

CONTRIBUTION OF SOME BEHAVIOURAL FACTORS TO ABSENTEEISM OF MANUFACTURING WORKERS IN BANGLADESH[#]

Md. Ekramul Hoque & Md. Mayenul Islam

School of Business,
Bangladesh Open University
Gazipur, Bangladesh

The study was conducted to identify the impact of some behavioural and social factors on absenteeism of manufacturing workers in Bangladesh. It also examined the association of the demographic variables of the workers on absenteeism. The sample of the study was selected by using random number table consisted of 400 workers from four textile and four jute mills situated at Dhaka and Khulna divisions of Bangladesh. The study showed that: (i) absenteeism has significant positive correlation with job stress and negative correlation with job satisfaction and mental health; and (ii) non significant association was found between absenteeism and demographic variables except for the variables of wage and experience.

Absenteeism is a common form of wastage of human and material resources and requires scientific study and control. Absenteeism is the practice or habit of being an 'absentee'. It refers to a tendency on the part of the employees to remain away from work on flimsy grounds. Absenteeism is an omnipresent phenomenon and affects almost every type of organization. It has been recognized as a vital issue that affects the total management, discipline, and also quantity and quality of production of a firm. A high rate of absenteeism was found to be an important cause of loss in production in our manufacturing industry (Mannan, 1984). An effective use of full labour force engaged, is essential to reduce losses and for that absenteeism needs to be controlled and held down to the lowest possible level. It is a subject to be studied, matter to be thought over and problem to be solved. It requires immediate attention but it is often conveniently ignored. Unless it is taken care of at the right time, it spreads like an epidemic creating disciplinary problems. Therefore, understanding this problem is as important as understanding any other

[#] Correspondence concerning this article should be addressed to Md. Ekramul Hoque, School of Business, Bangladesh Open University, Gazipur-1705, Bangladesh. <ekram@bou.bangla.net>

important problems of an industry. Little or no in-depth studies have been done to see the influence of the behavioural and social factors on absenteeism of the workers of manufacturing industries in Bangladesh. So, there is a need to conduct a study in this area. The present study attempts to find out the impact of some behavioural and social factors such as job satisfaction, job stress, mental health, pay inequity, and personal and family life satisfaction on absenteeism of the manufacturing workers. Whether absenteeism of the workers differs with regard to their demographic variables (i.e., age, experience, education, wage, marital status, and number of dependents) were also investigated.

A number of studies have examined the relationship of absenteeism with job satisfaction, job stress, mental health, pay inequity, and family and personal life satisfaction. These studies show contradictory findings about the relationship between absenteeism and said factors. Fleishman, Harris, and Burt, (1955), Herzberg, Mansner, Peterson, and Chapwell, (1957), Hoque and Rahman, (1999), Hossain (1992), Khaleque (1979), Locke (1976), Nicholson, Brown, and Chadwick-Jones, (1976), Noland (1945), Rahman and Islam (1998), Rahman (2002) and Van Zelst and Kerr (1953), found a negative correlation between job satisfaction and absenteeism. Nicholson et al., (1976) also found no systematic relationship between absenteeism and the job satisfaction facets of pay, promotions, supervisors and coworkers.

Rahman (2002) in a study on 350 garment workers found significant positive correlation between absenteeism and job stress. He reported that the factors responsible for job stress include excessive workload, shortage of shipment time, shortage of workers, risky work, and shortage of machine.

Margolis, Kores, and Quinn (1974) reported that non participation at work was significantly related to several health risk factors, such as, poor physical health, escapist drinking, depressed mood, low self-esteem, low life satisfaction, low job satisfaction, low motivation to work, intention to leave job, and absenteeism from work. Mental health also influences sickness absence. Several studies have demonstrated a relationship between absence and psychoneurotic problems (Howell & Crown, 1971; Jenkins, 1980; Taylor, 1968; Tinning & Spry, 1981).

Mamoria (1992) reported that when people perceive an imbalance in their input-output ratio relative to other, tension is

created. It may result in lower productivity, more absenteeism, etc. Francis and Milbourn (1980) saw that pay dissatisfaction leads to two major consequences: (i) desire for more pay and (ii) a lowered attractiveness of the job. Pay dissatisfaction may also lead to absenteeism, turnover, overall job dissatisfaction, and a search for a higher paying job. According to Miner (1980) the employees may think of absenteeism as a way to reduce inequity.

The survey of working Canadians (Alice, Chair, Ross, Gardiver, & Meudal, 2001) found that workers experiencing high work/life conflict were found to have absenteeism rates three times higher than the workers with low work/life conflict.

Very few studies have been carried out in socioeconomic context of Bangladesh. Most of the studies focus on the cost of absenteeism and the impact of some demographic and socioeconomic variables on absenteeism.

The present study attempts to achieve the following specific objectives:

- (a) To measure the influence of such specific behavioural and social factors as job satisfaction, job stress, mental health, pay inequity, and personal and family life satisfaction on absenteeism of the workers.
- (b) To examine whether absenteeism is related to some demographic variables such as age, experience, education, wage, skill, marital status, and number of dependents of the workers; and
- (c) To make suggestions for managerial policy implications in the light of the findings of the present study.

In the light of the review of relevant literature the following hypotheses were framed for verification through empirical investigation:

- (a) Job satisfaction has significant negative correlation with absenteeism of the workers.

- (b) The higher the job stress, the higher the absenteeism of the workers.
- (c) Mental health tends to have significant negative impact on absenteeism of the workers.
- (d) The higher the pay inequity as perceived by the workers, the higher the absenteeism of the workers.
- (e) The higher the perceived degree of satisfaction of the workers with their personal and family life, the lower their absenteeism.

The description of the variables are as follows.

Independent Variables:

- Demographic Variables: Age, Experience, Education, Wage, Skill, Marital status, and Number of dependents.
- Behavioural and Social Factors: Job satisfaction, Job stress, Mental health, Pay inequity, and Personal and Family Life Satisfaction.

Dependent Variable:

- Absenteeism

METHOD

Sample

The study was conducted on four textile mills and four jute mills situated in Dhaka and Khulna industrial belt of Bangladesh. The sample consisted of a total of 400 workers selected randomly from the eight mills, taking 50 workers from each mill. In selecting the samples, lists of the workers of each mill were prepared with the help of the Time Offices (which keep records of the time of entry and exit of each worker working in the mill under different shifts) of each mill. Serial numbers were assigned to the names of the workers in the list of each mill and 50 workers were drawn out of the list of each mill using Random Number Table. Thus, 400 workers were sampled out from a total number of 11,306 workers of these eight mills.

The age of the sampled workers of the textile and the jute mills taken together ranged from 18 to 70 years, the mean age was 37.18 years. The experience of the sample of workers ranged from 1 to 44 years. The mean experience of the workers was 13.78 years. Their educational qualification varied from illiterate to higher secondary level. Their monthly wages ranged from Tk.1000 to Tk.5000. The monthly average wage of the workers was Tk.2315.80. Among the sample, 68.2 per cent were skilled and 31.8 per cent were unskilled, and 93.0 per cent were married and only 7.0 per cent were unmarried. The number of dependents ranged from 1 to 9. The average number of dependents was 5.44.

Instruments

To collect data for the present study, the following measuring instruments were used.

Brayfield-Rothe Scale for Measuring Job Satisfaction

To measure overall job satisfaction, the Bengali version of the Brayfield-Rothe Scale for measuring job satisfaction (Brayfield & Rothe, 1951) was used in this study. This is the widely used scale for measuring job satisfaction of the employees. It consisted of 18 items in relation to job satisfaction. Each item could be replied by checking any one of the five response categories, "strongly agree", "agree", "undecided", "disagree", and "strongly disagree." The items were selected in such a way that the satisfied end of the scale was indicated by "strongly agree" and "agree" for one half of the items and by "strongly disagree" and "disagree" for other half. The scoring weight for each item ranged from 1 to 5 and the possible total scores varied from 18 to 90 with the undecided or neutral point at 54. A total score on or above the neutral point represents job satisfaction and a score falling below this point represents "dissatisfaction". Khaleque (1979) reported a correlation coefficient of .63 between Brayfield-Rothe Scale and Job Descriptive Index.

The Scale for Measuring Job Stress

To measure the perceived job stress of the respondents, a single item 5-point scale consisting of a simple statement ("Is your job stressful?") was used (Hossain, 1995). The respondents indicate their

feeling of stress by checking any one of the five categories of answers ranging from “not at all stressful” (1) to extremely stressful (5). Higher scores indicate higher job stress and vice versa.

Goldberg Health Questionnaire for Measuring Mental Health

Mental health of the respondents was measured using the Goldberg Health Questionnaire (GHQ, Goldberg, 1978) originally developed by Goldberg (1972) to identify individuals with minor emotional illness by assessing the severity of their emotional disturbance. The GHQ is designed as a self administered mental health screening test. The original development of the instrument (Goldberg, 1972) resulted in a 60 item version with the ‘best’ 30, 20, and 12 of these items being identified for use where respondents’ time is at a premium. In the present study the 12-item version was used with 4 points Likert scaling. The responses were given weights of 0, 1, 2 and 3 for ‘not at all’, ‘somewhat’, ‘to a considerable extent’, and ‘to a great extent’ respectively, with higher scores as indicative of better mental health. Banks et. al., (1980) used it as an indicator of mental health in occupational studies and found that it provides a useful estimate of mental health in employment related and occupational problems. The development studies (Goldberg, 1972) showed high internal consistency (0.65), test-retest reliability (0.73) and validity in terms of a good linear relationship with clinical check-up records as the criteria $r = .70$.

Scale for Measuring Pay Inequity

This scale consisted of two items, selected from relevant literature (Nadler, Camman, & Lawler, 1975). The scale was constructed to measure the degree of perceived inequity with regard to pay of the workers. This was done by adding the values of the workers’ responses to two items on a 5-point scale ranging from “not at all agree” (1) to “extremely agree” (5). The score, thus, obtained represents the perceived degree of the workers’ pay-inequity. The two items are:

1. My pay is less considering what other people in this organization are paid.
2. My pay is less considering what other organizations in this area pay.

Test retest reliability coefficient of the scale was $r = .78$, which was highly significant ($p < .001$).

Scale for Measuring Personal Life and Family Life Satisfaction

To measure the perceived degree of satisfaction of the workers with their personal life and family life a 5-point scale was used (Hoque, 1996). The subjects indicate their feeling of satisfaction by checking any one of the five categories of responses ranging from “not at all agree” (1) to “extremely agree” (5). The score obtained represents the perceived degree of workers’ personal life and family life satisfaction. The items are:

1. I am really satisfied with my personal life.
2. I am really satisfied with my family life.

Test-retest reliability coefficient of the scale was $r = .63$, which was highly significant ($p < .001$).

Measure of Absenteeism

The absenteeism related data were obtained from the factory records for a period from July 2000 to June 2001. For absence records the labour officer of each mill was requested to give the total number of days a particular worker remained absent from his work without the permission of the authority.

RESULTS AND DISCUSSION

Chi-square, Pearson’s product moment correlation coefficient, multiple regression and descriptive statistical procedures were used to analysis the data.

Table 1

Chi-square Analysis showing association between Absenteeism and Demographic Variables of the Workers (N = 400)

Variables	Chi-square	df	p
Age	0.98	3	ns
Experience	1.52	2	.015
Education	3.50	2	ns
Wage	7.82	2	.008
Skill	0.17	1	ns
Marital Status	1.44	1	ns
Number of Dependent	0.36	2	ns

ns = non significant

To see the association of demographic variables with absenteeism, chi-square was computed. The results in Table 1 show non significant effect of age on absenteeism. Consistent result was found in other studies (Godoureck, 1965; Haque, 1991; Hoque & Rahman, 1999; Hossain, 1995; Sharma, 1970, Singhal, 1976). The results also show that experience has significant effect on absenteeism of the workers. Leigh (1986), Hossain (1995), and Hoque and Rahman (1999) also found similar results, indicating that absenteeism is more among the workers with higher work experience than the workers with lower work experience. It is observed in Table 1 that there is non significant association between education and absenteeism. The results suggest that absenteeism does not differ according to level of education of the workers. Hoque and Rahman (1999) found that absenteeism did not appear to be associated with the levels of education of the workers. The results in Table 1 further indicate that wage has significant effect on absenteeism of the workers. Drago and Wooden (1992), Hoque and Rahman (1999) reveals that absenteeism is higher among the higher salaried employees than the lower salaried employees. The results in Table 1 further show that skill has non significant effect on absenteeism. The results suggest that absenteeism does not differ according to skill level. Sharma (1970) also found similar results indicating that skill has no relation with absenteeism of the workers. The results in Table

1 reveal that there is non significant association between marital status and absenteeism. It suggests that marital status is not a significant factor in determining the proneness of a worker for absenteeism. The results in Table 1 further indicate that there is non significant relationship between absenteeism and number of dependents. Vaid (1967) also found that dependence load per earner was identical in the 'chronic absentees' group and the 'extremely regular' work group. The results suggest that regularity in work attendance does not appear to be influenced by the number of dependents.

Table 2

Correlation between Perceived Job Satisfaction, Job Stress, Mental Health, Pay Inequity and Personal and Family Life Satisfaction and Absenteeism of the Manufacturing Workers of Bangladesh (N=400)

Variables	I	II	III	IV	V
I. Absenteeism	-				
II. Job satisfaction	-.33**	-			
III. Job stress	.29**	-.26**	-		
IV. Mental health	-.34**	.31**	-.46**	-	
V. Personal & family life satisfaction	-.03	.167**	-.004	.07	-.26**

* $p < .05$; ** $p < .01$

The results in Table 2 show that absenteeism has significant positive correlation with job stress, and negative correlation with job satisfaction and mental health. Absenteeism was found to have non significant correlation with pay inequity and personal and family life satisfaction of the workers. Khaleque (1979), Nicholson, et al., (1976), Rahman and Islam (1998) and Rahman (2002) found significant negative correlation between job satisfaction and absenteeism. Rajeshwari (1992) reported that excess job stress encourages the employees to go on periodic self-declared vacations in the form of absenteeism. Parkes (1987) reported that the majority of sickness episodes causing absence from work were due not to life-threatening illness, but to less serious health problems. Several studies have demonstrated a relationship between absence and psychoneurotic

problems (Taylor, 1968; Tinning & Spry, 1981). All these findings support the findings of the present study.

It is observed from the results (Table 2) that the degree of perceived pay inequity has non significant correlation with absenteeism of the workers. The results however, show that pay inequity has significant negative correlation with job satisfaction. The results suggest that the workers' perception of inequity regarding their pay may have indirect impact on absenteeism, which is a negative correlate of job satisfaction. Perceived personal and family life satisfaction was found to have non significant correlation with absenteeism of the workers. The results further show that personal and family life satisfaction has significant positive correlation with job satisfaction of the workers, which is found to have significant negative correlation with absenteeism of the workers. It indicates that personal and family life satisfaction has an indirect impact on absenteeism of the workers. Khaleque and Rahman (1987) showed that satisfaction with family and social life had positive influence on the overall job satisfaction of the workers.

Table 3

Summary of Stepwise Multiple Regression: Dependent Variable-Absenteeism (N=400).

Variables in the Equation	Multiple ^R	R ²	F	P	Beta	t	p
1. Mental health	.337	.1136	50.99	.000	-.172	-3.36	.000
2. Job satisfaction	.413	.1703	40.73	.000	-.175	-3.57	.000
3: Job stress	.474	.2247	28.62	.000	.156	3.10	.002

Results in Table 3 show that after adhering to the given statistical criteria, three of the independent variables were entered in the equation and the order of their inclusion was as follows: Mental health, job satisfaction, and job stress. As each additional variable was entered, the multiple R and R² increased. This indicates that mental health, job satisfaction, and job stress were the best set of predictors of absenteeism having a combined contribution of about 22.47 per cent. Allowing one of the independent variables to operate while controlling for the other variables in the equation, it was found that job stress (beta = .156) had positive contribution on absenteeism while the contribution of mental

health ($\beta = -.172$) and job satisfaction ($\beta = -.175$) was negative. The individual contribution of these variables was, however, statistically significant.

CONCLUSIONS

Several major conclusions emerged from the present study:

1. Absenteeism has significant positive correlation with job stress, and negative correlation with job satisfaction and mental health of the workers.
2. Mental health is found to be the highest negative contributor to absenteeism of the workers. Job satisfaction contributes negatively to absenteeism, while the contribution of job stress to absenteeism is positive.
3. As to the association of demographic variables (i.e., age, experience, education, wage, skill, marital status, and number of dependents) with absenteeism of the workers, non significant association was found except for the variables of wage and experience.

Absenteeism rates in manufacturing industries of Bangladesh needs to be controlled and held down to the lowest possible level. Though absenteeism can not be rooted out from the industries, yet management should give adequate attention to the problem of absenteeism, and take necessary steps to reduce it to a minimum. Job satisfaction, job stress, and mental health are significant contributing factors to absenteeism. Behavioural factors (job satisfaction, job stress, and mental health) are found to have more decisive impact on absenteeism of the workers than the demographic variables. Behavioural factors are more under the control of the management than the demographic variables. Hence, it may be suggested that more emphasis be given on the behavioural factors than the demographic variables for reducing absenteeism. The finding may have implication for managerial practices. In order to reduce absenteeism of the workers it is essential to lay emphasis on enhancing job satisfaction and mental health and reducing job stress of the workers.

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