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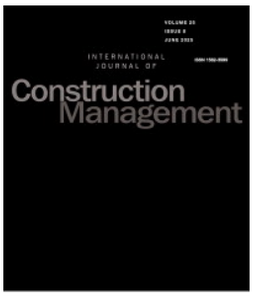

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Assessing work-life balance strategies employed by Nigerian Builders

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ABSTRACT

The study presents the findings of assessing work-life balance (WLB) strategies for Builders in the Nigerian construction industry. A quantitative approach was employed, aided by using a well-structured questionnaire that elicited responses from Builders in the Nigerian construction industry, to assess the improvement strategies adopted by Builders in the Nigerian construction industry in ensuring a balance between work and life. The retrieved data was analyzed using descriptive statistics, the Mann-Whitney U Test, and exploratory factor analysis (EFA). The result of the study showed that the most rated strategies across the two cadres assessed were continuous professional development, cutting down on work overtime, and reduction in office-related work at weekends. The result of the EFA gave three derived constructs, which are professional and work-related strategy, leisure-related strategy, and self-oriented strategy. To conclude, the research findings from this study present a guideline for which stakeholders can help builders in the Nigerian construction industry attain WLB. The identification and understanding of key strategies that could enhance WLB for builders would ensure a balanced, suitable, and fulfilling life for builders in Nigeria.

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KEYWORDS
Builders; construction industry; Nigeria; improved productivity; work-life balance

Introduction

The construction industry has been noted to be one of the most stressful sectors due to how its activities are conducted (Wahab 2010; Enshassi et al. 2015), and operatives are tasked with ensuring that projects are completed as planned considering quality, cost, and time (Bowen et al. 2018). Construction projects are dynamic due to the nature of uncertainties, interpersonal, and inter-role challenges, which could increase stress on construction operatives (Mohr and Wolfram 2010). The impact on construction operatives results in work characteristics including extended working hours, rigid task duration, and complex tasks, resulting in the possibility of work-family conflict (Turner et al. 2008; Xia et al. 2008).

Work and family are very important spheres in the lives of the majority of adults. Obtaining a balance between work and family has become a social issue that has continually gained traction among people in many fields of human endeavors. The importance attached to the two spheres has attracted the attention of scholars to examine the possible challenges to the establishment of a balance between work and family (Kelliher et al. 2019; Calleja et al. 2020; Gragnano et al. 2020). Greenhaus and Allen (2011) noted that an imbalance occurs when an employee's level of commitment to work does not permit such an employee to dedicate adequate time to the home front. A lack of balance between work and family could hurt overall performance (Dodanwala and Shrestha 2021). Therefore, finding a balance between work and life becomes crucial to avoiding conflict.

Over the past decades, a significant number of researches have been conducted on work-life balance (WLB) in the construction industry from either a developing or developed country's perspective (Ng et al. 2005; Leung et al. 2008; Lingard and Francis 2008; Ibem et al. 2011; Chan et al. 2012; Bowen et al. 2013; Panojan et al. 2019; Chan et al. 2020; Tijani et al. 2020; Aghimien et al. 2022; Dodanwala et al. 2022). In addition, past studies on WLB have been conducted in the Nigerian construction industry (Oladinrin et al. 2014; Tunji-Olayeni et al. 2017; Ojo et al. 2019; Oyewobi et al. 2020; Osuizugbo et al. 2023). Though the previous related studies contribute to the literature on WLB practices in the Nigerian construction industry, they mainly attempt to present perspectives from specific professionals (Quantity surveyors) and gender (female). Osuizugbo et al. (2023) worked on barriers to the adoption of work-life balance practices amongst construction companies; Oyewobi et al. (2020) focused on the impact of work-life policies on the organizational commitment of construction professionals; Ojo et al. (2019) dwelled on work stress among professionals; Tunji-Olayeni et al. (2017) focused on the work-life balance of women, Ibem et al. (2011) dwelled on WLB practices of various professionals in the Nigerian construction industry, while Oladinrin et al. (2014) analyzed stress management among professionals. Other professionals WLB practices in Nigerian construction including the Builder, who is tasked with many responsibilities to ensure the final product delivered is carried out according to predetermined, quality, time, and cost have not been specifically explored. Outcomes from these studies would not provide a very reliable and accurate outlook on WLB practices in the Nigerian construction industry. To the best knowledge of the authors, only the studies of Ibem et al. (2011) and Osuizugbo

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et al. (2023) have gathered the perspective of Builders regarding WLB practices. Besides, the scope of these studies did not capture the coping strategies adopted by Builders across different cadres to improve WLB. Moreover, Baanni et al. (2014) and Dang (2020) established that there is a low level of implementation of strategies that would improve WLB in developing countries, such as Nigeria. Hence, this limits the strategy that could improve WLB in the Nigerian construction industry.

The current study aims to fill the gap by assessing the improvement strategies adopted by Builders in the Nigerian construction industry to ensure a balance between work and life. Besides, a lack of balance between work and life could result in mental illness and by extension, suicide for Builders in the Nigerian construction industry. Hence, a better understanding of the current improvement strategies adopted by Builders could inform the development of appropriate policies tailored towards ensuring a balance between work and life. Moreover, studies (Oladinrin et al. 2014; Oyewobi et al. 2020; Osuizugbo et al. 2023) have advocated for research on the strategies that could improve the WLB of professionals, such as the Builder in the Nigerian construction industry.

The study contributes to the body of knowledge by presenting the dominant WLB strategies that can be adopted. This study provides a reference for balancing work and life from a developing country's perspective. The study findings highlight strategies to improve WLB practices in the Nigerian construction industry. Again, the study outcome would guide key stakeholders including the Federal Ministry of Labour and Productivity, and employers of labour when developing policies for workers in Nigeria to ensure informed decision-making. Moreover, the outcome of this study could assist the construction industry in other developing countries in achieving WLB as noted by Tijani et al. (2020) and Rashmi and Kataria (2021); there is sparse literature on the strategies that could WLB for professionals operating the construction in developing countries. Besides, considering the global nature of the construction industry and its link to the economy, improving work-life balance in developing countries could ensure more stable and productive global supply chains (Osuizugbo et al. 2023). The paper is segmented into literature review, methodology, result and discussion, and conclusion.

Literature review

Overview of work-life balance in the construction industry

The construction industry has been adjudged to be among the highly demanding sectors, which are characterized by extended working hours, tight schedules, and physically demanding activities, among others (Chan et al. 2020; Adah et al. 2023). Although the industry has been noted to contribute to the development of the nation, through the delivery of needed critical infrastructure, its demanding manner of operation has a toll on the well-being of the operations in the industry (Abas et al. 2021; Adah et al. 2023). The construction industry's present operational approach may have socio-economic implications for workers in the industry. Apraku et al. (2020) noted that the majority of operations carried out in the construction industry are challenging and demanding, owing to frequent changes in site location. Manivannan et al. (2022) attributed the current challenges affecting the construction industry to the mode of operation, which has resulted in a low level of productivity, a high rate of absenteeism among site operatives, and poor quality of work. Other factors, including the aging of the workforce, have been noted to be an impediment to productivity and by extension would negatively impact the WLB of the current workforce (Hasan et al. 2018). The health status of professionals working in the construction industry could be impeded due to improper WLB. Kotera et al. (2020) reported the high prevalence rate of physical ill-health and mental ill-health among professionals working in the construction industry and further attributed this to the lack of balance between work and life activities. The symptoms of physical ill-health and mental ill-health include cardiovascular diseases, the inability to have adequate sleep, fatigue, depression, and anxiety (Arvelin-Pasanen et al. 2018). Unfortunately, about 62% of the professionals working in the construction industry including the Builder have been stressed due to their inability to have a balanced WLB (Campbell 2006). These make professionals in the construction industry susceptible to quick anger or irritability, alcohol consumption, and the use of abusive drugs (Carver and Scheier 1989; Siu et al. 2005) as coping mechanisms against a lack of balance between work and life. Based on the past evidence, it can be inferred that there is a need to implement policies that would enhance the WLB of professionals working in the construction industry to ensure the delivery of the needed critical infrastructure.

Significance of work-life balance in the construction industry

Evidence exists that workers play crucial roles for organizations to achieve their objectives and to continuously be in business. Several studies (Panojan et al. 2019; Chan et al. 2020; Oyewobi et al. 2020; Irfan et al. 2021; Aghimien et al. 2022; Adah et al. 2023) have all indicated the need for operatives in the construction sector to achieve an equilibrium between demands for personal, professional, and family life. A balanced WLB permits employees to have a balanced lifestyle and allows them more latitude to familiarize themselves with work and non-work-related commitments (Rashmi and Kataria 2021). Not only that, WLB ensures that the organization meets its planned productivity levels without negatively impacting factors relating to its employees' personal lives (Yadav et al. 2022). Kelliher and Anderson (2010) added that guaranteed WLB is a tool often employed by employers to attract and retain competent staff in the construction industry. Other authors have also mentioned the significance of a balanced WLB. According to Zheng et al. (2015), allowing employees to have a balanced WLB not only improves their mental health but further enables better fertility and an increased labour force. Poor WLB could result in a decrease in the quality of life among professionals in the construction industry (Lewis et al. 2007). Again, Irfan et al. (2021) noted that effective WLB motivated employees and further enhanced their dedication levels toward the achievement of organizational objectives. The inability of professionals in the construction industry, like other industries, to achieve a WLB could result in professionals losing interest, declining performances, and quitting organizations (Kanwar et al. 2009). The aforementioned narration indicates the need for organizations in the construction industry to adopt strategic policies that would ensure workers have a balance between work and other life roles.

Strategies to improve work-life balance

A relationship exists between occupation stress and balance in work-life (Rafeeq and Harish 2015). A plethora of studies with adequate evidence have also noted that a link exists between employees' satisfaction with WLB strategies. A lack of effective

coping strategies could result in job stress (Mika et al. 2014). Developed economies, such as Australia, the United States of America, and the United Kingdom have recognized the need to adopt effective work-life balance to improve productivity levels and hold onto high-performing employees (De Cieri et al. 2005; Kossek et al. 2010). Various authors have proposed strategies that could improve WLB. For instance, Chittenden and Ritchie (2011) and Oladinrin et al. (2014) noted that time management is a useful tool that could improve WLB, while also acclaiming that planning and taking necessary actions to improve the situation by employees may improve WLB. Also, the acceptance of responsibility given to employees could serve as an important strategy for improving WLB (LaMontagne et al. 2007; Chittenden and Ritchie 2011). Pressure from clients for organizations to deliver projects as planned could have a considerable impact on workers' WLB. As such, Nickson et al. (2004) and Skinner and Pocock (2011) recommend job sharing to enhance workers' well-being and WLB equilibrium. Moreover, due to the long working hours practiced in the construction industry, the industry has failed to attract young entrants seeking to start a family (Lingard and Francis 2008); hence, permitting employees to go on vacation and holiday with loved ones could add value to WLB for workers (Dlamini et al. 2019). Baral and Bhargava (2011) added that going on holiday and vacation to a location away from an employee's place of work enables such an employee to have a balanced WLB.

The labour law in some countries has mandated employers to implement leave opportunities for their workers (Burgess et al. 2007). Some organizations often find it difficult to fulfill the legal requirement leave for their employees to go on vacation with loved ones (Aghimien et al. 2022). Lack of implementation of labour laws could negatively impact workers' WLB (Burgess et al. 2007). Also, granting study leave to employees could enhance WLB (Baral and Bhargava 2011; Dlamini et al. 2019; Panojan et al. 2019). Furthermore, Aghimien et al. (2022) noted that continuous professional development could be an effective WLB strategy. Employees who are permitted to embark on continuous professional development tend to feel appreciated for the opportunity for personal growth. Employers that provide their workers with the opportunity for continuous professional development and paid study leave would improve employees' loyalty (Monterde 2015). Due to the demanding nature of construction operations, employees can adopt other strategies for effective WLB. For instance, delegating duties to subordinates is an effective strategy for enhancing employee well-being and a balance between work and life (Skinner and Pocock 2011; Macintyre et al. 2020). These strategies, when implemented, would permit an employee to make time for their personal issues, thereby improving productivity, job performance, staff retention, and decreased absenteeism. Apart from delegating duties to subordinates as a work-life strategy, other approaches can be employed to strike a WLB. This could include cutting down on work overtime (Skinner and Pocock 2011). A reduction in work overtime enhances work-life balance (Thorgeirs and Kelliher 2016). WLB initiatives that would promote wellness, such as traveling and working out in the gym, could be adopted in the construction industry to enhance productivity levels (Apraku et al. 2020; Tijani et al. 2020; Yadav et al. 2022). Quinn (1996) suggested that organizations should permit their employees to partake in sporting activities for a healthy WLB, which in turn would enhance productivity. Carver and Scheier (1989) and Sim and Bujang (2012) noted that some employees are deeply engaged in religious activities to serve as a coping strategy to overcome the pressure they face due to family and work. The aforementioned WLB strategies, when adopted, would enable workers to attend to issues relating to personal life.

Seeking assistance from colleagues in the form of social support could improve work-life balance. Carver and Scheier (1989) and Van Hooff et al. (2006) described social support as assistance given to a person in need by his or her colleagues. Furthermore, Ghiselli et al. (2001) argued that listening to one's favorite music could help to improve work output and, by extension, WLB. Other strategies that are adopted due to work stress are smoking and alcohol consumption (Carver and Scheier 1989; Matilla-Santander et al. 2019). Carver and Scheier (1989), Cooper and Cartwright (1997), and Yadav et al. (2022) noted that self-control and seeking counseling resulting in reduced workplace stress increase the likelihood of promoting an atmosphere for positive health and well-being, which are effective strategies to improve work-life balance. LaMontagne et al. (2007) submitted that effective coping strategies to improve WLB for individuals include meditation, reduction in office-related work at weekend work, taking the mind away from work after working hours, planning and taking necessary actions to improve the situation (active coping), and accepting responsibility. Fletcher and Scott (2010) and Chittenden and Ritchie (2011) noted that chatting with friends about topical issues of interest and reducing office-related work at weekends can enhance WLB. During interactions, important areas of interest that could span across politics, business, family lifetyles, and relationships are often discussed among people with common interests. Cooking or eating favorite meals is viewed as an effective strategy to reduce stress and ensure good practice for work-life equilibrium (Kofoworola and Alayode 2012). Moreover, Johnson and Michael (2005) associated good health with the type of food consumed and the time the food is consumed. The impact of stress could be overwhelming on an individual who fails to seek clarification from superiors and colleagues. Such individuals could end up wasting resources and time without achieving tangible outcomes. Chittenden and Ritchie (2011), Kofoworola and Alayode (2012), and Yadav et al. (2022) recommended seeking clarification from superiors and colleagues as a way to achieve WLB. Also, Happell et al. (2013) noted that parting and socializing are strategies adopted by some workers to ensure work-life equilibrium. Yadav et al. (2022) put forth that supportive WLB policies, such as seeking clarification from superiors and colleagues, seeking more family time, and seeking assistance from colleagues are strategies that permit employees to balance their work and life. Strategies, such as these should be implemented in the workplace to maintain a balance between work and life. Kobasa (1979) and Chittenden and Ritchie (2011) claimed that accepting responsibility and self-control are vital strategies for ensuring a balance between work and life and preventing burnout. Changing the workplace by the employee was noted to be an effective WLB strategy in enhancing employees' productivity (Chittenden and Ritchie 2011; Panojan et al. 2019). Macintyre et al. (2020) emphasized the need to adopt coping strategies, such as engagement in religious activities, cooking or eating a favourite meal, delegation of duties to subordinates, listening to favourite music, partaking in sports, parting/socializing and taking alcohol for an employee to have balanced work-life integration. Continuous professional development and strategies to obtain equilibrium between work and life (Finstad et al. 2021; Munawar and Riaz 2021). The implementation of the aforementioned policies could lead to everlasting organizational success (Bhuvanaiah and Raya

Table 1. Strategies to improve work-life balance.

Strategies	Sources
Accepting responsibility	Kobasa 1979; LaMontagne et al. 2007; Chittenden and Ritchie 2011
Self-control	Kobasa 1979; Carver and Scheier 1989; Cooper and Cartwright 1997; Chittenden and Ritchie 2011
Planning and taking necessary actions to improve the situation (active coping)	Carver and Scheier 1989; LaMontagne et al. 2007; Chittenden and Ritchie 2011
Continuous professional development	Finstad et al. 2021; Munawar and Riaz 2021; Aghimien et al. 2022
Time management	Chittenden and Ritchie 2011; Oladinrin et al. 2014
Seeking clarification from superiors and colleagues	Chittenden and Ritchie 2011; Kofoworola and Alayode 2012; Yadav et al. 2022
Chatting with friends	Fletcher and Scott 2010; Chittenden and Ritchie 2011
Joining professional association	Panojan et al. 2019; Munawar and Riaz 2021
Engagement in religious activities	Carver and Scheier 1989; Sim and Bujang 2012; Macintyre et al. 2020
Listening to favourite music	Ghiselli et al. 2001; Macintyre et al. 2020
Taking my mind away from work after working hours	LaMontagne et al. 2007; Yadav et al. 2022
Reduce office related work at weekend work	LaMontagne et al. 2007; Chittenden and Ritchie 2011
Seeking for more family time	Nickson et al. 2004; Yadav et al. 2022
Seeking assistance from colleagues	Van Hooff et al. 2006; Yadav et al. 2022
Meditation	Carver and Scheier 1989; LaMontagne et al. 2007
Seeking counselling	Carver and Scheier 1989; Cooper and Cartwright 1997; Yadav et al. 2022
Cutting down on work overtime	Skinner and Pocock 2011; Thorgeirs, and Kelliher 2016
Cooking/eating favourite meal	Kofoworola and Alayode 2012; Macintyre et al. 2020
Traveling	Apraku et al. 2020; Tijani et al. 2020
Delegating my duties to subordinates	Skinner and Pocock 2011; Macintyre et al. 2020
Parting/socializing	Happell et al. 2013; Macintyre et al. 2020
Partake in sports	Quinn 1996; Macintyre et al. 2020
Job sharing	Nickson et al. 2004; Skinner and Pocock 2011
Vacation and holiday with loved one(s)	Baral and Bhargava 2011; Dlamini et al. 2019; Panojan et al. 2019
Working out in the gym	Apraku et al. 2020; Tijani et al. 2020; Yadav et al. 2022
Changing workplace	Chittenden and Ritchie 2011; Panojan et al. 2019
Taking of alcohol	Carver and Scheier 1989; Siu et al. 2005; Happell et al. 2013; Macintyre et al. 2020
Smoking	Carver and Scheier 1989; Happell et al. 2013; Matilla-Santander et al. 2019

2014). Table 1 outlines a summary of the strategies for attaining a WLB.

Methodology

The study aims to evaluate WLB strategies for Builders in the Nigerian construction industry. By adopting a deductive approach underpinned by a post-positivism philosophical view, the study elicited quantitative data from the target respondents through the use of a structured questionnaire. The option of using a questionnaire is backed by its attributes of quantifiability and objectiveness, while also being characterized by being able to retrieve data from a large pool of respondents (Tan 2011; Ikuabe et al. 2022). Again, a questionnaire was considered suitable for this current study because quantification and generalization are permissible with the use of a relevant statistical analytical tool(s) (Culka 2018). Before designing the questionnaire, a detailed search of major databases was conducted. These databases are composed of SCOPUS and Web of Science (WoS), which are the main scientific databases for relevant publications.

The study area was Lagos State, Nigeria. This location is referred to as the commercial capital of the country, boasting a significant number of construction projects and also housing a huge number of construction professionals (Ikuabe et al. 2019; Ibrahim et al. 2023a). The target respondents of the study are Builders, whose main responsibility is to supervise building production management. The sampling frame for the study was a detailed list of registered Builders with the Council of Registered Builders of Nigeria (CORBON).

The current study focused on gathering insights from Builders at various stages of their careers, with emphasis on junior and senior cadre workers. In this study, the junior cadre workers are delineated as employees not in management or leadership positions, while the senior cadre workers are employees who have held or are currently holding management positions. A typical workforce in the construction industry would consist of a junior-level worker and a senior-level worker, guided by the distribution of the questionnaire to respondents.

$$n = \frac{N}{1 + N(e)^2} \tag{1}$$

Where n = sample size; N = population; and e = error margin (4%).

The sample size was arrived at using the formula provided by Yamane (1967). One hundred and thirty-two (132) respondents submitted a fully completed questionnaire that is suitable for analysis of the three hundred and eighteen (318) questionnaires administered. The response rate signified a 42% level of response and was believed to be adequate, as Moser and Kalton (1999) that a response rate of 20% is appropriate for a questionnaire survey. This was employed to emphasize builders, considering the homogeneity of the sample of respondents. The current study adopted the snowball sampling method, a non-probability method. The researchers adopted the snowball sampling technique to select only respondents with prerequisite knowledge and experience in the research area. Questionnaires were administered physically to respondents and they were also requested to share the contact information of their colleagues currently practicing in Lagos State to increase the sample size. The data collection phase lasted for three months and this action made the questionnaire circulate widely among the predetermined group of participants. Before the questionnaire was distributed to respondents, three senior faculty members with over ten years of experience reviewed the instrument and some suggestions made by the reviewers to enhance the questionnaire. Before distribution, the questionnaire underwent revisions in response to the reviewers' suggestions. The authors chose to use a five-point Likert rating scale because it offered the benefit of including a neutral option for the survey respondents to express their views.

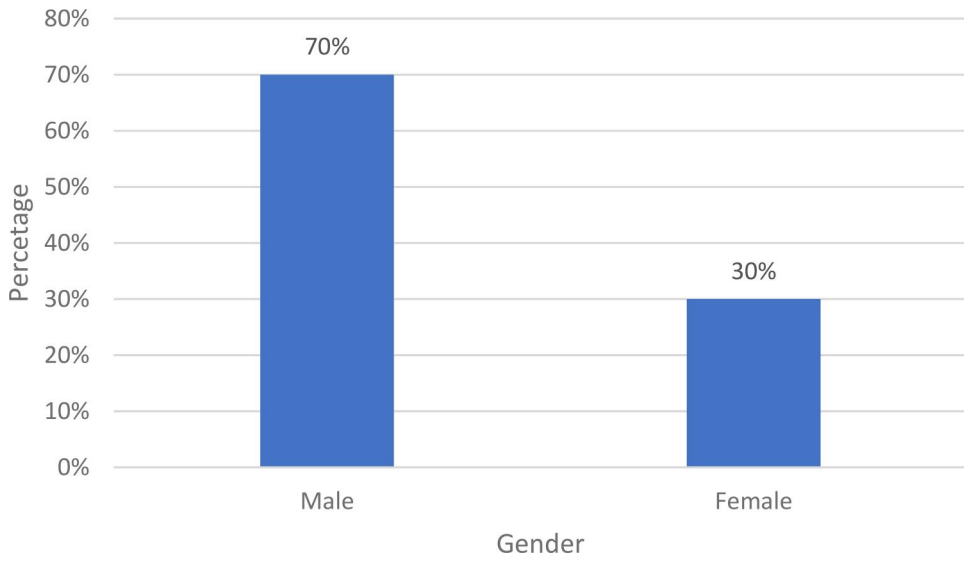

Figure 1. Gender.

Also, a five-point Likert rating scale was adopted because it permits the measurement of a phenomenon that is cognitive (Harpe 2015).

The research instrument comprised two sections: the former dwelt on the demographic information of respondents, while the latter sought opinions from the respondents based on their level of agreement on the identified strategies for improving WLB for Builders in the Nigerian construction industry using a 5-point Likert scale comprised of Never (1) to Every Time (5), which enabled respondents to indicate the types of strategies adopted to enhance their WLB. The authors chose to use a five-point Likert scale because it offers the benefit of including a neutral option for survey respondents. From the review of extant literature, a total of 28 strategies were identified. The collected data was analyzed using the Statistical Package for Social Science (SPSS) version 27 and Microsoft Excel resulting in the Tables and figures presented. In this study, the Shapiro-Wilk normality test was adopted as recommended by Hanusz et al. (2016). The significant value of all the assessed coping strategies was returned as 0.000 which is below the 0.05 threshold that is needed to designate normality. The validity and reliability of the research instrument were subjected to assessment using Cronbach's alpha. An alpha value of 0.815 was given, which ensured good reliability and validity of the research instrument since the alpha value is above the threshold of 0.70 and gravitates towards 1.00 (Tavakol and Dennick 2011). Descriptive statistics were used to analyze the data on the background information of the respondents and also rank the identified strategies for improving WLB using the mean item score. After deducing that the data is non-parametric, a non-parametric test, such as the Mann-Whitney U-Test (*M-W*) was employed to test for the difference in opinions given by the respondents based on their job cadre. *M-W* is a non-parametric test used to ascertain differences in opinions among two groups (Oti et al. 2021). For this study, *M-W* was employed to ascertain the differences in opinion between the junior and senior cadres of the sampled respondents.

Furthermore, exploratory factor analysis (EFA) was employed in grouping the identified strategies. Deploying principal component analysis (PCA), the EFA helped in determining the unidimensionality and factor analysis ability of the identified strategies, as suggested by Ikuabe et al. (2020), Oke et al. (2021), and Ibrahim et al. (2023b). The intent of the EFA is to outline an understanding of the structured patterns, which gives insights into the relationship among the factors (Yong and Pearce 2013).

Results and discussions

Demographic details of respondents

The justification for using demographic characteristics in the study was that it assists in understanding the diversity within our sample and ensures that the findings in this study represent the broader population. Again, the demographic data assist in identifying patterns and trends among our respondents. Besides, demographic characteristics are important for policymaking and organizations for making informed decisions. The gender distribution of the respondents is indicated in Figure 1. It showed that 70% of the respondents are male, while 30% of the respondents are female. Figure 2 indicates the years of experience of respondents with 1–5 years represent 63.6% of the respondents, while respondents with 6–10 years represent 18%, 11–20 years represent 12%, and 6% have had above 20 years of professional experience. Regarding the educational background of the respondents, Figure 3 depicts that 70% hold a Higher National Diploma or a Bachelor's degree. Respondents with a Master's degree or its equivalent constitute 22%, while 3% of the respondents have a doctorate, and 6% hold an Ordinary National Diploma. Based on the job cadre, Figure 4 shows that respondents who are in the junior cadre represent 42%, while respondents who are in the senior cadre represent 58% and are the majority. All the respondents are registered members of the Council of Registered Builders of Nigeria (CORBON) as indicated in Figure 5.

WLB strategy

Table 2 presents the result of the analyzed data on the strategies for improving WLB elicited from the study's respondents. Also, the result outlines the findings from the *M–W U* test conducted. Findings reveal that the top-rated strategies for workers in the junior cadre are continuous professional development, listening to favorite music, and cutting down on work overtime. This translates to the fact that workers in the junior cadre are motivated in the pursuit of professional development, which tends to

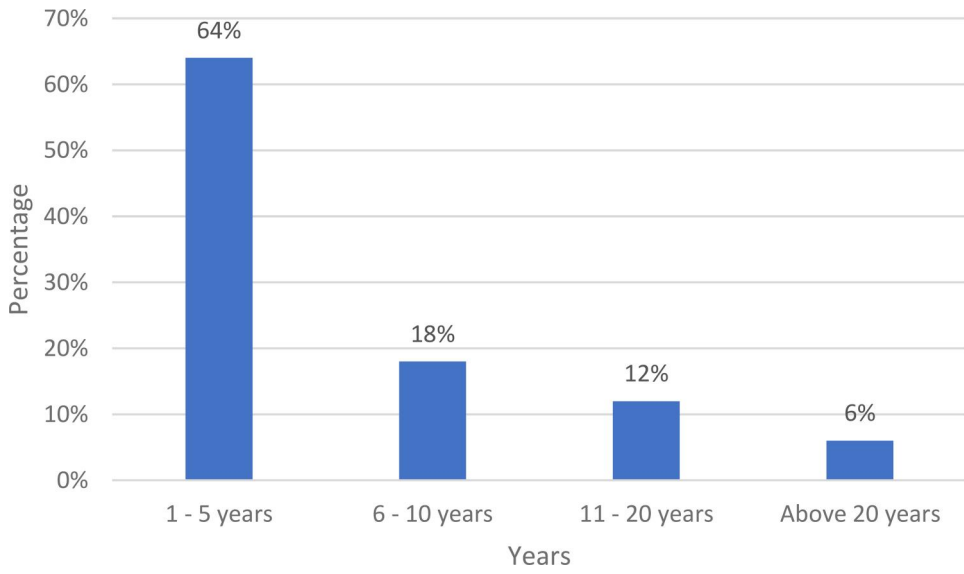

Figure 2. Years of experience.

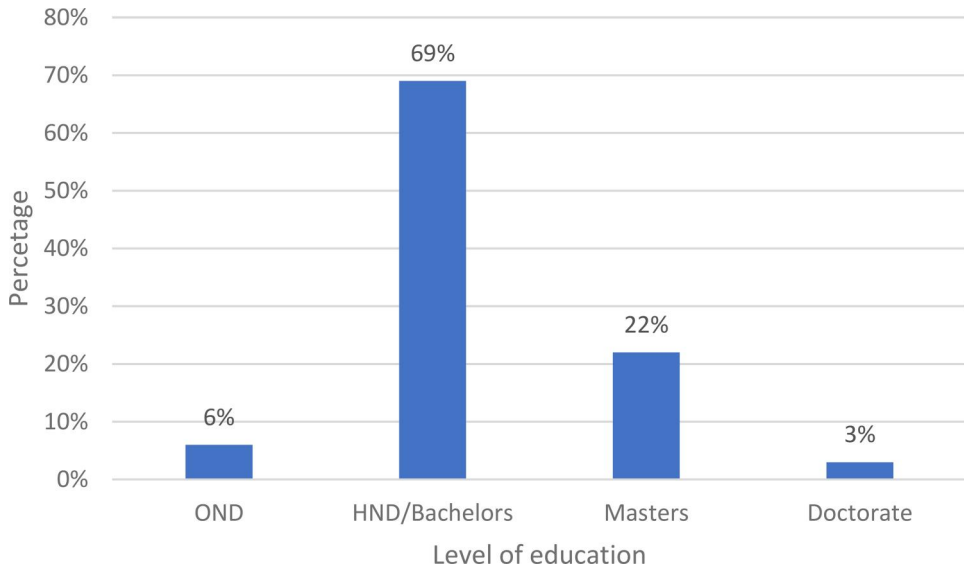

Figure 3. Level of education.

transcend the attainment of WLB. For workers in the senior cadre, the top-rated strategies are reducing office-related work at weekends, time management, and cutting down on work overtime. This reflects the fact that after a very hectic week, workers in the senior cadre are encouraged to attain a healthy WLB when there is a reduction in workload at weekends. Based on the overall rated strategies for improving WLB, it is shown from the findings that the most ranked initiative is continuous professional development (*MIS = 3.64; p-value = 0.217*), cutting down on work over time (*MIS = 3.58; p-value = 0.093*), reduction in office-related work at weekends (*MIS = 3.52; p-value = 0.538*), self-control (*MIS = 3.45; p-value = 0.117*), and time management (*MIS = 3.45; p-value = 0.736*). Also, it was revealed that there was a convergence in the opinions given by the two sets of respondents (junior and senior cadres) for the twenty-eight identified strategies for attaining WLB. The p-value derived from the analysis shows that they are all above 0.05, thus indicating there is no significant statistical difference in the viewpoints given by the two categories of respondents.

Exploratory factor analysis

Exploratory factor analysis is used to identify the common factors and categorize variables that explain the order and structure of the variables being measured (Watkins 2018). The study used exploratory factor analysis (EFA) for the categorization of the strategies for WLB among builders into more manageable clusters. Through the use of principal component analysis (PCA) aided by varimax rotation. According to Tabachnick and Fidell (2007), this method aids in the reduction of multiple numbers of variables into reduced sub-scales with consistent patterns. Hair et al. (2006) affirmed that for the conduct of EFA, larger samples are required; consequently, a total of 132 samples were used for the study.

For the determination of the factorability of the dataset, the Kaiser–Meyer–Olkin Measure of Sampling Adequacy (KMO) and Bartlett's test of sphericity were used to test the reasonableness of the EFA (Rožman et al. 2021). Budaev (2010) noted that KMO is used in the determination of factor coherence and establishing if there is a minimum partial correlation among the

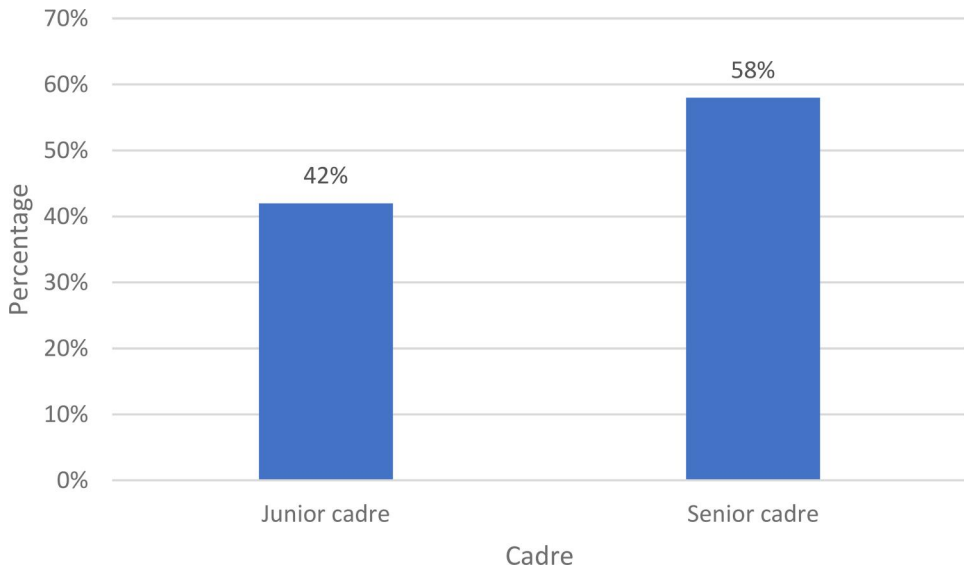

Figure 4. Job cadre.

Figure 5. Professional status.

variables. Table 3 presents the result of the analyzed dataset, indicating the KMO and Bartlett's test. Hair et al. (2006) delineated values between 0.5 and 0.7 as average, values between 0.7 and 0.8 as decent, and values from 0.8 to 0.9 as commendable. According to earlier studies (Oke et al. 2021; Ikuabe et al. 2020; Watkins 2018), the study's KMO value of 0.855 exceeded the threshold of 0.5. This means that the result is commendable and that the number of items for each factor is satisfactory (Kaiser 1974). Also, Bartlett's test of sphericity produced a value of 1125.628 while being significant with a p-value of 0.000 (Pallant 2005). The extraction method is adopted in grouping the components (Mukherjee and Baral 2023). The result of the test portrays the adequacy of the suitability and factorability of the dataset for the conduct of EFA.

Table 4 outlines the result of the PCA, which portrays three components having an eigenvalue <1. The first component has an eigenvalue of 5.791, which is attributed to having the highest percentage of the variance explained at 36.736%. This is followed by the second component, which has an eigenvalue of 3.499 and a variance explained at 25.778%. while the third component has an eigenvalue of 1.628 and a variance explained of 10.517, the three components have a cumulative variance of 73.031%.

Table 5 outlines the factor loadings extracted from the iterations resulting from the principal component analysis. From the result, it is shown that there are three constructs derived from the twenty-eight variables using the varimax extraction method. The first component has nine variables that are highly correlated and have factor loadings ranging from 0.911 to 0.489. This component is named 'Professional and work-related strategy'. For the second component, eleven variables are given to be highly correlated with factor loadings ranging from 0.836 to 0.471. This component is named 'Leisure-related Strategy'. The third component has seven variables that are correlated and have factor loadings that range from 0.782 to 0.458. The component is named 'Self-oriented strategy'. Also, the extracted communalities for all the variables are shown to be above 0.5, which is the threshold set for the study.

Table 2. Mean rating and Mann–Whitney *U* test.

	Junior cadre		Senior cadre		Overall		*M–W*	
Strategies	Mean	Rank	Mean	Rank	Mean	Rank	*Z*-value	*p*-Value
Continuous professional development	3.90	1	3.5	5	3.64	1	−1.336	0.217
Cutting down on work overtime	3.70	3	3.57	3	3.58	2	−0.518	0.093
Reduction in office related work at weekends	3.01	15	3.74	1	3.52	3	−0.787	0.538
Self-control	3.39	7	3.52	4	3.45	4	−1.274	0.117
Time management	3.35	8	3.65	2	3.45	4	−0.649	0.736
Engagement in religious activities	3.12	13	3.46	7	3.42	6	−1.285	0.634
Joining professional association	2.86	16	3.5	5	3.39	7	−1.746	0.068
Listening to favorite music	3.90	1	3.17	12	3.39	7	−0.926	0.159
Seeking assistance	3.33	9	3.26	10	3.27	9	−1.472	0.735
Mediation	2.04	25	3.39	9	3.27	9	−0.184	0.491
Taking of alcohol	2.85	17	3.43	8	3.24	11	−1.773	0.095
Chatting with friends	3.46	5	3.09	14	3.18	12	−1.592	0.446
Seeking clarification from superiors and colleagues	3.17	11	3.17	12	3.15	13	−0.864	0.151
Accepting responsibility	1.77	27	3.26	10	3.15	13	−0.376	0.399
Seeking counselling	3.48	4	2.96	18	3.09	15	−1.559	0.725
Parting/socializing	3.08	14	3.09	14	3.06	16	−0.294	0.832
Taking my mind away from work after working hours	3.24	10	2.91	19	3	17	−1.937	0.424
Job sharing	2.53	20	3.13	13	2.94	18	−0.899	0.108
Travelling	2.47	21	3.09	14	2.88	19	−1.584	0.226
Cooking/eating favorite meal	3.44	6	2.57	23	2.82	20	−0.661	0.647
Working out in the Gym	2.42	22	3	17	2.82	20	−1.847	0.573
Delegating my duties	2.55	19	2.87	20	2.76	22	−1.662	0.711
Changing workplace	3.14	12	2.55	24	2.73	23	−0.831	0.863
Partake in sports	2.10	23	2.83	21	2.61	24	−1.529	0.647
Vacation and holiday with loved one(s)	2.08	24	2.83	21	2.58	25	−0.738	0.094
Seeking for more family time	2.67	18	2.51	26	2.48	26	−1.996	0.166
Smoking	1.98	27	2.17	27	2.09	27	−1.007	0.241
Planning and taking necessary actions to improve the situation (active coping)	1.77	28	1.65	28	1.64	28	−0.229	0.763

M–W: Mann–Whitney *U* test.

Table 3. KMO and bartlett's test.

Kaiser–Meyer–Olkin measure of sampling adequacy		0.855
Bartlett's test of sphericity	Approx. chi-square	1125.628
	df	138
	Sig.	0.000

Table 4. Total variance explained.

	Initial Eigenvalues			Extraction sums of squared loadings		
Component	Total	% Of variance	Cumulative %	Total	% Of variance	Cumulative %
1	5.791	20.684	20.684	5.791	36.736	36.736
2	3.499	12.463	33.146	3.49	25.778	62.514
3	1.628	10.142	43.288	1.025	10.517	73.031
4	0.988	9.603	52.891			
5	0.962	7.44	60.331			
6	0.873	5.623	65.954			
7	0.811	5.343	71.297			
8	0.783	4.686	75.983			
9	0.725	3.66	79.643			
10	0.664	3.487	83.13			
11	0.627	3.02	86.151			
12	0.619	2.438	88.589			
13	0.572	2.206	90.794			
14	0.517	1.848	92.642			
15	0.465	1.661	94.303			
16	0.374	1.335	95.639			
17	0.294	1.049	96.687			
18	0.273	0.976	97.663			
19	0.157	0.56	98.224			
20	0.142	0.506	98.73			
21	0.121	0.433	99.162			
22	0.103	0.367	99.529			
23	0.064	0.23	99.758			
24	0.035	0.125	99.884			
25	0.024	0.085	99.968			
26	0.008	0.03	99.998			
27	0	0.002	100			
28	−4.14E-16	−1.48E-15	100			

Extraction method: principal component analysis.

Discussion of findings

Component 1—Professional and work-related strategy

The outcome of the EFA shows that the first component consists of nine variables: continuous professional development, joining professional association, seeking clarification from superiors and colleagues, job sharing, delegating my duties, changing workplace, cutting down on work overtime, reducing office related work at weekend works, and accepting responsibility. The component is labeled as a Professional and work-related strategy. The findings show that workers' aspirations towards the attainment of professional elevation serve as a significant strategy towards the attainment of WLB. Also, having a good working relationship has been shown to be a formidable strategy for the attainment of WLB. This is corroborated by Chittenden and Ritchie (2011), Kofoworola and Alayode (2012), and Yadav et al. (2022), who opined that seeking clarification from superiors and colleagues is a way to achieve WLB. This action could ensure the existence of a cordial relationship between employees because issues that might lead to disputes and misunderstandings would be effectively resolved between employees, there by leading to a harmonious working relationship and an increased productivity level. Furthermore, delegating duties to subordinates is an effective strategy for enhancing employee well-being and a balance between work and life (Skinner and Pocock 2011; Macintyre et al. 2020). Hence, a cordial working atmosphere with colleagues has been attributed to achieving WLB among workers. For Builders in the Nigerian construction industry, it becomes imperative to establish a buoyant synergy with other professionals in the construction industry landscape. This is vital due to the role of builders in construction project delivery as well as their collaborative functions with other stakeholders in the construction industry.

Table 5. Rotated component matrix.[a]

WLB strategies	Component 1	Component 2	Component 3	Extracted communalities
Professional and work-related strategy				
Continuous professional development	0.911			0.747
Joining professional association	0.826			0.775
Seeking clarification from superiors and colleagues	0.775			0.897
Job sharing	0.702			0.746
Delegating my duties	0.684			0.775
Changing workplace	0.636			0.794
Cutting down on work over time	0.546			0.772
Reduce office related work at weekend work	0.506			0.73
Accepting responsibility	0.489			0.801
Leisure-related strategy				
Listening to favorite music		0.836		0.802
Engagement in religious activities		0.816		0.722
Taking of alcohol		0.793		0.774
Chatting with friends		0.725		0.609
Parting/socializing		0.672		0.85
Cooking/eating favorite meal		0.661		0.803
Working out in the Gym		0.594		0.754
Partake in sports		0.553		0.628
Vacation and holiday with loved one(s)		0.518		0.789
Seeking for more family time		0.507		0.881
Smoking		0.471		0.804
Self-oriented strategy				
Self-control			0.782	0.939
Time management			0.734	0.824
Seeking assistance			0.669	0.793
Seeking counselling			0.628	0.771
Taking my mind away from work after working hours			0.537	0.939
Planning and taking necessary actions to improve the situation (active coping)			0.472	0.946
Mediation			0.458	0.807

Extraction method: principal component analysis.
[a]Three components extracted.

Component 2—Leisure-related strategy

The second component consists of eleven variables, which are listening to favorite music, engagement in religious activities, taking of alcohol, chatting with friends, parting/socializing, cooking/eating favorite meal, working out in the gym, partake in sports, vacation and holiday with loved one(s), seeking for more family time, and smoking. The component is labeled as Leisure-related strategy. Findings from the study indicate that the engagement of workers in leisure tends to help strike a good balance between work and the workers' personal engagements. This was affirmed by Ghiselli et al. (2001) and Macintyre et al. (2020) who argued that listening to one's favorite music could help to improve work output and, by extension, WLB. Also, Happell et al. (2013) and Macintyre et al. (2020) noted that parting/socializing are strategies adopted by some workers to ensure work-life equilibrium. While Quinn (1996) and Macintyre et al. (2020) suggested that organizations should permit their employees to partake in sporting activities for a healthy WLB, which in turn would enhance productivity. In general, a shift from work demands to engaging in leisure activities, such as sports and listening to music propels the attainment of WLB among builders in the construction industry. Therefore, Builders in the Nigerian construction industry should be encouraged to adopt strategies that would ensure they obtain WLB for them to keep well and achieve productivity.

Component 3—Self-oriented strategy

The third component consists of seven variables: self-control, time management, seeking assistance, seeking counseling, taking my mind away from work after working hours, planning and taking necessary actions to improve the situation (active coping), and mediation. The component is labeled as Self-oriented strategy. The ability of workers to manage other engagements without having a severe impact on the delivery mandates of work is vital to the attainment of WLB. This is supported by Chittenden and Ritchie (2011) and Oladinrin et al. (2014), who noted that time management is a useful tool that could improve WLB while also acclaiming that planning and taking necessary actions to improve the situation by employees may improve WLB. Furthermore, Carver and Scheier (1989), LaMontagne et al. (2007), Chittenden and Ritchie (2011), and Yadav et al. (2022) submitted that effective coping strategies to improve WLB for individuals include meditation, reduce office related work on weekend work, taking mind away from work after working hours, planning and taking necessary actions to improve the situation (active coping), and accepting responsibility. Therefore, workers are effectively aided in attaining a WLB as a coping mechanism for dealing with unwanted demands that come with the job. The adoption of self-oriented strategies by Builders, which should be encouraged and continuous in achieving a balance between work and life.

Conclusion and recommendations

The study explored WLB strategies amongst Builders in the Nigerian construction industry. Through the review of extant literature, twenty-eight strategies were identified and presented to the target respondents for rating with the aid of a structured questionnaire. The data elicited from the respondents was subjected to statistical analysis using SPSS version 27, and the reliability and validity of the research instrument were affirmed. The methods of data analysis employed for the study included

descriptive statistics, the Mann-Whitney U test, and exploratory factor analysis. The result showed that for workers in the junior cadre, the most rated strategies for attaining WLB are continuous professional development, listening to favourite music, and cutting down on work overtime. While for workers in the senior cadre, the top-rated strategies are reducing office-related work at weekends, time management, and cutting down on work overtime. Overall, the most rated strategies were continuous professional development, cutting down on work overtime, and reduction in office related work at weekends. Also, it was shown that there is a significant difference in the opinions given by respondents who are of junior and senior cadres. The principal component analysis employed for the exploratory factor analysis produced three constructs as the strategies employed for improving WLB by Builders in the Nigerian construction industry. These are professional and work-related strategy, leisure-related strategy, and self-oriented strategy. The findings from the study present a detailed guideline for which stakeholders can help builders in the Nigerian construction industry attain WLB. Also, construction organizations can use the findings of the study to benchmark the needed initiatives to aid the attainment of WLB among Builders in their organizations. This would help boost productivity and increase all-round delivery mandates required of Builders in the construction industry. Also, the Nigerian Institute of Building (NIOB) can utilize the outcome of the study in making policies that can assist members in closing the gulf exhibited in the policy-practice interface. A significant theoretical contribution made by the study is that it closes the gap in knowledge of the requisite strategies for the attainment of WLB by Builders in the Nigerian construction industry. Moreover, it serves as a good theoretical base for further studies that aim to seek answers to the needed initiatives for actualizing a WLB for other professionals in the Nigerian construction industry, such as Architects, Quantity Surveyors, Project Managers, etc. The study further contributes to the body of knowledge in the WLB domain by presenting key strategies that could permit a deeper understanding of strategies that could be adopted to enhance health, well-being, and productivity in the construction industry. An understanding of the constructs that emerged from this study, which could enhance WLB, can be a guide for key stakeholders, including the Federal Ministry of Labour and Productivity when developing policies for workers in Nigeria. It is worth noting that the study is not without some limitations. Firstly, the study area was limited to Lagos State. While Lagos State serves as the commercial capital of Nigeria, other studies can explore the views of builders in other states of the country. A comparative assessment can be conducted to establish what is obtainable in Lagos compared to other states of the country. Another limitation of this current study is the methodology adopted, further studies could be conducted that would employ research tools other than the questionnaire adopted in this present to examine the effect of work-life balance on building professionals' performance, with any suitable case study. Also, a study can be conducted in other developing countries to examine whether the result of this current study is similar to other developing countries. Subsequent studies could explore the impact of work-life balance on workers with more experience, job title, job responsibilities, salary and workers with higher educational qualifications. Again, other studies could be conducted to compare the impact of work-life balance on workers in the private or public sector to provide strategies and suggest recommendations. Subsequent studies can collect data from labor unions like the Nigeria Labor Congress (NLC) or Trade Union Congress (TUC) to explore the impact of work-life balance on workers. Again, more research could be conducted that would collect data from multiple sources including the press, newspaper publications, social media, labor unions, or the Nigerian Institute of Building (NIOB) on the impact of work-life balance on workers to provide strategies and suggest recommendations.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Data availability statement

The data that supports the findings of this research is available upon reasonable request.

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