager to employ unethical project management practices to complete the project and thereby increase project risks. Project stakeholders could also impose unethical values and expectations that affect the practices of the project managers. This corroborates with the findings of Wang, Jian, and Li (2017), who revealed that projects that are complex and difficult to carry out could face ethical challenges as project managers could easily be tempted to fall below ethical standards. Ofori and Addo (2017) also discovered similar results in their study on stakeholder pressure and the ethical behavior of project managers.

As revealed to personal project managers personal attributes, information presented revealed that technical skills, personal values are crucial to influencing adherence to project management ethical practices. It was also revealed the leadership style and communication were key factors to also look out for in project management. In tandem with Arora, Prasad, and Reddy (2021) this showed revealed that personal values and technical skills play critical role in





shaping the ethical behaviour of project managers. In addition, findings shows that qualification of project manager is key to influencing adherence to project management ethical practices in building construction while age and gender do no significantly contribute.

## 6.0. Conclusion

Adherence to project management ethical standards in building construction is essential for carrying out sustainable projects that can withstand the test of time. Unfortunately, there have been cases of building construction failures and collapses all over the country recently, many of which are associated with non-adherence to project management ethical standards. The study examined the factors that influence this menace. The findings showed that organizational factors influencing ethical practices include the project environment and stakeholders' influence. Concerning project-related factors, project scope and complexity, project financing, project risk, and project stakeholders are the major influencing factors, while for factors related to project managers, project managers' technical skills, qualifications, and personal values were the major factors influencing adherence to project management ethical practices. From the foregoing, it is clear that the influencing factors could be organization, project, or professional related, while in most cases, it is a combination of these factors. It is, therefore, suggested that proper evaluation should be carried out before, during, and after construction and should be assigned to different professionals to ensure transparency and compliance with standards.

### Declarations

#### Source of Funding

This research work did not receive any grant from funding agencies in the public or not-for-profit sectors.

#### **Competing Interests Statement**

Authors have declared no competing interests.

#### **Consent for Publication**

The authors declare that they consented to the publication of this research work.

### **Authors' Contributions**

All authors equally contributed to research and paper drafting.

#### Acknowledgements

In carrying out this research, we acknowledge the sincere support received from the following: (1) Prof. Abdul Naser Abdul Ghani, the Dean and the Postgraduate Students of School of Housing, Building and Planning (HBP), University of Science of Malaysia, Penang, Malaysia, (2) Builder AdenieSaidi and Builder Sunday Wusu of the Nigerian Institute of Building, Lagos State Branch, (3) Engr' Lola Adetona and the management of the Nigerian Institute of Civil Engineers, Lagos State Branch, (4) Mr AyubaAkere and the management of the Nigerian Institute of Quantity Surveyors, Lagos State Branch, and (5) The management of the Nigerian Institute of Town Planners, Lagos State Branch.





#### References

[1] Arora, R., Prasad, R., & Reddy, M. (2021). Personal Values and Ethical Behavior of Project Managers: A Comparative Analysis. International Journal of Project Management, 39(1): 121–131.

[2] Atanda, J. O., & Olukoya, O.A. (2019). Green Building Standards: Opportunities for Nigeria. Journal of Cleaner Production, 227: 366–377.

[3] Bronte-Stewart, M. (2015). Beyond the Iron Triangle: Evaluating Aspects of Success and Failure Using a Project Status Model. Computing & Information Systems, 19(2): 21–27.

[4] Buba, G.S.P., Hamid, R. A., Ramly, Z. M., Jatau, T. S., & Jatau, J.D. (2020). Unique Factors of Best Value Procurement from the Perspective of Nigerian Construction Professionals. International Journal of Built Environment and Sustainability, 7(2): 1–14.

[5] Burrows, J.D. (2021). The Importance of Business Ethics as A Project Management Professional. Project Management Ethics, Unpublished Thesis.

[6] Daniel, E.I., Oshineye, O., & Oshodi, O. (2018). Barriers to Sustainable Construction Practice in Nigeria. In Proceeding of the 34th Annual ARCOM Conference, Belfast, UK, Pages 3–5.

[7] Fry, L. W., Krambia-Kapardis, M., & Kouchouli, E. (2011). Ethical Leadership and Decision Making in Organizations: A Review of The Literature. Journal of Business Ethics, 104(4): 437–453.

[8] Hillebrandt, M. (2017). Transparency As a Platform for Institutional Politics: The Case of The Council of The European Union. Politics and Governance, 5(3): 62–74.

[9] International Ethics Standards Coalition. (2016). An Ethical Framework for The Global Property Market.

[10] Kim, Y. S., & Lee, J. (2013). The Influence of Organizational Culture on Project Management Ethics. International Journal of Project Management, 31(3): 397–405.

[11] Liu, X., Zou, P.X., & Chen, A. (2015). Ethical Behavior in Project Management. Journal of Business Ethics, 128(4): 789–798.

[12] Liu, X., Wang, H., & Li, Y. (2019). The Impact of The Legal and Regulatory Environment on Project Management Ethics. International Journal of Project Management, 37(1): 32–41.

[13] Melanie, G. & Russell, T. (2017). Ethical Practice and the Role of People Professionals, CIPD.

[14] Odeyemi, S. O., Giwa, Z. T., & Abdulwahab, R. (2019). Building Collapse in Nigeria (2009-2019), Causes and Remedies – A Review. USEP. Journal of Science and Engineering Production, 1(1): 123–135.

[15] Ofori, G., & Addo, A. (2017). Stakeholder Pressure and Ethical Behavior in Project Management. International Journal of Project Management, 35(2): 229–237.

[16] Okagbue, H.I., Iroham, C.O., Peter, N.J., Owolabi, J.D., & Opanuga, A.A. (2018). Systematic Review of Building Failure and Collapse in Nigeria. International Journal of Civil Engineering and Technology, 9(10): 1391–1401.





[17] Omenihu, F. C., Onundi, L. O., & Alkali, M. A. (2016). An Analysis of Building Collapse in Nigeria (1971-2016): Challenges for Stakeholders. Annals of Borno, 26(1): 113–140.

[18] Oyedele, L. O., Anigbogu, A. O., & Adetola, A. (2015). Ethical Leadership, Trust, and Collaboration in Project Management. International Journal of Project Management, 33(5): 945–955.

[19] Project Management Institute. (2013). A Guide to the Project Management Body of Knowledge (PMBOK Guide), 5th Edition. Newtown Square, PA: Project Management Institute.

[20] Sharpe, T. (2019). Ethical Issues in Domestic Building Performance Evaluation Studies. Building Research & Information, 47(3): 318–329.

[21] Silvius, A.J., Schipper, R.P., & Planko, J. (2017). Sustainable Project Management: The GPM Reference Guide. International Journal of Project Management, 35(6): 1084–1085.

[22] Usman, N.D., Dabs, D.Y., Shwarka, M.S., & Abubakar, H.O. (2018). Assessment of Professionalism And Ethical Standards on Project Delivery in Nigerian Built Environment. African Journal of Applied Research (AJAR), 4(2): 216–226.

[23] Wang, Y., Jiang, Y., & Li, J. (2017). The Influence of Project Complexity on Ethical Behavior in Project Management. International Journal of Project Management, 35(6): 792–800.

[24] Wasiu, J., Oyeboade, O.J., Adebayo, V.B. (2014). Causes of Building Collapse and Prevention in Nigeria. International Conference and Annual General Meeting, Nigerian Institute of Civil Engineers.

[25] Zhai, L., Wang, X., & Zhang, H. (2020). The Effect of Ethical Leadership on Project Success: The Mediating Role of Trust and Team Commitment. Journal of Business Ethics, 165(1): 1–13.

