

Assessment On The Level Of Worker Satisfaction On Welfare Provisions On Construction Sites In Ghana

D. M. Dok Yen

Department of Building Technology,
Tamale Technical University, Tamale. Ghana

K. Nana Tabi

Department of Building Technology,
Kwame Nkrumah University of Science and Technology, Kumasi. Ghana

E. Adinyira

Department of Building Technology,
Kwame Nkrumah University of Science and Technology, Kumasi. Ghana

ABSTRACT

Construction worker's efficiency can increase significantly with satisfactory welfare facilities in the area of adequate toilets, washing facilities, places to eat, and storage place for clothing and so on, and these could be the drivers for high output and increase in profit to a firm where and when they are provided. However, these basic requirements are often inadequate and in worst case are neglected at most construction sites. The aim of this research was to assess the level of worker's satisfaction on welfare provisions for construction sites in Ghana. The objectives set for the study were to evaluate worker's satisfaction in construction sites with regards to welfare provisions on site. The population sample for this study consisted of all active construction sites at the Kotoka International Airport (KIA) vicinity. Eighty (89) copies of the questionnaires were administered to permanent workers (the respondents) in five (5) construction sites with on-going construction activities in this study. Structured questionnaire and the census sampling technique were used to collect data. Descriptive statistics was employed to analyze primary data into percentages and frequencies. The study revealed that 69% of construction site workers in Ghana are not satisfied with the level of welfare facilities provided at site by their employers. The researchers discovered that accessibility to welfare facilities, provision of adequate number of welfare facilities, regular maintenance, illumination of space and closeness of welfare facilities were the most influential factors on the level of satisfaction of site workers in the Ghanaian construction industry. The study therefore, recommends that there should be regular assessment and enforcement conducted by policy makers and consultants on the quality of welfare facilities provided by contractors, based on the labour Act regulation on welfare provision on construction sites, to ensure that they are up to standard for workers on site.

Key Words: Construction Sites, Welfare Facilities, Satisfaction, Ghana.

INTRODUCTION

Welfare facilities provision on construction sites plays essential role's in workers well-being and health (HSE, 2010). According to Construction (Design and Management) Regulations (CDM 2015), construction site needs to be provided with minimum welfare facilities such as suitable toilet, washing facilities, potable drinking water, facilities for storage and rest. Although, the Labour Act of Ghana, Section 118, also states that it is the responsibility of an employer to make sure that every employee works under safe, healthy and satisfactory

conditions. Nevertheless, it is unfortunate when considering a survey on construction sites of D1K1 Building and Civil Engineering Contractors at Kotoka International Airport (KIA) in Accra. The survey revealed that most construction sites in Ghana have either some of these facilities or some have but they are not in suitable conditions. Welfare facilities turn to have a negative effect on workers if they are not adequately provided and maintained in a good state. Nevertheless, little research has been done in Ghana to assess the level of worker satisfaction with site welfare facilities provision by their employers on site. This research will seek to evaluate worker satisfaction in construction sites welfare provisions, in order to come out with the influencing factors for welfare satisfaction, which will go a long way to address the problem of poor welfare facilities on Ghanaian construction sites.

CONCEPTUAL FRAMEWORK/LITERATURE REVIEW

The Construction (Design and Management) Regulations (2015) described the minimum welfare facilities vital for all construction sites which includes toilets, washing facilities, access to drinking water, changing rooms and lockers, and rest facilities.

Significance of Welfare Facilities

According to Hiba (1998) provision of welfare facilities has an impact on productivity of works and can be costly if workers are dissatisfied. Hiba (1998) explained that in each working day, workers need to take water, eat food and snacks, wash and clean their hands, visit the washroom and relax to regain from fatigue. Hiba further claimed that the absence of welfare facilities can negatively affect worker output rate. However, good welfare facilities are often appreciated far beyond the time and money invested, and helps workers to overcome problems which are important to them Hiba (1998)

Classification of Welfare Facilities

Welfare facilities can be classified under two types namely intra-mural and extra-mural. Intra-mural consist of facilities provided within the organizations or sites and these include sick bay, supply of water, washing and bathing facilities, changing rooms, canteens, provision of safety measures, tasks which assist in improving the conditions of work, and so on. Whilst extra-mural activities include the facilities and services provided outside the construction site or factory such as; housing accommodation, indoor and outdoor recreational facilities, educational facilities and the like (Suresh and Vijayarani, 2015).

Shelters and Living accommodation

The ILO code of practice (1992), state that, shelters should be provided for site workers, which includes facilities for washing, canteens and a place for storing and drying of clothing especially for places where those facilities are not available. Furthermore, where the means of transport is not available for construction workers at the site to their homes, suitable accommodation should be provided for them. However, separate facilities such as resting facilities, toilet and washing should be provided taking into consideration male and female gender.

Sanitary Conveniences

With reference to the CDM regulations (2015), appropriate and adequate sanitary conveniences (toilet) should be provided at easily accessible locations. The sanitary conveniences should be clean and tidy, and the rooms to the facilities should have sufficient ventilation and lighting. Separate sanitary convenience should be provided for male and female gender. However, where it cannot be possible, rooms with lockable doors will be needed. There should be sufficient number of sanitary facilities on construction site; however, care should be taken to ensure that each should be rightly located to avoid long walks, waiting and

frustration (Health and Safety Executive (HSE), 2010). Also, adequate number of toilet facilities should be provided in a clean and neat state for the workers, with proper illumination inside toilets.

Workplace (Health, Safety and Welfare) Regulations

This regulation Health, Safety and Welfare Regulations (1992) captures a broad range of basic or fundamental health, safety and welfare issues. The regulations mostly applied to workplaces. Regulation that contains the welfare facilities that is to be provided at the workplace, some of these include; sanitary conveniences, washing facilities, drinking water, accommodation for clothing, facilities for changing clothing and facilities for rest and to eat meals.

Code of Practice for Welfare Facilities

There is no specific code of practice for welfare facilities in Ghana. The codes of practice which captures welfare facilities are the Labour Act, 2003 (ACTS 651) and the Factories, Offices and Shops Act, 1970 (ACTS 328).

Labour Act, 2003 (ACT 651)

According to the provisions made in the Labour Act of Ghana, Section 118, it is the responsibility of an employer to make sure that every employee works under safe, healthy and satisfactory conditions. Failure of any employer to discharge his duty under safe, healthy and satisfactory conditions is liable to have committed an offence with a fine not exceeding 1000 penalty units or sentence to prison not exceeding 3 years or both. Additionally, employers should provide separate sufficient and suitable washing and toilet facilities for male and female workers. Storage facilities, changing facilities, drying and cleaning facilities for clothing must be provided by the employer. Finally, the Acts make provision for the employer to supply clean drinking water at the workplace for its employees.

Welfare Facilities for Factories, Offices and Shops

The Factories, Offices and Shops Act, 1970 (ACTS 328) spelt out welfare facilities in details, it also, talks about washing facilities, sanitary convenience, provision of drinking water to the workers, accommodation for clothing, sitting facilities and place for meals, the Act talks about the relevant significant welfare facilities necessary at work of which construction sites are included.

Sitting Facilities

Furthermore, the factories, Offices and Shops Act states that, workers in any factory, office or shop in the course of their work have reasonable opportunities for sitting without damage to their work, sitting facilities provision should be made and maintained for them at suitable places accessible and convenient to them so that they can benefit from these opportunities provided. In addition, whereby virtue significant amount of such work can appropriately be done by sitting, a suitable and comfortable seat design and constructed to suit the worker and the kind of work he is doing must be provided and maintained appropriately.

RESEARCH METHODOLOGY

The researchers employed a descriptive survey method for this study. This study investigated the adequacy of workers satisfaction at construction sites in relation to their welfare as earlier stated in the research objective. Administration of questionnaire was the tool adopted in the investigation in order that the right responses are obtained.

Population

The study population consisted only permanent workers at the construction sites of D1K1 Building and Civil engineering contractors at Kotoka International Airport (KIA) vicinity. This area was chosen for the study because it was an area where a lot of development is ongoing in Accra and also the projects are undertaken by different construction firms, the justification is that these are workers who have been at the construction site for long and therefore could give better assessment and satisfaction of welfare facilities on the construction site.

Sample and sampling size

The researchers selected all active construction sites at the Kotoka International Airport (KIA). The numbers of active construction sites were eight (8) at the KIA vicinity, but only five sites gave permission to administer the questionnaire. The total numbers of permanent workers on the five sites were 89 persons and it was used as sample sizes. The respondents consist of Project Managers, Project Engineer, Supervisors, Quantity Surveyors, Foreman, Artisans, Helpers, Land Surveyors, Time Keepers and Store Keepers from the five sites.

Table 1.0 Sampling Size from five Construction site

Table 1.0	

Source: Field Survey, (2016)

ANALYSIS AND DISCUSSION OF RESULTS

Evaluation of welfare provisions and worker satisfaction at site

Table 2.0 shows the level of satisfaction of workers welfare provisions at the site. Workers' were asked to rate their level of satisfaction with respect to whether they were, *Highly Satisfied, Satisfied, Neutral, Dissatisfied or Highly dissatisfied* with the regular provisions of their welfare. From the table, it can be seen from Site1 that 46.2% of the respondents were dissatisfied, while 30.8% of them were highly dissatisfied, 15.4% of the respondents were neutral on their level of satisfaction and only 7.7% of the respondents were satisfied with their welfare provisions on site, Site2 shows that 46.7% were dissatisfied, 20% highly dissatisfied, 20% neutral, whilst 13.3% said they were satisfied with the welfare facilities that were provided at site. Also, in Site3 40% of the respondents shows that workers were dissatisfied with welfare facilities at site, 20% were highly dissatisfied, 20% were neutral, however, 10% were satisfied and also 10% said they were highly satisfied with the welfare facilities at site. In Site 4, 16% of them were dissatisfied, 20% highly dissatisfied, 20% were neutral, also 28% were satisfied and 16% were highly satisfied with welfare facilities at their site. Finally in Site 5, a large percentage of the respondents representing 50% show that workers were dissatisfied with welfare facilities at their site, 16.7% were highly dissatisfied, 25% were neutral, on the other hand, 4.2% were satisfied and also in a similar manner, 4.2% were highly satisfied with their welfare facilities.

Discussion

The results from the study showed that majority of the construction site workers were not satisfied with welfare facilities that were provided by their employers at site, and this can be seen clearly from the analysis with 77%, 66.7%, 60%, 66.7% and 58.7% from S1, S2, S3 and S5 respectively when considering the sum of the percentages of respondent who were generally

dissatisfied with their welfare facilities that were provided. Although, S4 had the highest percentage of 44% respondents who were satisfied with their welfare facilities, yet this high percentage scored was still less than half the total number of workers at S4 who think their welfare was satisfactory.

Table 1.0 Sampling Size from five Construction site

Construction site	Permanent workers
Site 1	13
Site 2	15
Site 3	10
Site 4	27
Site 5	24
Total Sample Size	89

Source: Field Survey, (2016).

Although, the HSE (2010) recommends the average number of toilets on an active construction site to be within a ratio of at least one to ten (ratio 1: 10), implying 1 toilet should be provided to every 10 workers at site, all the construction sites that were visited had lower than the required number. The CDM regulations (2015), also recommends that the number of toilets provided should be equal to the number of basins or urinals, every 5 workers per 1 toilet, whilst every 6 to 25 workers at site should have 2 toilets. However, more than 25 workers need to have an additional toilet for every additional 5- 10 workers. The BS6465-1:2006 code also recommends a ratio of 1 toilet to 7 persons where portable toilets are emptied once a week. Furthermore, at least 1basin or wash trough points should be provided for every 10 workers at site and shower for each workplace should be provided at the rate of at least one for each 25 people (Anon, 2010).

From the analysis, it can be inferred that majority of the respondents were dissatisfied with the welfare facilities provided at their site. This dissatisfaction was probably due to the fact that majority of the Ghanaian construction sites do not provide the needed welfare provision required by the Health and Safety regulations. Also, the inadequate number of welfare facilities on site, poor condition of welfare facilities and so on and so forth, based on physical observation on most of the welfare facilities at sites that were visited by the researchers during the study, is a clear justification why majority of the respondents were not satisfied with the welfare facilities provided at their site.

Table 2.0 Evaluation of worker satisfaction

Response	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	TOTAL
	Frequency No. (%)					
Highly Satisfied	-(-)	-(-)	1(10)	4(16)	1(4.2)	6(6.9)
Satisfied	1(7.7)	2(13.3)	1(10)	7(28)	1(4.2)	12(13.8)
Neutral	2(15.4)	3(20)	2(20)	5(20)	6(25)	18(20.7)
Dissatisfied	6(46.2)	7(46.7)	4(40)	4(16)	12(50)	33(37.9)
Highly dissatisfied	4(30.8)	3(20)	2(20)	5(20)	4(16.7)	18(20.7)
Total	13(100.0)	13(100.0)	13(100.0)	13(100.0)	13(100.0)	13(100.0)

Source: Field Survey, (2016)

Factors influencing the level of satisfaction of welfare facilities

Table 3.0 presents an analysis of the factors influencing the level of satisfaction of the provisions of welfare at site. Respondents were asked to establish their level of satisfaction with the provisions of welfare facilities at their site, with respect to whether the factors were *very influential, influential, influential moderately, less influential or not influential*.

From the table, it can be seen that 55.2% of all the respondents in all the five sites were of the view that; the maintenance of welfare facilities was very influential to the level of satisfaction of welfare facilities at site, 39.1% think maintenance is influential, 4.6% were of the view that it was moderately Influential, only 1.1% thinks is less influential but no respondent was of the view that maintenance was not influential.

With regards to adequate number of welfare facilities, 65.5% of the respondents showed that adequate number of welfare facilities were very influential to the level of satisfaction of welfare facilities, 32.2% said it was influential and all the remaining respondents of 2.3% think it was moderately influential by the provision of welfare facilities.

Closeness of welfare facilities, 18.4% think closeness of welfare facilities to site or workers was very influential to worker satisfaction with welfare facilities (WF), 49.4% think it was influential whilst all the remaining 32.2% were of the opinion that closeness was moderately influential to the satisfaction level of WF provision on site.

Accessibility of facilities, 35.6% of the respondents were of the view that accessibility of the facilities was very influential to the level of satisfaction (LS) of WF on site, whilst all the remaining 64.4 % of respondents were of the view that accessibility was influential to the level of satisfaction (LS) on construction site WF.

Illumination of space, 34.5% of respondents were of the view that illumination of space was very influential on the LS of site WF, 42.5% of respondents think illumination of space was influential, 18% moderate and whilst the remaining 2.3% were of the opinion that illumination of space was less influential to LS of WF at site.

Enough tables and seats, 24.1% of respondents were of the view that *enough tables and seats were* influential to the LS, 60.9% think it was moderately influential, and the remaining 14.9% were of the view that enough tables and seats had less influential on the LS of workers on WF provisions at site.

Adequate space or room provided, 5.7% of respondents were of the view that adequate space or rooms for site workers were very influential to LS in the provision of welfare facilities, 44.8% were of the view that adequate space was influential to the level of satisfaction of WL, and the remaining majority of 49.4% of respondents were of the view that adequate space was moderately influential to LS on welfare facilities at site.

Separate facilities for both genders: 17.2% of the respondents were of the view that separate facilities for both genders was very influential to the level of satisfaction of WF provisions on site, 23% thought it was influential, 21.8% of them thought it was moderately influential and the remaining 37.9% were of the opinion that provision of separate welfare facilities for both male and female workers were less influential to the level of satisfaction of WF on site.

Clean and hygienic environment: 44.8% of the respondents were of the view that clean and hygienic environment were very influential to the level of satisfaction of WF on site and the

remaining majority were of the opinion that clean and hygienic environment for workers were influential to the LS in the provision of welfare facilities.

Table 3.0 Discussion

Although all the factors from the analysis seems to have some level of influence on satisfaction of WF provisions, a critical analysis of the responses when considering whether a factor has a critical influence or not, by grouping the responses into summation of levels, that is, were the sum of responses that fall within *very influential (VI)* and *influential (I)* were deemed to be a critical factor while sum of factors with responses within *moderately influential (MI)*, *less influential (LI)* and *not influential (NI)* were deemed not to be very critical factor. However, were two or more factors score the same sum values, the factors with more respondents saying *very influential (VI)* were considered to be the most critical factors using simple percentages. Based on the above, it can therefore be seen clearly from Table 2 that most site workers in the Ghanaian construction site are of the view that the most critical factors influencing the level of workers satisfaction on welfare facilities at site in descending order of their criticalities are as follows with their responses: clean and hygienic environment, accessibility of facilities, adequate number of welfare facilities, maintenance of welfare facilities, illumination of space, closeness of welfare facilities, adequate space or room and enough tables and seats (canteen, changing room and resting room) provided with their responses respectively as 100%,100%, 97.7%, 94.3%, 77%, 67.8%, 50.5%, 40.2% and 24.1%. Notwithstanding the fact that clean hygienic environment and accessibility of facilities had the same level of influence of 100%, clean hygienic environment was still considered to be more critical because it had more respondents with *very influential (VI)* than *accessibility of facilities* when comparing the two most critical factors from the study with 44.8% very influential and 34.5% very influential respectively.

Table 3.0 Factors influencing the level of welfare facilities
Source: Field Survey, (2016)

Factors	Very influential	Influential	Moderately Influential	Less Influential	Not Influential	Total
	No (%)	No (%)	No (%)	No (%)	No (%)	No (%)
Maintenance of welfare facilities	48(55.2)	34(39.1)	4(4.6)	1(1.1)	-(-)	87(100)
Adequate number of welfare facilities	57(65.5)	28(32.2)	2(2.3)	-(-)	-(-)	87(100)
Closeness of welfare facilities	16(18.4)	43(49.4)	28(32.2)	-(-)	-(-)	87(100)
Accessibility of facilities	31(35.6)	56(64.4)	-(-)	-(-)	-(-)	87(100)
Illumination of Space	30(34.5)	37(42.5)	18(20.7)	2(2.3)	-(-)	87(100)
Enough tables and seats (canteen, changing room and resting room)	-(-)	21(24.1)	53(60.9)	13(14.9)	-(-)	87(100)
Adequate space or room provided	5(5.7)	39(44.8)	43(49.4)	-(-)	-(-)	87(100)
Separate facilities for both gender	15(17.2)	20(23.0)	19(21.8)	33(37.9)	-(-)	87(100)
Clean and hygienic environment	39(44.8)	48(55.2)	-(-)	-(-)	-(-)	87(100)

CONCLUSION

The study discovered that 69% of Ghanaian construction site workers are dissatisfied with the current level of provision of welfare facilities at their various sites. This dissatisfaction is due to the fact that the majority of Ghanaian contractors do not provide the required welfare facilities recommended by the Health and Safety regulations. The researchers also observed that the majority of the sites had an inadequate number of Welfare facilities on site, several cases of poor condition of facilities and so on and so forth, when these researchers visited the sites for this study, it is a clear justification also why majority of the respondents were not satisfied with the provision of welfare facilities at their site. However, clean and hygienic environment, accessibility of facilities, adequate number of welfare facilities, maintenance of welfare facilities, illumination of space, and closeness of welfare facilities were found to be the critical factors that influence workers satisfaction at construction sites in Ghana.

RECOMMENDATIONS

Contractors should comply with Health and Safety regulations, by giving consideration to the satisfactory provisions of welfare facilities at site for their workers. Regular assessment ought to be conducted by policy makers and consultants on the quality of welfare facilities that are provided by contractors at site to ensure that they are up to standard for workers on site. Consultants should ensure that they enforce the Labour Act on the provisions of welfare facilities at site as part of the condition of contract.

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