Livelihood and Environmental Perspective of Female Garments Workers in Bangladesh: A Study on Selected Garment Factories

***Dr. Engr. Ayub Nabi Khan**
****S. M. Akterujjaman**
*****Md. Herok Ahmad**
******Hafsana Yasmin**

*Professor & Pro-Vice Chancellor BGMEA University of Fashion & Technology (BUFT)
**Assistant ProfessorDepartment of Business AdministrationBGMEA University of Fashion & Technology (BUFT)
***Lecturer, Department of Economics, Asian University of Bangladesh.
****Lecturer, Department of Fashion Design & Technology, Uttara University

Abstract

The rapid development of the garment sector, along with its mobilization of women workers, has made it a popular issue of concern among policy makers, activists and scholars. This paper intends to investigate the work environment, both physical and Social, of the women workers in the readymade garment (RMG) sector in Bangladesh. To that end, it attempts to identify the problems faced by the women workers, to explore the underlying reasons and to recommend appropriate measures in meeting the challenges. The study surveyed 180 workers from 30 garment factories situated in different locations of Dhaka and Gazipur area to determine the key influential factors that significantly influence on livelihood and environmental perspective of female garments workers in Bangladesh. These workers were surveyed through convenience sampling method with structured questionnaire from June to July 2016. After collection of primary data, hypotheses were formulated and one sample T-test was used to test the hypotheses with 0.05 level of statistical significance. For assuming the characteristics of data, demographic analysis, descriptive analysis and interpretations were drawn on the basis of percentage frequency, calculated mean, standard deviation (SD). In addition, empirical analyses were depicted by coefficient of variation (CV). The recommendations were provided based on the research findings and analysis.

Keywords: Women workers, Readymade garment (RMG), Bangladesh, Satisfaction.

Introduction

The readymade garment (RMG) industry is the largest export earning sector of Bangladesh. This sector earns about 81.32% foreign currency. RMG sector has created employment opportunities especially for the women, where more than 85% of production workers are women who mainly come from the rural areas of Bangladesh (Akterujjaman & Herok, 2016). RMG industry of Bangladesh is rapidly expanding because of availability of labor especially female labor accessibility and cheap wages (Sikdar, et al. 2014). The contribution of garment workers to the growth of export-oriented industries in Bangladesh in the last decade had created opportunities for factory jobs for women. In spite of the great contribution made to the national economy the female garment workers in Bangladesh were beset with enormous complains. Such as, low payment, compulsory over-time, uncertainty of job, threaten of sack, payment withheld.

As new industries expand, the labor force grew with the economy of the country, at the same time health hazards for those workers present there in various occupational diseases and accidents highly prevailed among the workers. According to Grad (2002), “health is a state of complete physical, mental and social wellbeing and not merely the absence of diseases or infirmity”. Occupational health hazard is concerned with health hazard in relation to work

environment. The science of occupational health hazards covers a wide field, like work physiology, occupational hygiene, occupational psychology, occupational toxicology etc. (Hanington and Gill, 1990).

The occupational health problems affecting workers of our country, in fact workers of any developing country are liable to be much more complicated and dangerous as compared to that of developed countries because of the reasons of:

a) Poor health status due to poverty, overcrowding, illiteracy, malnutrition, higher prevalence of infections, parasite and other diseases, lack of adequate medical and health care facilities and a host of other factors.

b) Non-industrial illnesses form a major health problem of garment workers. In fact incidence of many common illnesses like respiratory ailments (flue bronchitis, cough, and asthma), tuberculosis, peptic ulcer, dysentery etc. are higher among industrial workers as compared to the general population.

c) Sickness absenteeism is the major contributory factor to the total absenteeism. The reasons for thus high sickness absenteeism are very much varied and complicated but there is no doubt that the prevalence of sickness is high among our workers. One of the main reasons may be the payment of medical allowances in cash with wages in lieu of plant level medical treatment in kind (as per industrial workers Wages and Productivity Commission). Effective health care measures taken at the place of employment to render immediate treatment at the early stages of many of these illnesses will cut short the course and will prevent the disablement due to sickness to a great extent.

d) Lack of any laboratory facilities for monitoring, analyzing and assessing the harmful contaminants in the work environment and their effect on the health of the workers is causing health hazards.

Objectives of the Study

The primary aim of the study is to analyze the basic social environment and environmental health conditions of women garment workers.

The specific objectives are:

1. To find out the health and safety issues of female workers of garment industry in Bangladesh

2. To assess the relationship of occupational factors such as length of service, working hours and nature of job with physical problem.

3. To improve the overall production of garment industry, developing female workers health and safety issues.

4. To provide a set of recommendations and suggestions on the basis findings and analysis.

Hypotheses of the Study

Research hypothesis is an unproven statement, which helps the researcher to draw the Suggestion on his hypothetical assumption whether it is true or false based on some specific statistical tests (Akterujjaman, 2010). Based on the objectives of the study, the following hypotheses (at 95% confidence level) are developed, which are to be tested.

Table 1: Developing Hypotheses for Different Factors

Factors	Null hypothesis (H_0)	Alternative hypothesis (H_a)
Medical Facilities	$\bar{x}_{mf} = 0$	$\bar{x}_{mf} \neq 0$
Taken Medical Treatment	$\bar{x}_{tmt} = 0$	$\bar{x}_{tmt} \neq 0$
Pure Drinking Water Facilities	$\bar{x}_{pdwf} = 0$	$\bar{x}_{pdwf} \neq 0$
Latrine Facilities	$\bar{x}_{lf} = 0$	$\bar{x}_{lf} \neq 0$
First Aid Facilities	$\bar{x}_{faf} = 0$	$\bar{x}_{faf} \neq 0$
Emergency Fire Exit	$\bar{x}_{efe} = 0$	$\bar{x}_{efe} \neq 0$
Childcare Unit	$\bar{x}_{ccu} = 0$	$\bar{x}_{ccu} \neq 0$
Maternity Leave and Benefits	$\bar{x}_{mlab} = 0$	$\bar{x}_{mlab} \neq 0$
Disciplinary Action	$\bar{x}_{da} = 0$	$\bar{x}_{da} \neq 0$
Transport Facilities	$\bar{x}_{tf} = 0$	$\bar{x}_{tf} \neq 0$
Personal Protective Equipments	$\bar{x}_{ppe} = 0$	$\bar{x}_{ppe} \neq 0$
Fire Training Equipments	$\bar{x}_{fte} = 0$	$\bar{x}_{fte} \neq 0$
Received Fire Training	$\bar{x}_{rft} = 0$	$\bar{x}_{rft} \neq 0$
Fire Drill	$\bar{x}_{ft} = 0$	$\bar{x}_{ft} \neq 0$

Literature Review

Chowdhury, et al. (2015) investigated the work life balance status of female garment workers of Bangladesh that affected due to work life balance situation. They suggested good salary, reduce work load, residential facility, transport facility, child care centre, flexible working hours and child schooling facility for female garments workers with a view to improve their work life balance status. Sikdar, et al. (2014) depicted the socio-economic conditions of female garment workers in Dhaka city of Bangladesh and found that women were doing work on an average 11.12 hours per day while their average salary is very few (less than Tk 7000 per month). So, it can be said that women should get standard salary to lead their life with joy. Begum, et al. (2010) found that there are different factors that are responsible for the harassment of women garment workers in Bangladesh. Most of the female garments workers are employed at lower category of jobs like, helper, operator, polyer etc. Female workers are sexually harassed by their co-workers in the factory or by police or by eve-teasers in the street several times, but no measures are taken by the respective authorities.

Akterujjaman (2013) studied on satisfaction of garment workers that is related to the productivity of the employees. He found that when the workers are more satisfied productivity and profit maximization will be high. He did not consider the livelihood and environmental perspective of female garments workers separately. But the present study of us will give emphasis on this issue. Ahmed & Raihan (2014) revealed that the majority of female workers health is not so good in the garment sector of Bangladesh and they suffer from the disease like problems in bones, abortion complexity, dermatitis, back pain, fatigue, fever, abdomen pain, common cold etc. It is suggested that to improve the working conditions of garment workers

their health condition should be improved and importance should be given on this issue. Shakila & Khoshnur (2009) conducted a research by the Bangladesh Occupational Safety Health and Environment Foundation (OSHE) with the support of Asia Monitor Research Centre (AMRC) to understand the status, the working environment and reproductive health conditions of the female garment workers in Bangladesh. The research has some important and interesting findings, such as lack of consciousness about occupational safety and health issues, several health related problems associate with their working environment. Heath & Mobarak (2015) explored that the remarkable development of Bangladeshi readymade garments sector basing on lives of women workers, whereas the women workers were neglected in every sphere in the factory and not considered as human being. Karim (2014) in his paper compared and contrasted two models of women empowerment in Bangladesh: the micro-finance model of Grameen Bank and the wage –labor model based on the readymade garment industry. The study used the case of Bangladesh and displayed the changes taking place predominantly Muslim society among engaged in different spheres of economic activities. The article of Amin, et al. (1998) studied on garment factory workers in Bangladesh to explore the implications of work for the early socialization young women. In the paper combinations of quantitative and qualitative data were used to examine the opportunities for labor force participation in the garment industry provide a social setting of some young Bangladeshi women who experienced adolescence.

Research Methodology

For assessing the environmental perspective of female garments workers in Bangladesh, a survey was conducted in Dhaka and Gazipur region. Female workers were selected as sample respondents, because of their high percentages of participation as production workers in RMG factories. The survey covered total number of 180 respondents, which were drawn from 30 garment factories situated in different locations of Dhaka and Gazipur by using a convenience sampling technique. Data were collected during June to July 2016, where a self-constructed questionnaire was use to collect the primary data considering the objectives of the study. Simple statistical techniques like, frequency distribution, percentage of frequency, mean value, standard deviation, co-efficient of variation and hypothesis testing were used to analyze the collected data.

Empirical Findings and Analysis

An analysis is generated from the questionnaire to achieve the objectives of the study. In order to analyze the collected data a 5-point Likert types scale has been used, where 5 stands for highly satisfied workers, 4 stands for satisfied workers, 3 stands for neutral workers, 2 stands for dissatisfied and 1 stands for highly dissatisfied workers. Several judgments were made from the responses of workers to validate the objectives of the study. The results of different tests are presented below:

1. Demographic characteristics of the respondents

The analyses of the demographic characteristics of the respondents are shown in the table 2.

Table 2: Demographic characteristics of the respondents (*N = 180)

Options/ Characteristics	Frequency	Percentage	Valid Percentage
Age			
18-23 Years	69	38.33%	38.33%
24-29Years	75	41.67%	41.67%
30-34 Years	22	12.22%	12.22%
35 Above	14	7.78%	7.78%
Total	180	100%	100%
Marital Status			
Single	38	21.11%	21.11%
Married	140	77.78%	77.78%
Divorced/separat	2	1.11%	1.11%
Total	180	100%	100%
Level of Education			
Below Class 5	42	23.33%	23.33%
Class 5-8	124	68.89%	68.89%
SSC	14	7.78%	7.78%
HSC	0	0.00%	0.00%
Total	180	100%	100%
Monthly Income			
Below BDT 6000	22	12.22%	12.22%
6000-10000	96	53.33%	53.33%
11000-15000	60	33.33%	33.33%
16000- Above	2	1.11%	1.11%
Total	180	100%	100%
Average Working hour in a week			
Below 40	0	0.00%	0.00%
40-49	80	44.44%	44.44%
50-59	80	44.44%	44.44%
60- Above	20	11.11%	11.11%
Total	180	100.00%	100.00%

Source: Field Survey, June – July 2016

Table 2 shows the demographic characteristics of the respondents. All of these 180 respondents are female. About 38 percent of the respondents are in 18-23 years and 42 percent respondents are in 24-29 years of age and about 12 percent of the respondents are in 30-34 years and about 8 percent of the respondents are in 35-39 years and there is no respondent for above 40 years of age. Marital status shows that majority of the respondents (78 percent) are married, on the other hand, 21 percent respondents are single. Table 1 also reveals the level of the education of the female garments workers, where 23 percent respondents are failed to pass class 5 and 69 percent of the total respondents are at the range of class 5 to class 8 and only 8 percent has been passed their secondary school exam. Around 12 percent of the respondents replied that they have earned less than Tk.6000 per month in an average case. 53 percent has been mentioned that their average monthly income is Tk. 6000-10000, a good number that is 33 percent has replied their average monthly income is in between Tk. 11000 – 15000. The highest number of respondents (44 percent) has mentioned that their working hour is within 40-59 hours per week, where equally 44 percent has replied that they are used to work 50-59 hours in a week on an average.

2. Company Provide Medical Facility

It is found that out of 180 respondents, 129 respondents give their opinion that they get medical facility from the selected factories.

Table 3: Medical Facility

Satisfaction	Frequency	Percentage	Mean	SD	CV
Highly Satisfied	10	5.6	3.821	0.551	14.425
Satisfied	86	47.8			
Neutral	33	18.3			
Missing System	51	28.3			
Total	180	100			

Source: Field Survey, June – July 2016

Table 3 reveals that out of 129 workers 47.8 percent female workers are satisfied and 18.3 percent respondents are neutral regarding their medical facilities garments industries in Bangladesh. Here the mean value is 3.821, which is line up the neutral category of the female workers. The standard deviation (SD) and co-efficient of variation (CV) are respectively 0.551 and 14.425, which indicates the number of female workers in Bangladesh is get proper medical facilities. Therefore, maximum workers are satisfied toward their medical facilities.

3. Medical Treatment Provide by the Company

It has been found that out of 180 respondents, 104 respondents give their opinion that they take company medical treatment from the selected factories.

Table 4: Medical Treatment

Satisfaction	Frequency	Percentage	Mean	SD	CV
Highly Satisfied	12	6.7	3.5	0.914	26.11
Satisfied	42	23.3			
Neutral	40	22.2			
Dissatisfied	6	3.3			
Highly Dissatisfied	4	2.2			
Missing System	76	42.2			
Total	180	100			

Source: Field Survey, June – July 2016

The above table 4 states that out of 104 workers 23.3 percent female workers are satisfied and 22.2 percent respondents are neutral position for taken the treatment form the company .At this point, the mean value is 3.5, which line is shows that neutral category of the female workers satisfaction level. The standard deviation (SD) and co-efficient of variation (CV) are respectively 0.914 and 26.11, which indicates the number of female workers in Bangladesh is get proper medical treatment. So, the researchers can conclude that most of the factories are

provide medical treatment. As a result, female workers are satisfied regarding their medical treatment.

5. Sufficient Pure Drinking Water Facilities

It has been found that out of 180 respondents, 129 respondents give their opinion that they got sufficient pure drinking water from the factories.

Table 5: Drinking Water Facilities

Satisfaction	Frequency	Percentage	Mean	SD	CV
Highly Satisfied	28	15.6	4.116	0.554	13.461
Satisfied	88	48.9			
Neutral	13	7.2			
Missing System	51	28.3			
Total	180	100			

Source: Field Survey, June – July 2016

From table 5 observed that the highest 48.9 percent female workers are satisfied and 15.6 percents respondents are highly satisfied regarding the sufficient pure drinking water. Table shown that mean value is 4.116 that line up satisfaction category of female workers satisfaction level. The standard deviation (SD) and co-efficient of variation (CV) are respectively 0.554 and 13.461, which indicates the number of female workers in Bangladesh is get sufficient pure drinking water from the selected garments factories. Therefore, the researchers can conclude that most of the factories provide pure drinking water. As a result, female workers are satisfied regarding their pure drinking water.

5. Sufficient Latrines Facilities in the Factory

Observed that out of 180 respondents, 129 respondents give their opinions regarding factories have sufficient latrine facilities.

Table 6: Sufficient Latrines Facilities

Satisfaction	Frequency	Percentage	Mean	SD	CV
Highly Satisfied	36	20.0	4.039	0.722	17.640
Satisfied	62	34.4			
Neutral	31	17.2			
Missing System	51	28.3			
Total	180	100			

Source: Field Survey, June – July 2016

The above table 6 showed that 34.4 percent female workers are satisfied and 20 percents respondents are highly satisfied regarding the latrines facilities. Here mean value is 4.039 that line up satisfaction category of female workers satisfaction level. The standard deviation (SD)

and co-efficient of variation (CV) are respectively 0.722 and 17.640, which indicates the number of female workers in Bangladesh is get sufficient latrines facilities from the selected garments factories. Therefore, the researchers can conclude that most of the garments factories in Bangladesh provide sufficient latrines facilities for female workers. As a result, female workers are satisfied regarding their latrines facilities.

6. First Aid Facilities

It is found that out of 180 respondents only 42 respondents give their opinion regarding first aid facilities.

Table 7: First Aid Facilities

Satisfaction	Frequency	Percentage	Mean	SD	CV
Highly Satisfied	4	2.2	3	1.036	34.533
Satisfied	10	5.6			
Neutral	10	5.6			
Dissatisfied	18	10.0			
Missing System	138	76.7			
Total	180	100			

Source: Field Survey, June – July 2016

Table 7 showed that 10.0 percent female workers are dissatisfied, 5.6 percents respondents are satisfied and 5.6 percent female workers are neutral category regarding the taken first aid facilities to the company. The mean value is 3 that fall in neutral category of female workers satisfaction level. The standard deviation (SD) and co-efficient of variation (CV) are respectively 1.036 and 34.533, which indicates the number of female workers in Bangladesh does not takes first aid facilities from the selected garments factories.

7. Emergency Fire Exit of the Company

Practical that out of 180 respondents, 129 respondents give their opinion selected factories have available emergency fire exist

Table 8: Emergency Fire Exit

Satisfaction	Frequency	Percentage	Mean	SD	CV
Highly Satisfied	8	4.4	3.868	0.490	12.668
Satisfied	96	53.3			
Neutral	25	13.9			
Missing System	51	28.3			
Total	180	100			

Source: Field Survey, June – July 2016

Above table 8 observed that the highest 53.3 percent, female workers are satisfied and 13.9 percents respondents are neutral line regarding the emergency fire exist. Here the mean value is 3.868 that line maximization of neutral category of satisfaction level. The standard deviation (SD) and co-efficient of variation (CV) likewise 0.490 and 12.668, which indicates the number of selected garments factories in Bangladesh have sufficient emergency fire exist.

8. Child Care Facility

Realistic that out of 180 respondents, 120 respondents give their opinion selected factories have childcare unit.

Table 9: Child Care Facility

Satisfaction	Frequency	Percentage	Mean	SD	CV
Highly Satisfied	2	1.1	3.566	0.847	23.752
Satisfied	64	35.6			
Neutral	32	17.8			
Dissatisfied	12	6.7			
Highly	10	5.6			
Missing System	60	33.3			
Total	180	100			

Source: Field Survey, June – July 2016

Table 9 reveals that out of 120 female workers, 35.6 percent are satisfied and 17.8 percent workers are neutral regarding their childcare unit in garments industry in Bangladesh. At this juncture mean value is 3.566 is upper than neutral categories. The standard deviation (SD) and co-efficient of variation (CV) likewise 0.847 and 23.752, which indicates the number of selected garments factories in Bangladesh have available childcare unit.

9. Maternity Leave & Benefit Facility

It is found that out of 180 respondents, 179 respondents give their opinion that they got maternity leave and benefit in the selected factories.

Table 10: Maternity Leave & Benefit Facility

Satisfaction	Frequency	Percentage	Mean	SD	CV
Highly Satisfied	16	8.9	3.805	0.581	15.270
Satisfied	112	62.2			
Neutral	51	28.3			
Missing System	1	.6			
Total	180	100			

Source: Field Survey, June – July 2016

Table 10 observed that out of 179 workers 62.2 percent female workers are satisfied and 28.3 percents respondents are neutral position regarding their maternity leave and benefits from the selected garments industries in Bangladesh. Here the mean value is 3.805, which is line up the maximum neutral category of the female workers. The standard deviation (SD) and co-efficient of variation (CV) are respectively 0.581 and 15.270, which indicates the number of female workers in Bangladesh is get proper maternity leave and benefits. So, maximum workers are satisfied toward their maternity leave and benefits. Therefore, the researchers can conclude that the female workers of the selected garments factories are satisfied toward their maternity leave and benefit facilities.

10. Disciplinary Action Taken by the Management

Practical that out of 180 respondents, 113 respondents give their opinion in selected garments factories female workers are satisfied with the disciplinary by taken the management.

Table 11: Disciplinary Action

Satisfaction	Frequency	Percentage	Mean	SD	CV
Highly Satisfied	25	13.9	3.790	0.996	26.280
Satisfied	53	29.4			
Neutral	20	11.1			
Dissatisfied	8	4.4			
Highly	4	2.2			
Missing System	70	38.9			
Total	180	100			

Source: Field Survey, June – July 2016

The above table 11 observed that out of 113 workers 29.4 percent female workers are satisfied and 13.9 percents respondents are highly satisfied regarding their factories disciplinary action that are taken by the management. Where the mean value is 3.790, which is line up the maximum neutral category of the satisfaction level in female workers. The standard deviation (SD) and co-efficient of variation (CV) are respectively 0.996 and 26.280, which indicates the number of female workers in Bangladesh are satisfied regarding discipline. Therefore, maximum workers are satisfied toward their discipline.

11. Company Provide Transport Facility

Realistic those out of 180 respondents, only 22 respondents give their opinion selected factories in Bangladesh their company provide transport facilities.

Table 12: Provide Transport Facility

Satisfaction	Frequency	Percentage	Mean	SD	CV
Satisfied	2	1.1	3.00	0.756	25.200
Neutral	16	8.9			
Dissatisfied	4	2.2			
Missing System	158	87.8			
Total	180	100			

Source: Field Survey, June – July 2016

Table 12 reveals that out of 22 female workers 8.9 percent are neutral and 2.2 percent workers are dissatisfied regarding their transport facilities. At this juncture mean value is 3 showed that neutral categories. The standard deviation (SD) and co-efficient of variation (CV) likewise 0.756 and 25.2, which indicates the number of selected garments factories in Bangladesh does not provide transport facilities for the workers.

12. Sufficient Personal Protective Equipments

It is found that out of 180 respondents, 97 respondents give their opinion that they get sufficient personal protection equipments in the workplace.

Table 13: Personal Protective Equipments

Satisfaction	Frequency	Percentage	Mean	SD	CV
Highly Satisfied	49	27.2	4.340	0.756	17.556
Satisfied	33	18.3			
Neutral	14	7.8			
Dissatisfied	1	6.00			
Missing System	83	46.1			
Total	180	100			

Source: Field Survey, June – July 2016

The above tables 13 observed that out of 97 workers 27.2 percent female workers are highly satisfied and 18.3 percents respondents are satisfied regarding their factories sufficient personal protective equipment in workplace. Where the mean value is 4.340, which is line up the satisfied category of the satisfaction level in female workers. The standard deviation (SD) and co-efficient of variation (CV) are respectively 0.756 and 17.280, which indicates the number of female workers in Bangladesh are satisfied their workplace. So, maximum workers are satisfied toward their personal protective equipments in the workplace.

13. Sufficient Fire Fighting Equipments

Practical that out of 180 respondents, 140 respondents give their opinion in selected garments factories female workers about the fire fighting equipments in works place.

Table 14: Fire Fighting Equipments

Satisfaction	Frequency	Percentage	Mean	SD	CV
Highly Satisfied	2	1.1	2.9	0.833	28.724
Satisfied	36	20.00			
Neutral	48	26.7			
Dissatisfied	54	30.00			
Missing System	40	22.2			
Total	180	100			

Source: Field Survey, June – July 2016

Table 14 reveals that out of 140 female workers, 30.0 percent are dissatisfied and 26.7 percent workers are neutral position regarding their fire fighting equipments in works place. At this juncture mean value is 2.9 is shown that below neutral categories. The standard deviation (SD) and co-efficient of variation (CV) likewise 0.833 and 28.724, which indicates the number of selected garments factories in Bangladesh are not available fire fighting equipments in works place. As a result researchers can conclude that the selected garments factories fire fighting equipments are not sufficient.

14. Sufficient Fire Training

Realistic those out of 180 respondents, only 176 respondents received fair training selected factories.

Table 15: Fire Training

Satisfaction	Frequency	Percentage	Mean	SD	CV
Highly Satisfied	10	5.6	3.772	0.560	14.462
Satisfied	118	65.5			
Neutral	46	25.6			
Dissatisfied	2	1.1			
Missing System	4	2.2			
Total	180	100			

Source: Field Survey, June – July 2016

Table 15 reveals that out of 176 female workers, 65.5 percent are satisfied and 25.6 percent workers are neutral position regarding their fair training. At this juncture mean value is 3.772 is shown that maximization of neutral categories. The standard deviation (SD) and co-efficient of variation (CV) likewise 0.560 and 14.462, which indicates the number of selected garments factories in Bangladesh provide fair training facilities for the workers.

15. Frequency of the Fire Drill

It is found that out of 180 respondents, 164 respondents give their opinion about the fair drill in selected garments factories in Bangladesh.

Table 16: Fire Drill

Satisfaction	Frequency	Percentage	Mean	SD	CV
Highly Satisfied	8	4.4	3.780	0.565	14.95
Satisfied	116	64.4			
Neutral	36	20			
Dissatisfied	4	2.2			
Missing System	16	8.9			
Total	180	100			

Source: Field Survey, June – July 2016

The above table 16 observed that out of 164 workers 64.4 percent female workers are satisfied and 20 percents respondents are neutral position regarding their factories fire drill. The mean value is 3.780, which is line up the maximum neutral category of the satisfaction level in female workers. The standard deviation (SD) and co-efficient of variation (CV) are respectively 0.565 and 14.95, which indicates the number of female workers in Bangladesh are satisfied regarding fire drill. So, maximum workers are satisfied toward fire drill facilities.

HYPOTHESES TESTING

Data were analyzed with a Likert type -5 point scale ranging from highly dissatisfied (1) to highly satisfied (5). In this study weighted average value of 3.5 (test value) has been considered as the optimum level for every case. One sample t-test is done to test hypotheses 1 to 14.

Table 16: One – sample Test

Test Value= 3.5						
Factors	**t**	**df**	**Sig. (2-tailed)**	**Mean Difference**	**95% Confidence Interval of the Difference**	
					Lower	**Upper**
Medical Facility	6.628	128	.000	.32171	.2257	.4177
Medical Treatment Provided by the Company	.000	103	1.000	.00000	-.1777	.1777
Pure Drinking Water	12.639	128	.000	.61628	.5198	.7128
Sufficient Latrine	8.470	128	.000	.53876	.4129	.6646
First Aid Facilities	-3.128	41	.003	-.50000	-	-.1772
Emergency Fire Exit	8.531	128	.000	.36822	.2828	.4536
Child Care Unit	.862	119	.391	.06667	-	.2199
Maternity Leave and	7.007	178	.000	.30447	.2187	.3902
Disciplinary Action	3.062	109	.003	.29091	.1026	.4792
Transport Facilities	-3.102	21	.005	-.50000	-	-.1648
Sufficient Personal Protective	10.857	96	.000	.84021	.6866	.9938
Sufficient Fire Fighting Equipments	-8.516	139	.000	-.60000	-.7393	-.4607
Sufficient fire training	6.459	175	.000	.27273	.1894	.3561
Frequency of the Fire drill	6.354	163	.000	.28049	.1933	.3677

Source: SPSS output, compiled by the authors

The test statistic table 16 shows the results of the one-sample t test. The t column displays the observed t statistic for each sample, calculated as the ratio of the mean difference divided by the standard error of the sample mean. The 95% confidence interval of the difference provides an estimate of the boundaries between which the true mean difference lies in 95% of all possible random samples of the factors (14 factors) in the test.

Since for the factor “medical facility” confidence interval lies entirely above 0.0. As a result, Ha is supported. So Ha is granted and Ho is not granted. Therefore it can be concluded that the female workers are satisfied regarding their medical facility in selected garments factories.

Hence for the factor, “taken treatment from the company medical” confidence interval lies entirely above 0.0. Thus, Ha is perfect. So, Ha is supported and Ho is rejected. So, it can be concluded that RMG workers are satisfied toward medical treatment of the selected factories.

Accordingly, in favor of the factor “pure drinking water facilities” confidence interval lies entirely above 0.0. Thus, Ha is accurate. That is why Ha is accepted and Ho is rejected. So, it can be said that workers are satisfied in the direction of pure drinking water facility of the selected RMG factories.

Therefore, in support of the factor “latrine facilities” confidence interval lies entirely above 0.0. Hence, Ha is true. Accordingly, Ha is realistic and Ho is rejected. Thus, we can conclude that workers are satisfied regarding the latrine facility by elected garments factories.

Consequently, in the favor of the factor “first aid facilities” confidence interval lies entirely below 0.0. That means Ho is correct. So, Ho is true and Ha is rejected. So, we can conclude

that female workers of selected garments factories are not satisfied toward their first aid facilities.

In view of that the factor "emergency fire exit" confidence interval lies entirely above 0.0. Thus, Ha is accepted. That means Ha is granted. Hence, Ha is accurate and Ho is discarded. From now, we can terminate that workers are satisfied regarding their emergency fire exit facility of the selected RMG factories.

For now in favor of the factor "Child care unit" confidence interval lies entirely above 0.0. Therefore it means Ha is precise. So, Ha is accepted and Ho is false. Thus, the researchers conclude that the selected garments factories female workers are satisfied regarding their child care unit.

Accordingly, for the factor "maternity leave and benefits" confidence interval lies entirely above 0.0. That's why, Ha is perfect. For this reason, Ha is exact and Ho is cast off. Therefore, we can conclude that workers are satisfied in the selected garments factories regarding their maternity leave and benefits.

Since, for the factor "disciplinary action" confidence interval lies entirely above 0.0. Thus, Ha is precise. Accordingly, Ha is factual and Ho is inaccurate. Thus we can conclude that workers are satisfied regarding their disciplinary action in the elected RMG industry.

Hence, in favor of the factor "transport facility" confidence interval lies entirely below 0.0. Thus, Ho is true. That means Ho is accepted and Ha is rejected. So, we can conclude that workers are not satisfied concerning transport facility provided by the preferred RMG factories.

Thus, in favor of the factor "personal protective equipment in the work place" confidence interval lies entirely above 0.0. Hence, Ha is established and Ho is not granted. Therefore it can be concluded that the female workers are satisfied regarding their Personal protective equipment in the work place in selected garments factories.

In view of that the factor "fire fighting equipments" confidence interval lies entirely below 0.0. That means Ho is true and Ha is rejected. So, we can conclude that workers are not satisfied concerning fire fighting equipments provided by the preferred RMG factories.

Consequently, in favor of the factor "received fire training" confidence interval lies entirely above 0.0. As a result, Ha is supported. That why Ha is accepted and Ho is discarded. So, it can be done that workers are satisfied in the direction of received fire training of the selected RMG factories.

Since for the factor "fire drill" confidence interval lies entirely above 0.0. As a result, Ha is supported. So Ha is settled and Ho is not granted. Therefore it can be concluded that the female workers are satisfied regarding their fire drill facility in selected garments factories.

Conclusion

RMG sector has already recognized as the most important economic strength of Bangladesh which is contributing three-fourth of export earnings and where 4 million people are working, of which 85% are women (Akterujjaman & Herok, 2016). Due to participation in this income generating sector their life and status in the society got upgraded. But still majorities of women are disadvantaged and economically poverty stricken categories women folk. However, largely, the condition of female garment workers is very frustrating because of mainly low wage and salary, poor working

All of us must realize that the current crisis in RMG sector is not something isolated from the overall socio-economic problems. The owners and the laborers cannot build enough confidence among themselves to have an equitable solution to the problem. Both the parties must realize that they have bigger interest at stake to protect the industry. Violence, coercion or anything

imposed forcefully will not solve the problems. All the parties must come into an equitable solution keeping in mind the bigger interest of the economy. RMG sector in Bangladesh has come a long way in last two decades. The industry has crossed many hurdles to stay competitive. It has proved many predictions futile and wrong, and compete fiercely even after the abolition of quota. The credit for that achievement goes to both the entrepreneurs and the laborers. Taking that fighting spirit ahead, the RMG sector must formulate an equitable solution for all the involved parties and ensure brighter future for the country as a whole. Last but not the least, the poor female garments workers, who are the major workforce behind this sector must be recognized properly and concrete ideas and their implementation should come to lessen the plight of them. Unless and until we fail to ensure the basic rights of the poor female garments workers, we can't expect this sector to achieve its desired goal.

Recommendations

There is an urgent need for action to improve the working environment of women workers in the RMG industry of Bangladesh. To ensure a safe, secured and healthy work environment the following recommendations may be suggested.

- The physical layout of the garment factories should be improved. There should be a number of adequate toilets, separate washroom, lunch place and canteen for the workers.
- There should be adequate fire-fighting equipments and fire fighting training. More than one path for entry and exit is a must to evacuate the workers in case of emergency.
- Workers comfort and safety should be given first priority to improve their work environment. Employers should provide equipment's such as masks, gloves, caps etc for safety and hygienic purpose.
- There should be a full time doctor in each factory for regular medical check-up of the workers.
- The negative impact of garment industry jobs on the health of female workers is a matter of great concern. Here, policy intervention is urgently needed. Providing compensation for injuries and accidents is essential.
- Day care centers might be made available in or around work place. The mental stress of the working mothers can be minimized by introducing day care centers.
- To create a cordial social environment in the work place, the management and the workers should interact openly with each other.

References

Ahmed, S. and Raihan, M.Z., 2014. Health status of the female workers in the garment sector of Bangladesh. *J Faculty Econom Administr Sci*, *4*(1), pp.43-58.

Akterujjaman, S.M., 2010. Problems and Prospects of SMEs Loan Management a Study on Mercantile Bank Limited, Khulna Branch. *Journal of Business and Technology*, *5*(02).

Akterujjaman, S.M., 2013. Export Performance of Readymade Garments Sector of Bangladesh: An Analysis. *Available at SSRN 2642828*.

Akterujjaman, .S.M. and Ahmad, H., 2016. Workers' Satisfaction toward RMG Industry in Bangladesh: A Study on Dhaka and Gazipur City.

Amin, S., Diamond, I., Naved, R.T. and Newby, M., 1998. Transition to adulthood of female garment-factory workers in Bangladesh. *Studies in family planning*, pp.185-200.

Begum, F., Ali, R.N., Hossain, M.A. and Shahid, S.B., 2010. Harassment of women garment workers in Bangladesh. *Journal of the Bangladesh Agricultural University*, *8*(2), pp.291-296.

Chowdhury, M.M., Hoque, N. and Mohammed Jonayed Kabir, M., 2015. Work-Life Balance of Female Garment Workers in Bangladesh: An Imperial Investigation. *Global Journal of Management And Business Research*, *15*(7).

Hanington, J. M. and F. S. Gill., 1989. Occupational Health. Blackwell Scientific Publications, London.

Heath, R. and Mobarak, A.M., 2015. Manufacturing growth and the lives of Bangladeshi women. *Journal of Development Economics*, *115*, pp.1-15.

Karim, L., 2014. Analyzing Women's Empowerment: Microfinance and Garment Labor in Bangladesh. *Fletcher F. World Aff.*, *38*, p.153.

Shakila, M. M. & Khoshnur, A. K., 2009. Working Conditions and Reproductive Health Status of Female Garments Workers of Bangladesh. *Bangladesh Occupational Safety, Health and Environment Foundation (OSHE),* pp.1-20.

Sikhdar, M.H., Sarkar, S.K. and Sadeka, S., 2014. Socio-Economic Conditions of the Female Garment Workers in the Capital City of Bangladesh. *International Journal of Humanities and Social Science*, *4*(3), pp.173-179.

Grad, F.P., 2002. The preamble of the constitution of the World Health Organization. *Bulletin of the World Health Organization*, *80*(12), pp.981-981.