




## Paper Type: Research Paper



## Determinants of Job Satisfaction among the Employees of Aluminum Industries in Rajshahi City of Bangladesh: a Cross-Sectional Study

K. M. Mustafizur Rahman\* 

Department of Population Science, Jatiya Kabi Kazi Nazrul Islam University, Trishal-2224, Mymensingh, Bangladesh; nishan\_hrd@yahoo.com.

## Citation:



Mustafizur Rahman, K. M. (2022). Determinants of job satisfaction among the employees of aluminum industries in Rajshahi city of Bangladesh: a cross-sectional study. *Journal of applied research on industrial engineering*, 9(4), 507-516.

Received: 15/03/2022

Reviewed: 12/04/2022

Revised: 02/07/2022

Accepted: 09/07/2022

### Abstract

Job satisfaction of the employees is a concerning issue, accelerates the productivity of any organization. Higher job satisfaction among the employees means the higher chance of profitability of the employers. An effective understanding of factors associated with job satisfaction of the employees is precious to push organizational development. This study based on the data collected from three aluminum industries in Rajshahi city of Bangladesh during January 21, 2016 to March 20, 2016 to identify the determinants of job satisfaction among the employees. In this study, age, sex, education, work experience, satisfaction with salary, workplace environment and workplace management system are revealed as the determinants of job satisfaction. For instance, higher aged respondents are more likely to satisfy with job than lower aged (Odds Ratio (OR): 1.30 [0.48-3.57]). Female are more likely (OR: 1.90 [1.03-3.51]) to satisfy with their job than the male. Higher educated employees are less likely (OR: 0.97 [0.56-1.70]) to satisfy with their job than the lower educated employees. Respondents with 15 & above years of experience are more likely (OR: 1.05 [0.33-2.15]) to satisfy with their job than those have less than 5 years of experience. Satisfaction with salary (OR: 1.97 [1.14-3.41]), workplace environment (OR: 1.62 [0.59-6.51]), management system (OR: 1.24 [1.25-3.98]) are significantly associated with job satisfaction of the employees. As the first study, it provides the determinants of job satisfaction among the employees in aluminum industries in Rajshahi city of Bangladesh. Relevant authorities are suggested to consider the study's findings and recommendations to create new policies regarding job satisfaction.

**Keywords:** Salary, Workplace environment, Management, Logistic regression, Job satisfaction.

## 1 | Introduction

Bangladesh has made some noteworthy development in the economic growth and reduction of poverty since the early 1980s [1]-[2] and the industries remain the heart of such progresses. Expansion of industrial sector has accelerated the job markets of the country and reduced the unemployment rate of the nation as well. The active and continuous efforts of employees help to run the development wheels continuously. Hence, it is imperative to ensure the satisfaction of the employees with their work. Job satisfaction is widely viewed as the attitudes of employees towards their working conditions and working environments [3]-[5] and positive emotional response to their jobs and work performances [6]-[8]. Job satisfaction is broadly researched topic [9] due to the reality that most individuals spend a large part of their work life at work. Some factors are very much important for the job satisfaction of the employees. However, there are some mark differences

 Licensee **Journal of Applied Research on Industrial Engineering**. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0>).



Corresponding Author: nishan\_hrd@yahoo.com


<https://doi.org/10.22105/jarie.2022.334346.1460>

between the factors related to job satisfaction of low skilled and high skilled employees especially in physical labour-based industries where financial benefits and services are the main motivational and satisfaction factors for the employees. Additionally, they are not so much eager for social affiliation, self-esteem, rewards and recognition for their performance [10].

Many organizations/industries fail to realize the importance of job satisfaction of their employees that is critical for industrial/organizational productivity [11]-[14]. Employees are the fundamental component in the process of achieving the industrial/organizational mission and vision [15]. Job satisfaction is a complex matter and generally can be explained as a sense of comfort and positive experience of an employee related to his job [16]. Satisfaction of employees is an indispensable intention for any organization to reach [17] as the increase level of job satisfaction of the employees will definitely leads to more return to the organization.

The application of aluminum products in our daily life has dramatically increased over the last few decades and this has resulted in the quick expansion of aluminum industries certainly. A number of people are working in these industries. In Bangladesh, this sector definitely creates a huge number of job opportunities for its population. It is considered as one of the growing sectors that have specific participation in national development of the country. As a physical labour oriented industry, ensuring enough job satisfaction should be the concerning matter of aluminum industry. The main depositing fact of this study is to identify the most influential factors that affect the job satisfaction of the employees in aluminum industries. The appropriate policy responses at the industrial level can only be initiated by knowing the influential factors. Although there are studies on the determinants of job satisfaction around the world [11], [14], [18]-[22], in Bangladesh, extant literature has not paid particular focus of job satisfaction among the employees of aluminum industries. For example, job satisfaction of the employees has been studied in almost all the sectors including private companies [23], banking sectors [24], non-government organization sectors [25], educational sectors [21], readymade garments industries [26]-[27] except the aluminum industries. Thus, due to the lack of research on job satisfaction among the employees in aluminum industries, this study set the aim to identify the determinants of employee's job satisfaction in aluminum industries in Bangladesh. Considering the sector of the study (i.e. aluminum industries), it can be said as an innovative study. It is believed that findings of the current study will be more helpful for Bangladeshi policy makers in formulating active policies and creating strong measures along with revising the existing policies and programs to encourage the respected authorities in ensuring job satisfaction among the employees in aluminum industries in Bangladesh.

## 2 | Methods

### 2.1 | Data

The study is based on the primary data came from the project titled “determinants of human resource development in industrial sector in Rajshahi city: a micro-survey study”, under the department of population science and human resource development, university of Rajshahi, Bangladesh. In brief, data for the project were collected from three aluminum industries in Rajshahi city of Bangladesh. In order to select these industries, firstly all the industries of that industrial area (locally called Bangladesh Small and Cottage Industries Corporation (BSCIC) area) are classified according to the number of employees. Based on the number of employees and the reality of the industries in the study area, the industries are categorized as: category one (the number of employees is less than 100); category two (the number of employees is 100-200); and category three (the number of employees is more than 200). Then, one industry from each of the category is randomly selected and finally the data were collected randomly from the employees of those three industries between January 21, 2016 and March 20, 2016.

About 70 percent employees from the industry of each category are the respondents of this study. Specifically, 70 employees form the industry under category one; 142 employees form the industry under category two; and 205 employees form the industry under category three. Finally, the data from 417

employees were collected from the selected industries. A well-structured questionnaire was administered face-to-face to 417 employees.

## 2.2 | Outcome Variable

As we think all the employees are satisfied with their job in very general context is the research question or hypothesis of this study. Job satisfaction (however, relative issues but considered in this study as the verbal consent of the respondents) of the employees is considered as the outcome variable, which is dichotomized by assigning “1” if an employee is satisfied with his/her job (based upon their opinion) and “0” for otherwise. Here, the job satisfaction is considered as the aggregate of salary/wage satisfaction (income from their job), satisfaction with workplace environment (includes heat, light and space at their working place) and management system (training, overtime payment, rewards and promotion) of the corresponding industry.

## 2.3 | Explanatory Variables

A wide range of respondent’s characteristics, reported to be associated with job satisfaction of the employees in previous studies [15], [28]-[30], were included in the current study. These characteristics include respondent’s current age (classified as <30, 30-39, 40-49 or 50 & above years), sex (classified as male or female), education (categorized 0 to 5 years of schooling as below secondary, 6 to 10 years of schooling as secondary, or 11+ years of schooling as higher secondary & above), work experience (categorized as < 5, 5-9, 10-14 or 15 & above years), satisfaction with salary/wage (classified as no or yes), satisfied with workplace environment (categorized as no or yes), satisfied with management system (categorized as no or yes).

## 2.4 | Statistical Analysis

After performing descriptive statistics of the study sample, chi-square tests were used to identify the differences in the percentage of employees by the explanatory variables (detailed above). All variables significant in chi-square tests at level  $p < 0.20$  were included in regression analysis. Moreover, multicollinearity in the logistic regression analysis was checked by examining the standard errors for the regression coefficients. A standard error larger than 2.0 indicates numerical problems such as multicollinearity among the explanatory variables [31]. No evidence of multicollinearity was observed in the current study. Finally, a binary logistic regression model was used to identify the factors that are influential in job satisfaction of the respondents. The statistical significance of all analysis was set at  $p < 0.05$ . No sampling weights were provided with the data as such we do not apply sampling weights in the analyses. The entire statistical analysis of the study was performed with SPSS version 16.0 for Windows (SPSS Inc., Chicago, IL, USA).

## 3 | Results

*Table 1* represents the basic characteristics of the study respondents. The average age is 38.5 years. Among the participants, 22.8 percent are less than 30 years, 26.9 percent are 30-39 years, 31.7 percent are 40-49 years and 18.6 percent are 50 and above years old. Approximately, 80 percent respondents are male while 19.9 percent are female. Average year of schooling is 5.9, and majority of the respondents (61.6 percent) are with secondary level of education. Also, 26.2 percent are below secondary level while only 12.2 percent are higher secondary and above level. Average work experience of the respondents is 13.2 years where majority of the respondents (43.9 percent) are working for 15 and above years whereas, work experience less than 5 years consists only 15.6 percent. Overwhelming majority of the respondents (80.1 percent) is not satisfied with their salary/wage while only 19.9 percent are provided their opinion that they are satisfied with their salary/wage. On the other hand, 68.6 percent respondents are not satisfied with their workplace environment and only 31.4 percent are satisfied with that. Also, 75.3 percent respondents are not satisfied

with the management system of their respective industry and only 24.7 percent are satisfying with the same context.

**Table 1. Basic characteristics of the respondents.**

Variables	Frequency	Percent
Age group (in years)		
<30	95	22.8
30-39	112	26.9
40-49	132	31.7
50 & above	78	18.6
Average age (SD)	38.5 (10.6)	
Sex		
Male	334	80.1
Female	83	19.9
Education		
Below secondary	109	26.2
Secondary	257	61.6
Higher secondary & above	51	12.2
Average year of schooling (SD)	5.9 (3.4)	
Work experience (in years)		
<5	65	15.6
5-9	95	22.8
10-14	74	17.7
15 & above	183	43.9
Average work experience (SD)	13.2 (8.1)	
Satisfaction with salary/wage		
No	334	80.1
Yes	83	19.9
Satisfaction with workplace environment		
No	286	68.6
Yes	131	31.4
Satisfaction with management system		
No	314	75.3
Yes	103	24.7

**Notes:** SD indicates Standard Deviation.

Table 2 analyzes the bivariate association between job satisfaction and basic characteristics, and shows the variation in percentage. A significant association between job satisfaction and age group was found; percentage of the respondents who are satisfied with their job is higher among the lower age group and lower among the higher age group ( $p < 0.001$ ). Respondent's sex is significantly associated with the job satisfaction, where female are more satisfied with their job than their counterparts ( $p < 0.001$ ). A significant association is also found between respondent's education status and job satisfaction where higher percentage of satisfied respondents have higher education than other education categories ( $p < 0.001$ ). Also, higher work experience of the respondents consists lower percentage in considering their job satisfaction and the association is significant ( $p < 0.001$ ). Respondents who are satisfied with their salary/wage, workplace environment and management system are more likely to satisfy with their job than their counterparts.

Table 3 shows the results of binary logistic regression model that yields the odds of being job satisfaction by categories of explanatory variables. The likelihood of being satisfied with the job decreases with the age except 50 & above years. The odds of being satisfied with job for those in age group 30-39 years is 0.89 times (95 percent confidence interval: 0.69-2.80), for those in age group 40-49 years is 0.93 times (95 percent confidence interval: 0.39-2.23) and for those in age group 50 & above years is 1.30 times (95 percent confidence interval: 0.48-3.57) than those in age group less than 30 years. Female are more likely (1.90 times) to satisfy with their job (95 percent confidence interval: 1.03-3.51) than their counterparts. The odds of being satisfied with their job for the respondents in the secondary education level is 1.68 times (95 percent confidence interval: 0.72-3.91) and for those in higher secondary & above education is 0.97 times (95 percent confidence interval: 0.56-1.70) than those in below secondary education. Respondents with work experience 5-9 years are 1.63 times more likely (95 percent confidence interval:

1.03-4.54), 10-14 years are 1.34 times more likely (95 percent confidence interval: 0.56-3.22) and 15 & above are 1.05 times more likely (95 percent confidence interval: 0.33-2.15) to satisfy with their job than the reference category. Respondents who are satisfied with their salary/wage are 1.97 times (95 percent confidence interval: 1.14-3.41) more likely to satisfy with their job than those are not satisfied with their salary/wage; also, who are satisfied with the workplace environment (1.62 times and 95 percent confidence interval: 0.59-6.51) and management system (1.24 times and 95 percent confidence interval: 1.25-3.98) are more likely to satisfy with their job than their counterparts respectively.

**Table 2. Percentage of respondents by job satisfaction.**

Variables	Job Satisfaction of the Employee	
	Number	Row Percentage
Age group (in years)		
<30	61	35.8
30-39	68	39.3
40-49	103	22.0
50 & above	54	30.8
p-value	<0.001	
Sex		
Male	243	27.2
Female	43	48.2
p-value	<0.001	
Education		
Below secondary	67	38.5
Secondary	189	26.5
Higher secondary & above	30	41.2
p-value	<0.001	
Work experience (in years)		
<5	48	26.2
5-9	49	48.4
10-14	48	35.1
15 & above	141	23.0
p-value	<0.001	
Satisfaction with salary/wage		
No	244	26.9
Yes	42	49.4
p-value	<0.001	
Satisfaction with workplace environment		
No	243	21.7
Yes	90	31.9
p-value	<0.001	
Satisfaction with management system		
No	255	18.9
Yes	79	23.3
p-value	0.04	

Notes: The p values of chi-square tests.

## 4 | Discussion

To the best of my knowledge, this is the first study that reveals the determinants of job satisfaction among the employees in aluminum industry. The small scales cross-sectional data show that majority of the employees are not satisfied with their job in the aluminum industries of Rajshahicity. The determinants of job satisfaction among the respondents include age, sex, education, work experience and satisfaction with salary/wage, workplace environment and management system.

**Table 3. Determinants of job satisfaction**

Variables	Odds Ratio	95 percent Confidence Interval
Age group (in years)		
<30®	1.00	-
30-39	0.89	0.69-2.80
40-49	0.93	0.39-2.23
50 & above	1.30	0.48-3.57
Sex		
Male®	1.00	-
Female	1.90*	1.03-3.51
Education		
Below secondary®	1.00	-
Secondary	1.68	0.72-3.91
Higher secondary & above	0.97*	0.56-1.70
Work experience (in years)		
<5®	1.00	-
5-9	1.63	1.03-4.54
10-14	1.34	0.56-3.22
15 & above	1.05*	0.33-2.15
Satisfaction with salary/wage		
No®	1.00	-
Yes	1.97**	1.14-3.41
Satisfaction with workplace environment		
No®	1.00	-
Yes	1.62*	0.59-6.51
Satisfaction with management system		
No®	1.00	-
Yes	1.24*	1.25-3.98

Notes ®: Reference Category; Level of significance: \*\*: p<0.01; \*: p<0.05.

Higher age, particularly 50& above years are associated with higher likelihood of job satisfaction among the respondents in this study which is in line of previous studies [32]-[34]. This might be due to the fact that, in Bangladesh, majority of the people are losing their physical strength from the age of 50 & above and they tend to become an elderly population. It is well known to them that, they are well behind than their younger due to their age, physical limitation and constricted job market as a result they are facing difficulties to manage a job. So, respondents with higher age are satisfied with their job by considering that at least they have a job. Female contains the highest odds of job satisfaction in the current study as compared to male. In previous studies, gender is also found as one of the determinants of job satisfaction, where female is more likely to satisfy with their job than male [35]-[37]. In conservative Bangladeshi society, female is still engaging only in the domestic work. Hence, as an employee, earning money from the work remains dream to them. When they are able to earn money, they are satisfied with that and their work and this might be true for the result of the present study.

Consistent with previous literature [38], the current study also finds lower job satisfaction among the higher educated respondents. Several factors might be responsible for that as the scarcity of job in the country and the expectations of the higher educated employees from the employers are not often met. The employees believe their educational qualification did not match with their current position. Higher work experience also exerts the higher odds of job satisfaction among the employees in this study, which is in a line with the previous study [39]. The main reason behind this might be the fact that the adaptation power within their existing work environment of the respondents increase with the increase of their work experience.

Some previous studies have shown that the job satisfaction of employees influenced by their level of income [40]-[42]. The current study also finds the higher likelihood of job satisfaction among the respondents who are satisfied with their salary/wage. It is quite evident that, especially in Bangladesh, satisfaction with income is more or less represents the satisfaction with job among the employees. Job satisfaction is also largely influenced by the workplace environment as some previous literatures have shown [43]-[44], in this study satisfaction with workplace environment exhibits the higher likelihood of



job satisfaction. Generally, people want to get a suitable workplace environment, where they are bound to spend at least eight hours per day. Satisfaction with the workplace environment of the respondents definitely accelerates their satisfaction with the job and the present study shows the same. Consistent with previous studies [45]-[46], the current study also finds the higher likelihood of job satisfaction among the respondents who are satisfied with management system of their industry as compared to those who are not satisfied with that. The possible reason for such result is that, due to the lack of employees' friendly management system, dissatisfaction among the employees regarding their job always works within their minds.

## 5 | Conclusions

In entirety, as the first study, it provides the determinants of job satisfaction among the employees of aluminum industries in Rajshahi city of Bangladesh. Based on the upstair results and discussion, carefully planning should be made to accelerate the job satisfaction of the employees, since job satisfaction of the employees is considered as the main instruments of industrial progresses. Without ensuring the job satisfaction of the employees, industrial/organizational profitability remains distant dream. Relevant authorities may consider the following five recommendations in revising and redrawing the existing policies along with creating new effective policies to ensure job satisfaction among the employees. The recommendations are: 1) need to establish a comprehensive rights based job market for all, 2) ensure that access to employment opportunities is fair and equal without discrimination, 3) need for inflationary adjustment with the salary/wage (i.e. increase in the salary of the employees on regular basis) of the employees, 4) need to ensure secured and safety workplace (tolerable light and sound in the workplace) environment for the employees, and 5) friendly industrial management should be established for the employees as well as for the industry.

## Limitations

The current study has some limitations. Being a cross-sectional study, it does not permit casual association of the explanatory variables with the outcome variable. The data come from aluminum industry in Rajshahi Industrial Area of Rajshahi city, and thus may not be generalizable to all the entire industries in Bangladesh. Despite the limitations, as the pioneer study in this sector, it demonstrates a detail analysis of various determinants of job satisfaction of the employees in aluminum industries, which is generalizable to all the industries of Rajshahi district in Bangladesh.

## Acknowledgements

The author gratefully acknowledges the department of population science and human resource development, Rajshahi university, Bangladesh, for providing the scope to conduct this study.

## Funding

The author received no specific funding for this work.

## Conflict of Interest

The author declares no potential conflicts of interest with respect to this research, authorship, and/or publication of this article.

- [1] Rahman, K. M. (2019). Fulfillment of fundamental rights among Bangladeshi people: does income and expenditure matter? *Indian journal of economics and development*, 7(8), 1-7. <https://www.academia.edu/download/60557854/146892-IJED-galley-ok20190911-75607-vwblak.pdf>
- [2] Ullah, S. M. A., Rahman, K. M. M., & Islam, M. T. (2018). Development of selected sectors under democratic governments in Bangladesh: a comparative analysis. *KILA journal of local governance*, 5(1), 21-28.
- [3] Fiorillo, D., & Nappo, N. (2014). Job satisfaction in Italy: individual characteristics and social relations. *International journal of social economics*, 41(8), 683-704. <https://doi.org/10.1108/IJSE-10-2012-0195>
- [4] Joung, H.-W., Goh, B. K., Huffman, L., Yuan, J. J., & Surles, J. (2015). Investigating relationships between internal marketing practices and employee organizational commitment in the foodservice industry. *International journal of contemporary hospitality management*, 27(7), 1618-1640. <https://doi.org/10.1108/IJCHM-05-2014-0269>
- [5] Randeree, K., & Chaudhry, A. G. (2012). Leadership–style, satisfaction and commitment: an exploration in the United Arab Emirates’ construction sector. *Engineering, construction and architectural management*, 19(1), 61-82. <https://doi.org/10.1108/09699981211192571>
- [6] Bigliardi, B., Dormio, A. I., Galati, F., & Schiuma, G. (2012). The impact of organizational culture on the job satisfaction of knowledge workers. *VINE*, 42(1), 36-51. <https://doi.org/10.1108/03055721211207752>
- [7] Chatzoudes, D., Chatzoglou, P., & Vraimaki, E. (2015). The central role of knowledge management in business operations. *Business process management journal*, 21(5), 1117-1139. <https://doi.org/10.1108/BPMJ-10-2014-0099>
- [8] Van Dierendonck, D. (2015). The influence of planning, support and self-concordance on goal progress and job satisfaction. *Evidence-based HRM*, 3(3), 206-221. <https://doi.org/10.1108/EBHRM-04-2014-0013>
- [9] Curtis, E. A. (2007). Job satisfaction: a survey of nurses in the republic of Ireland. *International nursing review*, 54(1), 92-99.
- [10] Amin, R. (2016). Job satisfaction of low-skilled employees of manufacturing industry in Bangladesh: a case study. *Journal of investment and management*, 5(6), 166-170. <https://www.academia.edu/download/50613086/10.11648.jjim.20160506.20.pdf>
- [11] Aziri, B. (2011). Job satisfaction: a literature review. *Management research & practice*, 14(3). <http://www.mrp.ase.ro/no34/f7.pdf>
- [12] Deeter-Schmelz, D. R., & Sojka, J. Z. (2003). Developing effective salespeople: exploring the link between emotional intelligence and sales performance. *The international journal of organizational analysis*, 11(3), 211-220. <https://doi.org/10.1108/eb028972>
- [13] Fisher, C. D. (2003). Why do lay people believe that satisfaction and performance are correlated? Possible sources of a commonsense theory. *Journal of organizational behavior: the international journal of industrial, occupational and organizational psychology and behavior*, 24(6), 753-777.
- [14] Millán, J. M., Hessels, J., Thurik, R., & Aguado, R. (2013). Determinants of job satisfaction: a European comparison of self-employed and paid employees. *Small business economics*, 40(3), 651-670.
- [15] Raziq, A., & Maulabakhsh, R. (2015). Impact of working environment on job satisfaction. *Procedia economics and finance*, 23, 717-725.
- [16] Bakotic, D., & Babic, T. (2013). Relationship between working conditions and job satisfaction: the case of Croatian Shipbuilding Company. *International journal of business and social science*, 4(2), 205-213. [https://www.academia.edu/download/56545203/working\\_condition\\_1.pdf](https://www.academia.edu/download/56545203/working_condition_1.pdf)
- [17] Wan, H. L. (2007). Human capital development policies: enhancing employees' satisfaction. *Journal of European industrial training*, 31(4), 297-322. <https://doi.org/10.1108/03090590710746450>
- [18] Daud, N. (2016). Determinants of job satisfaction: how satisfied are the new generation employees in Malaysia? *Procedia-social and behavioral sciences*, 219, 208-213. <https://doi.org/10.1016/j.sbspro.2016.05.007>
- [19] Heimerl, P., Haid, M., Benedikt, L., & Scholl-Grissemann, U. (2020). Factors influencing job satisfaction in hospitality industry. *SAGE open*, 10(4), 2158244020982998. <https://doi.org/10.1177/2158244020982998>



- [20] Jędrzejczak-Gas, J., & Wyrwa, J. (2020). Determinants of job satisfaction in a transport company: a Polish case study. *Equilibrium. quarterly journal of economics and economic policy*, 15(3), 565-593. <https://doi.org/10.24136/eq.2020.025>
- [21] Masum, A. K. M., Azad, M. A. K., & Beh, L. S. (2015). Determinants of academics' job satisfaction: empirical evidence from private universities in Bangladesh. *PLoS one*, 10(2), e0117834. <https://doi.org/10.1371/journal.pone.0117834>
- [22] Tsai, S.-B., Huang, C.-Y., Wang, C.-K., Chen, Q., Pan, J., Wang, G., Wang, J., Chin, T. C., & Chang, L.-C. (2016). Using a mixed model to evaluate job satisfaction in high-tech industries. *Plos one*, 11(5), 1-13. <https://doi.org/10.1371/journal.pone.0154071>
- [23] Islam, M., Rasul, M., & Ullah, G. M. (2012). Analysis of the factors that affect job satisfaction: a case study on private Companies employees of Bangladesh. *European journal of business and management*, 4(4), 35-47. <https://ssrn.com/abstract=2427260>
- [24] Mahmud, M. T., Hasan, M. T., & Ashif, A. S. M. (2014). Determinants of job satisfaction: a comparative study in the banking sector of Bangladesh. *International journal of economics and empirical research (IJEER)*, 2(1), 22-28. <https://ideas.repec.org/a/ijr/journal/v2y2014i1p22-28.html>
- [25] Uddin, M. M., Uddin, M. Z., Paul, R., Khan, T., & Ali, S. (2019). Exploring the factors affecting employee's satisfaction in non-government organizations (ngos) of Bangladesh: an experience from Bangladesh rural advancement committee (BRAC). *Open journal of social sciences*, 7(08), 1-23. DOI: [10.4236/jss.2019.78001](https://doi.org/10.4236/jss.2019.78001)
- [26] Alauddin, M., Ahsan, S. H., Hossain, M. M., Mowla, M. M., & Uddin, M. S. (2019). Measuring the factors affecting employees job satisfaction in readymade garments industry: Bangladesh perspective. *International journal of advances in management and economics*, 8(1), 146-152. <https://scholar.google.com/citations?user=S3p86CoAAAAJ&hl=en&oi=sra>
- [27] Rahman, M. S., Siddiqi, K. O., & Basak, S. (2018). Factors influencing job satisfaction of the workers: an empirical study on readymade garment (Rmg) sector in Bangladesh. *British journal of multidisciplinary and advanced studies*, 2(2), 66-79. <https://bjmas.org/index.php/bjmas/article/view/25>
- [28] De Lourdes Machado-Taylor, M., Meira Soares, V., Brites, R., Brites Ferreira, J., Farhangmehr, M., Gouveia, O. M. R., & Peterson, M. (2016). Academic job satisfaction and motivation: findings from a nationwide study in Portuguese higher education. *Studies in higher education*, 41(3), 541-559. <https://doi.org/10.1080/03075079.2014.942265>
- [29] Steijn, B. (2004). Human resource management and job satisfaction in the Dutch public sector. *Review of public personnel administration*, 24(4), 291-303. <https://doi.org/10.1177/0734371X04269187>
- [30] Wei, L. (2006). Strategic human resource management: Determinants of fit. *Research and practice in human resource management*, 14(2), 49-60. <http://www.uop.edu.pk/ocontents/SHRM%20Determinants%20of%20Fit.pdf>
- [31] Chan, Y. H. (2004). Biostatistics 202: Logistic regression analysis. *Singapore medical journal*, 45(4), 149-153. <https://pubmed.ncbi.nlm.nih.gov/15094982/>
- [32] Bos, J. T., Donders, N. C. G. M., Bouwman-Brouwer, K. M., & van der Gulden, J. W. J. (2011). Determinants of job satisfaction in four age groups; university employees' point of view. *Tijdschrift voor toegepaste arbowetenschap*, 1, 14-21.
- [33] Iroegbu, M. N. (2015). Do age and gender have anything to do with job satisfaction: a practical outlook on the Nigerian public sector. *American journal of applied psychology*, 4(4), 111-114. <http://article.ajoap.org/pdf/10.11648.j.ajap.20150404.15.pdf>
- [34] Yilma, S. (2002). *Some major determinants of job satisfaction among employees of oromia head and zonal cooperative promotion offices* (Masters thesis, Addis Ababa University). Retrieved from <http://thesisbank.jhia.ac.ke/id/eprint/7562>
- [35] Bender, K. A., Donohue, S. M., & Heywood, J. S. (2005). Job satisfaction and gender segregation. *Oxford economic papers*, 57(3), 479-496. <https://doi.org/10.1093/oeq/gpi015>
- [36] Ishitan, T. T. (2010). Exploring the effects of congruence and Holland's personality codes on job satisfaction: an application of hierarchical linear modeling techniques. *Journal of vocational behavior*, 76(1), 16-24. <https://doi.org/10.1016/j.jvb.2009.06.014>
- [37] Okpara, J. O., Squillace, M., & Erondy, E. A. (2005). Gender differences and job satisfaction: a study of university teachers in the United States. *Women in management review*, 20(3), 177-190. <https://doi.org/10.1108/09649420510591852>

- [38] Metle, M. K. (2003). The impact of education on attitudes of female government employees. *Journal of management development*, 22(7), 603–626. <https://doi.org/10.1108/02621710310484759>
- [39] Gesinde, A. M., & Adejumo, G. O. (2012). Effects of age and work experience on job satisfaction of primary school teachers: implications for career counseling. *International journal of Asian social science*, 2(3), 302-309.
- [40] Bender, K. A., & Heywood, J. S. (2006). Job satisfaction of the highly educated: the role of gender, academic tenure, and earnings. *Scottish journal of political economy*, 53(2), 253–279.
- [41] Ismail, A., Mohamed, H. A.-B., Hamid, N. S., Sulaiman, A. Z., Girardi, A., & Abdullah, M. M. (2011a). Relationship between performance based pay, interactional justice and job satisfaction: A mediating model approach. *International journal of business and management*, 6(11), 170–180. [https://www.academia.edu/download/45954931/Relationship\\_Between\\_Performance\\_Based\\_P20160525-16437-1sri7wb.pdf](https://www.academia.edu/download/45954931/Relationship_Between_Performance_Based_P20160525-16437-1sri7wb.pdf)
- [42] Takei, I., Sakamoto, A., & Murase, Y. (2009). The effects of absolute and relative incomes on job satisfaction among male workers in Japan. *Sociological focus*, 42(1), 39–56. <https://doi.org/10.1080/00380237.2009.10571342>
- [43] Agbozo, G. K., Owusu, I. S., Hoedoafia, M. A., & Atakorah, Y. B. (2017). The effect of work environment on job satisfaction: Evidence from the banking sector in Ghana. *Journal of human resource management*, 5(1), 12–18.
- [44] Lane, K. A., Esser, J., Holte, B., & McCusker, M. A. (2010). A study of nurse faculty job satisfaction in community colleges in Florida. *Teaching and learning in nursing*, 5(1), 16–26. <https://doi.org/10.1016/j.teln.2009.05.001>
- [45] Chang, S.-C., & Lee, M.-S. (2007). A study on relationship among leadership, organizational culture, the operation of learning organization and employees' job satisfaction. *The learning organization*, 14(2), 155-185. <https://doi.org/10.1108/09696470710727014>
- [46] Tsai, Y. (2011). Relationship between organizational culture, leadership behavior and job satisfaction. *BMC health services research*, 11(1), 1–9. <https://doi.org/10.1186/1472-6963-11-98>