Factors Affecting Job Satisfaction of Sugar Industrial Workers in Relation to Demographic Factors: An Empirical Study in Bangladesh

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Abstract

The primary objective of this study is to observe the impact of demographic factors on the job satisfaction of workers of the sugar industry in Bangladesh. Current research determines whether the age, level of education, marital status, and years of experience play a role in the job satisfaction of respondents and whether job satisfaction level differs among respondents in terms of age, level of education, marital status, and years of experience. A total of 300 respondents who are permanent production workers have been selected from state-owned sugar mills in Bangladesh on a random basis. A pre-structured questionnaire and for the information required face-to-face interview was conducted by the researcher. In analyzing data different statistical tools like Chi-square tests, ANOVA, Correlation were applied and data processed by using SPSS. The results of the present study revealed that a higher percentage of the high age workers was more satisfied with their present job than that of low age but statistically not significant. Other factors such as education, experience, and marital status, do not affect overall work satisfaction. The findings of this study suggest that the government and the concerned authority should draft proper policies and special programs to improve the level of satisfaction of sugar industrial workers.

Keywords: Job Satisfaction, Job Stress, Sugar Industry, Workers, Demographic Factors

JEL Classification Code: J11, J28, L20, M12, M54

1. Introduction

The world is passing through a phase of restructuring, downsizing, mergers, and takeovers in the industrial sector is currently, specifically in the sugar industry. The sugar industry plays a vital role in the economic development of a country. The sugar industry is an agro-based industry playing an important role in achieving socio-economic development of the rural community in particular and the region in general. Workplace satisfaction and dissatisfaction determine the quality, productivity, and performance of the sugar industrial workers (Gazi, 2020). Job satisfaction has emerged to be a very significant component of the management strategies of sugar industrial authority and government. Job satisfaction is generally defined based on the comparison of actual results with the desired results (Islam et al. 2020). Job satisfaction is a reflection of the positive attitude of workers towards employment. When employees are able to meet the demand from their work environment, higher job satisfaction is noticed and the turnover rate decreased. Job satisfaction is the function of the professed connection between what one thinks and gets from one’s job and how much importance or value he attributes to it (Rane, 2011). Workers of the sugar industry have experienced less or more job satisfaction regarding pay, benefits, and working environment.
The indicators of job satisfaction are pay, promotion, job status, job security, working condition, the behavior of the employers, open communication, autonomy in work, recognition for good work, relation with colleagues, and participation in decision making. Apart from these, indicators such as workers’ age, education, experiences, and marital status impact job satisfaction significantly. The consequences of job satisfaction are very much significant to an organization in terms of its productivity, absenteeism, turnover, efficacies, competence, employee relations, and wellbeing of the employees (Gazi et al., 2021). Bangladesh has started rethinking how to make a remarkable revolution in the sugar industry sector by ensuring workers’ job satisfaction. So the concerned authority of the Bangladesh Sugar Industry must be aware of workers’ job satisfaction. Bangladesh sugar industrial workers are facing the challenges of maintaining productivity as well as keeping their workforce engaged and motivated due to expected job satisfaction. Thus, this study looks at the impact of demographic factors on the job satisfaction of workers in Bangladesh. Many studies have been conducted to analyze the job satisfaction level of workers of different fields in the world but there are no notable research works on the sugar industry in Bangladesh particularly, no study found to examine the relationship between demographic factors and job satisfaction.

2. Literature Review

Job satisfaction is defined as the extent to which an employee feels self-motivated, content & satisfied with his/her job. Job satisfaction happens when an employee feels he or she is having job stability, career growth, and a comfortable work-life balance. is the attainment of peace of mind from work (Gazi, 2020). Job satisfaction is the consequences of what a worker wants and what he truly gets from their job. Moreover, job satisfaction results from the joyful mental state that achieves work standards (Tran & Tran, 2020). Job satisfaction is a comfort to an employee with different levels of work with different dimensions. Job satisfaction is an emotional response to innumerable aspects of work (Rastgar et al., 2012). Different studies provide strong evidence of a resilient connection between job satisfaction and specific personal characteristics.

Nguyen et al. (2020) found from their study that all control variables i.e. age, gender, education level has no significant impact on satisfaction. Reuben (2017) revealed from his study that there was no significant impact of gender differences on job satisfaction; he also found that job satisfaction was positively correlated with the age and experience of respondents. Islam et al. (2020) found that people of all ages are more or less satisfied but not statistically significant. Asadi et al. (2008) and Tella et al., (2007) pointed out that the age, gender, and experience of workers affect the overall satisfaction. Their study also highlighted the correlation between length of service experience and job satisfaction. Liu and White (2011) perceived from their study that gender, education, and work experience did not influence job satisfaction significantly. Santhapparaj (2005) found that women managers are usually satisfied with their work. He examined and found that there was a significant negative relationship between age, education, and various aspects of work that controlled job satisfaction. Islam and Akter (2019) discovered that job satisfaction is significantly different depending on age and experience.

However, there was not a significant statistical difference between other demographic factors like gender, marriage status, designation, etc. Hind and Bader (2005) and Gazi (2017) have argued that most workers have satisfactory levels of job satisfaction with long-term employment. He found that gender, age, and type of occupation were not necessarily related to job satisfaction. Hagedorn (2008) reported that women have lower job satisfaction than men. Mullins (2009) noted that work satisfaction levels are affected by the individual (such as marital status, personality, age, education, and, intelligence and skills, and job adaptation) and several variables related to others.

Chileshe and Haupt (2009) had shown that respondents had more explanatory powers than their personal qualities in terms of job satisfaction. Perry and Wise (2010) found that female and highly educated individuals were more satisfied with their job. Demographic factors gender, age, education, experience, and marital status of the workforces have widely been found critical in determining job satisfaction (Asadi et al., 2008). Yıldırım et al. (2016) found positive culture affects job satisfaction and commitment. Oshagbemi (2003) found that age, experience, and gender have no significant associations with job satisfaction. Noordin and Jusoff (2009) found that marital status and age have a significant impact on the level of job satisfaction of the respondents. Yusuf (2019) found that some specific job factors positively correlated with overall job satisfaction. Bellou (2009) recognized that age and gender affect employee work satisfaction.

With the end of the view, the present study has been designed to conduct research work on the workers’ job satisfaction in relation to demographic factors of the sugar industry in Bangladesh. The main objectives of the study to examine the level of job satisfaction regarding demographic factors (age, education, experience, and marital status) of workers of the sugar industry in Bangladesh. The researcher also examined the influence of demographic factors on the overall job satisfaction of the respondents.

The researcher made a (1) null hypothesis based on a review of the literature and the research objectives, the
following specific predictions for the practical verification of the investigation were:

**H1:** Demographic factors (such as age, education, experience, and marital status) do not significantly affect respondents’ overall job satisfaction.

### 3. Methods and Procedures

The present study was conducted on Job Satisfaction in Relation to Demographic Factors of Sugar Industrial Workers in Bangladesh.

#### 3.1. Data and Sample

A total of 300 respondents were selected on a stratified random sampling basis from five state-owned sugar mills that were selected on a random sampling basis. To make the sample representative total of 300 workers including 100 foremen and 200 workers selected from 5 sugar mills considering the production sections of each. Primary data and information are used for the purpose of the study. Data were collected through an organized questionnaire. The collected data were subsequently analyzed using various statistical tools and descriptive methods.

#### 3.2. Variables Covered

The variable covered in the present study is:

1. **Independent Variables:** Demographic factors such as age, education, experience, and marital status of the subjects.
2. **Dependent variable:** Job satisfaction.

#### 3.3. Conceptual Framework

![Research Framework](image)

**Figure 1:** Research Framework

### 4. Results

The data collected from the respondents was processed in the Social Science Statistics Package (SPSS) for quantitative analysis. The statistical analysis and discussion are as follows:

The workers’ age, education, experiences, and marital-related information (Foreman and Worker) is shown in Table 1a.

The results of Table 1a expose that all (100%) foremen were from the 55–65 age group. It was observed that the average age of foremen was higher (56.56) than that of the workers (39.06). The results further suggest that the mean age of foremen was significantly higher than that of the workers. The table further shows that the average educational level of workers was higher (3.29) than that of the foremen (2.68). These results also indicate that the level of education of the workers was significantly higher than that of foremen.

Table 1a also suggests that the mean experience of foremen is significantly different from the mean experience of workers, which is for the foreman 35.21 years and the worker 15.64 years. On the other hand, Table 1a explains that 100% of foremen were married and 87% of workers were married and the remaining 13% were not married. However, there is a significant connection between marital status and the level of workers. The number of married respondents was higher (workers and foreman) than unmarried.

To test whether there is any significant difference in age, education, and experience between foremen and worker z-test had been applied and the results are shown in Table 1b. It is clear from Table 1b that the foreman is significantly higher in age and experience compared to workers. However, workers’ education level is significantly higher than that of foremen.
In the case of age, the mean values are 56.56 and 39.06 years for foreman and workers respectively, and the mean values of education are 2.68 and 3.29 for foreman and worker respectively which is significant. Table 1b show respondents’ working experience and the mean values are foreman 35.21 years and for workers 15.64 years.

Since age, education, experience, and marital status affect employees ‘overall work satisfaction, the two categories were classified as “high and low” to see the effect of these factors on respondents’ overall work satisfaction. Ages, experience, and education were classified as lower and upper groups of respondents. Respondents were classified as married and unmarried. The average differences in job satisfaction according to the above personal reasons of the respondents are shown in Table 2.

Table 1a: Chi-square Table According to the Age, Education, Experiences, and Marital Status of Respondents (N = 300)

<table>
<thead>
<tr>
<th>Demographic Factors</th>
<th>Respondents</th>
<th>Average</th>
<th>Chi-Square</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Foremen</td>
<td>56.56</td>
<td>295.54</td>
<td>4</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>39.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of Education</td>
<td>Foremen</td>
<td>2.68</td>
<td>28.63</td>
<td>5</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>3.29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of Experiences</td>
<td>Foremen</td>
<td>35.21</td>
<td>155.70</td>
<td>4</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>15.64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Status</td>
<td>Married</td>
<td>14.23</td>
<td></td>
<td>1</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td></td>
<td>Unmarried</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1b: (Mean Difference) Comparison of Age, Education, and Experience between Foreman and Workers

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group Statistics for foreman (N = 100)</th>
<th>Group Statistics for the worker (N = 200)</th>
<th>Z</th>
<th>df.</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D</td>
<td>Mean</td>
<td>S.D</td>
<td></td>
</tr>
<tr>
<td>Age (in year)</td>
<td>56.56</td>
<td>1.696</td>
<td>39.056</td>
<td>10.01</td>
<td>17.392</td>
</tr>
<tr>
<td>Education</td>
<td>2.68</td>
<td>1.062</td>
<td>3.29</td>
<td>1.081</td>
<td>-4.594</td>
</tr>
<tr>
<td>Experience (in year)</td>
<td>35.21</td>
<td>4.65</td>
<td>15.64</td>
<td>10.86</td>
<td>17.232</td>
</tr>
</tbody>
</table>

Table 2: Mean differences of Job Satisfaction to Some Personal Factors (Age, Education, Experience, and Marital Status) of the Respondents (N = 300)

<table>
<thead>
<tr>
<th>Groups</th>
<th>Number</th>
<th>Mean</th>
<th>S.D</th>
<th>S.Err. Mean</th>
<th>Z</th>
<th>df.</th>
<th>Sig. (2-tailed)</th>
<th>Mean diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low age</td>
<td>153</td>
<td>67.31</td>
<td>9.38</td>
<td>0.759</td>
<td>-2.008</td>
<td>298</td>
<td>&lt;0.05</td>
<td>-2.073</td>
</tr>
<tr>
<td>High age</td>
<td>143</td>
<td>69.38</td>
<td>8.46</td>
<td>0.698</td>
<td>-0.638</td>
<td>298</td>
<td>N.S</td>
<td>0.749</td>
</tr>
<tr>
<td>Lower education</td>
<td>222</td>
<td>68.52</td>
<td>8.82</td>
<td>0.592</td>
<td>1.271</td>
<td>298</td>
<td>N.S</td>
<td>-1.318</td>
</tr>
<tr>
<td>Higher education</td>
<td>78</td>
<td>67.77</td>
<td>9.48</td>
<td>1.073</td>
<td>-1.271</td>
<td>298</td>
<td>N.S</td>
<td>-1.318</td>
</tr>
<tr>
<td>Low experience</td>
<td>154</td>
<td>67.68</td>
<td>9.18</td>
<td>0.740</td>
<td>-0.698</td>
<td>298</td>
<td>N.S</td>
<td>-1.288</td>
</tr>
<tr>
<td>High experience</td>
<td>146</td>
<td>69.00</td>
<td>8.76</td>
<td>0.725</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>274</td>
<td>68.21</td>
<td>9.08</td>
<td>0.549</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unmarried</td>
<td>26</td>
<td>69.50</td>
<td>7.97</td>
<td>1.562</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the case of age, the mean values are 56.56 and 39.056 years for foreman and workers respectively, and the mean values of education are 2.68 and 3.29 for foreman and worker respectively which is significant. Table 1b show respondents’ working experience and the mean values are foreman 35.21 years and for workers 15.64 years.

Since age, education, experience, and marital status affect employees ‘overall work satisfaction, the two categories were classified as “high and low” to see the effect of these factors on respondents’ overall work satisfaction. Ages, experience, and education were classified as lower and upper groups of respondents. Respondents were classified as married and unmarried. The average differences in job satisfaction according to the above personal reasons of the respondents are shown in Table 2.

Table 2 shows that the Z-ratio was significant only for age. This indicates that mean job satisfaction is significantly different between low and high age groups. Older respondents have higher satisfaction than younger ones. Other factors such as education, experience, and marital status have no significant effect on overall job satisfaction.
The difference in job satisfaction between the age group of the respondents has been unilaterally investigated (one-way ANOVA) and the result is shown in Table 3.

Table 3 indicates that the highest average satisfaction score (69.17) was in the age group of 15–25 years. Other mean scores of job satisfaction were 67.75, 66.85, 68.58, and 69.03 in the age groups of 15–35, 35–45, 45–55, and 55–65 years respectively. However, average job satisfaction scores for different age groups did not differ significantly.

To explore the difference in job satisfaction among workers based on the level of education of the workers, a one-way ANOVA test was conducted and the results are shown in Table 4.

Table 4 shows that the highest satisfaction was of respondents with SSC qualification (69.21). The result of the one-way ANOVA test indicates that the mean difference of job satisfaction scores of different levels of education was not statistically significant.

To find out the difference in job satisfaction between the respondents based on their work experience, a one-way ANOVA test is performed and the results are shown below (Table 5).

Table 5 shows that respondents with 30–40 years of experience had the highest average score of job satisfaction (69.17). Respondents who had 0–10, 10–20, 20–30, 40–50 years of experience had average job satisfaction scores of
67.44, 68.47, 68.11, and 67.50 respectively. The result of the ANOVA test indicates that the mean difference of job satisfaction scores of different levels of experience was not significant.

Z-tests were applied between married and unmarried employees and the results are shown in Table 6 to see if there is any significant difference in average work satisfaction. From Table 6 it is seen that there was no significant difference between job satisfaction of married and unmarried employees. However, job satisfaction is higher among married workers than that of unmarried workers.

Table 7 demonstrates the following associations:

- There was a significant positive relationship between age and work experience, but a significant negative correlation between age and education level.
- There was a significant negative correlation between the level of education and the experience of work.
- There was no significant correlation between job satisfaction and demographic factors.

5. Discussion

The arguments discussed based on the hypothesis are accepted or not accepted in light of the purpose of the current research-based on review literature. The discussion is as follows:

The results show that personal factors such as age, education, experience, and marital status of employees did not have any significant effect on overall work satisfaction (Oshagbemi, 2003; Liu & White, 2011). Table 2 shows that the respondents/employees of higher age group workers have higher job satisfaction than that of lower age group workers but statistically not significant (Mello, 2006; Noordin & Jusoff, 2009). Other factors like education, experience, and marital status have no significant influence on overall job satisfaction (Islam & Akter, 2019). Table 3 results show that the average job satisfaction score of different age groups was not significantly different. Table 4 results show that different levels of education were not statistically significant in the case of job satisfaction, with the F-ratio at 1.376. The result also indicated that the mean difference of job satisfaction scores of different levels of experience was not significant (Oshagbemi, 2003), where the F-ratio was 0.485. (Table 5). Also, there was no significant difference between job satisfaction and marital status (Oshagbemi, 2003; I971) but married workers are slightly higher satisfied than unmarried workers (Table 5). Thus, the results confirmed the null hypothesis. Correlation results indicate that there was no significant positive or negative relationship between age, experience, education, and overall job satisfaction (Table 7). So, the projected hypothesis is accepted.

Several research studies have found a significant positive effect of age on overall job satisfaction, such as Santhapparaj et al. (2005), Hagedorn (2008), Hind and Bader (2005), and Liu and White (2011). The research findings of related studies such as Hulin and Smith (1965), Noordin and Jusoff (2009), and Reuben (2017) also proved the same. More studies at home and abroad found a significant positive effect of age on overall work satisfaction (Hossain, 1995; Bellou, 2009), which confirmed the findings of the present study.

Several studies such as Mullins (2009), Chen and Francesco (2000), and Oshagbemi (2003) revealed that the level of job satisfaction is affected by a wide range of

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>S.D</th>
<th>S. Err. Mean</th>
<th>Z</th>
<th>df.</th>
<th>Sig. (2-tailed)</th>
<th>Mean diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>274</td>
<td>20.79</td>
<td>4.33</td>
<td>0.262</td>
<td>1.166</td>
<td>298</td>
<td>0.05</td>
<td>0.093</td>
</tr>
<tr>
<td>Unmarried</td>
<td>26</td>
<td>18.87</td>
<td>3.88</td>
<td>0.839</td>
<td>1.116</td>
<td>298</td>
<td>(N.S)</td>
<td>0.992</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Level of Education</td>
<td>0.502**</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Work Experience</td>
<td>0.903**</td>
<td>0.461**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>4. Job Satisfaction</td>
<td>0.053</td>
<td>0.017</td>
<td>0.052</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*p < 0.05, **p < 0.01.
variables relating to personal factors, i.e., age, education, experience, and marital status. Numerous studies also found similar results. For instance, Chileshe and Haupt (2009) found that age had an impact on the satisfaction derived from work. The present study indicates that job satisfaction did not differ significantly compared to workers’ age. Hind and Bader (2005) found that gender, age, and type of occupation were not necessarily related to job satisfaction. Perry and Wise (2010) said highly educated employees were highly satisfied.

The present results indicated that sugar industrial workers differ but not significantly in their job satisfaction in relation to age. As job satisfaction increases with age, the higher the age of employees, the higher the level of work satisfaction. The present results are compatible and consistent with the previous outcomes (Shahid et al., 2012; Chileshe & Haupt, 2009).

6. Conclusion

The present study was an endeavor to get hold of a better understanding about the job satisfaction concern with demographic factors of sugar industrial workers. Job satisfaction of sugar industrial workers directly impacts the development of this sector. But the job satisfaction is impacted by demographic factors such as higher age group workers have higher job satisfaction than that of lower age group workers. Besides, married workers are more satisfied than unmarried workers. Work experience and level of education also have an influencing power on job satisfaction. Even after so many years of independence, the sugar industry of Bangladesh has not yet reached the desired level. Continuous losses, labor dissatisfaction, and the use of backdated machinery and technologies have left this sector behind. Labor management, the government must take immediate action to save this industry from extinction. To increase job satisfaction and reduce the pressure on the sugar industry, the current recommendations have been made in light of the results of the study.

1. As it has been seen job satisfaction significantly differs between lower and higher age group workers, and that higher age group workers have higher job satisfaction than that of lower age workers, separate programs should be implemented by the sugar industrial authority for the existing low age group workers, which will produce maximum satisfaction.

2. As the workers of the sugar industry have poor education and no training, it is found that higher educated workers have lower job satisfaction than lower-educated workers. Bangladesh Sugar and Food Industries Corporation (BSFIC) and Government should establish a clear hierarchy of scope for smooth career for the higher educated workers and should have special programs to improve the level of education of lower-educated workers. As well as Bangladesh Sugar and Food Industries Corporation (BSFIC), Bangladesh Sugarcane Research Institute (BSRI), and Training Centre of Sugar Mills (TCSM) should undertake training programs for the sugar industrial workers.

3. As it is found that married workers are more satisfied than unmarried workers, family-friendly support and allowance should be granted by the sugar industrial authority to workers to retain them.

4. As it is found that higher experienced workers are more satisfied than the lower experienced workers, the sugar mills authority could give special attention to retain and attract experienced workers.

5. The findings above may have significance for Government, the Labour department, BSFIC authority, and other policy-makers. As such, they should give special attention to workers’ job satisfaction and welfare by taking various utilitarian and operative initiatives and programs.

References


