

The Impact of Designation, Experience and age on Existing and Expected Quality of work Life: A Case Study of four Sugar Mills in Bangladesh

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Abstract: This present study was designed with a view to investigate the impact of designation, experience and age of sugar mill employees on existing and expected quality of work life (QWL). A total number of 150 employees were selected from four sugar mills on a stratified random sampling basis. The results reveal that the designation, experience and age of sugar mill employees in Bangladesh do not alter their rating of the existing and expected quality of work life (QWL).

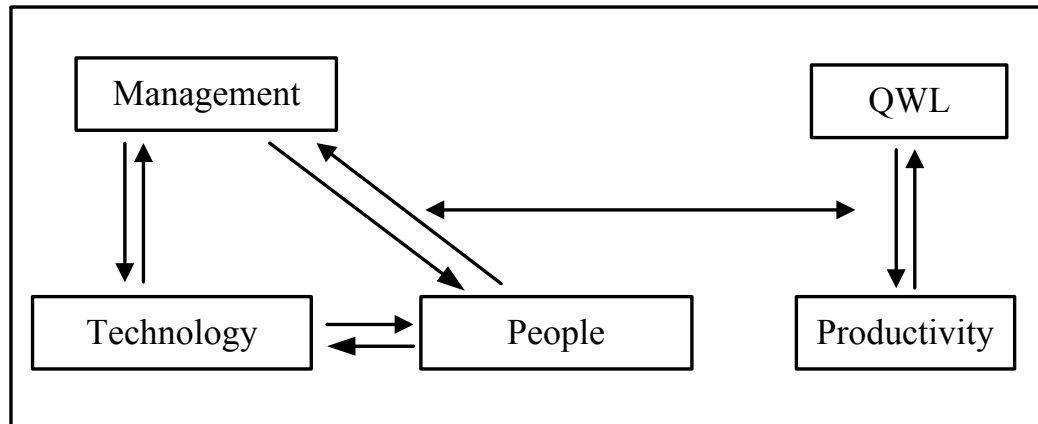
1. Introduction

Background: Originally Quality of work life (QWL) activity occurred during the period 1969 to 1974 (Nadler and Lowler, 1983). Quality of work life covers almost all aspects of employees' organizational life and significantly affects the performance levels of employees. QWL programs are desirable for both human and performance needs and it provides the higher order needs of workers as well as their basic needs (Newstrom and Davis, 1993). QWL is positively related to organizational commitment and the improvement of work satisfaction of employees (Venkatachalam and Velayudhan, 1997). QWL has direct impact on human outcomes and it significantly reduces absenteeism, minor accidents, grievances and quits (Havlovic, 1991). QWL provides a wide range of benefits and social security, which makes improvement in productivity, reduction in absenteeism, turnover, sick leave, alienation etc. QWL benefits also include financial services, consumer services, career counselling, employee information reports, retirement benefits, recreational services and health safety measures. QWL includes higher quality and quantity of output of goods and services (Dewivedi, 1995).

The core concern of quality of work life and productivity has been to humanize work process, democratize authority patterns and increase organizational capabilities to adjust with the internal and the external environment (Emery and Thorsurd, 1959). Quality of work life and productivity include dynamic interaction and interchange between people, technology and management (Suri, Singh and Akhtar, 1991). Following figure illustrates this view.

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Figure: Relationships between Management, Technology, People, QWL and Productivity.



Source: Suri, *et al.*, (1991), *Quality of Work life and Productivity*, New Delhi: National Productivity Council.

The reality is that in the organization the sharing of social understanding and the participation of all parties concerned would constitute positive attitude for better QWL and higher productivity. Enhancing QWL will result in productivity improvement and gains from productivity improvements in turn will strengthen QWL (Walton, 1972).

The study undertakes detail investigation of demographic variables on quality of work life of sugar mill employees in Bangladesh. People are the common element in every organization because without the support of people, machine remains idle and money tied up. Sugar industry of Bangladesh is suffering from many problems. Poor quality of work life may be a major cause for inefficient functioning of the sugar industry in Bangladesh. An organization fulfils itself through work, which gets accomplishment through persons in their mental and manual engagement. Work is the core of life, it means autonomy, it pays off in success and establishes self-respect or self-worth (Rosow, 1974). The quality of organization depends on the quality of work, which controlled by employees. The problem of employees' adjustment to their work situation is reflected through their perception of QWL. The knowledge of quality of work life is vital towards understanding their problems with their work place and also towards adopting suitable policies for making them happier with their work situation. Studies on QWL have been conducted in manufacturing organizations in many countries but studies on QWL in Bangladesh are rare to found. Wadud (1996) in a study found that younger group and higher experienced group had significantly higher perception on QWL than the older group and the lower experienced groups.

2. Objectives and Hypothesis

2.1 Objectives

This paper has the following objectives:

- i) To examine the impact of designation and the perception of sugar mill employees about QWL in Bangladesh.
- ii) To investigate the impact of experience and age of sugar mill employees on QWL in Bangladesh.

2.2 Hypothesis

To achieve these objectives, the following hypothesis was formulated and tested.

The designation, experience and age of the employees do not alter their rating of the existing and expected quality of work life in sugar industry.

Rationale for this Hypothesis:

The fulfilment of personal needs, values and expectations define the quality of work life (Seashore, 1975). Work experiences and outcomes can affect a person's general quality of life and they can affect QWL and family life (Rice et al., 1985). The considerations are educational status of employees, living standard of employees, socio-economic condition of Bangladesh and satisfaction of employees.

3. Methodology

3.1 Sample

For this present study, the sample size was 150 employees working in the selected four leading sugar mills in Bangladesh (Syampur Sugar Mills Ltd., Rajshahi Sugar mills Ltd., Natore Sugar Mills and Joypurhat Sugar Mills Ltd.). For selecting the sample stratified random sampling techniques were used. Using proportional allocation method, the sample size of different selected sugar mills is shown Table 1 below.

Table 1: Mill wise distribution of sample employees

Name of the Sugar Mills	Employees (sample size)	Percentage
1. Syampur Sugar Mills Ltd. (SSML)	28	18.67
2. Rajshahi Sugar Mills Ltd. (RASML)	46	30.67
3. Natore Sugar Mills Ltd. (NSML)	35	23.33
4. Joypurhat Sugar Mills Ltd. (JSML)	41	27.33
Total	150	100

The demographic variables of the respondents are shown in Table-2.

Table 2: Demographic variables of the sample employees (N=150)

Age (years)	Education			Sex Percent	Income per month (Taka)	Experience (years)
	Levels	N	Present			
Range 28-56	1. Primary (I-V)	56	37.33	Male 99.33 N=149	Range 1,500.00- 17,500.00	Range 1-37
	2. Secondary (VI-X)	20	13.33			
	3. Higher Secondary (XI-XII)	36	24			
Mean 42.53	4. Graduate (XIII-XIV)	28	18.67	Female 0.67 N=1	Mean 5,342.12	Mean 18.82
	5. Masters (XV-XVI)	10	6.67			
	Total	150	100			

The mean age of respondents was 42.53 years. Their mean income and experience were Take 5,342.12 and 18.82 years respectively. Among the respondents 99.33 percent were male and .67 percent were females. The education level of the respondents was low. (Table-2)

3.2 Measuring Instrument

For the purpose of this study the following ten determinants of QWL were selected on the basis of available literature:

1. Participation in decision making;
2. Career advancement;
3. Job safety and security;
4. Achievement;
5. Compensation;
6. Interpersonal relations;
7. Recognition and praise;
8. Job stress;
9. Pay and allowance;
10. Working condition.

On the basis of objectives of the present study a structured questionnaire was framed to collect data from the respondents. The respondents were requested to give their rating of the various determinants of QWL on a five point scale rating from 1 to 5, low score representing poor QWL and high score representing better QWL. The mean scores less than 3 on a 5 point rating scale signify low score (Chander and Singh, 1993). The scale includes 10 basic major determinants of QWL. Each determinant carries two questions.

Justification for selecting these QWL determinants

The quality of work life may embrace all the possible aspects of work related life, including wage and hours, work environment, benefits and services, career outlook, human relations etc, that are relevant to employees satisfaction and motivation (Nadler and Lowler, 1983). QWL includes all those factors affecting the physical, social, economical psychological and cultural well being of workers (Beinum, 1984). Security, autonomy, equity of pay, rewards, satisfaction, involvement, stress, working environment are identified as several factors which help to measure QWL (Venkatachalam and Velayudhan, 1997).

3.3 Data Analysis

A five point Likert scale was used to analyze the perception and expectations of the sugar mill employees about the quality of work life regarding their designation, experiences and age in the selected four sugar mills.

To analyze the data for the present study, the following statistical tools were used:

- i) Mean and standard deviation scores on all ten determinants of QWL.
- ii) Z-test.

For comparison of responses, sample (employees) were divided into groups according to designation (officer, supervisor, staff and worker), experience (up to 10 years, 11-20 years and more than 20 years) and age (up to 40 years, 41-50 years and above 50 years).

4. Findings

Results of the present study have been summarized in table 3 to 11. Analysis of results presents the impact of designation, experience and age of the sugar mill employees on existing and expected QWL.

Table 3: Mean, standard deviation scores of the existing QWL determinants across designation

Determinants of QWL	Designation							
	Officer		Supervisor		Staff		Worker	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Participation in decision making	3.04	.88	2.28	.79	1.61	.80	2.13	.98
Career advancement	2.89	.88	2.88	.73	2.76	.99	2.65	.85
Job safety and security	3.25	.52	3.08	.86	3.18	.71	3.11	.77
Achievement	3.21	.69	.300	.58	2.92	.82	2.85	.79
Compensation	2.32	.72	1.96	.73	2.08	.56	1.87	.58
Interpersonal relations	3.79	.57	3.96	.20	4.08	.44	4.15	.42
Recognition and praise	3.32	.67	3.04	.54	3.43	.64	3.50	.59
Job stress	4.46	.51	4.12	.53	4.10	.83	4.00	.70
Pay and allowance	2.75	.93	2.40	.76	2.00	.75	1.93	.77
Working condition	3.57	.63	3.52	.51	3.61	.53	3.11	.77
n	28		25		51		46	

Table-3 presents the mean and standard deviation scores of the sugar mill employees across designation (officer, supervisor, staff, worker) for all determinants of existing QWL.

Table 4: Mean, standard deviation scores of expected QWL determinants across designation.

Determinants of QWL	Designation							
	Officer		Supervisor		Staff		Worker	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Participation in decision making	4.93	.26	4.88	.33	4.82	.39	4.93	.25
Career advancement	4.82	.48	4.92	.28	4.88	.33	4.95	.21
Job safety and security	4.75	.44	4.72	.46	4.76	.43	4.70	.47
Achievement	4.43	.50	4.16	.55	4.41	.50	4.43	.50
Compensation	4.61	.49	4.40	.50	4.57	.50	4.65	.48
Interpersonal relations	4.57	.50	4.48	.51	4.63	.49	4.48	.51
Recognition and praise	4.50	.58	4.76	.44	4.65	.48	4.70	.47
Job stress	4.50	.69	4.64	.49	4.67	.48	4.70	.47
Pay and allowance	4.96	.19	4.96	.20	4.88	.33	4.89	.31
Working condition	4.54	.79	4.48	.82	4.49	.76	4.50	.75
n	28		25		51		46	

Table 4 shows the mean and standard deviation scores of the employees across designation (officer, supervisor, staff and worker) for all the determinants of expected QWL.

Table 5: Z-values across designation of existing and expected QWL determinants gap.

Determinants of QWL	Designation			
	Officer	Supervisor	Staff	Worker
Participation in decision making	-10.8990**	-15.1842**	-25.8834**	-18.7768**
Career advancement	-10.1882**	-13.0459**	-14.5080**	-17.8165**
Job safety and security	-11.6523**	-8.4077**	-13.5933**	-11.9542**
Achievement	-7.5760**	-7.2562**	-11.0793**	-11.4619**
Compensation	-13.9135**	-13.7882**	-23.6864**	-25.0443**
Interpersonal relations	-5.4435**	-4.7461**	-5.9642**	-3.3877**
Recognition and praise	-7.0460**	-12.3463**	-10.8907**	-10.7846**
Job stress	-.2467	-3.6021**	-4.2455**	-5.6308**
Pay and allowance	-12.3199**	-16.2876**	-25.1008**	-24.1858**
Working condition	-5.0797**	-4.9978**	-6.7826**	-8.7706**
n	28	25	51	46

** Significant at 1% level of significance.

Table 5 presents Z values across the designation (officer, supervisor, staff and worker) of existing and expected QWL determinants gap.

Table 6 : Mean and standard deviation scores of existing QWL determinants across experience.

Determinants of QWL	Experience in years					
	upto 10 years		11-20 years		More than 20 years	
	Mean	SD	Mean	SD	Mean	SD
Participation in decision making	1.73	.88	2.04	1.00	2.45	.97
Career advancement	2.91	.87	2.75	.95	2.71	.85
Job safety and security	3.36	.58	3.08	.73	3.16	.76
Achievement	3.14	.83	2.99	.74	2.82	.77
Compensation	2.09	.61	2.07	.64	1.96	.69
Interpersonal relations	4.00	.44	4.03	.44	4.02	.49
Recognition and praise	3.41	.59	3.39	.59	3.38	.65
Job stress	4.23	.69	4.24	.57	4.02	.80
Pay and allowance	2.00	.82	2.32	.87	2.14	.86
Working condition	3.55	.67	3.44	.60	3.34	.72
n	22		72		56	

The above table presents the mean and standard deviation scores of the employees across experience for all determinants of existing QWL.

Table 7 : Mean and standard deviation scores of expected QWL determinants across experience.

Determinants of QWL	Experience in years					
	upto 10 years		11-20 years		More than 20 years	
	Mean	SD	Mean	SD	Mean	SD
Participation in decision making	4.82	.39	4.93	.26	4.86	.35
Career advancement	4.82	.39	4.94	.23	4.88	.38
Job safety and security	4.64	.49	4.75	.44	4.80	.40
Achievement	4.32	.48	4.39	.49	4.39	.56
Compensation	4.50	.51	4.53	.50	4.63	.49
Interpersonal relations	4.59	.50	4.60	.49	4.46	.50
Recognition and praise	4.68	.48	4.64	.51	4.66	.48
Job stress	4.68	.48	4.64	.56	4.63	.49
Pay and allowance	4.95	.21	4.92	.28	4.89	.31
Working condition	4.32	.78	4.67	.67	4.36	.84
n	22		72		56	

Table 7 shows the mean and standard deviation scores of the employees across experience for all determinants of expected QWL.

Table 8 : Z-values across experience of existing and expected QWL determinants gap.

Determinants of QWL	Experience in years		
	Up to 10 years	11-20 years	More than 20 years
Participation in decision making	-15.0573**	-23.7334**	-17.4889**
Career advancement	-9.3964**	-19.0116**	-17.4409**
Job safety and security	-7.9072**	-16.6251**	-14.2898**
Achievement	-5.7725**	-13.3849**	-12.3398**
Compensation	-14.2168**	-25.7017**	-23.6096**
Interpersonal relations	-4.1550**	-7.3442**	-4.7033**
Recognition and praise	-7.8318**	-13.6004**	-11.8544**
Job stress	-2.5111*	-4.2476**	-4.8658**
Pay and allowance	-16.3465**	-24.1389**	-22.5113**
Working condition	-3.5124**	-11.6044**	-6.8993**
n	22	72	56

** Significant at 1% level of significance.

* Significant at 5% level of significance.

Table 8 presents Z values across the experience of existing and expected QWL determinants gap.

Table 9 : Mean and standard deviation scores of existing QWL determinants across age.

Determinants of QWL	Age in years					
	upto 40 years		41-50 years		Above 50 years	
	Mean	SD	Mean	SD	Mean	SD
Participation in decision making	1.64	.79	2.50	.94	2.90	.97
Career advancement	2.79	.98	2.69	.80	2.85	.88
Job safety and security	3.11	.78	3.24	.63	2.90	.85
Achievement	2.92	.80	3.00	.73	3.05	.76
Compensation	2.07	.64	1.93	.56	2.15	.81
Interpersonal relations	4.04	.46	4.02	.48	3.90	.55
Recognition and praise	2.40	.66	3.36	.58	3.30	.57
Job stress	4.06	.75	4.24	.68	4.20	.83
Pay and allowance	2.11	.85	2.22	.84	2.45	1.00
Working condition	3.40	.69	3.47	.63	2.15	.81
n	72		58		20	

Table 9 shows the mean and standard deviation scores of the employees across age for all the determinants of existing QWL.

Table 10 : Mean and standard deviation scores of expected QWL determinants across age.

Determinants of QWL	Age in years					
	upto 40 years		41-50 years		Above 50 years	
	Mean	SD	Mean	SD	Mean	SD
Participation in decision making	4.86	.35	4.91	.28	4.95	.22
Career advancement	4.89	.32	4.93	.26	4.85	.49
Job safety and security	4.72	.45	4.78	.42	4.85	.37
Achievement	4.33	.47	4.38	.52	4.50	.60
Compensation	4.58	.50	4.55	.50	4.55	.51
Interpersonal relations	4.56	.50	4.57	.50	4.45	.51
Recognition and praise	4.68	.50	4.62	.49	4.65	.49
Job stress	4.61	.57	4.74	.44	4.45	.51
Pay and allowance	4.89	.32	4.93	.26	4.95	.22
Working condition	4.56	.75	4.48	.75	4.30	.92
n	72		58		20	

Table 10 shows the mean and standard deviation scores of the employees across age for all the determinants of expected QWL.

Table 11 : Z-values across age of existing and expected QWL determinants gap.

Determinants of QWL	Age in years		
	upto 40 years	41-50 years	Above 50 years
Participation in decision making	-31.6212**	-18.7130**	-9.2173**
Career advancement	-17.2846**	-20.2800**	-8.8801**
Job safety and security	-15.1708**	-15.4897**	-9.4070**
Achievement	-12.8946**	-11.7261**	-6.6969**
Compensation	-26.2240**	-26.5785**	-11.2132**
Interpersonal relations	-6.4944**	-6.0433**	-3.2793**
Recognition and praise	-13.1172**	-12.6382**	-8.0320**
Job stress	-4.9542**	-4.7015**	-1.1477
Pay and allowance	-25.9723**	-23.4713**	-10.9192**
Working condition	-9.6583**	-7.8530**	-7.8442**
n	72	58	20

** Significant at 1% level of significance.

Table 11 presents Z values across age of existing and expected QWL determinants gap.

5. Discussion on Findings

Table-3 shows that irrespective of the designation of the respondents, they feel that QWL is not satisfactory in the sugar industry. It is very clear from this table that except “Job stress” (for all the designation), “Interpersonal relations” (for the two designation viz, staff and worker) all other determinants have been rated as poor. From table-4, the expected mean scores are more than 4 for all determinants in the case of sugar industry employees of all designation. The results of the Z-test as presented in table-5, reveal that the Z-values are significant at 1% level of significance for all the determinants, except “Job stress” in the case of officer. These results show that except for “Job stress” in the officer level the designation (officer, supervisor, staff, worker) of the sugar mill employees does not significantly alter their perception of QWL.

Table-6 shows the mean and the standard deviation scores of the respondents across experience for all determinants of existing QWL. An analysis of this table reveals that for all three experience groups, i.e., up to 10 years, 11-10 years and more than 20 years, the QWL has been perceived more or less identically. “Participation in decision making”, “Pay and allowance”, “Compensation” and “Career advancement” have been rated as the lowest by the respondents. Table-7 shows the mean and the standard deviation scores of the expected QWL across experience for all determinants. The expected mean scores are more than 4 for all determinants of QWL. The Z-values (as shown in table-8) are significant at 1% and 5% levels of significance for all the determinants in all experience groups. These results prove that there is a significant difference in the existing and expected QWL in the sugar industry as perceived by the employees, irrespective of their experience level.

Table-9 shows that for the three age groups, i.e., up to 40 years, 41-50 years and above 50 years, the QWL has been perceived more or less identically. “Participation in decision making” (up to 40 years age group mean score 1.64) and “Compensation” in all age groups have been rated as the lowest by the respondents. Table-10 shows that the expected mean scores are more than 4 for all determinants for all age groups of QWL. The results of the Z test, as presented in table-11, reveal that Z-values are significant at 1% level of significance for all the determinants except “Job stress” in the case of ‘above 50 years’ age group. These results show that except for “Job stress” the age of the sugar mill employees does not have much effect on their perceptions of QWL.

This analysis accepts the hypothesis that the designation, experience and age of the employees do not alter their rating of the existing and expected quality of work life in sugar industry.

The present findings are in agreement with the conclusion of Hoque and Rahman (1999), who reported: QWL does not differ significantly according to age, education, experience and income of the workers. Chander and Singh (1993) also found that the designation, experience and age did not have any significant impact on rating of the actual and expected QWL.

The present finding however do not find support in the studies of Ghosh and Kalra (1982) who found that QWL was influenced by age, income, qualification, experience, etc. Kumar and Shanubhogue (1996) found that the perceptions of QWL were affected by designation.

6. Conclusion/recomandation

Form the analysis of the results of the present study following conclusions emerged:

- ◆ Designation, experience and age of the sugar mill employees do not alter their rating of the existing and expected quality of work life (QWL).
- ◆ Sugar industry is functioning in an environment, where four major determinants of QWL i.e., *Participation in decision making, Pay and allowance, Compensation and Career advancement* are largely missing and the employees would like to see an environment that includes these determinants.
- ◆ Most of the determinants of QWL do need immediate attention from the government and the concerned authority to improve the quality of work life (QWL).

The present study has however it's limitations. It is difficult to an individual to draw up an accurate picture of quality of work life of employees divided into various categories, scattered geographically all over the country and particularly in rural areas under different circumstances, perceptions, attitudes, educational status, income status etc. This limitation however was reduced through interview and informal discussion with the employees. It can be stated that the limitations would not affect the findings of the study as every effort is made to gather and evaluate the situation as accurately and objectively as possible.

7. References

1. Beinum, H.V. (1984). Comming to Terms with QWL, *Management in Government*, July-September, 16(2), 133-139.
2. Chander, S. and Singh, P. (1993). Quality of Work Life in A University: An Empirical Investigation, *Management and Labour Studies*, April, 18(2), 97-107.
3. Dwivedi, R.S. (1995). *Human Relations and Organizational Behaviour: A Global Perspective*, New Delhi: Macmillan India.

4. Emery, F.E. and Thorsurd, E. (1959). *Characteristics of Socio-Technical Systems*, London: Tavistock Institute.
5. Gosh, S. and Kalra, S.K. (1982). Perceptual Difference in Quality of Work Life Factors, *Indian Journal of Training and Development*, 12(3&4), 10-12.
6. Havlovic, S.J. (1991). Quality of Work Life and Human Resources Out Comes, *Industrial Relations*, 30(3), 469-479.
7. Hoque, M.E. and Rahman, A. (1999). Quality of Working Life and Job Behaviour of Workers in Bangladesh: A Comparative Study of Private and Public Sector, *Indian Journal of Industrial Relations*, October, 35(2), 175-184.
8. Kumar, H. and Shanubhogue, A. (1996). Quality of Work Life, - An Empirical Approach, *Manpower Journal*, October-December, XXX 11(3), 17-23.
9. Nadler, D.A. and Lowler III, E.E. (1983). Quality of Work Life; Perspectives and Directions. *Organizational Dynamics*, 11(3), 20-30.
10. Newstrom, J.W. and Davis, K. (1993). *Organizational Behaviour*, Tata McGraw Hill Publishing Company Ltd.
11. Rice, R.W. *et.al*, (1985). Organizational Work and the Perceived Quality of Life Toward a Conceptual Model, *Academy of Management Review*, April, 10(2), 296-310.
12. Rosow, J.M.(ed.), (1974). *The Worker and the Job: Coping and Change*, Englewood: Prentice-Hall.
13. Seashore, S.E. (1975). Defining and Measuring the QWL, in Davis, L.E. and Chern, A.E. *QWL*, New York.
14. Suri, G.K., Singh, A. and Akter, S. (1991). *Quality of Work Life and Productivity*, New Delhi: National Productivity Council.
15. Venkatachalam, J. and Velayudhan, A. (1997). Quality of Work Life: A Review of Literature, *South Asian Journal of Management*, January-March, 4(1), 45-57.
16. Wadud, N. (1996). Job Stress and Quality of Work Life among Working Woman, *Bangladesh Psychological studies*, 6, 31-37.
17. Walton, R.E. (1972). How to Counter Alienation in the Plant, *Harvard Business Review*, November-December.

Appendix

Questionnaire

- (a) Name of the department (b) Designation
 (c) Age (years) (d) Educational qualification
 (e) Gross salary (monthly) Tk. (f) Length of service (years)
 (g) Marital status (h) Sex : Male ☐ Female ☐

Direction : Please give (✓) mark for your reply.

PART – A

- Q. 1 Do you agree that you have freedom of taking decisions for your job and implement them?
- Q. 2 Do you agree that everybody in your industry gets opportunities to improve his/ her job?
- Q. 3 Do you agree that your industry assures growth and security of job?
- Q. 4 Do you agree that your work gives you a feeling of achievement?
- Q. 5 Do you agree that rules and regulations in your industry fulfill adequate and fair compensation?
- Q. 6 Do you agree that interpersonal relation in your industry is quite satisfactory?
- Q. 7 Do you agree that the management appreciate your skills, abilities and performance?
- Q. 8 Do you agree that you feel tired when engaged in your work?
- Q. 9 Do you agree that your salary and perquisites offered by your industry is satisfactory?
- Q. 10 Do you agree that your industry maintains a good working environment?

[illegible]

