

## *Factors Affecting Employee's Satisfaction about Workplace Environment: A Micro-Survey Study*

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### ABSTRACT

In poor setting workplace environment in Bangladesh, most of the employees are bound to work due to the scarcity of job. Despite remarkable progresses in industrial sectors over the last few decades employees are facing two types of disadvantages; one they are working with dissatisfied workplace environment and lower wages on the other. It is the reality of the most of the employees in industrial sectors especially in the physical labour oriented industries. This study based on the information collected from 417 employees of three physical labour based aluminum industries in Rajshahi city of Bangladesh. Results of this study highlight that there are a strong variation in the satisfaction level of the employees about the workplace environment by their socio-demographic characteristics. It is believed that the findings of the study will facilitate policy-makers and respected authorities to take timely and viable steps and develop workable strategies to address the issue of sound workplace environment in the industrial sector. Without ensuring employees satisfaction through better workplace environment, it is difficult to reach sustainable development of the country.

**Keywords:** Workplace environment, Industry, Employee's satisfaction, Bangladesh.

### Introduction

Bangladesh has made some comprehensive improvements in the economic sectors and labour remaining in the heart of such development. At the same time, the country has made some remarkable progresses in industrial sectors over the last few decades to ensure the safe and secure work environment for its employees. This industrial sector is continuously expanding and strongly participating in the overall development of the country. Despite these developments, this sector is still facing a lot of challenges to ensure a proper workplace environment to its employees. This situation is quite worsening in small industrial sectors where there are no or limited scope for ensuring secured workplace environment for the workers. In spite of this limitation, a number of people are working with these industries. The reality is that, the ever increasing pressure to tolerate, in the milieu of increasing needs have pressed people to engage in income generating activities in any way. In that context, the alternative for people to make choices and to claim rights to safe employment has remained elusive in the context of existence and hence has been subjected to injustices and dispossession. This often leads the workers to feel forced to accommodate with the uncomfortable environment.

There is no doubt that, the development in country is an aggregate product of several factors while labour remains at the center. So, it is urgent to ensure their safety work environment for its workforce. Workplace is generally considered as the second home of the workers as much of their time is spent in that place. The workplace environment is a key determinant of the quality of their work and level of productivity of an employee. The working environment is one of the most crucial factors which influence the level of satisfaction as well as motivation of its employees (Agbozo et al., 2017). There is a link between working conditions and job satisfaction (Brill et al., 2001; Newsham et al., 2004; Veitch et al., 2005; Newsham et al., 2009; Kinzl et al., 2005). Study shows that, when the employees' are physically and emotionally have the desire to work, then their performance outcomes shall be increased (Boles et al., 2004). No doubt that, the quality work environment of the employee is responsible

for accelerating their level of motivation and subsequent performances. Level of working environment also affects the job satisfaction of the employees (Lane et al., 2010) and better indoor environment which leads to more satisfied employees and thus better outcomes for their employers (Singh et al., 2010; Thayer et al., 2010). Studies found that, both job satisfaction and performance are affected by the physical workplace environment (Feige et al., 2013; Gou et al., 2013; Monfared and Sharples, 2011; Haynes, 2008). Additionally, a good workplace design of an organization has optimistic relation with occupants health and well-being (Baird, 2010; Thayer et al., 2010), and it help to reduce the ratio of absenteeism and improved satisfaction (Choi et al., 2012; Frontczak et al., 2012; Singh et al., 2010). The working productivity and effectiveness of the workers are directly affected by the workplace environments and it has received much attention today than before (Kim et al., 2008). Therefore, a progressive work environment is not only important for the physical, mental and emotional health of the workers, but is also significant for the production and effectiveness of the industry. The better the labour feel at work, the more likely they will take pride in their work functions and be loyal toward their place of employment. Under these circumstances, this study is a humble effort to explore the satisfaction levels of the employees about their workplace environment.

### **Methods and Materials**

This study is based on the primary data collected from 3 aluminum industries in Rajshahi Industrial Area under Rajshahi Districts of Bangladesh. In order to select these industries, firstly we have classified all the industries of that industrial area by the number of employees. We have then made the categories of the industries as: category 1 (the number of employees is less than 100); category 2 (the number of employees is 100-250); and category 3 (the number of employees is more than 250). Then we randomly select 1 industry from each of the category and finally we have 3 industries for data collection. Then we have collected the information from 70 employees form the industry under category 1; 142 employees form the industry under category 2; and 205 employees form the industry under category 3. Then our total sample size reached to 417. These primary data were collected by employing a well-designed, comprehensive and pre-tested questionnaire as well as in-depth interviews with both managerial and non-managerial staff, belonged to several departments including human resource (HR). The first step was to contact with human resource department of each of the industries. A meeting with the human resource department was arranged and the purpose, general outline, methods and details of this study were explained. Then the interviews were carried out. Uni-variate classification analysis i.e. percentage distribution has been performed in order to observe the socio-economic characteristics of respondents. Then, bivariate analysis was performed to identify the association of different selected variables with the workplace environment of the respondents. Finally, a multivariate technique named as logistic regression analysis is used to identify some several factors of the respondents that are strongly influence their satisfaction level about the workplace environment. The data were edited, compiled, processed and analyzed by using SPSS 17.0 program.

### **Results and Discussions**

#### ***Socio-Demographic Characteristics***

It is observed from Table1, that the average age of the respondents is 38.5 years where majority (31.7%) of the respondents are in the age group 40-49 years, followed by 30-39 years (26.8%), less than 30 years (22.2%) and 50

years and above are 18.7%. Approximately, 80% respondents are male while 20% are female. In education 62% respondents are in the secondary level while 25.9% have their education below secondary level. The number of higher educated respondents remains low and the average number of schooling year of the respondents is only 5.9. Most (91.8%) of the respondents are married while 8.2% are in the other category that includes unmarried, divorced and widow/widower. The average household size of the respondents is 4.8 where the number of family members is 4-6 for 82% respondents. Majority (43.9%) of the respondents are working with that industry for more than 15 years and the average work experience of the respondents with that particular industry is 13.2 years. Besides this work experience, the total work experience for the respondents is 15.5 years where most of the respondents (36.2%) are working for more than 20 years.

In this study we have defined the workplace environment as the surrounding physical condition of the industry e.g. industrial noise, lighting and temperature. The respondents are asked with the three aspects of workplace environment and it is found that only 36.7% put their opinion for workplace environment as healthy while 50.8% said fairly healthy and 12.5% said unhealthy (Table 1).

**Table 1: Socio-Demographic Characteristics of the Respondents**

Variables	Frequency	Percentage
<b>Age group</b>		
< 30 years	95	22.8
30-39 years	112	26.8
40-49 years	132	31.7
≥50+ years	78	18.7
<b>Average age</b>	<b>38.5</b>	
<b>Sex</b>		
Male	334	80.1
Female	83	19.9
<b>Education</b>		
Below secondary level	108	25.9
Secondary level	258	61.9
Higher secondary to higher	51	12.2
<b>Average years of schooling</b>	<b>5.9</b>	
<b>Marital status</b>		
Married	383	91.8
Others	34	8.2
<b>Family member</b>		
1- 3	42	10.1
4 – 6	334	82.5
≥7	31	7.4
<b>Average no. of family member</b>	<b>4.8</b>	
<b>Work experience within the industry</b>		

< 5 years	64	15.3
5-9 years	95	22.8
10-14 years	75	18.0
≥15 years	183	43.9
<b>Average work experience within the industry</b>	<b>13.2</b>	
<b>Total work experience</b>		
< 10 years	121	29.0
10-14 years	62	14.9
15-19 years	83	19.9
≥20 years	151	36.2
<b>Average total work experience</b>	<b>15.5</b>	
<b>Work place environment</b>		
Healthy	153	36.7
Unhealthy	52	12.5
Fairly healthy	212	50.8

**Association of Selected Variables with Workplace Environment**

It is observed that, the status of the respondent’s perceptions about their workplace environment is significantly associated with their age ( $p = < 0.001$ ). Among all the respondents, majority of the young respondents claimed that their workplace environment is unhealthy while most of the respondents aged 50 years and above made their opinion that their workplace environment is healthy and the main reason of their such opinion is that they are cope themselves with their workplace environment and not looking to move to other industry as their less working years remain. The association also significant between the sex and status of workplace environment ( $p = < 0.001$ ), where majority of the women said that their workplace environment is unhealthy while majority of the male put their opinion about the fairly healthy of their workplace environment.

**Table 2:** Association of Respondent’s Characteristics with Workplace Environment

Variables	Work place environment			Total
	Healthy	Fairly healthy	Unhealthy	
<b>Age group</b>				
< 30 years	22 (23.2)	40 (42.1)	33 (34.7)	<b>95 (100)</b>
30-39 years	34 (30.4)	63 (56.2)	15 (13.4)	<b>112 (100)</b>
40-49 years	49 (37.1)	79 (59.8)	4 (3.0)	<b>132 (100)</b>
≥50 years	48 (61.5)	30 (38.5)	0 (0.0)	<b>78 (100)</b>
<b>Total</b>	153 (36.7)	212 (50.8)	52 (12.5)	<b>417 (100)</b>
	$\chi^2 = 82.64; d.f. = 6; p = < 0.001$			
<b>Sex</b>				
Male	136 (40.7)	181 (54.2)	17 (5.1)	<b>334 (100)</b>

<b>Female</b>	17 (20.5)	31 (37.3)	35 (42.2)	<b>83 (100)</b>
<b>Total</b>	153 (36.7)	212 (50.8)	52 (12.5)	<b>417 (100)</b>
$\chi^2 = 84.42; \text{d.f.} = 2; p = < 0.001$				
<b>Education</b>				
<b>Below secondary level</b>	21 (19.4)	57 (52.8)	30 (27.8)	<b>108 (100)</b>
<b>Secondary level</b>	98 (38.0)	138 (53.5)	22 (8.5)	<b>258 (100)</b>
<b>Higher secondary and higher level</b>	34 (66.7)	17 (33.3)	0 (0.0)	<b>51 (100)</b>
<b>Total</b>	153 (36.7)	212 (50.8)	52 (12.5)	<b>417 (100)</b>
$\chi^2 = 54.74; \text{d.f.} = 4; p = < 0.001$				
<b>Work experience within the industry</b>				
<b>&lt; 5 years</b>	14 (21.9)	27 (42.2)	23 (35.9)	<b>64 (100)</b>
<b>5-9 years</b>	19 (20.0)	55 (57.9)	21 (22.1)	<b>95 (100)</b>
<b>10-14 years</b>	33 (44.0)	35 (46.7)	7 (9.3)	<b>75 (100)</b>
<b>≥15 years</b>	87 (47.5)	95 (51.9)	1 (0.5)	<b>183 (100)</b>
<b>Total</b>	153 (36.7)	212 (50.8)	52 (12.5)	<b>417 (100)</b>
$\chi^2 = 76.97; \text{d.f.} = 6; p = < 0.001$				
<b>Total work experience</b>				
<b>&lt; 10 year</b>	21 (17.4)	57 (47.1)	43 (35.5)	<b>121 (100)</b>
<b>10-14 year</b>	15 (24.2)	40 (64.5)	7 (11.3)	<b>62 (100)</b>
<b>15-19 year</b>	37 (44.6)	45 (54.2)	1 (1.2)	<b>83 (100)</b>
<b>≥20 year</b>	80 (53.0)	70 (46.4)	1 (0.7)	<b>151 (100)</b>
<b>Total</b>	153 (36.7)	212 (50.8)	52 (12.5)	<b>417 (100)</b>
$\chi^2 = 78.96; \text{d.f.} = 6; p = < 0.001$				

*Note: Figure in Parenthesis Indicates Percentage*

The association of the status of workplace environment is significantly varied with the education level of the employees ( $p = < 0.001$ ) where majority of the respondents put their opinion that the workplace environment is fairly healthy. Work experience of the respondents also significantly ( $p = < 0.001$ ) associated with the workplace environment. It is found that the percentage of the respondents who put their opinion of healthy workplace environment increasing with the increase of their work experience within the industry and the percentage of those respondents who put their opinion about unhealthy workplace environment is decreasing with the increase of their work experience within the industry and the variation is statistically significant. Similar results have also found in case of the total work experience of the respondents (Table 2). One possible reason for this type of result is that, more experienced workers are more use to with their workplace environment than the lower experienced one.

### ***Results from Logistic Regression Analysis on Workplace Environment***

To identify the more influential factors of the respondents that are responsible to put their opinion about the workplace environment logistic regression has been employed and the results are presented in Table 3. The

dependent variable i.e. respondents’ perception about the work place environment is categorized as ‘1’ if they satisfy with their workplace environment and ‘0’ otherwise. The independent variables includes: age, sex, education and work experience of the respondents. It is found that respondents with higher age are more likely to satisfy with their workplace environment than the lower age. Respondents aged 30-39 years, 40-49 years and 50 years and above are 1.17 times, 1.88 times and 1.05 times respectively significantly and more likely to satisfy with their workplace environment than those age less than 30 years. Female are 38% more likely to satisfy with their workplace environment. In male dominated workplace, still women are facing trouble to manage a job. In that situation choice of workplace environment is quite ambitious to them and they are quite happy with the thing that they have a job and avoid their limitation of satisfaction about the workplace environment. More educated respondents are less likely to satisfy with their workplace environment than their lower counterparts. It is observed that, those are in secondary level education are 42% and those having higher secondary and higher education are 73% less likely to satisfy with their workplace environment than below secondary level education. One possible reason for that no/lower educated employees belief that it is much difficult to get a job with their little education so, enter into a job is much better to them than the limited workplace facilities/environment. On the other hand, more educated believe that, in the lower/limited job opportunities, option for the job is far away so they engage in to any kinds of job by neglecting their satisfaction about workplace environment. Considering work experience within the industry, it is found that respondents having work experiences of 5-9 years, 10-14 years and 15 years and above are 1.92 times, 2.41 time and 1.76 times respectively more preferable with the workplace environment than the lower work experience. Similar results are also found in case of total work experience of the respondents where, more the work experience more the likelihood of their satisfaction about the workplace environment (Table 3).

**Table 3:** Logistic Regression Analysis Results on Workplace Environment of the Respondents

Variables	Respondent’s satisfaction about their workplace environment	
	ERC	OR
<b>Age group</b>		
< 30 years ®	-	1.00
30-39 years	1.17**	3.23
40-49 years	1.88***	3.57
≥50 years	1.05*	2.87
<b>Sex</b>		
Male®	-	1.00
Female	1.95***	1.38
<b>Education</b>		
Below secondary level ®	-	1.00

Secondary level	-0.55**	0.58
Higher secondary and higher level	-1.3***	0.27
Work experience within the industry		
< 5 years ®	-	1.00
5-9 years	-0.09	1.92
10-14 years	-0.89*	2.41
≥15 years	-0.28	1.76
Total work experience		
<10 years ®	-	1.00
10-14 years	-0.55	1.58
15-19 years	-2.1***	1.13
≥20 years	-2.2***	1.11
Constant	-1.5***	4.58

*Note: ERC = Estimated Regression Coefficient; OR = Odds Ratios; ® = Reference Category; and level of significance: \*\*\* $p < 0.01$ ; \*\* $p < 0.05$ ; \* $p < 0.10$*

### Conclusions and Recommendation

In Bangladesh, current economic growth, social development and reduction in poverty largely depend much on the developments in the labour markets and safe and secure workplace environment. Therefore, a safe and secure workplace and observance of rights of rapidly growing workforce are need of the hour. Satisfactory workplace environment has a strong relation to employee's satisfaction. Employee satisfaction is a crucial issue in business organizations (Atkins, et al., 1996; Podsakoff, et al., 1996; Koys 2001; Matzler and Renzl, 2007). In the modern time, the industries are facing several challenges and ensuring healthy work environment is one of them. The industries must satisfy the needs of its employees in order to increase efficiency, effectiveness, productivity and job commitment of employees by providing good working conditions. It is a matter of concern that the employers are more profit oriented and employees are deprived from their limited rights. The labor is chief here in the country due to inadequacy of job availability as compared with job requirements. So, the option for changing job is far behind. At these situations they are badly able to adjust the environment.

Apart from their economic satisfaction, they are always vulnerable to the deficiency of fresh air, in appropriate ventilation, deficient lighting, noise, and not enough work space. A study found that whenever there is an improvement in the physical design of office building, productivity through employee performances is increased by about 5-10 percent (Haynes, 2008). Similarly, it is found that the type and quality of lighting system at the workplace promotes working experience of employees which then results to increased productivity (Chandra sekar, 2011, Dilani, 2004). Study revealed that lighting, noise, colour and air quality impact employee productivity

(Sarode, 2014). It is considered that, workplace environment has a strong relation with job satisfaction and job satisfaction is significantly a strong tool of increasing industrial productivity. When employees are satisfied with the workplace quality their performance will increase (Leblebici, 2012). So that, it is need to ensure the proper workplace environment for its employees. Results of this study indicate that, older respondents are more preferable to put their opinion about the healthy workplace environment than their younger. Female are more likely to satisfy with their workplace environment. Less educated and more work experienced respondents are highly preferable to satisfy with their workplace environment than those are more educated and have less work environment. The results of this study highlight that, as a physical labour oriented industry, their satisfaction level based on the reality that, in the situation of job crisis in the country, they have a job and it is their large achievements and blaming about their work environment is not logical and they hardly cope with the situation. However, they have hidden dissatisfaction about their workplace environment.

Despite quantitative progress in economic and social fronts, and labour remains the heart of such progress, the country needs to travel a long way to address dispossessions and ensuring better workplace environment to increase the satisfaction level of the employees. It is evident that, better workplace environment means more job satisfaction and more job satisfaction means high industrial productivity. Therefore, there is a need for proper state intervention policy to ensure sound workplace environment aimed at enhancing higher productivity of the industries. It is need to develop the effective programming through well-planned sectoral approaches. Findings from this study will help the policy makers to identify the root causes of their dissatisfaction about their workplace environment in design effective programs in the regarding matter. It is believed that the results will facilitate policy-makers and respected authorities to take timely and viable steps and develop workable strategies to address the issue of workplace environment especially in industrial sectors. Unless major changes are made for decent employment and sound workplace environment, development of the country will not increase significantly.

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### ***Competing Interests Statement***

The authors declare no competing financial, professional and personal interests.

### ***Consent for publication***

We declare that we consented for the publication of this research work.

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