

ICRP 2019

4th International Conference on Rebuilding Place

HIGH PERFORMANCE WORK PRACTICES AND CONSTRUCTION PROJECT PERFORMANCE NIGERIA

J. Lawalson Temitope (a)*, Richard Olayiwola Alonge (b)

*Corresponding author

(a) Department of Building Technology, Rufus Giwa Polytechnic, Owo, P.M.B 1019, Owo, Ondo State, Nigeria,
temitopejohnny@gmail.com

(b) School of Housing, Building, and Planning, Universiti Sains Malaysia, 11800 Penang, Malaysia

Abstract

In Nigeria, poor construction project performance is a cause of concern in the construction sector. It is on record that several construction projects executed in the country faced several challenges that vary in degree from minor issues to complex type. Many factors have been raised as source or cause of such challenges by professionals and researchers basically because of its' adverse impact on the economic and social growths. The construction environment in Nigeria is another challenge in the area of construction project performance, although, some researchers have attributed the success of Nigerian construction Industry to the utilisation of construction project management system. This paper review High performance work practices through human resources management as a possible boost to the Nigerian Construction project performance. The main objective is to assess the impact of high-performance work practices (HPWP) on the construction project performance in Nigeria. For substantial evidence, this study engaged a cross-sectional survey research design. Questionnaires were used to collect data from respondents. About Eighty-four (84) research questionnaire were retrieved after distribution of 110 questionnaires, representing 76.36% response rate. The respondents consist of 38 Line managers, 23 Construction managers, 12 Project managers and 11 Site Engineers. Smart PLS software was used to do the analysis, the findings showed that HPWP practices has positive significant on the performance of construction project in Lagos state of Nigeria. But there must be adequate awareness and effective utilisation of the HPWPs for effective result.

© 2019 Published by Future Academy www.FutureAcademy.org.UK

Keywords: HPWPs, project performance, construction industry, HRM.



This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. Introduction

Management of construction project has had a paradigm shift from the utilisation of hard system method to soft factors. Construction project quality are assessed by means of performance measurement which can be expressed as the system of performance assessment in term of cost, quality and time, these are considered the fundamental to the success of project. As project established assets of productivity by means of conversion of resources into assets of productivity, for the cost, time and right quality, (Nagarajan, 2012). In the field of project management, the scale of quality achievement and cost is usually termed iron triangle. Among all the three aspects, it is the attainment of schedule, cost and compliances that the construction project management system is helping to resolve. This brings about quality of construction projects at sites.

Managing projects is one of the early methods and highly esteemed accomplishment of mankind with professional impetus of Masons and craftsmen, Architects and Builders (Irefin, 2013). This is a testimony to some notable achievement attained in the construction sector globally, such as the Great Wall of China, the pyramids and the ancient cities. As there is high demand of construction practices, then, it is opined that there is a corresponding higher necessity of proper and adequate planning and controlling of resources, materials and personnel in construction processes. Construction practices procedure involves the whole method that outline standard and procedure for all stages and sections of the building production; dishing out responsibilities and building industry professionals' interaction, who are shoulder with the responsibilities of making decisions on the proper management of the construction project. Likewise, in the word of Isa, Jimoh, and Achuenu (2013), construction sector in both developing and developed countries is that section of the country that transforms several resources into constructed civil and facilities. In Nigeria, the National Bureau of Statistics (2013) declared that the construction and building sector is a major contributor to Nigeria's GDP. The building and construction in the country is growing consistently as the GDP stood at an average of 3%.

The breakthrough of the construction sector in Nigeria can be in tune with the utilisation of adequate construction project management methods such as HPWP. As opined by Nwachukwu, Emoh, and Egolom (2010) and Windapo and Rotimi (2012), the construction sector in Nigeria has been hostile by such factors as incessant building collapse, unnecessary delay of projects, projects abandonment and cost overrun. The major panacea to all these deleterious factors was highlighted as effective and efficient project management which is lacking in construction process in Nigeria. The notion of construction project management is not a new idea to the country in general as it has been implemented in other sector of the nations' economy such as the oil and gas sector and public sector. Many authors, such as Olateju, Abdul-Azees, and Alamutu (2011) has reiterated the massive positive impact that an effective utilisation of innovative construction project management system and techniques has on the overall performance of public sectors. In the study conducted by Ogunde, Olaolu, Afolabi, Owolabi, and Ojelabi (2017) that focused on the problem defying system of managing project that is eco-friendly in countries that are developing with Nigeria as case study, It was recommended that there should be incorporation of construction project management systems with compulsion of effective training, as well as skill reformation agenda for professionals and skill workers in the construction sector to assists the greening of construction project management system.

In a nutshell, the paradigms shift of the sector from traditional system of project management to the modern innovative construction project management system has not yield the desired result, hence the introduction of this high-performance work practices system of human resources management in the construction sector. As justified by Nwachukwu and Emoh (2011), it was stated that the usage and awareness level of High performance work practices systems are still at low level in Nigeria. The current happenings in the construction sector in Nigeria require and improved construction project management practices procedures. This is owing to the fact that private and public building construction projects are barely completed to time and within the ranges of the initial contract sum, materials and quality specifications and standard code of practices.

The HPWP content method suggested that HPWP relate to improved objective and subjective performance (Aryee, Walumbwa, Seidu, & Otaye, 2012) as HPWPs comprises related HRM practices that can enhance employee skills, employee and motivations (Piening, Baluch, & Ridder, 2014). Several empirical research have established that HPWPs are connected to various desired results, such as preferred job performance, innovation and creativity (Costantini, Sartori, & Ceschi, 2017), adequate organisational citizenship behaviour (Kehoe & Wright, 2013), job satisfaction and higher organisational commitment (Korff, Bieman, & Voelpel, 2017), minimal turnover rates of employee (Jiang, Lepak, Hu, & Baer, 2012).

HPWSs can be called coordinated package of High-Performance Work Practices (HPWPs) that establish synergistic influences whereby particular practices strengthen one another to maximise the efficiency and effectiveness of an organisation. Organisational performance maximisation is consolidated to the consolidation of HPWPs into HPWSs outcome by the adequate harmonising of the incorporated HPWPs. Therefore, studies have highlighted the value of HPWSs and the significance of suitable incorporation of HPWPs.

However, many construction industries and developers remain adamant to the utilisation of HPWPs for different reasons ranging from institutional resistance to diversification, environmental threats, counterfeiting, and apathy, political instability, just to mention but a few (Johns, 1993). But in Nigerian construction sectors case, the lack of willingness to engage HPWPs may be as a result of lack of details, coherent and clear classification that acknowledge the series of practices that are available for use and their interconnection to performance results. Therefore, this paper looks at the adoption of HPWPs among Nigerian construction industry and the impact on their organisation performance.

2. Problem Statement

Construction project poor performance is a major factor of concern in the construction sector of Nigeria. Many of the Nigerian construction sector projects done in the country faced so many challenges which are different in magnitude, size and time period.

The break-even of the Nigerian construction sector can be in tune with the utilisation of construction project management methods, even though, the sector has been witnessing quite an enormous problems of building collapse, frequent delays, cost overrun and project abandonment. Hence, it is imperative to look into the possible influence of HRM's High Performance Work Practices (HPWP),

if implemented in the confrontation of the common challenges of construction project management method in Nigeria (Ogunde et al., 2017).

It is generally known through research that High Performance Work System are created to improve organisational performance by enhancing the productivity, commitment and capability of employee. Despite this fact, there is handful of consensuses about the systems structures and the overall practices of it. This insufficient structure may likely be hindered by knowledge growth in the construction sector in Nigeria and the level or extent to which organisations incorporate these systems.

3. Research Questions

The study aims at providing answers to the following questions:

- What is the awareness level of HPWPs among construction industries Nigeria?
- What is the effect of three dimensions factors of HPWPs on the construction project performance in Nigeria?

4. Purpose of the Study

The main significant of the study is to assess the impact of three dimensions of HPWPs on performance of construction project in Nigeria. This will enable the construction industry in Nigeria to be aware of the efficiency and effectiveness of HPWPs.

5. Research Methods

A cross-sectional survey type of design was utilised wherever samples were collected from the study population at any one point or the other. This research was done with the use of questionnaire survey to assess the impact of HPWPs on performance of ongoing project under construction in Nigeria using Lagos state as case study. Meanwhile, professionals of construction industry are the respondent. The sampling system was random sampling techniques to arrive at the study's sample size. Eighty-four (84) research questionnaire were recollected after distribution of 110 questionnaires, representing 76.36% response rate. All the returned questionnaire was checked and scrutinised for inconsistencies, errors, completeness and omissions. The respondents consist of 38 Line managers, 23 Construction managers, 12 Project managers and 11 Site Engineers as respondents of the study. The questionnaire was designed using 5 likers scale whereby respondents were requested to assess the level of awareness of HPWPs by professionals in the industry and the effectiveness of HPWPs on the construction industry performance. All the participants were gathered from 20 construction industry in Lagos state of Nigeria with each organisation having a minimum of 100 employees. The main reason for the exclusion of organisation with employees that are <100 employees was basically as a result of outcome of past studies in management of human resource, where it was observed that the larger the size of the organisation, the better to get official unit of the organization engaging in HRs and even well-established practices of HR (Guthrie, 2001).

Collection of data was done by means of self-administered questionnaire in construction industries based in Lagos state between March 2019 and May 2019. Respondent were from 176 construction firms,

with each of the firm having minimum of 100 employees. The targeted respondent that completed the questionnaire were executive senior managers that are controlling the functions of the HR. Male respondent were 86 % while the female were 14 %. The majority of the male respondent had between 10 years and 15 years of working experience, indicating 96 %.

5.1. Theoretical framework

Influence of HPWP on organization performance has been provided through research conducted in the past, with HPWP impacting some several organisational performance indicators which includes financial performance, productivity of employee, turnover rate, and absence rate. Despite these results, very handy research findings are available on the influence of each AMO dimensions of HPWP on the performance of an organisation and as far as Nigeria is concern, an attempt has not been made to investigate all these AMO dimensions of HPWP on construction project performance.

Research study in the past has shown that the utilisation of practices that includes ability endearing, such as formal procedure of employee selection, training programme that are comprehensive, can brings about improved financial performance, as well as employee productivity. Also, motivation endearing practices of HPWP can potentially leads to improved productivity and financial performance. Conclusively, opportunity endearing practices, such as programme that enables employee participation, feedback operations and comprehensive communications are established as performance influence factor. These procedures are justified in a past study whereby meta-analysis was adopted as a method of survey (Jiang et al., 2012). Therefore, in this study, the three dimensions of HPWP shall be hypothesis relative to AMO model proposed by (Obeidat, Mitchell, & Bray, 2016).

5.2. Measures

English was used to prepare questionnaire and submit it to handful number of expertises in the field of HRM for the purpose of content validity. The study adopted the tested model of multi dimensional of interaction of organization performance and HPWP in which HPWP concepts was conducted in compliance to AMO framework (Obeidat et al., 2016). This is modify and construction project performance in Lagos state Nigeria was incorporated instaed of organisation performance. The three main dimensions, which are ability-endearing, motivation-endearing and opportunity-endearing practices were developed based on scales as reflected in past empirical study (Flood et al., 2008) In developing the HPWP scale items, multiple sources were utilised since there is no consensus on standard HR practices that should be used to highlight HPWP. Hence, the HPWP classification into three fundamental dimensions permits this study to considered only the practices dimensions that are based on theory that can result to improved performance in the context of construction industry in Nigeria. All the measurement items were measured based on seven point scale. Meanwhile, 9 items scale was utilised in the assessment of ability-endearing practices, which consists of staffing, that is recruitment, selection and formal job scrutiny. Training and development practices with some highlighted items which borther on the staffing procedure and the employees proportions in generic skills training. Motivation-endearing practices were carve out to assess compensation practices and performance management. Also, scale of 3

items were drawn to assess practices related to performance management. All items were ratified from past studies (Flood et al., 2008).

This study make use of perceive general organisational performance measure with the use of quasi-perceptual performance measurement, whereby performance were assessed objectively, such as profitability, return on equity and sales growth by memmeans of managers perceptions, as utilised by (Ketkar & Sett, 2009). The organizational performance was assessed by requesting the respondents to make a comparison between their companys' performance to the performance of similar companies in the same sector, construction sector for a period of 3 years minimum. This was achieved by responses drawn on a 7-points Likerts scale with scale of 1 as 0% to 7 as 100%. In alignment with research studies conducted in the past on HPWP impact on organisational performance, as opined by (Guthrie, 2001), some major organisation variables were incorporated as probable variables of control signify their impact on the performance of the organisation; these includes turnover rate of employee, absence rate of employee, companys' age, size and ownership, the industrial sector within the operation field that the organisation operated and HR-connected responsibility through organisations' line managers. The number of the active working employee indicate the company size while the age of the organisation represent the years of the organizations' operation existence in Lagos, Nigeria. Meanwhile, the company ownership indicates the formation of the company whether foreign company or local established company. Employee absence and employee turnover were controlled statistically fundamentally on research linking two variables of the organizations' financial performance. For instance, Shaw, Gupta, and Delery (2005) established through research results that there is a significant connection between organization financial performance and turnover despite that absenteeism was persistently connected to maximum turnover and minimised performance. Meanwhile, responsibility for HR by line management was connected to HPWPs results (Mitchell, Obeidat, & Bray, 2005).

6. Findings

The constructs' evaluation of reliability and validity were conducted, the average variance extracted with the Cronbach alpha and values of composite reliability were assessed for the reliability. The results as shown in Table 1 showed that all the measurements constructs are consistent internally and reliable. This is based on the threshold proposed by researchers whereby 0.8 was proposed for composite reliability, 0.5 for average variance extracted and 0.7 for Cronbach alpha (Obeidat et al., 2016). In order to exemplify the relationship between the measurements and the constructs, the descriptive statistics which consists of correlations, means as well as standard deviations for all variables were shown in Table 1. It can be seen that high correlations were established between the both variables, that is impact of HPWP on construction project management and Impact of HPWP on the construction project performance. The first variable showed the various dimensional operation segments of HPWP and the second establish the initial backup of the influence of HPWP on performance indicators of construction sector in Lagos state of Nigeria.

Table 01. Shows the result of the descriptive analysis of the measurement

| | M | SD | AV | CR | α | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----------------------------|----------|----------|-----------|-----------|-----------|-------------|------------|----------------|-----------------|------------------|------------------|------------------|-------------|-------------|
| Company age | 3.2 1 | 0.7 7 | 1.00 | 1.00 | 1.00 | 1 | | | | | | | | |
| Company ownership | 2.1 5 | 0.5 0 | 1.00 | 1.00 | 1.00 | -0.17 | 1 | | | | | | | |
| Sector | 1.4 2 | 0.4 9 | 1.00 | 1.00 | 1.00 | 0.148 | 0.191 * | 1 | | | | | | |
| Company turnover | .08 0 | .05 0 | 1.00 | 1.00 | 1.00 | -.092 | -0.058 | - 0.05 5 | 1 | | | | | |
| Absence | .08 1 | .47 | 1.00 | 1.00 | 1.00 | 0.002 | 0.034 | -.030 | .711* * | 1 | | | | |
| Line Manager responsibility | 4.5 2 | .92 | 1.00 | 1.00 | 1.00 | 0.001 | 0.106 | - 0.04 4 | -0.179 | - 0.246* * | 1 | | | |
| Ability endearing | 4.4 2 | 0.8 6 | 0.58 4 | .918 | .898 | .327** | .047 | - 0.01 5 | - 0.192 * | -0.219* | 0.626* * | 1 | | |
| Motivation endearing | 4.1 8 | 0.9 2 | 0.65 4 | 0.90 4 | 0.86 8 | 0.211* | 0.145 | 0.06 1 | -0.155 | 0.182* | 0.635* * | 0.744* * | 1 | |
| Opportunity endearing | 4.1 6 | 0.8 8 | 0.63 8 | 0.89 7 | 0.85 6 | 0.124 | 0.107 | - 0.05 7 | -0.157 | -0.225* | - 0.773* * | - 0.738* * | 0.783* * | 1 |
| Organisational performance | 3.9 8 | 0.9 6 | 0.62 9 | 0.89 4 | 0.85 2 | 0.385* * | 0.005 | 0.06 9 | -0.215 | -0.270 | 0.425* * | 0.618* * | 0.602* * | 0.641* * |

Notes: n=84. Natural logarithm of company age, ownership and sector, ***Correlations are significant at the 0.05 and 0.01 levels, $p < 0.05$; $p < 0.01$. Meanwhile, M is mean, SD is standard deviation, AV is average variance extracted, CR is composite reliability, and α is Cronbach Alpha.

Meanwhile, the tolerance values and the variance inflation factors was within the acceptable standard level when it was evaluated to acknowledge any multicollinearity challenges, tolerance values factor of variance inflation and condition index. According to general rule of thumbs, (Pallant, 2005), the acceptable point of cut off for factor of variance of inflation is less than 10 in value, while the value of tolerance should be > 0.10 and the condition index that is above 30 signify moderate collinearity among the constructs. According to the result shown in Table 2, it can be seen that the diagnosis for multicollinearity of all dependent variables showed that it is very alright. While, tolerance values and inflations' factor of variance of tolerance are in the range of the standard value.

Table 02. Show the value of tolerance and variance inflation factor

| Variables | Tolerance | VIF | Condition Indices |
|---------------------------|-----------|------|-------------------|
| Ability endearing (A) | 0.479 | 2.08 | 28.98 |
| Motivation endearing (M) | 0.518 | 1.68 | 33.01 |
| Opportunity endearing (O) | 0.379 | 2.26 | 35.85 |

Based on the results and the test of hypothesis on the relationship utilising SMART PLS software. The direct relationship of the three adopted AMO variables that were tested indicated that there is a positive significant relationships between the variables. A practices has $t = 2.079$, $p = 0.037$, M practices

has $t=2.053$, $p=0.040$, while O practices has $t=2.111$, $p=0.035$, relative to construction organisation performance in Lagos state of Nigeria. Therefore, all the proposed hypothesis were all supported according to the result shown in Figure 1. This corroborate the past research findings (Boselie, 2010; Obeidat et al., 2016).

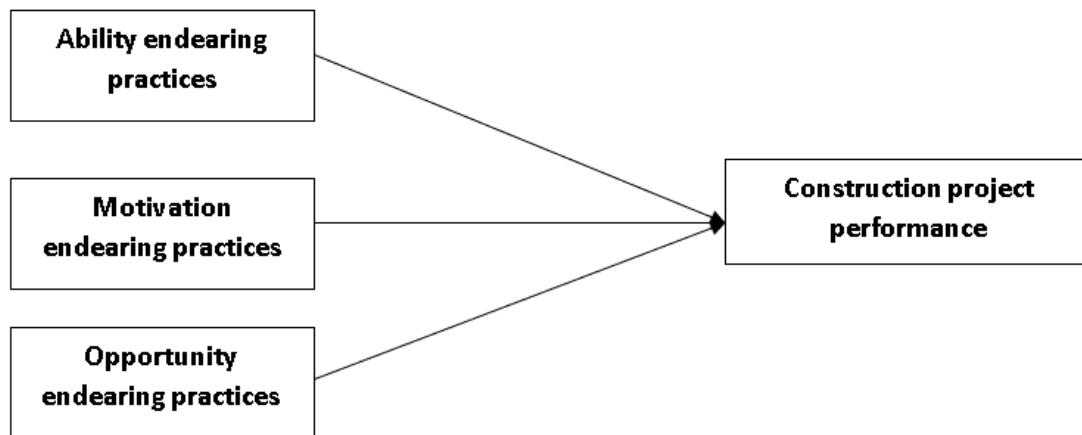


Figure 01. Relationship between the three variables and construction project performance

7. Conclusion

The findings of this study added to the body of knowledge in several means. First, the findings show positive and significant relationship that exist between construction project performance and HPWP practices. This comply with the result of other researchers in the past (Katou & Budhwar, 2010). The significant impact of HPWP practices on performance of construction project signify that the investments of construction organisation on HR practices such as recruitment, maintaining and training of highly skilled employees has the probable impact in the generation of financial benefits. This affirmed the potentiality of AMO dimensions in attaining financial benefits and reveals the responsibility of HPWP in improving competitive advantages of an organisation such as construction industry. Second, this study generally confirms past research findings, it also indicates the role of each dimensions of HPWP on such organisation like construction industry in Nigeria. Lastly, the findings offer valid information for HPWP practices relationship with performance of construction project in a developing country as Nigeria.

References

- Aryee, S., Walumbwa, F. O., Seidu, E. Y., & Otake, L. E. (2012). Impact of high-performance work systems on individual-and branch-level performance: Test of a multilevel model of intermediate linkages. *J Appl Psychol*, 97(2), 287-300. <https://doi.org/10.1037/a0025739>
- Boselie, P. (2010). High performance work practices in the health care sector: a Dutch case study. *International Journal of Manpower*, 31(1), 42-58.
- Costantini, A., Sartori, R., & Ceschi, A. (2017). Framing workplace innovation through an organisational psychology perspective: a review of current WPI studies. *Aligning Perspectives on Health, Safety and Well-Being. Workplace Innovation*, 131-147.
- Flood, P., Kamwa, T., O'Regan, C., Guthrie, J., Liu, W., Armstrong, C., & MacCurtain, S. (2008). New models of high performance work system: the business case for strategic HRM, partnership and diversity and equality system. *National Centre for Partnership and Performance, Dublin*,

- available at: www.ihrec.ie/download/pdf/new_models_of_high_performance_work_systems.pdf (accessed April 16, 2014).
- Guthrie, J. P. (2001). High-involvement work practices, turnover, and productivity: evidence from New Zealand. *Academy of Management Journal*, 44, 180-192.
- Irefin, I. A. (2013). Effects of Project Management on the Performance of a Construction Firm in Nigeria. *American International Journal of Contemporary Research*, 3(6), 54 – 58.
- Isa, R. B., Jimoh, R. A., & Achuen, E. (2013). An Overview of the Contribution of Construction Sector to Sustainable Development in Nigeria. *Net Journal of Business Management*, 1(1), 1 – 6.
- Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *The Academy of Management Journal*, 55(6), 1264-1294. <https://doi.org/10.5465/amj.2011.0088>
- Johns, G. (1993). Constraints on the adoption of psychology-based personnel practices: Lessons from organizational innovation. *Personnel Psychology*, 46, 569-592.
- Katou, A. A., & Budhwar, P. S. (2010). Causal relationship between HRM policies and organizational performance: evidence from the Greek manufacturing sector. *European Management Journal*, 28(1), 25-39.
- Kehoe, R. R., & Wright, P. M. (2013). The impact of high-performance HR practices on employees' attitudes and behaviors. *Journal of Management*, 36, 366-391. <https://doi.org/10.1177/0149206310365901>
- Ketkar, S., & Sett, P. K. (2009). HR flexibility and firm performance: analysis of a multi-level causal model. *The International Journal of Human Resource Management*, 20(5) 1009-1038.
- Korff, J., Biemann, T., & Voelpel, S. C. (2017). Human resource management systems and work attitudes: The mediating role of future time perspective. *Journal of Organizational Behavior*, 38(1), 45 – 67. <https://doi.org/10.1002/job.2110>
- Mitchell, R., Obeidat, S., & Bray, M. (2005). The Effect of Strategic Human Resource Management on Organizational Performance: The Mediating Role of High-Performance Human Resource Practices. *Special Issue: Human Resource Management and the Line*, 52(6), <https://doi.org/10.1002/hrm.21587>
- Nagarajan, K. (2012). Project Management, 6th Edition, Publisher New Age International (P) Limited, New Delhi.
- National Bureau of Statistics (NBS). (2013). Nigerian Construction Summary Report 2010 – 2012, Central Business District, Abuja.
- Nwachukwu, C. C., Emoh F. I., & Egolum, C. C. (2010). Equating Cost Constraint Factors to Construction Project Management Success in Nigeria (An Analytical Approach). *UNIZIK Journal of Environmental Sciences*, 1(1), 18.
- Nwachukwu, C. C., & Emoh, F. I. (2011). Building Construction Project Management Success as A Critical Issue in Real Estate Development and Investment. *American Journal of Social and Management Sciences*, 2(1), 56 – 75.
- Obeidat, S., Mitchell, R., & Bray, M. (2016). The link between high performance work practices and organizational performance. *Employee Relations*, 38(4), 578-595. <https://doi.org/10.1108/ER-08-2015-0163>.
- Ogunde, A., Olaolu, O., Afolabi, A. O., Owolabi, J., & Ojelabi, R. A. (2017). Challenges confronting construction project management system for sustainable construction in developing countries: Professionals perspectives (A case study of Nigeria). *Journal of Building Performance*, 8(1), 1-11. <http://spaj.ukm.my/jsb/index.php/jbp/index>
- Olateju, O. I., Abdul-Azees, I. A., & Alamu, S. A. (2011). Project management practice in Nigerian public sector – An empirical study. *Australian Journal of Business and Management Research*, 1(8), 1-7.
- Pallant, J. (2005). SPSS survival manual: A step by step guide to using SPSS for windows (version 12). New South Wales, Australia: Allen & Unwin.
- Piening, E. P., Baluch, A. M., & Ridder, H. G. (2014). Mind the intended-implemented gap: Understanding employees' perceptions of HRM. *Human Resources Management Journal*, 53(4), 545-567. <https://doi.org/10.1002/hrm.21605>
- Shaw, J. D., Gupta, N., & Delery, J. E. (2005). Alternative conceptualizations of the relationship between voluntary turnover and organizational performance. *Academy of Management Journal*, 48(1), <https://doi.org/10.5465/amj.2005.15993112>
- Windapo, A. O., & Rotimi, J. O. (2012). Contemporary issues in building collapse and its implications for sustainable development. *Buildings*, 2(3), 283-299. <https://doi.org/10.3390/buildings2030283>