

Quality of work life and organizational performance: Empirical evidence from Dhaka Export Processing Zone

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Abstract:

Dhaka Export Processing Zone manufacturing enterprises are playing an important role in term of investment, employment generation and export. We, therefore, have undertaken this exploratory study on the influence of workers quality of work life (QWL) on job satisfaction and organizational performance. QWL is hypothesized to directly or indirectly influence organizational performance. A questionnaire survey was undertaken within the EPZ enterprises with non-managerial employees who are mainly involved in the production process. A simple random sampling method was used and about 216 sample responses were returned and usable. Data were analyzed using descriptive statistics, chi-square test and regression analysis to test the formulated hypotheses and the significance and reliability of the findings. The findings suggest QWL although is positively related to organizational performance but it is not significant as hypothesized. However, there is a positive and significant relationship between QWL and employees' job satisfaction. Finally, conclusion and policy implications are given.

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1. Introduction

Quality of Work Life (QWL) has become one of the important issues in manufacturing enterprises like EPZ and those outside of EPZ. More than 64 per cent of female workers are engaged in Dhaka EPZ and more than 90 per cent are worker level employees (Majumder, 2006). In term of working conditions, export-oriented enterprises are supposed to maintain their international standards. However, working conditions are changing by the force of technological advancement. In addition, it has been observed that technology has also changed the work culture in manufacturing enterprises (Mathur, 1989; Ratnam, 2001).

Technological innovation in the work process has evidently brought about higher level of product quality and volume of production (Rahman, 2005; Islam, 2002; Yussuf, 2008). The manufacturing systems are changed by the introduction of new machines and advanced technology as demanded by the global market. This new technology has changed the traditional production systems in the textile and garments/RMG enterprise by including capital-intensive technologies like as Computer Aided Design (CAD) and Computer Aided Manufacturing (CAM) to product textiles and garment for the international market (Mody, et. al., 1992; Wright, 1997; Indrasari, 1995). International markets are demanding high quality of products by new technology to satisfy the competitors. Technological changes in manufacturing process required working harder with newer skills (Islam, 2002). Employees however are still not comfortable in working with technology, this is because of the lack of needs-based training as well as the lack of on-the-job training. The basic philosophy of QWL is in regard to employee learning capability (Camman, 1984) and learning organization environment (Zain, 1999). Otherwise jobs become under threat and insecure, result in an increased level of employee dissatisfaction on work performance.

In the EPZ manufacturing enterprises, as mentioned earlier, a significant portion of workers, i.e., 64%, are women who work in the garments and textile enterprises with sub-standard working conditions and live in poor working facilities. They are not unionized and hence lack of bargaining power, even though unequal wage are prevailing among the men and women workers at different categories of enterprises. Moreover, Zohir (2007), in his report, stated that the minimum wage levels are set by BEPZA, but the Instruction Manual No.1 (GOB, 1989) is not followed by the employers where the employees' benefits are mentioned. In addition, women are getting wages less than men as different minimum wages are set in different enterprises. However, wage discrimination exists in the EPZ. The employers do not recognize this discrimination. Male workers are getting overtime benefits and other facilities (Zohir, 2007). But compare to outside EPZ enterprises, still they are in better working conditions. The basic needs have to be ensured

for work with high satisfaction, only then that firms can achieve their goal or targeted volume (Paul Majumder, 2006).

Paul Majumder (2006) stated that establishing EPZ is one of the strategies for Export-Oriented Industrialization (EOI) and found that growth of EPZ has a positive effect both on working conditions and employment generation. But, as per Bangladesh Export Processing Zone (BEPZA) policy, trade union is not allowed within export processing zone (Zohir, 2007).

Previous studies revealed that Export Processing Zones (EPZs) have become an important factor for economic enclaves particularly in employment generation, export diversification and investment creation. One of the important objectives of Industrial Policy of Bangladesh is employment generation and investment in export-oriented industries. In continuing that policy, EPZ is playing as a catalyst and economic instruments for attracting foreign direct investment, employment, foreign exchange earnings and technology transfer. In the age of globalization, the concept of EPZ has become more significant for economic growth. The numerical result shows that it has a dramatic increasing trend from 1975 with 25 countries and the numbers of EPZs were 79 to 116 countries and covering more than 3000 zones in 2003. As a result 42.0 million people are employed within those zones (Aggarwal, 2005).

In Dhaka Export Processing Zone, Zohir (2007) study states that labor law is strictly followed by the Zone authority, but still some of worker's age is below eighteen. In fact, when we conducted our survey for this study at EPZ, we found that there was a notice at almost every main gate of the enterprises that individuals below age 18 are not allowed to be recruited by the organization. EPZ enterprises used multiple sources of vacancies announcement, however, gate advertisement is more widely used than other sources. Moreover, it has been observed in our field survey that women participation is less in the managerial level.

In order to ensure good industrial relations in the DEPZ and the other zones BEPZA has issued two instructions manual for operating the enterprises (GOB, 1989). Instruction manual No. I (one) deals with terms and conditions of employment of workers and officers working in the EPZ, whilst Instruction manual No. II (two) deals with fixing minimum wages and other benefits of the workers engaged in different operating within Export Processing Zones in Bangladesh.

Quality of work life at EPZ is becoming an important issue, particularly in the garments and knitting manufacturing enterprises. Quality of work life encompasses working conditions, working time, mode of wages payment, health hazards issue, in a nutshell some of financial and non-financial benefits and management behavior towards workers. Daily national newspaper reported that the workers unrests that took place within EPZ enterprises and outside EPZ enterprises are related to workers quality of life. In fact, the issues related to QWL are as broad as the whole range of labor problems.

After the independence in 1972, Bangladesh was in economic crises in terms of industries, and employment. To accelerate the economic growth and to survive Bangladesh Government took initiative for setting up Export Processing Zone in 1978 as

a special economic zone. In 1983, the first EPZ was established and started its operation. By seeing successful operation, the second EPZ was set up in 1993 in Dhaka. In order to growing demand of the investors and the success of Chittagong and Dhaka Export Processing Zones, Bangladesh Government established 6 more EPZs in different regions of Bangladesh. Government approved an Executive Committee by the Parliament named Bangladesh Export Processing Zones Authority (BEPZA) Act-1980 and empowered for creation, development, operation and management of the Zones.

Presently 265 industrial units are in operation in Export Processing Zones of Bangladesh. Among these 103 industrial units are in Dhaka Export Processing Zone (Barua, 2008). Investors are from 33 different countries along with Japan, Korea, Hong Kong, Thailand, Taiwan, China, USA, UK, Ireland, Germany, Malaysia, Indonesia, France, Singapore, Italy, Sweden, UEA, India, Nepal and Pakistan who have invested in DEPZ.

The cumulative investment figure in EPZs up to January, 2008 is US\$ 1286.60 million. Out of this, the second highest investment US\$ 556.26 million is in Dhaka Export Processing Zone (BEPZA, 2008). Among the foreign investors, South Korea is on top of the list, followed by China, Japan, India, USA, UK, Taiwan, and Malaysia respectively. By looking at the country export performance, during the fiscal year 2006-2007 goods worth of US\$ 13,903.47 million were exported from Export Processing Zones. Among them goods worth of US\$ 5894.86 million was from Dhaka Export Processing Zone. During the current fiscal year 2007-2008, in the first half year goods worth has been exported which is 51% of the targeted amount. EPZs performance is not only in export, it has a great achievement in employment generation. Up to January, 2008 among the EPZs the employment was about 224,086 (BEPZA). Among them 75,768 was in Dhaka Export Processing Zone up to May, 2008 and the number was 76,177 in May 2007, the employee number has been decreased because of unrest among the workers (May, 2006 New Age, Daily News Paper, Dhaka, Bangladesh; BEPZA Bulletin). BEPZA is playing a vital role in employment generation as well as export. It has been noticed that among the employees in EPZs, about 64% are female. During 2005-2006, out of 100% total export from Bangladesh, EPZ contribution was 17.43%. On the other hand RMG & Knit export from EPZ share was 20.40%.

This study identifies factors that are associated with employees' job satisfaction and Quality of Work Life of Dhaka Export Processing Zone for organizational performance. The specific objectives of this study are: to identify the relationship between QWL and employees satisfactions as well as QWL and organizational performance.

2. How Quality of Work Life Affect Organizational Performance?

Quality of Work Life

Quality of work life is a concept of behavioral scientist, and the term was first introduced by Davis in 1972 (Mathur, 1989; Hian and Einstein, 1990). According Robins (1990) QWL is “a process by which an organization responds to employee needs by developing mechanisms to allow them to share fully in making the decisions that design their lives at work”. The key elements of QWL in the literature include job security, job satisfaction, better reward system, employee benefits, employee involvement and organizational

performance (Havlovic, 1991; Scobel, 1975). For the purpose of this study, QWL is defined as the favorable condition and environment of employees benefit, employees' welfare and management attitudes towards operational workers as well as employees in general.

Therefore, quality of life is sociological and psychological phenomenon, but sociologists are not putting their interest in industrial sector, where the workers are the core potential resource for organizational performance. In the workplace, the term 'QWL' is 'work in excellence' and 'working conditions' such as standards of living, life styles. Now the term has developed with the introduction of social compliance (SC) in the workplace. In the past decade, there was a trend to introduce ISO 9001, and ISO 14000, with the emphasis on product quality. Blishe and Atkinson (1978) have shown that there are two kinds of indicators for defining quality of life. One is an objective indicator, for example money and the other is subjective indicator, such as financial status, living standard, job etc. In a nutshell, objective indicators define as quality of life in terms of goods and while subjective indicators are defined as quality of life as perceived by individuals. Hankiss (1978) stated that 'quality of life' is not a sum of its component units. Quality of life is more than interaction, attitude, aspiration, fears, satisfaction or dissatisfaction thus it creates cross cultural similarities and dissimilarities.

The behavioural scientist Abrams (1973), Hall (1976), Andrews and Withey (1976), Campbell et al., (1976) and Blishe et al., (1975) believe and state their views of 'quality of work' that it is the combination of statistical and psychological factors. They assessed responsibility as subjectivity and the other people well-being as objective indicators.

Stone (1978) has stated in his paper on organic solidarity and life quality indicators that quality of life has been accepted by psychological factors. That has been considered as an individual satisfying or frustrating factors. Later, Mishra (1985) found in his study that age and length of service did not affect QWL. It was a function of income of the employees, income leads to high QWL, and higher level of education higher level of QWL.

QWL and organizational factors:

QWL practice involves acquiring, training, developing, motivating and appraising for the best performance of the employees as per organizational objectives. Indeed, core elements of QWL are of working conditions, employee job satisfaction, employees' behavioral aspects, and employees' financial and non-financial benefits, growth and development, and supervision (Lau & May, 1998; Hackman & Oldham, 1975; Taylor & Bowers, 1972).

Job satisfaction can be understood by explaining people want to come to work. Locke (1976) defined job satisfaction as "a positive emotional state resulting from the appraisal of one's job or job experiences". Though various researchers identified it in different ways and conclude that it's a combination of physiological, psychological and environmental circumstances, the result of this combination is a person's job satisfaction. Job satisfaction has significant affect on organizational performance in terms of wages,

salary, incentives, boss-subordinate relationships, company policy, promotion, job itself, co-worker relationship (hygiene factors) (Nash, 1985). Job satisfaction in recent year has become associated with quality of work life movement (<http://ezinearticles.com>).

It is well known that employee intrinsic motivation has an impact on organizational performance and Herzberg et al. (1959) had shown that motivated employees tend to performs better. Company need to find out the factors that influence employees' satisfaction and to ensure their quality of work life (Gilgeous, 1998). In this study we are measuring quality of work life by Herzberg hygiene factors.

Wage policy: Wage policy affects organizational performance. Wage policy is the core components to measure employees' satisfaction and quality of work life. Dhaka Export Processing Zone enterprises employer sets the wages, and the wages are varied enterprises to enterprises and job to job. Though EPZ has a set of instruction manual to sets the minimum wages some times employers were followed this instruction (GOB). Minimum wage level is reported in the following Box.

Box 1: Minimum Wages Applicable to the EPZ Workers		
Apprentice/Trainee	US\$22	TK. 1100/=
Unskilled	US\$35-38\$	TK. 1750-1900/=
Semi-skilled	US\$45-50\$	TK. 2250-2500/=
Skilled	US\$58-63\$	TK. 2900-3150/=
Source: Zohir (2007), BEPZA instruction II (1989).		

Company policy: Zohir (2007) has identified that financial benefit and social welfare, security and leave provisions has a positive impact on worker quality of work life. And these set of benefits has an impact on firm performance. Moreover, this research report (Zohir, 2007) stated that non-financial benefit has also the positive role for workers quality of life and firm performance. For example, canteen facilities, festival bonus, attendance bonus, transport facilities and wage increment.

Union: Eaton's (1990) studies indicated that there was a negative association between union involvement and QWL. But in the rank-and-file surveys, the focus has been principally on perceptions of the union's influence in the workplace and member's satisfaction with the union (Eaton et al., 1992). Zohir (2007) report suggested that for the bargaining point of view, DEPZ workers wanted to have worker's association in their enterprise. But in DEPZ trade union is prohibited, because of the closing threatening industry and withdraw investment from Japan, Korea and Taiwan (Eusuf et al., 2007).

Previous empirical studies have also suggested that the perception of management attitudes towards the benefits of workers in terms of worker welfare union, socialization, training and workers participation in decision making, trade union in EPZ has potentially negative impact on zone production, employment and exports (Muqtada et al. 2002). Moreover, the study stated that if the trade union right restored in DEPZ, it might difficult to organize trade union effectively, as DEPZ enterprises are mostly female dominants and female workers find a little time to spend on trade union activities. Zone recruitment mostly done by notice board advertisement and a very short interviews, and workers are drawn from rural unskilled female category, and they involved with learning

by doing, no formal training or socialization. In house training of workers is not available (Bhattacharya, 1998).

In the same vein, Muqtada et al. (2007) assert that workers had their common complaints related to wage and working conditions such as working hours, late attendance, and working lunch. Workers perceived that management always pays them (workers) inadequate wages and low overtime, few days of leave, long work hour without compensation and enterprises are very strict about late attendance. This complaint creates disputes and dissatisfaction at work. As workers have no structured labor-management consultation and negotiation, therefore complaints generate conflict and unrest in the zone. Communication mechanism in DEPZ is top-down. And workers have no role on making decision.

QWL and Organizational Performance

In Bangladesh EPZ, the concept of QWL is considered to be about improving working conditions of only higher level workers. No significant attempt has been made to explore QWL of the lower level workers. This study thus is the first attempt to do so. Based on the review of relevant literature, the following sets of hypotheses are formulated on the quality of work life in DEPZ.

$$OP = f \{ QWL, JS, WAGPOL, COMPOL, Union \}$$

$$JS = f \{ QWL, OP, WAGPOL, COMPOL, Union \}$$

Where:

OP = Organizational Performance

QWL = Quality of Work Life

JS = Employee Job Satisfaction

WAGPOL = Company wage policy

COMPOL = Company policy

UNION = Union

3. Research Method

Research site: Dhaka EPZ is the second largest according to the number of factories, investment and export and of course in terms of employment. It has been selected as the site for this research as the researcher has an access to this special economic zone. Dhaka EPZ has 265 enterprises in operation, and 35 under construction. It is 40 km. away from capital Dhaka city, 24 km from International Air Port and 330 from Chittagong Sea Port.

Survey Process and Procedure

Survey for non-managers: This survey is the partial results of the full-scale survey of the managerial level officers to collect data on organizational change and productivity improvement as an empirical study on Dhaka Export Processing Zone. There was a questionnaire set for non-managerial level employees so it is the by product of the main research. The researcher had a full scale survey on managerial level, with 53 enterprises

among all the A, B and C categories enterprises. By validating the data and information, we conducted a structure questionnaire survey. Simple random sampling method was used for collecting data. The sample size was 216. The data were collected during the July-August of 2008.

Measurement

Organizational performance: The variables regarding organizational performance were (Lau & May, 1998) measured by a 5-point Likert-scale ('1' strongly disagree to '5' strongly agree). The variables include the items of Q2, Q9, Q10, Q26, Q27, and Q28. Items details are in annexure.

Employees Job satisfaction: Job satisfaction was measured with five variables. Whereas, Hackman and Oldham (1980) measured job satisfaction with twelve items, in case of Bangladesh not all of them were relevant in the context of EPZ workers. These items were measured by a 5 point Likert scale ('1' Strongly disagree to '5' Strongly agree). Those items are: Q1, Q3, Q14, Q20, Q21, Q25 and Q29. Items details are in *Annexure*.

QWL: Quality of Work Life was measured with ten items (Hackman and Lawler, 1971). Those items are: Q8, Q11, Q12, Q13, Q22, Q23, Q30, Q31, Q32 and Q33. All those items were measured by using a 5-point Likert scale ('1' strongly disagree to '5' strongly agree). Items details are in *Annexure*.

Wage policy: The variables regarding wage policy in DEPZ enterprises were measured by two items by using a 5-point Likert scale. The items were Q4, Q5, Q15 and Q16 (see detail in *Annexure*).

Company policy: Company policy was measured with six variables. These variables items were measured by using a 5-point Likert scale. Those were Q6, Q7, Q19, and Q24. Items details are in *Annexure-G*.

Union: Union was measured with two items. These variable items were measured by using a 5-point Likert scale. These were Q17 and Q18. Items details are in *Annexure-G*.

Reliability: Reliability reflects the consistence of a set of items variables scale by measuring the concept in a particular. It illustrates the individuals differences concerning the amount of agreement or disagreement of the concept studied. In this study, reliability measurement is important to verify the variables consistencies through employee job satisfaction, quality of work life and organizational performance. Cronbach's alpha is computed using SPSS scale reliability programme for each set of constructs. The value of Cronbach's alpha is reported in Table 1.

Chronbach alpha reliability Table 1

Factor	Items	Cronbach's Alpha
Organizational performance	6	.3469
QWL	10	.3336
Job satisfaction	7	.6698
Company policy	4	.5825
Wage policy	4	.4391
Union	2	.2713
Overall 33 items	33	.8185

Statistical Analysis of Data

Collected data were analyzed by using statistical tools and the software used was SPSS 11.5 windows version for regression analysis, correlation analysis, and testing of the research hypotheses.

4. Data analysis, result and discussion

Survey findings showed that among the respondents, 63% were male and 37% were female (Table 2). From the job categories, there were 36.1% who were operators and 16.2% helpers. Actually, these are the majority within the Dhaka EPZ enterprises. It has been found that the mean value of service length is 2 to 3 years (71.3%). It indicates that most of workers have not been in the same job level for many years.

According to survey, Table 2, the mode of recruitment is dominated by gate recruitment (58.3%) where multiple sources of job vacancies announcement were circulated. One of the major findings in this survey is that a significant portion of the respondents (i.e., 94.4 %) opined that they are the appointment letter from the employer. It has been observed during survey time that workers are getting their appointment letter for six months as of their provisional/apprentice period. This practice of apprenticeship is almost absent in outside EPZ enterprises.

Table 2 Profile of Respondents

Employee Type	Number	Percentage
Male	137	63%
Female	79	37%
Total	216	100%
Position	Number	Percentage
Helper	35	16.2%
Operator	78	36.2%
Supervisor	34	15.7%
Production officer	35	16.2%
Quality Controller	16	7.4%
Issue Man/Girl	18	8.3%

Total		100%
Appoint letter	Number	Percentage
Received	204	94.4%
Not received	12	5.6%
Total	216	100%
Recruitment method	Number	Percentage
Media advertisement	0	0%
Gate advertisement	127	58.8%
Campus advertisement	13	6.0%
Referred	76	35.2%
Others (specify)	0	0%
Total	216	100%
Income (monthly)	Number	Percentage
Less than 2000TK.	0	0%
2001-3000TK.	53	24.5%
3001-4000TK.	80	37.0%
4001-5000TK.	50	23.1%
Above 5000TK.	33	15.3%
Total	216	100%
Age group	Number	Percentage
15-19	13	6.0%
20-24	92	42.6%
25-29	85	39.4%
30-34	25	11.6%
35-39	1	0.5%
Total	216	100%
Type of organization	Number	Percentage
A-Foreign own	137	63.4%
B-Joint venture	30	13.9%
C-Local own enterprises	49	22.7%
Total	216	100%
Length of service	Number	Percentage
1 Year	22	10.2%
2 Years	80	37.0%
3 Years	74	34.3%
4 Years	33	15.3%
5 Years	6	2.8%
6 Years	1	.5%
Total	216	100%

Source: Field study, 2008.

Chi-square (χ^2) Tables (Appendix A-F) shows that there are highly significant relationship between employees' job satisfaction, quality of work life (QWL) and organizational performance variables.

Table 3 Regression results testing the relationship between quality of work life and organizational performance/Model Summary

Model	R	R Square	Adjusted R Square	F change	Std. Error of the Estimate	Sig.
1	.754(a)	.569	.559	55.418	.31924	.000

a Predictors: (Constant), UNION, QWL, COMPOL, WAGPOL, JS

Regression result has been used to test the hypothesis 1 to measure with the variables of job satisfaction, wage policy, company policy, union, quality of work life and organizational performance. The correlation of coefficient is (+.754). The R-square adjusted is .559. Thus, the model composing of job satisfaction, company wage policy, company policy, union, and quality of work life can explain about 55.9% of the total variation in organizational performance and also the result is statistically significant at the level of .05.

Table 4 Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.160	.211		.760	.448
	QWL	-.132	.086	-.086	-1.537	.126
	JS	.485	.075	.400	6.429	.000
	WAGPOL	.380	.068	.337	5.616	.000
	COMPOL	.140	.051	.157	2.744	.007
	UNION	.079	.031	.119	2.513	.013

a Dependent Variable: Organizational Performance (OP)

Based on the sample size of DEPZ enterprises some of variables OP (organizational performance: Q2, Q9, Q10, Q26, Q27, and Q28), QWL (Quality of work life: Q8, Q11, Q12, Q13, Q22, Q23, Q30, Q31, Q32 and Q33), JS (Job satisfaction: Q1, Q3, Q14, Q20, Q21, Q25 and Q29), WAGPOL (wage policy: Q4, Q5, Q15 and Q16), COPOL (company policy: Q6, Q7, Q19, and Q24 and UNION (Union: Q17, Q18). QWL is not significant relationship with organizational performance. Job satisfaction is highly significant with organizational performance and the level of significant was 5%. It explained 40.0% of total variance. Wage policy has a positive and significant relationship with organizational performance at the level of .05 that explained 33.7% of total variance. Company policy has positive and significant relationship with organizational performance at the level of 5% that explained 15.7% of total variance. Union also has a positive relationship with organizational performance at the level of 5% that explained 11.9% of total variance. All the five variables in equation 1 is account for 92.7% of total variance. Result further revealed that QWL was not related to organizational performance.

Table 5 Regression results testing the relationship between quality of work life and employee job satisfaction/Model Summary

Model	R	R Square	Adjusted R Square	F	Std. Error of the Estimate	Sig.
1	.746(a)	.557	.546	52.761	.26711	.000

a Predictors: (Constant), UNION, QWL, COMPOL, OP, WAGPOL

Regression result has been used to test the relationship between the variables of organizational performance, wage policy, company policy, union, quality of work life and employee job satisfaction. The correlation of coefficient is (+.746). The R-square adjusted is .546. Thus, the variation in employee job satisfaction can be explained about 54.6% by the model consisting of organizational performance, company wage policy, company policy, union, and quality of work life (QWL) and also the result is statistically significant at the level of .05.

Table 6 Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.512	.173		2.958	.003
	OP	.339	.053	.411	6.429	.000
	QWL	.184	.071	.144	2.581	.011
	WAGPOL	.115	.060	.124	1.916	.057
	COMPOL	.171	.042	.231	4.079	.000
	UNION	.021	.026	.040	.811	.418

a Dependent Variable: Job Satisfaction

The coefficient Table 6 reports that organizational performance is highly positive significant relationship with employee job satisfaction and it has explained 41.1% of total variance. Similarly, QWL has a positive and significant relationship with employee job satisfaction at the level of .05, thus explained 14.4% of total variance. Wage policy also have a positive significant relationship with employees job satisfaction thus can explain 12.4% of total variance. Company policy is highly significant relationship with employees' job satisfaction at the level of .05 and thus explained 23.1% of total variance. Union has a positive relationship but not significant with employee job satisfaction. All the five variables in equation 2 is account for 94.7% of total variance. Result further revealed that QWL was related to employees' job satisfaction.

In sum, The Table 2 shows that EPZ enterprises are following ILO rules as they have no 'child labor' meaning thereby that labor law is strictly enforced and followed up by BEPZA and counselor. Mode of recruitment mostly followed by factory gate advertisement and referred. It has been observed that employees' are with formal recruitment letter by the enterprises, which fulfill their right. Descriptive statistics

(appendix-G) result indicates that female employee who has completed minimum of ten months service are entitled maternity leave with pay.

The empirical results reveal that QWL has a negative but not significant relationship with organizational performance. The quality of work life variables included company health and safety policy, worker free lunch, workers transport facility, maternal leave with salary for female workers, providing job related training, availability of leave, family life, living accommodation by employer, living in own hire house, and healthy & hygienic living accommodation. Thus the hypothesis on the positive relationship between QWL and organizational performance is not accepted. But this finding seems to suggest that for non-managerial and operational workers, quality of work life may not be as important as other factors as they still have to first satisfy their basic needs which can be achieved by having good wages and financial benefits, etc.

This study also revealed that quality of work life has a positive and significant relationship with employees' job satisfaction. Employees satisfactions items were included job safety & security, worker not afraid of losing job, worker satisfied with provident benefit, supportive supervisor, organizational induction, workers voice to top management, and satisfies with work related technology. It has been noticed that most of the variables have positive correlation with employees' satisfaction. As employees' job satisfaction is positively related to organizational performance, it is important that managers should try to develop a strong connection between quality of work life and employee job satisfaction and eventually organizational performance.

All the hypotheses are tested by using chi-square and regression. Hypothesis on the relationship between QWL and organizational performance is rejected and hypothesis on the relationship between QWL and employee job satisfaction is accepted at the 0.05 level of significance (see Tables 3 and 5 and appendix chi-square Tables). It has been identified that QWL has negatively and not significant relationship with organizational performance. On the other equation QWL has positively significant with employee job satisfaction.

In the first regression equation 1 job satisfaction, wage policy, company policy and union were positively significant with organizational performance (Table 4). This result revealed that organizational performance not only depends on quality of work life, more depends on employees' basic need (e.g. job satisfaction, wage policy, company policy, union). On the second regression equation 2 organizational performance, QWL, wage policy and company policy were positively significant relationship with employees' job satisfaction. Where, union was not significant relationship with job satisfaction (Table 6).

Conclusion

A large number of workers in DEPZ, Bangladesh are playing an exciting role for economic growth special focus on investment, employment and export. This study focused on to identify the factors those are associated with employees' job satisfaction and their quality of work life. More specific the study was to identify the relationship between QWL and employees' satisfactions as well as QWL and organizational

performance. Apart from that the coefficient table (Table 4) shows the employees' job satisfaction, wage policy, company policy and union also have a positive relationship with organizational performance in DEPZ enterprises.

For this study data were collected within foreign own enterprises, joint venture enterprises and local own enterprise from Dhaka Export Processing Zone. 216 respondents were in different level of job and all of were non-managerial level. Most of the enterprises were textile related enterprises. Respondents' views have been explored and tested by statistical tools (SPSS) and found all except QWL are positively associated with organizational performance. However, it is also found that QWL is positively and significantly related to employee job satisfaction. As employee job satisfaction is found significantly and positively related to organizational performance, it is thus implied that the EPZ managers should try to develop a stronger connection between the QWL and employee satisfaction and organizational performance. The potential findings reveal that workers wage are not determining by market rates. Housing accommodations are not provided by the employers and the accommodation allowances are very low. This is very hardship to get private accommodation with this allowances, this made dissatisfaction among the employees. Similar result reveals in profit bonus, production bonus, losing their job, availability of job, office transport facility, and family life as well free working lunch.

Moreover, result revealed that quality of work life toward workers development like as training, worker union, participation in decision making variables are with high standard deviation (see descriptive statistics Table in appendix-G) values that explained management should come forward to meet workers demand that have the positive impact on firm performance. The present study suggests that quality of work life practice in DEPZ is beneficial for the entrepreneur, management as well buyer point of view according to high performance of work and high satisfaction for worker as well.

Policy Implications:

- (a) Workers voice need to be addressed and participation in policy level decision making should be enhanced. Dialogue culture among the employer and employees needs to be introduced. It is an effective tool for organizational culture change and for performance improvement and also reduces the dissatisfaction and unrest of firm production.
- (b) Legal aspect and social compliance has to be reviewed and monitored regularly and correction measure to be taken in time to time.
- (c) Appointment letter has to be issued for all level employees and career prospect to be ensured.
- (d) Paternal leave to be introduced along with maternity leave benefits for women
- (e) Transport and housing facilities to be enhanced for all
- (f) To ensure Employees satisfaction and Quality of Work Life in EPZ enterprises. Employers need to embrace a certain level of employment security, job safety, free from job anxiety, reasonable wage, family day/leisure life, social life enjoyment opportunity, participation in decision making.
- (g) Team work activities to be developed for more productivity/performance/Training to be introduced in all level for performance and job satisfaction

- (h) Labor management supportive relationship and adopting life long welfare policies, top management forum on labor management cooperation to be organized like that in Japan for gain sharing and establishing partnership relationship between labor and management (APO, 1991; APO, 2000).
- (i) Less overtime, off day, and weekly working hours not more than 48 (6 days in a week).

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Appendix- A

Chi-square (χ^2) test for Organizational performance/Test Statistics

	Q2	Q9	Q10	Q26	Q27	Q28
Chi-Square(a,b)	150.259	116.824	146.269	87.750	240.667	128.306
df	3	4	4	4	4	4
Asymp. Sig.	.000	.000	.000	.000	.000	.000

a 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 54.0.
 b 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 43.2.

Appendix- B

Chi- square (χ^2) test for QWL/Test Statistics

	Q8	Q11	Q12	Q13	Q22	Q23	Q30	Q31	Q32	Q33
Chi-Square(a,b)	222.380	263.306	196.963	132.407	39.444	141.546	198.306	509.509	352.380	154.926
df	4	4	4	3	3	4	4	4	4	3
Asymp. Sig.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

a 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 43.2.
 b 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 54.0.

Appendix- C

Chi- square (χ^2) test for Job Satisfaction

	Q1	Q3	Q14	Q20	Q21	Q25	Q29
Chi-Square(a,b)	176.778	110.667	343.861	126.333	207.426	407.009	296.269

df	3	3	4	3	4	4	4
Asymp. Sig.	.000	.000	.000	.000	.000	.000	.000

a 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 54.0.
b 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 43.2.

Appendix- D

Chi-square (χ^2) test for Wage policy

	Q4	Q5	Q15	Q16
Chi-Square(a,b)	217.074	81.037	331.130	325.296
df	3	3	4	4
Asymp. Sig.	.000	.000	.000	.000

a 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 54.0.
b 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 43.2.

Appendix- E

Chi-square (χ^2) test for Company policy

	Q6	Q7	Q19	Q24
Chi-Square(a)	172.704	233.259	353.537	111.778
df	4	4	4	4
Asymp. Sig.	.000	.000	.000	.000

a 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 43.2.

Appendix- F

Chi-square (χ^2) test for Union

	Q17	Q18
Chi-Square(a,b)	110.481	62.935
df	3	4
Asymp. Sig.	.000	.000

a 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 54.0.
b 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 43.2.

Appendix-G

Abbreviation of questionnaire and Descriptive Statistics for all items

Items	Items Description	Mean	Std. Deviation
Q1	My job is safe and secure in this organization	3.27	.612
Q2	To me, not many workers quit or leave their jobs in this organization	2.15	.682
Q3	Workers are not afraid of losing their job	2.36	.728
Q4	I am getting wages according to my skill, knowledge, ability and experiences	3.11	.663
Q5	Worker's wage in my organization is determined according to the market rates	1.90	.806
Q6	My duty and responsibility is clear	3.31	.848
Q7	Workers are aware of company policy/organizational performance	3.21	.721
Q8	I am satisfied with my company health and safety policy	3.13	.761

Q9	Workers are getting overtime benefits	3.99	1.030
Q10	Workers are getting yearly profit benefits	1.88	1.036
Q11	Working lunch is free for workers	2.64	.687
Q12	Workers are getting transport facilities by my organization	2.48	.777
Q13	Female workers are getting their maternal leave with salary	4.02	.768
Q14	I am satisfied with Company provident fund	3.06	.615
Q15	My performance is evaluated and rewarded	2.82	.652
Q16	I am satisfied with performance related pay	2.84	.656
Q17	I am a member of labor union	2.56	.732
Q18	To me, worker association is a part of management	3.64	1.144
Q19	Work direction is clear and make sense	3.22	.613
Q20	My supervisor is very supportive	3.11	.707
Q21	I am satisfied with organizational induction/orientation/job related training	2.97	.780
Q22	Job related training programs are regularly provided by management	2.15	.974
Q23	Leave is available when required	1.90	.871
Q24	Workers are punished for mistakes	3.17	.998
Q25	Workers have the right to put their voice to top management	2.75	.602
Q26	We received attendance bonus	3.88	1.215
Q27	We receive production bonus	1.65	.922
Q28	Worker are getting 'Yearly wage increment'	4.06	.991
Q29	I am satisfied with work related technology	2.90	.727
Q30	I am living with family	1.84	1.005
Q31	Living accommodation is given by my organization	1.31	.721
Q32	I am living my hired house	4.47	.935
Q33	Living accommodation is healthy and hygienic	2.31	.641