Workplace bullying among Nigerian artisans in building and construction industry

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Abstract
Bullying is a growing problem in the workplace. This study investigated the bullying experience of building and construction industry artisans. We employed a cross-sectional analytic design to study 240 artisans in respect of workplace bullying (WPB) experience using a self-report questionnaire. Percentage, mean and standard deviation were used for data analysis and interpretation. According to the study, a significant percentage (96.1\%) of the artisans perceived themselves as victims of WPB within the past 6 months and these experiences also occurred once or more times weekly. WPB is a considerable problem among building and construction industry artisans in Nigeria. Further studies that can influence the construction industry to create valuable programs to minimize bullying among artisans are required.

Abbreviations: BCI = building and construction industry, NAQ-R = Negative Act Questionnaire-Revised, WPB = workplace bullying.

Keywords: artisans, building and construction industry, workplace bullying

1. Introduction
In the building and construction industry (BCI), artisans are the site workmen who perform semiskilled works on building and construction sites. These artisans have various skills acquired from either skill acquisition centers or on-the-job experience in areas like masonry, carpentry, iron bending, tilling, plumbing and pipe fitting, painting, rendering, interlocking, among others.[1] The artisans work with a given BCI team made up of various professionals to carry out their duties based on instructions as well as use of their own critical and innovative skills. Without semiskilled labour performed by artisans, the building and construction industries will not record the current level of success in building and construction projects. These successes can also be attributed to how intelligent, creative, determined, hardworking, innovative, sociable, collaborative, ethical, and honest the artisans are in the discharge of their duties.[1] Nevertheless, bullies may target these set of workers due to feelings of inferiority.[2]

Bullying has been a significant issue of interest to educators and researchers due to its undesirable consequences in the work life of employees. There is an agreement about certain situations in which negative acts toward others can be regarded as bullying.[3,4] Therefore, workplace bullying (WPB) refers to conditions in the work setting where 1 or more workers demonstrate a feeling of subjection to negative acts by other worker(s) over a given period of time and are left in such a state that they cannot guard themselves against such acts. WPB can also be regarded as an extended and recurrent unwanted conduct exhibited at the place of work and toward 1 or more employees who are incapable of protecting themselves,[5] resulting in frequent undesirable consequences for the concerned employees[6] as well as establishments.[7] In order to label a behavioral act as WPB, there are 3 conditions that should be considered; these are: employees’ exposure to negative acts once per week; employees’ exposure to negative acts within the last 6 months; and existence of power inequality between the exposing employee and the exposed employee to negative acts.[6,9] In an industrial setup, WPB can mean the extreme harassment, socially unwanted acts or acts of malingering of the exposed employee by the exposing employee, and negatively affecting someone’s work tasks.
Previous research studies\(^4,\)\(^10\) have confirmed that WPB is a growing problem in organizational settings with the highest pervasiveness recorded in construction industry,\(^11\) education, public administration, social and health sectors.\(^12\) Despite the fact that WPB is seen as a major workplace health problem, its research documentation is skewed toward education, public administration, social and health sectors.\(^12\) Although, research studies on WPB have been conducted, empirical investigations among artisans in building and construction with respect to their perception, bullying exposure, and perpetrators of bullying have not attracted much attention. To date, no research investigation has been done on WPB among male and female artisans, and the perceived perpetrators of these bullying behaviors.

2. Method

2.1. Ethical approval

The institutions’ departmental research ethics committee gave the researchers the approval to conduct this cross-sectional analytic study. The artisans provided written informed consent. Finally, the World Medical Association’s Declaration of Helsinki for conducting research with human participants was complied with throughout the study.

2.2. Study sample

A suitable sample size was determined using G\(^*\)Power 3.1.9.4 software.\(^13,\)\(^14\) As a result, a minimum sample size of 239 was advocated by the power estimation. Sample size was calculated using a target effect size of 0.3, 0.05 alpha-level and power of 0.99 for Chi-square goodness-of-fit analysis. Two hundred fifty-eight artisans (258) who met the inclusion criteria (completing the informed consent in writing, and being available to participate in the study period) participated in the study. A total of 67 artisans artisans did not meet the inclusion and were excluded from the study. Only 240 artisans representing 93% completed and submitted the questionnaire whereas 18 had incomplete responses and were removed. The demographic features of the artisans were collected and presented in Table 1.

3. Data collection instruments

3.1. Artisans’ demographic questionnaire

The ADQ was used to collect the BCI artisan’s demographics data like gender, age, qualification, work experience, and marital status.

3.2. The negative Act questionnaire-revised (NAQ-R)

We used the revised version of negative act questionnaire (NAQ-R) to capture the BCI artisan WBP experiences.\(^15\) The NAQ-R consist of 22 items and has 4 subscales (work-related bullying, person-related bullying, physical intimidation bullying, and occupational devaluation) comprising of 7 items, 10 items, 3 items, and 2 items respectively. An example of item from the work-related scale is: “having your opinions and views ignored”, for person-related scale is: “persistent criticism of your work and effort”, for physical intimidation is: “threats of violence or physical abuse or actual abuse” whereas an example of occupational devaluation is: “being ordered to do work below your level of competence”. The NAQ-R is a 5-point scale instrument with items that are stated in behavioral terms. A good internal consistency has been reported for the NAQ-R in previous study (0.90 Cronbach alpha).\(^16\) Our study found that the internal consistency of the NAQ-R was good with Cronbach alpha of 0.89 for the work-related bullying, 0.81 for person-related bullying, 0.79 for physical intimidation bullying and 0.88 for occupational devaluation.

4. Procedure and analyses

The researchers administered the questionnaires with the help of 10 research assistants within 3 weeks. The research assistants were requested to explain to the artisans the main purpose of the questionnaires to ascertain their WPB experiences. The questionnaires were coded in such a way that no identifying information of the artisans will be reported to ensure their anonymity and confidentiality. The artisans were requested to complete the questionnaire and return the same directly to their research assistants. If there were any artisan who faced difficulties in completing the questionnaire, the research assistants were asked to provide them with further guidance. After completion, the questionnaires were then collected for analysis. The IBM SPSS version 25 was used to carry out the statistical analysis of the data collected (SPSS Inc., Chicago, IL). Percentage, mean, and standard deviation were the descriptive statistics used in the data analysis.

5. Results

As shown in Table 1, majority of the artisans were mainly male (73.8%) and married (43.8%). Most artisans were aged between

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**Table 1**

| Variables       | Frequency | Percentages (%) |
|-----------------|-----------|-----------------|
| Gender          |           |                 |
| Male            | 177       | 73.8            |
| Female          | 63        | 26.3            |
| Age             |           |                 |
| <30 yrs         | 42        | 17.5            |
| 30-39 yrs       | 100       | 41.7            |
| 40-49 yrs       | 57        | 23.8            |
| 50 & above      | 41        | 17.1            |
| Work experience |           |                 |
| <10 yrs         | 52        | 21.7            |
| 10-20 yrs       | 88        | 36.7            |
| 21-30 yrs       | 48        | 20.0            |
| Above 30 yrs    | 52        | 21.7            |
| Qualification   |           |                 |
| Trade test I    | 78        | 32.5            |
| Trade test II   | 78        | 32.5            |
| Trade test III  | 84        | 35.0            |
| Marital status  |           |                 |
| Single          | 68        | 28.3            |
| Married         | 105       | 43.8            |
| Separated/divorced | 14  | 5.8        |
| Widowed         | 53        | 22.1            |

BCI = building and construction industry.
30 and 39 years (41.7%) with 10 to 20 years’ work experience (88%).

Figure 1 exposed how BCI artisans confirmed whether or not they considered themselves as being bullied within the past 6 months. The chart showed that 34.6% affirmed being bullied now and then, 30.4% confirmed being bullied several times in a week, 18.3% almost on daily. Overall, a significant percentage (96.1%) of the artisans perceived themselves as victims of WPB within the past 6 months, whereas 3.9% had no bullying experience.

As shown in Figure 2, a significant proportion (96.1%) of the artisans had experienced WPB behaviors 1 or more times weekly; of these 40.8% experience WPB at least twice in a week, 31.7% experience such negative behavior more than 3 times in a week whereas 23.8% experience WPB between more than 4 times in a week and their supervisors, co-workers and sometimes their subordinates were frequently the source of these behaviors. Nevertheless, 3.8% of the artisans indicated they never had any WPB experience.

The WPB behaviors results in Table 2 showed that the male BCI artisans experienced work-related bullying more (mean = 28.31; 95% CI= 27.92-28.69) than the female artisans (mean = 28.29, 95% CI= 27.69-28.87). When asked from whom the WPB behavior are being perpetrated as shown in Figure 3, 61.7% of the artisans testified that the site supervisors perpetrate work
related bullying, followed by co-workers with 34.2% and their subordinates at 4.2%. However, the female artisans experienced person-related bullying more (mean = 38.38; 95% CI = 38.06-38.91) than their male counterparts (mean = 38.69; 95% CI = 38.04-39.35). When asked from whom the WPB behavior are being perpetrated, 47.5% of the artisans affirmed that their supervisors perpetrate the person-related bullying more, followed by co-workers with 43.8% with a minimal experienced observed from their subordinates at 8.8%. Similarly, the female artisans also are intimidated more (mean = 11.70; 95% CI = 11.29-12.11) than their male colleagues (mean = 11.59; 95% CI = 11.40-11.79). As regards, the perpetrators, 82.1% of the artisans asserted that their co-workers intimidate them more, followed by the supervisors with a little proportion of 17.9%. No record of subordinate intimidation was recorded. Lastly, the male artisans experienced occupational devaluation more (mean = 8.22; 95% CI = 8.06-8.38) than their female colleagues (mean = 7.17; 95% CI = 6.88-7.47). With respect to the perpetrators of occupational devaluation among BCI artisans, 57.1% of the artisans affirmed that their site supervisors perpetrate occupational devaluation more than their co-workers with 40.8% and then the subordinates with 2.1%.

6. Discussion

The present study made an investigation of the bullying experiences of BCI artisans in Nigeria. The artisans selected cuts across the different workers in the BCI. The findings of the present investigation revealed that a significant percentage of BCI artisans perceived themselves as victims of WPB within a 6-month period. This study revealed that overall, 96.1% of the respondents affirmed to having experienced WPB 1 or more times in the past 6 months; whereas 3.9% had little or no bullying exposure. Past research results,[17] showed that in the last 12 months, a significant percentage of workers were exposed to WPB behaviors 1 or more times, and the most recurrent source of
these behaviors were supervisors. In addition, other previous WPB studies were alike to our study by indicating that majority of workers in the workplace were exposed to WPB behaviors.\textsuperscript{[18–20]}

The results also revealed that a significant proportion (96.1\%) of the artisans experienced WPB behaviors 1 or more times weekly. Specifically, 40.8\% of the artisan’s experience WPB at least twice in a week, 31.7\% experience such negative behavior more than 3 times in a week whereas 23.8\% experience WPB between more than 4 times in a week. This outcome is in alliance with previous finding\textsuperscript{[21]} which shows that WPB exists. The study specifically revealed that 82.6\% of the respondents were on the receiving end of WPB behaviors whereas the highest daily occurrence of the most frequently observed behavior was recorded by 22\% and majority of them indicated that they observed the behaviors occasionally. Hence, effort should be directed at measures to reduce the incidence of WPB to the barest minimum to avert jeopardizing the interpersonal and work relationship that drives productivity among workers.

Additionally, this study determined the most common WPB behaviors among BCI artisans and by whom (male or female) these behaviors being perpetrated. Our findings revealed that the male BCI artisans experienced work-related bullying more than the female artisans. However, the female BCI artisans experienced person-related bullying more than their male counterparts. Similarly, the female artisans also are intimidated than their male colleagues in BCI firms. Lastly, the male artisans experienced occupational devaluation more than their female colleagues. Overall, the artisans affirmed that their site supervisors perpetrate WPB more than their co-workers and the subordinates. Past studies\textsuperscript{[20,22,23]} also revealed that these bullying behaviors were the most frequently exhibited acts in the workplace. This study is also in tandem with past work\textsuperscript{[21]} which revealed that staff in the senior cadre are the main perpetrators of WPB whereas those in the junior cadre are the main targets/victims. This implies that there is a high tendency for BCI artisans who had been victim’s WPB in the past to become future perpetrators as they progress in their career. Hence, efforts should be made to help the construction industry to create programs that can minimize bullying behavior among artisan. Initiatives must therefore be taken by the relevant government ministries to tackle artisan bullying in the Nigerian workplace.

Bullying and its link with disability and psychosocial impairment cannot be overlooked. Importantly, traumatic experiences may be associated with psychosocial impairment.\textsuperscript{[24]} Thus, it is very important through the course of life to develop the ability to cope with lifetime traumatic experiences in order to avoid the emergence of negative outcomes (e.g., bullying).\textsuperscript{[25,26]} Given that sensory perception plays a major role in emotional processes and negative outcomes (e.g., bullying) through the course of life,\textsuperscript{[26]} the adaptation of interventions which will target victims’ cognition and emotion is suggested. It is suggested that rational-emotive behavioral intervention\textsuperscript{[27,28]} be adapted to assist victims overcome the negative emotional and behavioral effects of bullying.

This present study assessed the bullying experience of BCI artisans; however, it is still not without some limitations. The first limitation that comes to mind is self-report bias since a self-report measure was used. Prospective studies are required to use interviews, focus group discussions and other qualitative measures to further validate the results. Secondly, the sample may not be a perfect representation of all the BCI artisans; so, efforts should be made to cover as many worker categories as possible in future studies since the industrial operations are common.

7. Conclusion

A significant proportion of BCI artisans experienced WPB behaviors 1 or more times weekly. In addition, the male BCI artisans experienced occupational devaluation more than the female artisans, whereas the female BCI artisans experienced person-related bullying and intimidation more than their male counterparts. The artisans affirmed that their site supervisors perpetrate WPB more than their co-workers and subordinates. Further studies that can influence the construction industry to create valuable programs to minimize bullying among artisans are required.

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