### SECTION-109 OF BANGLADESH LABOR CODE, 2006: LAW AND PRACTICES AT THE GARMENTS IN DHAKA, BANGLADESH

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Garments sector is one of the most important vital sources of industrial employment in Bangladesh. One of the remarkable features of this sector is the entry of female workers. The objective of this study is to determine the practices of section-109 of Bangladesh Labor Code 2006 at the different garments in Bangladesh. Data are obtained from 520 female workers who are experiencing to work after 10pm at the different garments in Dhaka, Bangladesh. Frequency distribution has been utilized to explore the socio-economic and section-109 related characteristics of the respondents and finally, chi-square test and binary logistic regression analysis have been employed to estimate the existing relationships among the variables. In chi-square test only age and length of work are statistically strongly significant on the practices of section-109. In logistic regression analysis monthly income, length of work and level of skill have been played strongly significant role on the practices of section-109. Clearly, only 37% female workers work after 10pm by their own interest or by permission of her and others are worked by forced or without permission of her. To implement section-109 properly at the garments in Bangladesh, necessary actions should be taken urgently.

**Keywords:** Practices, Section-109, garments, chi-square test, binary logistic regression and Bangladesh.

### Introduction

Bangladesh Labor Code, 2006 is an Act for consolidating and amending laws regarding employment of workers, relationship between workers and employers, determination of minimum wages, payment of wages, compensation for injuries arising out of and in the course of employment, formation of trade unions, raising and resolving industrial dispute, health, safety, welfare and environment of employment of workers and apprenticeship and related issues (Paul, 2008). The fondness of a process that began in 1992, Bangladesh Labor Code 2006 was called as a milestone achievement for factory workers. The new law brought together 25 separate acts and ordinances passed over the three and a half decades since Bangladesh achieved independence, extending the scope and acceptability of labor regulations nationwide. The law promised to benefit workers by guaranteeing rights that were being violated on a regular basis by employers (WoW, 2009). In addition, the law set an employer deadline for payment of wages, raised compensation pay

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in cases of accidents in the workplace and established more robust health and safety codes for factories, and other related rights of the employment like limited working hours for female workers, night shifts, restriction or prohibition of employment of women in certain work, maternity benefit etc. This Law was passed by the Parliament and assented by the President on the 11<sup>th</sup> day of October, 2006. The main objective of this Law is to recover the laws for the workers from a ramified system that complicates the understanding of specific law for the specific purpose. This Act contains more than 350 sections. Section-109 is important section related to 'Limited working hours for the female workers'. It states that 'No female worker shall be allowed to work in any establishment from 10 O'clock at night to 06 O'clock in the morning without her permission' (Paul, 2008).

Garments sector has started its journey in the late of 1970s in Bangladesh (Robbani, 2000). Garments industry has a supreme importance in the economy of Bangladesh. About 80% of the total export of Bangladesh comes from this sector. In 2010-11, 78.15% of the total export was from this sector. Since 1996 to 2011, the total export of this sector has been increased substantially (BBS, 1991 & 1992). The level of employment was 2 million in 2007 with 24% growth of employment (Rahman et al., 2008) and it has generated employment opportunities for millions of women (Rahman and Anwar, 2007). At present, 3.60 million workers are working in this sector, whereas 85% are female (Islam et al., 2014). Female employment is increasing significantly which is attributed by the social development in Bangladesh (BBS, 1991 & 1992).

There is a rapid growth in industrialization especially garments. Thus, practices of labor law are urgent in these garments. Moreover, there is a growing concern of labor rights among the garments workers in Bangladesh, especially in female issues. Consequently workers involve with disputes and getting involved in violence protest to protect human rights (Uddin and Hahed, 2007). In order to fulfill production quotas many workers are forced to put in far more hours per day than is allowed under the law. Very often, most of the women workers work after 10pm at the different garments in Bangladesh either her permission or without her permission to meet the production targets. Consequently, various occurrences are occurring regularly. Therefore, it is very crucial to practice labor law which is related to the female workers to ensure and protect their rights and so, this study emphasizes on the practices of the section-109 to protect the human rights of women workers in the garments. Section-109 is the important section of Bangladesh Labor Code 2006 to protect the right of female workers at their work place. Thus, it is very much significant to conduct this study. In Bangladesh, such kinds of research are very poor. Consequently, the objective of this study is to appraise the practices of section -109 at the different garments in Dhaka, Bangladesh. In addition, to measure the factors which are correlated with the practices of this section is also important aim of the study.

### **Data and Methods**

This is a cross sectional study involving 520 female workers at the different garments in Dhaka, Bangladesh. Data on selected socio-economic variables and section-109 related factors have been collected through questionnaire method during January to May, 2014 from workers of different garments in Dhaka by purposive sampling technique. To fulfill the objective frequency distribution, chi-square test, binary logistic regression analysis, correct classification rate (CCR), and cross validity prediction power (CVPP) have been used in this study. Initially, frequency distribution has been used to explore socio-economic and section-109 related characteristics of the respondents and finally, chi-square test and binary logistic regression analysis have been employed to estimate the existing relationships among the variables. In this study age, monthly income, education, length of work and level of skill are considered as independent variables and practices of section-109 (Y) is considered as dependent variable. In logistic regression analysis, practices of section-109 (Y) are considered as dependent variable and it is classified into following classes:

$$Y = \begin{cases} 1, & \text{work after 10pm} \\ 0, & \text{otherwise} \end{cases}$$

The analyses of the data have been made using the statistical software SPSS-16.0 version.

To check how much the model is stable over the population, the cross validity prediction power (CVPP),  $p_{cv}^2$  is applied. Here

$$\rho_{cv}^2 = 1 - \frac{(n-1)(n-2)(n+1)}{n(n-k-1)(n-k-2)} (1 - R^2)$$

Where,  $\bf n$  is the number of cases,  $\bf k$  is the number of predictors in the model and the cross validated  $\bf R$  is the correlation between observed and predicted values of the dependent variable (Stevens, 1996). The shrinkage coefficient of the model is the positive value of  $(p^2_{cv} - {\bf R}^2)$ ; where  $p^2_{cv}$  is CVPP and  ${\bf R}^2$  is the coefficient of determination of the model. 1- Shrinkage is the stability of  ${\bf R}^2$  of the model. The information on model fitting and estimated CVPP has been demonstrated in the results and discussion section. CVPP was also employed as model validation (Islam, 2005; 2011; 2012a; 2012b; 2013; Islam and Hossain, 2013a; 2013b; Hossain and Islam, 2013; Islam et al., 2013 & Faroque et al., 2014a; 2014b)

### **Results and Discussions**

## Results of the Effects of Socio-economic Variable on Work after 10pm at the Different Garments in Bangladesh

The results of descriptive statistics have been demonstrated in table 1 where the frequency with percentage distribution of the selected socio-economic and

association with section-109 among the employees of different garments in Dhaka, Bangladesh is revealed. In chi-square test only respondents' age and length of work are statistically strongly significant on the section-109 at the different garments in Bangladesh. In table 1, it is observed that 48% workers work after 10pm whose age is 17-26 years and 52% whose age is 27 years and more. Again, 37% workers work after 10pm by their own interest and during this period they work by their permission and 63% workers work after 10pm without her permission and by force. But this force is not regular. Sometimes the garments force workers to work after 10pm to meet the production targets during the different occasions. It is also observed that age group 17-26 years workers are more forced to work after 10pm than age group 27 years and more. Because, 17-26 years workers are more active and their productivity is higher than aged 27 years and more. Length of work of the respondents is also important strongly significant factor in this study. 87% and 13% workers work after 10pm whose length of work is 1- 5years and more than five years respectively. Again, those who are new workers and whose length of work is 1-5 years, are forced more to work after 10pm than who are old workers or whose length of work are more than 5 years. Because, those who are less

TABLE1: RESULTS OF ASSOCIATION BETWEEN DIFFERENT SOCIO-ECONOMIC AND SECTION-109 RELATED CHARACTERISTICS AMONG WORKERS OF DIFFERENT GARMENTS IN DHAKA, BANGLADESH

Variables	Work after 10 pm		Total	% of work	x²cal and p Value
	With permission	Without permission			
Age					
17 - 26 years	82	168	250	48	$x^2 = 3.514$
27 years and more	110	160	270	52	P = 0.037
Total	192	328	520	100	
Monthly income					
Tk. 3000 - 7000	154	251	405	78	$x^2 = 0.954$
Tk. 7100 and more	38	77	115	22	P = 0.193
Total	192	328	520	100	
Education					
Class eight and below	145	258	403	78	$x^2 = 0.684$
More than class eight	47	70	117	22	P = 0.236
Total	192	328	520	100	
Length of work					
1 - 5 years	172	278	450	87	$x^2 = 2.423$
More than 5 years	20	50	70	13	P = 0.076
Total	192	328	520	100	
Level of skill					
Skilled	54	101	155	30	$x^2 = 0.412$
Unskilled	138	227	365	70	P=0.295
Total	192	328	520	100	

experienced, do not well aware about their rights and laws than higher experienced workers. To exploit new workers is very easy than older workers. These two variables are statistically strongly significant on the practices of section-109 at the different garments in Dhaka, Bangladesh.

# Determining the Factors Affecting on Work after 10pm at the Different Garments in Bangladesh

The results of binary logistic regression analysis have been depicted in table 2 which contains the estimate of binary logistic regression coefficient (β), standard error of estimates {S.E.(β)}, p-value and odds ratio with 95% confidence interval (C.I.) that are calculated for each of the categorical variable. According to the fitted model monthly income, length of work and level of skill have played statistically strongly significant role on the practices of section-109 at different garments in Bangladesh. Again, it is found from table 2 that -2Log likelihood is 683.391, Cox and Snell R square is 0.070, Nagelkerke R square is 0.093 in this model. It implies that there are 7% (according to the value of Cox and Snell R square) and 9.3% (according to the value of Nagelkerke R square) variation of the effect on the practices of section-109 by the selected variables.

In the table 2, monthly income has been appeared as an important strongly significant factor affecting the practices of section-109 at the different garments in Dhaka, Bangladesh. The regression coefficient for the respondent's monthly income Tk. 7100 and more is 0.480 and the corresponding odd ratio is 1.616 with (95% C. I. [1.043, 2.505]). The result depicts that the likelihood of affecting work after 10pm is 1.616 times more for the respondent's monthly income Tk. 7100 and more compared to the respondent's monthly income Tk. 3000 - 7000. Clearly, those who earn more are worked more after 10pm at the different garments in Bangladesh. Respondent's length of work is another important strongly significant factor affecting the practices of section-109 at the different garments in Dhaka. The regression coefficient for the respondent's length of work 5 years and more is 0.883 and the corresponding odd ratio is 2.419 with (95% C. I. [1.349, 4.337]). The result depicts that the likelihood of affecting work after 10pm is 2.419 times more for the respondent's length of work 5 years and more compared to the respondents' length of work 1-5 years. Clearly, those are more experienced are worked more after 10pm at the different garments in Bangladesh. Lastly, respondent's level of skill is most important strongly significant factor affecting the practices of section-109. The regression coefficient for the respondent's level of skill unskilled is 0.500 and the corresponding odd ratio is 1.649 with (95% C. I. [1.270, 2.141]). The result depicts that the likelihood of affecting work after 10pm is 1.649 times more for the respondent's level of skill unskilled compared to the respondents' level of skill skilled. Clearly, those who are unskilled are worked more after 10pm at the studied garments in Bangladesh. Thus, in the logistic regression analysis level of skill, length of work and monthly income have statistically strongly significant impact on the practices of section-109 respectively at the different garments in Dhaka, Bangladesh.

TABLE 2: RESULTS OF BINARY LOGISTIC REGRESSION ANALYSIS OF PRACTICES OF SECTION-109 BY SOME SELECTED FACTORS (1 = WORK AFTER 10PM)

Explanatory variables	Coefficient $s(\beta)$	S. E. of Estimates	p Value	Relative Risk	95% C. I. for {EXP(β)}	
				$\{EXP(\beta)\}$	Lower	Upper
Age						
17 - 26 years				1.000		
27 years and more	-0.208	0.168	0.216	0.812	0.584	1.129
Monthly Income						
Tk. 3000 - 7000				1.000		
Tk. 7100 and more	0.480	0.224	0.032	1.616	1.043	2.505
Education						
Class eight and below				1.000		
More than class eight	-0.083	0.213	0.697	0.920	0.606	1.397
Length of work						
1-5 Years				1.000		
More than 5 Years	0.883	0.298	0.003	2.419	1.349	4.337
Level of skill						
Skill				1.000		
Unskilled	0.500	0.133	0.000	1.649	1.270	2.141

-2 Log likelihood = 636.391 Cox & Snell R square = 0.070 Nagelkerke R square = 0.093

TABLE 3: RESULTS OF CORRECT CLASSIFICATION RATE (CCR) OF LOGISTIC MODEL

Observed	Predicted				
Work after 10 pm by Work after 10 pm own interest With permission		Without permission	Percentage Correct		
With permission	16	176	8.3		
Without permission	27	301	91.8		
Overall percentage			61.0		

a. The cut value is 0.500

### **Results of CCR**

Table 3 represents the correct classification rate (CCR) which has been used to measure the fitness of the model. If it is used 0.500 as the threshold or cut value, 0.61 has been found as the value of CCR. Since a model that affords better classification should be judged superior by the goodness of fit test that indirectly assesses the classification performance of the model. It has been concluded through classification performance that the fitted model may be used for prediction.

### **Results of CVPP**

The estimated CVPP and  $\mathbb{R}^2$  of the given logistic model are 0.073 and 0.070 respectively. The shrinkage coefficient of the model is 0.003 and the stability of  $\mathbb{R}^2$  of the model is more than 99%. Hence the fitted model is well due to the shrinkage coefficient. Therefore, from these statistics it is also concluded that the fit of the model is well.

#### Conclusions

In this study, 63% workers worked after 10pm by force or without her permission at the different garments in Dhaka, Bangladesh. So, section-109 does not implement properly at the studied garments. The result depicts that the likelihood of affecting work after 10pm is 1.616 times more for the respondent's monthly income Tk. 7100 and more compared to the respondent's monthly income Tk. 3000 – 7000; 2.419 times more for the respondent's length of work 5years and more compared to the respondents' length of work 1-5years; 1.649 times more for the respondent's level of skill unskilled compared to the respondents' level of skill skilled. Thus, proper authority as well as government should take necessary steps to implement section-109 promptly at the every garment in Bangladesh.

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