



# Attaining Productivity Enhancement Through Worker Satisfaction on Readymade Garments Sector of Bangladesh

Md. Arifur Rahman<sup>1</sup>, Reashad Bin Kabir<sup>2,\*</sup>

<sup>1</sup>Knitting Production, Apex Fashion Wear Ltd., Dhaka, Bangladesh

<sup>2</sup>Department of Apparel Manufacturing Management and Technology, Shanto-Maraim University of Creative Technology, Dhaka, Bangladesh

## Email address:

arif.tex15th@gmail.com (Md. A. Rahman), robinreashad@yahoo.com (R. B. Kabir)

\*Corresponding author

## To cite this article:

Md. Arifur Rahman, Reashad Bin Kabir. Attaining Productivity Enhancement Through Worker Satisfaction on Readymade Garments Sector of Bangladesh. *Applied Engineering*. Vol. 4, No. 2, 2020, pp. 47-54. doi: 10.11648/j.ae.20200402.14

**Received:** August 28, 2020; **Accepted:** September 15, 2020; **Published:** September 25, 2020

**Abstract:** When the cornerstone of Bangladesh's economy, the Readymade Garments (RMG) sector, is proliferating vigorously, some intrinsic disgraceful factors are thwarting its progress. The absence of proper worker satisfaction is a significant one. Several research works done before indisputably demonstrated a strong relationship between worker satisfaction and its correlation with productivity improvement. This research reveals worker satisfaction as an integral factor of productivity enhancement in the RMG sector of Bangladesh. Moreover, it addresses how productivity enhancement is highly influenced by different elements of worker satisfaction. After identifying the factors from previous literature, the impact of those factors was analyzed. A questionnaire containing different factors of employee satisfaction was used for collecting necessary data. The survey presented a range of options from (1-5), depicting “strongly disagree” to “strongly agree” for collecting their feedback. Finally, after the data collection, productivity improvement through worker satisfaction has been investigated by using hypothesis testing—some satisfaction related factors have also been scrutinized to get a better result. As the RMG sector plays the predominant role in the Bangladesh economy, this research will help the factory owner and Managers to ensure worker satisfaction and production enhancement. This paper argues to focus on those factors which directly influence worker satisfaction intending to increase the productivity of the RMG sector as well as buttressing Bangladesh's economy.

**Keywords:** RMG Sector, Productivity Enhancement, Worker Satisfaction, Hypothesis Testing (Questionnaire Survey Based)

---

## 1. Introduction

Job satisfaction is a kind of element which enhances the worker motivation, as well as commitment, and leads to higher growth and productivity [1]. Bangladesh, being a developing nation, is trying to enhance industrial expansion by introducing several types of industries, such as jute mills, textiles, garments factories, tobacco companies, tea factories, cement factories, steel, iron, metal industries, etc. [2]. However, job satisfaction of RMG workers in Bangladesh is decreasing at present due to inadequate work practices that include insufficient salary, discrimination, morbid work environment, frequent work hazards [3-5]. Besides, those miserable working conditions, like lopsided pay in the factories and absenteeism of social compliance, are significant concerns in the RMG sector, as this initiate

repeated labor turmoil [6, 7]. In this paper, a questionnaire survey has been executed using the common factors from previous studies, and the hypothesis has been conducted to get the desired outcome.

## 2. Literature Review

### 2.1. Worker Satisfaction on Job

There is a deliberate feminization of the garment industry workforce in Bangladesh due to three reasons. These are: (1) Garment factory owners perceived that, like the poor women workers of other Asian NICs, who have been socially and economically oppressed for so long, teenage girls and young women from rural areas of Bangladesh have low aspirations of wages. Therefore, they appointed mainly unskilled adolescent girls or young women from the rural areas; (2) Since they are

already in a vulnerable socio-economic condition, as compared to their male counterparts, will agree to work for extra hours and if the situation demands it will be easier to dismiss them; (3) most garment factory owner has perceived them as docile, trustworthy and manageable [7, 8]. Some other researchers also mentioned in their study that most Bangladeshi garment factory owner has failed to see any causal relationship between labor standards and productivity outcomes [9].

## 2.2. RMG Sector of Bangladesh

In terms of core economic consideration RMG holds almost 14.07 percent of the GDP of Bangladesh as well as the 81 percent of the total export earnings. Although having a great figure in economy this sector is going through several negatives issues like labor unrest, poor cm, high bank interest, poor shipping facilities and so on. Therefore, collaborative and coordinated steps from both public and private sectors need to be initiated to overcome these challenges [10].



Figure 1. Job Satisfaction and Productivity Relation.

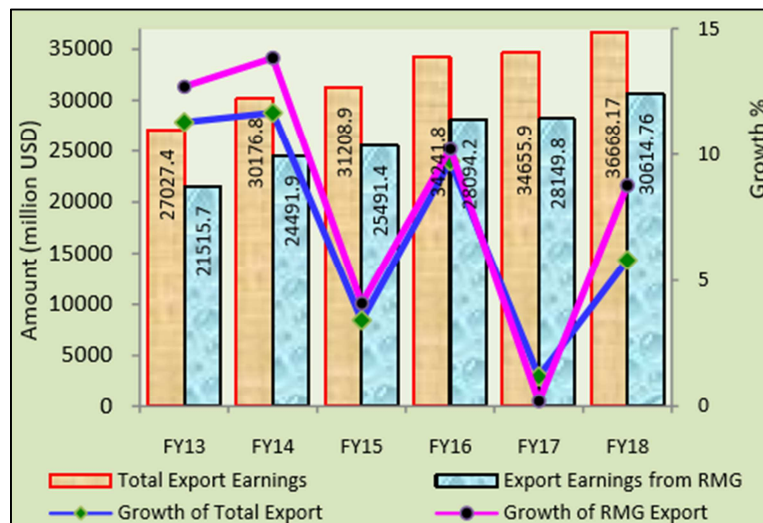


Figure 2. Trend & Growth of RMG Export and Its' Share (%) in Total Export [11].

Table 1. Number of Factories and Employment [12, 13].

FY	Number of Factory (Cumulative)	Number of Employment (Cumulative) (In Million)
2004-05	4107	2.00
2005-06	4220	2.20
2006-07	4490	2.40
2007-08	4743	2.80
2008-09	4925	3.50
2009-10	5063	3.60
2010-11	5158	3.60
2011-12	5876	4.00
2012-13	5600	4.00
2013-14	4222	4.00
2014-15	4296	4.00

FY	Number of Factory (Cumulative)	Number of Employment (Cumulative) (In Million)
2015-16	4328	4.00
2016-17	4482	4.00
2017-18	4560	4.00

## 2.3. Impact of Employee Satisfaction on Bangladeshi RMG Industry

Bangladeshi garment workers are the lowest paid garment workers in the world. Although their minimum wage was supposed to have risen to about \$40 a month in November 2010, many garment factory owners are still paying the old minimum wage of \$24 a month. It is also mentioned that most

Bangladeshi garment workers do not belong to unions and most of the union leaders are working for the interest of the garment factory owners and those who are actually trying to help them are being harassed by the employers [14]. Although it is fact that, minimum wages has increased up to \$95 a month in 2018. Office staffs who are closely involved is more sincere about the company, its goals and culture, therefore they work in coalesce for the collective advantages of both themselves and company [15].

### 3. Research Design

#### 3.1. Conceptual Framework

Several steps are decided for the research work. They are:

- First, employee satisfaction related factors collected from the previous literature
- 5 factors were identified for employee satisfaction
- A questionnaire has proposed based on factors along with a hypothesis
- hypothesis will be tested through Z test
- The results and managerial implications of the research will be recommended

#### 3.2. Formation of Hypothesis

Let us assume we have two hypotheses:

Null Hypothesis  $H_0$

Alternate Hypothesis  $H_A$

Null Hypothesis  $H_0$

Satisfied Worker has no impact on RMG Industry's Productivity Enhancement

Alternate Hypothesis  $H_A$

Satisfied Worker has positive impact on RMG Industry's Productivity Enhancement

#### 3.3. Hypothesis Testing Procedure

After collecting all the data (from factory), will be

processed by employing SPSS software.

In order to test the hypothesis, we will use Z test (Sample Size=40).

$$Z \text{ Test} = \frac{\bar{X} - \mu}{\frac{\sigma}{\sqrt{n}}}$$

Formula for Z test is

Where,

$\bar{x}$ =Mean of Sample

$\mu$ =Mean of Population

$\sigma$ =Standard Deviation

$n$ =Number of Observation

Since, we would like to get best result, so we have set our Level of Confidence for this test.

Here, Level of Confidence 95%. So,  $\alpha=0.05$

Again, from the hypothesis it is clear that, this is 2-Tail Test.

Hence for  $\alpha=0.05$ , the Critical Value is  $\pm 1.96$  (From Statistical Table).

#### 3.4. Questionnaire

The entire questionnaire is based on five factor they are:

1. Top Management
2. Appreciation for Individual effort
3. Hassle free Atmosphere
4. Job Oriented Training
5. Performance Appraisal/Incentive

Questionnaire Survey

Name:\_\_\_\_\_ Gender:\_\_\_\_\_ Cell Number:\_\_\_\_\_

E-mail:\_\_\_\_\_

Factory:\_\_\_\_\_ Designation:\_\_\_\_\_

(1- Strongly Disagree, 2 – Disagree, 3 - Neutral, 4 – Agree, 5 - Strongly Agree)

Put Tick Mark

Level of your Motivation & Satisfaction

**Table 2.** Factors Related to Satisfaction.

		1	2	3	4	5
1	Your Satisfaction level towards your Superiors	0	0	0	0	0
2	Employer appreciate Individual Effort	0	0	0	0	0
3	Your existing Work Position is Hassle-free	0	0	0	0	0
4	You are Satisfied from ongoing Worker Development Activities	0	0	0	0	0
5	Performance based Incentive is provided to all level of Employees	0	0	0	0	0

### 4. Data Collection

#### 4.1. Sampling

2 workers (respondent) have been selected randomly from 40 RMG factories (Convenience sampling). A set of questionnaire was distributed to total 80 respondents.

#### 4.2. Data Collection

The entire survey questionnaire collected directly from factory and file up for further processing. Finally the data are inputted on SPSS software.

## 5. Result and Discussion

### 5.1. Data Analysis

*Table 3. Your Satisfaction level towards your Superiors.*

	Frequency	Percent	Cumulative Percent
Strongly Disagree	1	1.3	1.3
Disagree	4	5.0	6.3
Neutral	19	23.8	30.0
Agree	33	41.3	71.3
Strongly Agree	23	28.7	100.0
Total	80	100.0	

*Table 4. Employer appreciate Individual Effort.*

	Frequency	Percent	Cumulative Percent
Strongly Disagree	2	2.5	2.5
Disagree	2	2.5	5.0
Neutral	15	18.8	23.8
Agree	52	65.0	88.8
Strongly Agree	9	11.3	100.0
Total	80	100.0	

*Table 5. Your existing Work Position is Hassle-free.*

	Frequency	Percent	Cumulative Percent
Strongly Disagree	3	3.8	3.8
Disagree	17	21.3	25.0
Neutral	26	32.5	57.5
Agree	27	33.8	91.3
Strongly Agree	7	8.8	100.0
Total	80	100.0	

*Table 6. You are Satisfied from ongoing Worker Development Activities.*

	Frequency	Percent	Cumulative Percent
Strongly Disagree	2	2.5	2.5
Disagree	10	12.5	15.0
Neutral	30	37.5	52.5
Agree	28	35.0	87.5
Strongly Agree	10	12.5	100.0
Total	80	100.0	

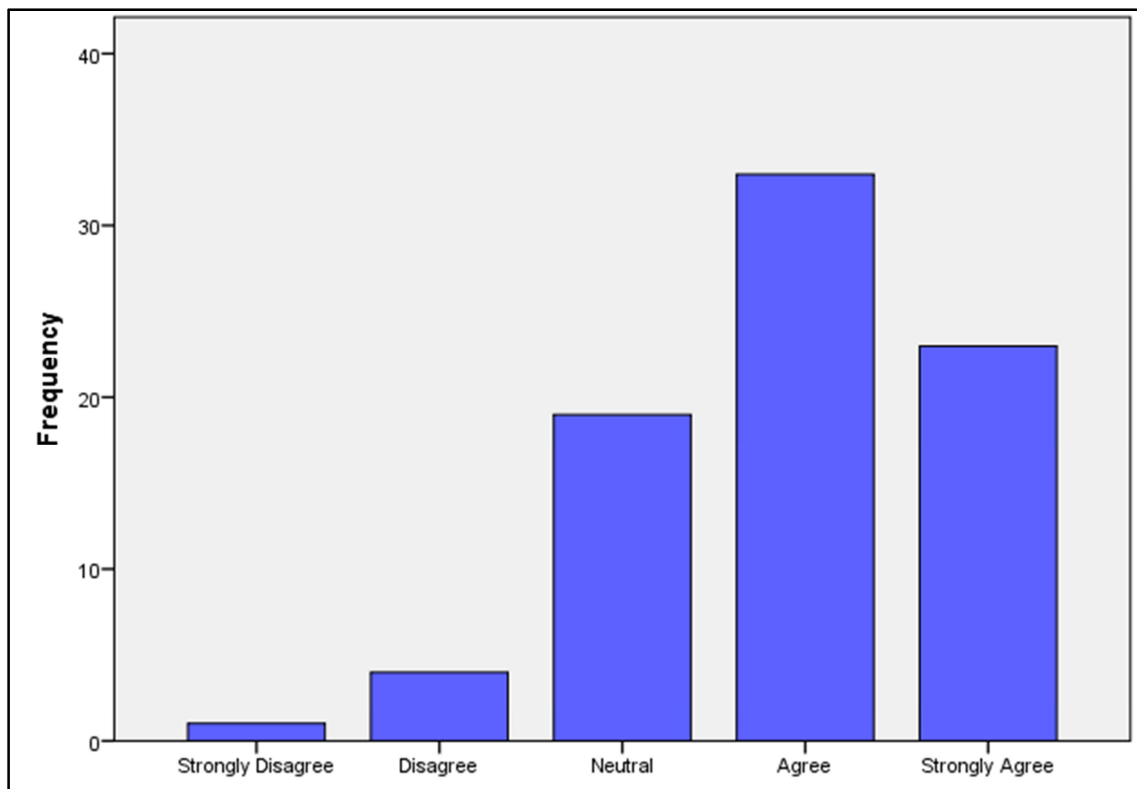
*Table 7. Performance based Incentive is provided to all level of Employees.*

	Frequency	Percent	Cumulative Percent
Strongly Disagree	1	1.3	1.3
Disagree	4	5.0	6.3
Neutral	17	21.3	27.5
Agree	45	56.3	83.8
Strongly Agree	13	16.3	100.0
Total	80	100.0	

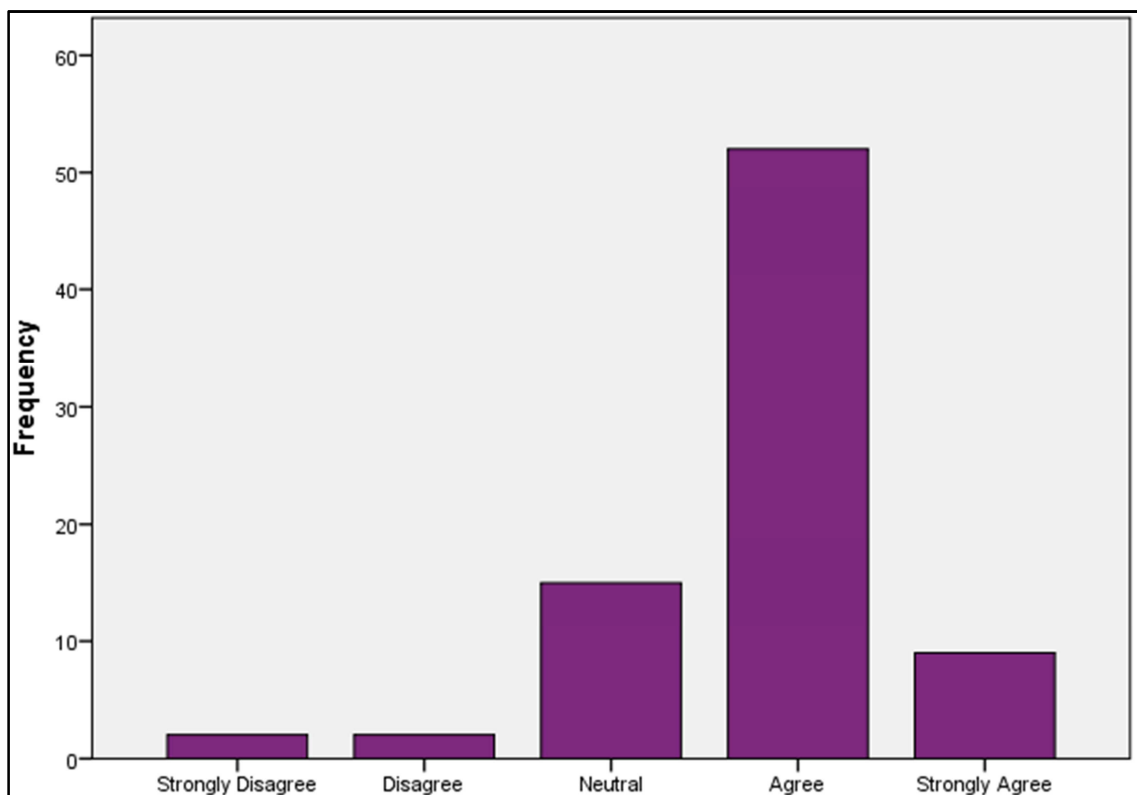
*Table 8. Statistics (Combined).*

	Z_Composite	Your Satisfaction level towards your Superiors	Employer appreciate Individual Effort	Your existing Work Position is Hassle-free	You are Satisfied from ongoing Worker Development Activities	Performance based Incentive is provided to all level of Employees
Valid	80	80	80	80	80	80
Mean	3.6625	3.91	3.80	3.23	3.43	3.81
Median	3.650	4.00	4.00	3.00	3.00	4.00
Std. Deviation	.5030	.917	.770	1.006	.952	.813
Sum	293.0	313	304	258	274	305
N				80		
Mean				3.6625		
Std. Deviation				.503		

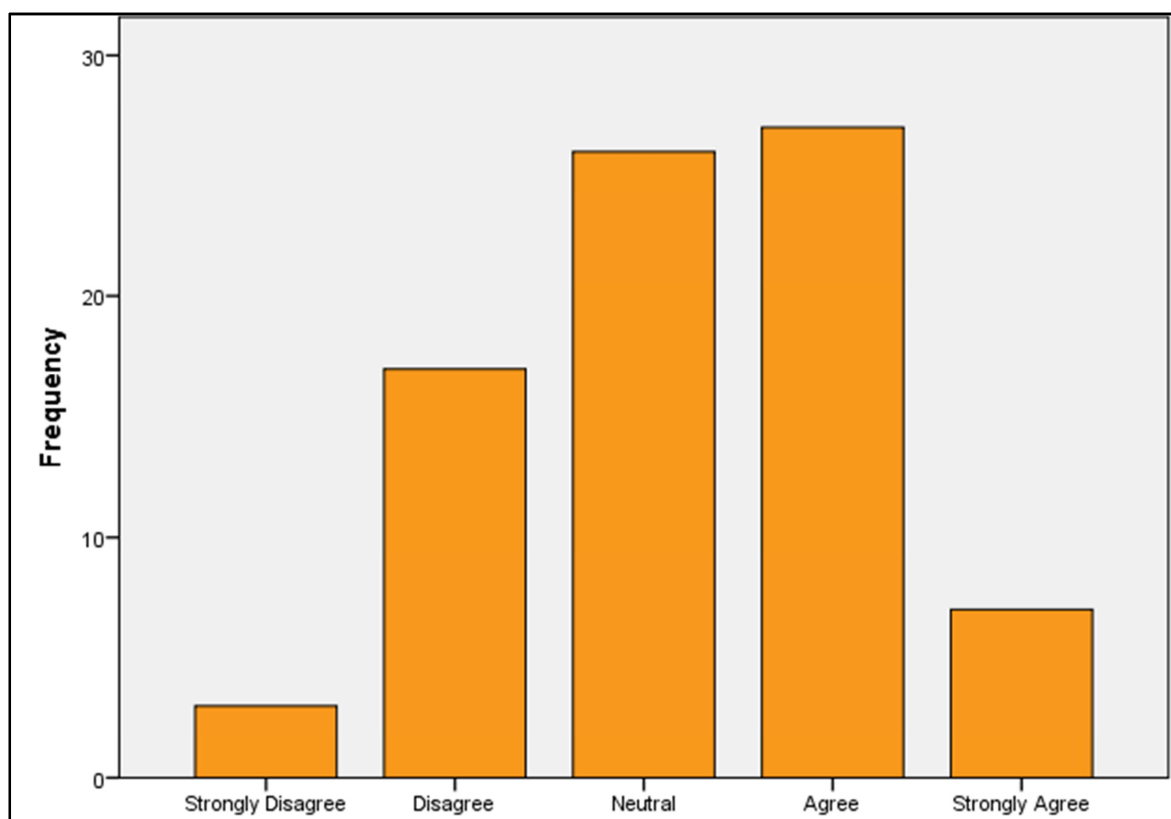
## 5.2. Graphical Analysis



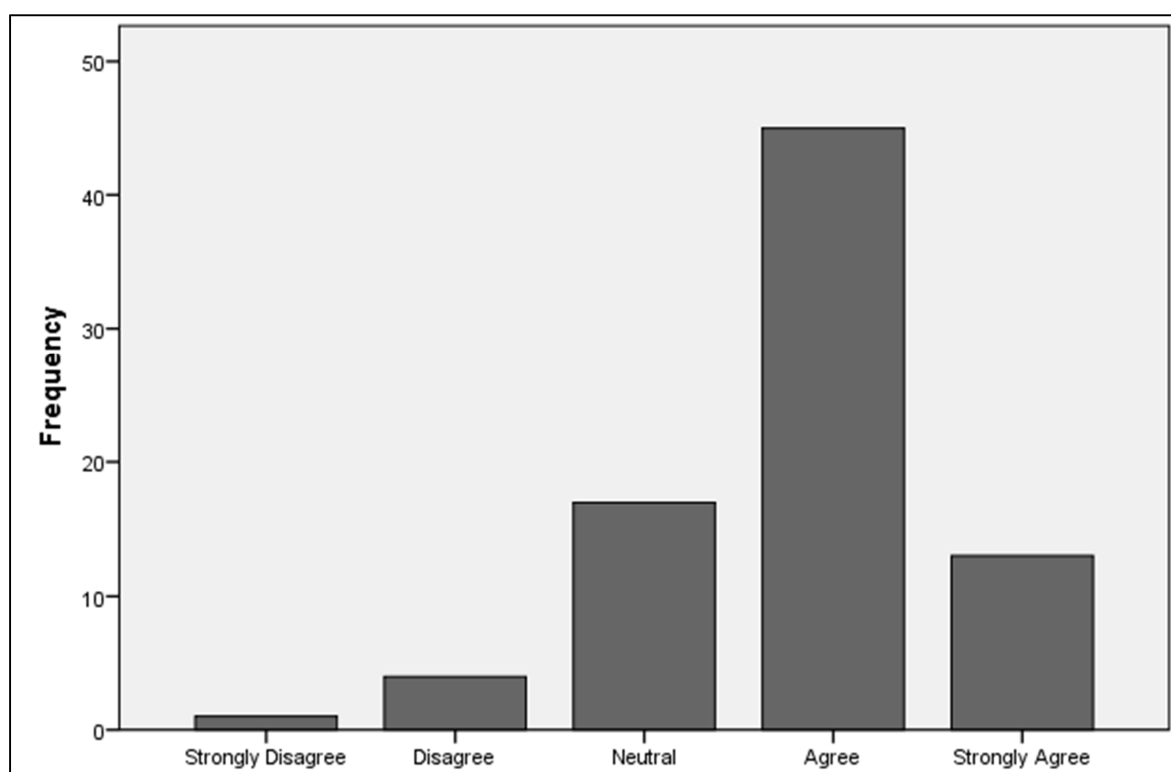
*Figure 3. Your Satisfaction level towards your Superiors.*



*Figure 4. Employer appreciate Individual Effort.*



**Figure 5.** *Your existing Work Position is Hassle-free.*



**Figure 6.** *You are Satisfied from ongoing Worker Development Activities.*

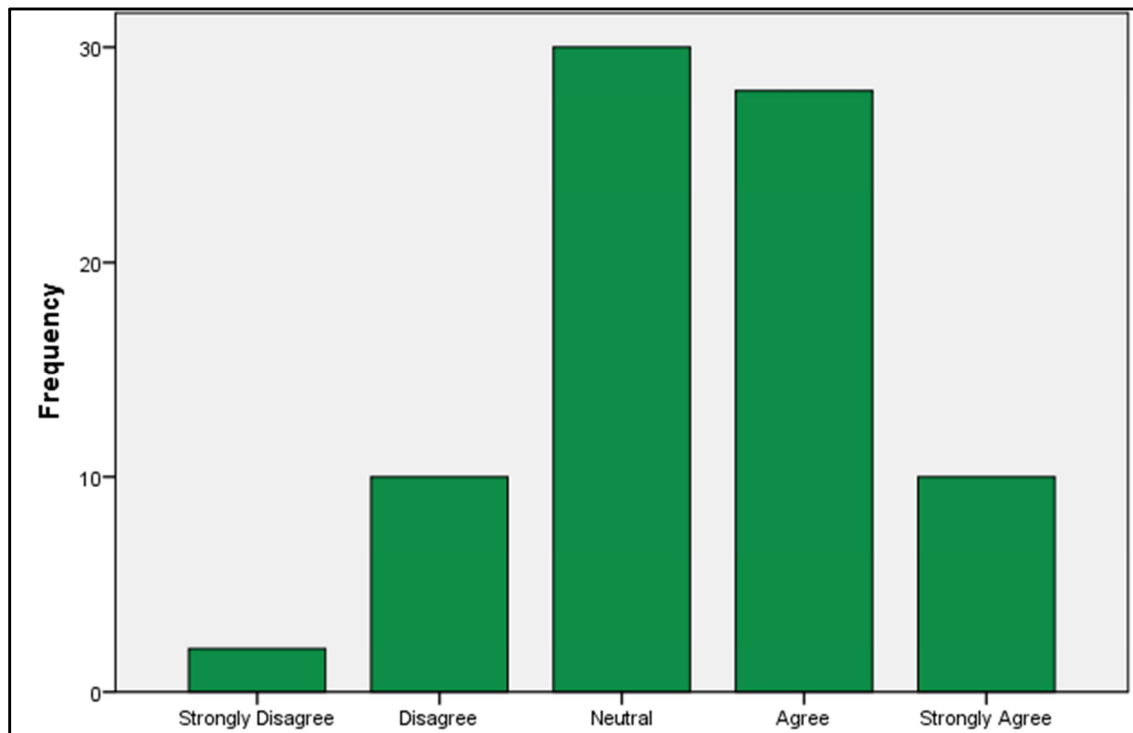


Figure 7. Performance based Incentive is provided to all level of Employees.

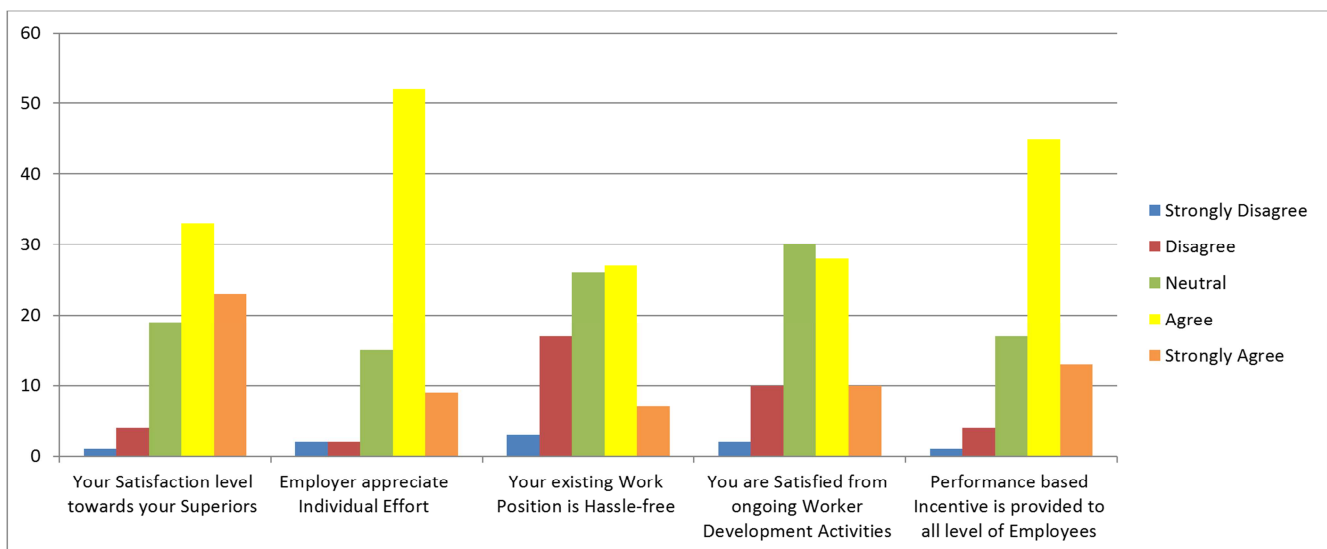


Figure 8. Overall survey Response from Employee against all questions.

### 5.3. Hypothesis Test

For Z test we have found following data:

Sample Size	80
Sample Mean	3.6624
Population Mean	3.00
Standard Deviation	0.503

Now, put the values in main formula

$$Z \text{ Test} = \frac{\bar{x} - \mu}{\frac{\sigma}{\sqrt{n}}}$$

$$Z = \frac{3.6625 - 3}{(0.503 / \sqrt{80})}$$

$$Z=11.78$$

### 5.4. Hypothesis Testing

After completing all the analysis, the value of Z-test was calculated and we achieved Z Value

$$Z=11.78$$

Whereas, at 95% Confidence Level [ $\alpha=0.05$ ], the Critical Value of Z is 1.96 (From Z table), which clearly indicated that our Calculated Value (C. V.) 11.78 is higher than Tabulated Value (T. V.). C. V. > T. V.

As a result Null hypothesis ( $H_0$ ) is Rejected and Alternative Hypothesis ( $H_A$ ) is Accepted.

It concludes that, Satisfied Worker has positive impact on RMG Industry's Productivity Enhancement.

## 6. Conclusions

The main purpose of this paper is to identify how the satisfied worker can enhance the productivity on RMG industry of Bangladesh. With the help of hypothesis testing through Z test it was evident that, Satisfied Worker has positive impact on RMG Industry's Productivity Enhancement. Five major factors have been found those significantly influence the satisfaction level of worker namely, "Top Management", "Appreciation for Individual effort", "Hassle free Atmosphere", "Job Oriented Training", "Performance Appraisal/Incentive". However it is also obvious that, all factors do not have similar impact on employee. Apart from this finding it can also expect that, this study perhaps help the managers and planners to identify the other influential factors for employee satisfaction. Moreover, other industrial sector like leather industries can also get idea from this paper to find out the factors for employee satisfaction.

## References

- [1] Rubel, M. R. B. and D. M. H. Kee, (2013), Perceived Support and Employee Performance: The Mediating Role of Employee Engagement. *Life Science Journal*, 10 (4): 2557-2567.
- [2] Hoque, F. (2015). Level of Job Satisfaction of Garments Worker: A Case Study on Savar Area in Dhaka District. *International journal of Research in Commerce, It & Management*, 3 (5), 151–158.
- [3] Aslam R & Shumaila S et al, (2011), Work Family Conflicts: Relationship between Work Life Conflict and Employee Retention A Comparative Study of Public and Private Sector Employees. *Interdisciplinary Journal of Research in Business*, 1 (2), 18-29.
- [4] Berik G & Rodger Y, (2008), Options for Enforcing Labor Standards: Lessons from Bangladesh and Combodia. *Journal of International Development*, 22, 56–85.
- [5] Hossan C G & Sarker A R et al. (2012) Recent unrest in RMG sector of Bangladesh: Is this an outcome of Poor Labour Practices? *International Journal of Business and Management*, 7 (3): 206-218.
- [6] Miller H & Rosse J, (2002), Emotional reserve and adaptation to job dissatisfaction, *The psychology of work: theoretically based empirical research*. Hillsdale, NJ: Erlbau.
- [7] Khan, S.I. 2001. Trade Unions, Gender Issues and the Ready-Made Garment Industry in Bangladesh. [www.unrisd.org/.../8DDEE7A220A7A155C1256D5500425415](http://www.unrisd.org/.../8DDEE7A220A7A155C1256D5500425415).
- [8] Islam and Swierczek (2003), Job Satisfaction Impact of Technological Change on Women Garment Workers in Bangladesh. *Journal of Business Administration*, 29 (2), 21-30.
- [9] Bangladesh Bank (2019), Quarterly Review on RMG: October-December FY19, Research Department, External Economics Division.
- [10] BGMEA (2014). *Member lists. Dhaka: Bangladesh Garment Manufacturers and Exporters Association*. Available at: <http://www.bgmea.com.bd/home/about> [Accessed 21 October 16].
- [11] BKMEA (2016) "*Facts and Figures of Knitwear Sector.*" *Narayanganj: Bangladesh Knitwear Manufacturers and Exporters Association*. Available at: [http://www.bkmea.com/facts\\_figures.php](http://www.bkmea.com/facts_figures.php).
- [12] Rogers, W. (2010), Fire Kills Garment Workers: Workers Protest Low Wages. The working conditions and wages of workers in the Bangladesh, Wordpress.
- [13] Markos, S., Pradesh, A. and Sridevi, M. (2010) "Employee Engagement: The Key to Improving Performance". *International Journal of Business and Management*, 5 (12): 89-96.
- [14] CIPD (2013). "*Employee Engagement*". *London: Chartered Institute of Personnel and Development*. Available at: <http://www.ci>.
- [15] [pd.co.uk/hr-resources/factsheets/employee-engagement.aspx](http://pd.co.uk/hr-resources/factsheets/employee-engagement.aspx).