Reinforcing Recruitment and Selection in Public Sector Manufacturing corporations of Bangladesh: A case study on Bangladesh Chemical Industries Corporation (BCIC)

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ABSTRACT

The Success of Public sector Manufacturing Corporations to a greater extent depends on the quality manpower. But the Recruitment & Selection process of the largest manufacturing Corporation Bangladesh Chemical Industries Corporation (BCIC) is not effective. Because there is no manpower planning, Job analysis and Recruitment & Selection policy to engage right people for the right job.

This research identifies the Problems and highlights the issues to reinforce the existing Recruitment & Selection Process of BCIC for attracting and Selecting Skilled and Knowledgeable Personnel.

Key words: Recruitment, Selection, Problems, Policy.

INTRODUCTION

(Report of the Task Forces 1990's) Bangladesh Chemical Industries Corporation (BCIC) is the largest public sector Corporation of the county. It came into being on $\mathbf{1}^{st}$ July, 1976 as per ordinance XXV of 1976 through a merger of erstwhile Bangladesh Fertilizer, Chemical & Pharmaceutical Corporation, Bangladesh Paper and Board Corporation and Bangladesh Tanneries Corporation which were formed earlier through the Presidential order-27 (Bangladesh Industrial Enterprises Nationalization order-27 of 1972)

(Annual Report Bangladesh Chemical Industries Corporation 2004-2005) Bangladesh Chemical Industries Corporation is a Semi-Autonomous Body with a Board of Directors consisting of one Chairman and five functional directors directly appointed by the Govt. of the Peoples Republic of Bangladesh. The Chairman is the chief Executive of the Corporation. The structure of BCIC head office is given in figure number 1.1. The rules & regulations of the Corporation are directly governed by the Govt. the business affairs of the enterprises under the Corporation are supervised, monitored & regulated through a Company/Enterprises Board. The vital policy and decision making matters are within the purview of the Board of Directors as per guidelines of the Government. Corporation plays a vital role in the management of the enterprises under its control and for establishment and development of new industrial enterprises. Factories and products produced by BCIC are shown in table number 1.1. Presenly BCIC has large and medium

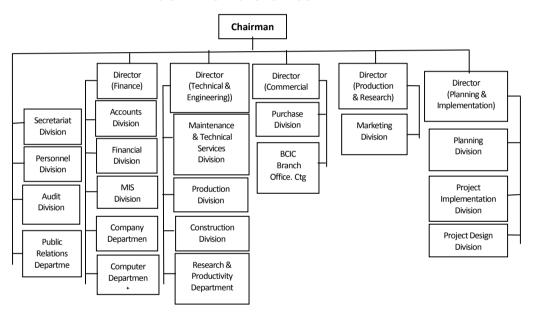
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sized total 13 Industries. (The facts on the ground collected through surveys, observation, Interviews, Office files etc.) Total manpower of BCIC is 11702. Out of this 2675 officers, 3849 staff, permanent worker 5219 and casual worker is 1750. Engineer, chemist, charted accountant MBA and other professionals are also included in this manpower. BCIC officers are under four cadres. Namely-

- General cadre.
- Finance cadre.
- Commercial cadre.
- · Technical cadre.

BCIC HEAD OFFICE ORGANOGRAM



Public sector manufacturing Corporations have significant role in the sustainable development of the country. (Rahman 1993) The expenses of establishment and operating expenditure of

public sector Corporations in Bangladesh is very high but productivity and services of these corporations like BCIC do not met the expected level due to various problems. Specially for attracting and selecting quality people through recruitment and selection,

(Report of the Task Forces 1990's) One of the most important reason is that the existing recruitment and selection of BCIC is not effective.

(Chisty 1985) To ensure the role of the public sector manufacturing corporation like BCIC right personnel are to be engaged for the right job.

OBJECTIVE

Field of this research is recruitment and selection of Bangladesh Chemical Industries corporation (BCIC). The objective of this study is to reinforce recruitment and selection process so that meritorious, qualified and skilled manpower can be recruited & selected to achieve the goal of BCIC.

Table number 1.1 Factories and products of BCIC

Name of the Factory	Name of the Product
Fertilizer Sector:	Urea
Chittagong Urea Fertilizer Company Ltd	
Jamuna Fertilizer Company Ltd	Urea
Asugang Fertilizer Company Ltd	Urea
Urea Fertilizer Factory Ltd	Urea
Polash Urea Fertilizer Factory Ltd	Urea
Natural Gas Fertilizer Factory Ltd	Urea
TSP Complex Ltd.	TSP
DAP Fertilizer Company Ltd	SSP
Paper Sector:	Paper
Karnaphuli Paper Mills Ltd.	
Khulna Hardboard Mills Ltd.	Hardboard
Other Sector:	Cement
Chhatak Cement Co. Ltd	
Usmania Glass Sheet Factory Ltd	Glass Sheet
Bangladesh Insulator & Sanitary Were Factory Ltd	Sanitary Were Insulator

LITERATURE REVIEW

There are probably as many definitions of recruitment and selection as there are books on this subject. Many of these definitions are relatively concise and often simplistic. Widely accepted definitions are- (Flippo 1978) Recruitment is the process of searching for prospective employees and stimulating them to apply for job in the organization. (Robbins 1978) Recruitment is the discovering of potential applicants for actual or

(Robbins 1978) Recruitment is the discovering of potential applicants for actual or anticipated organizational vacancies. Or from another perspective, it can be looked at the linking activity bringing together those with jobs and those seeking jobs.

(Werther and davis 1989) Recruitment process begins when new recruits are sought and ends when their applications are selected. (Dessler 2005) Responsibility for recruitment usually belongs to the personnel department. (Price 2007) This responsibility is

important because the quality of an organization's human resources depends on the quality of its recruits. (Nancevich 2004) Recruiters work to find and attract capable applicants. (NOE, Hollen beck, Gerhart and wright 2004) Job descriptions and job specifications provide the needed information upon which the recruitment process rests.

(Aswathapa 2008) Recruitment is a five-step process. The steps are (i) planning, (ii) strategy development, (iii) searching, (iv) screening, and (v) evaluation and control. Figure number 1.2 illustrates recruitment process and figure number 1.3 (page 10) illustrates the sources of recruitment.

(Werther and davis 1989) Both external as well as internal factors would govern the recruitment process. Demand and supply of specific skills, unemployment rate, labour-market conditions, legal and political considerations, and the company's image are the external factors.

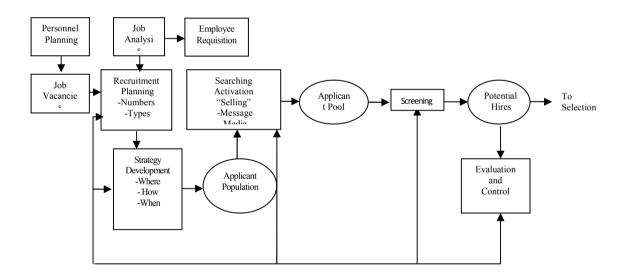


Figure number 1.2: Recruitment Process

Among the internal factors are recruiting policy of the organization, decision to have temporary and part-time employees, Human resource planning (HRP), size of the organization, cost of recruitment, and growth and expansion phase.

The philosophy of attracting as many applicants as possible for given jobs guided recruitment activities in the past. These days the emphasis is on matching the needs of the organization to the needs of the applicants. This would minimize employee turnover

and enhance satisfaction. Realistic job preview and job compatibility questionnaire help achieve this.

(Yoder 1972) Selection is the process by which candidates for employment are divided into two classes those who will be offered employment and those who will not. (Chruden & Sherman 1976) Personnel selection is the process of determining from the applicants for employment which ones best fit the manpower requirement and should be offered positions in the organization. (Welhrich & Koontz 1985) Selection is the process of choosing from the candidates, from within the organization or from outside, the most suitable person for the current position or for the future positions. (Jucious 1979) The Selection procedure is the system of functions and devices adopted in a given company for the purpose of ascertaining whether or not candidate posses the qualifications called for by a specific job. (Flippo 1984) Selection is the choosing an individual to hire from all those who have been recruited. Hence selection is dependent upon and follows recruitment. (Werther and Davis 1989) The selection process depends heavily upon inputs such as job analysis, human resource plans, and recruitment. These inputs are used within the challenges posed by a finite supply of labor, ethical Considerations, credential distortion, organizational policies, equal employment laws, immigration and Naturalization service rules and other legal concerns faced by organization.

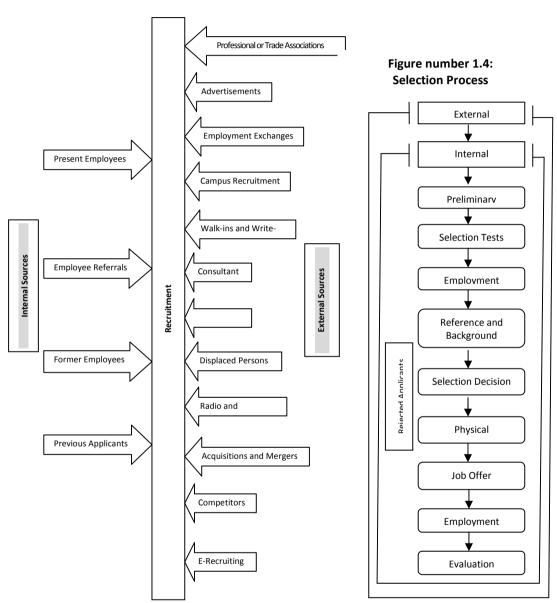
The key challenges that underlie the entire selection process are to secure qualified employees and to provide equal employment opportunity. In all phases of the selection process, personnel professionals must be concerned about the potential for adverse impact among the various steps of the selection process. Even when the overall selection process does not show an adverse impact upon members of protected classes, evidence of a discriminary impact at any step in the process should be investigated and the discrimination eliminated where found. (Aswathappa K 2008) The selection process begins when recruits apply for employment and ends with the hiring decision. Selection process is shown in figure number 1.4 (page 10).

METHODOLOGY

An intensive literature review has been done at the beginning of the study. Focusing on the main objective a survey has been carried out. Total sample number was 100. Stratification of sample size is shown in the table no.1.2. Only officers are included in the sample of this study. This survey includes the issues concerning how officers are recruited in their job and selected; what are the recruitment and selection polices, rules and regulations. It also includes service rules, annual reports, various government

gazettes and notifications of concern ministries, decision of the Board of Governors, office order, relevant previous files; recruitment and selection related information's of BCIC library.

Figure number 1.3 : Sources of Recruitment



To collect sample, officers at various levels have been provided close ended as well as open ended questionnaire. There are 24 questions in the questionnaire. 1-10 are related

to personal information of the respondents (not shown here). From No. 11-24 are recruitment and selection related questions. Among the sample 22 candidates are interviewed. It is notable that in some cases respondents did not provide any answer and documents. Therefore, hopefully this endeavor will become a value added source to formulate decisions relating to recruitment and selection polices.

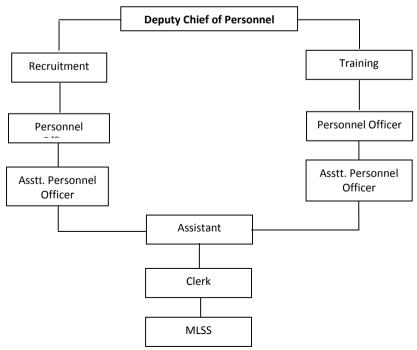
Departmental Departmental **Employees of** Mid and Candidates Total heads of the heads of the personnel entry level interested to factories of BCIC head office of division officers of have job in BCIC BCIC BCIC 20 15 20 30 15 100

Table number 1.2 categories of sample

Recruitment and selection Structure and system:

In BCIC there is no independent department for recruitment and selection. The recruitment and selection activities operated under purview of Recruitment and Training department. Head of this department is a Deputy General Manager. He is designated as deputy Chief of Personnel. He is locally trained only, did not get any foreign training. This department consists of fine officers and four staffs. All these officers and staffs are not working for the recruitment and selection only rather they also look after the training activities. A schematic structure has been shown in Figure number 1.5.

Figure number 1.5: Recruitment and selection Structure of Head Office



Recruitment and selection system:

Recruitment and selection of BCIC carried out on the basis of the following guide lines:

- (1) Establishment manual chapter I, Volume, I of Ministry of Public Administration.
- (2) Recruitment related latest amendments, Ordinance, orders.
- (3) BCIC Service Rule-1988.
- (4) Board decisions related to recruitment of BCIC.
- (5) Latest pay Scale of the government of Bangladesh.

Recruitment and selection is performed by the recruitment and training department under personnel division of BCIC.

At the advent of requirement of manpower on account of creation of new posts, dismissal. separation for the resignation, retirement. termination. the division/departmental heads and enterprise heads submit requisition to the personnel division for providing personnel. On receipt of manpower requisition both from the different division of BCIC head office as well as enterprises, the personnel division, after scrutiny and proper examination prepares a list for such requirements of personnel and places the same before the chairman of BCIC for his approval for filling up the posts through recruitment and selection. After approval from the chairman, the personnel division further processes the procedure for recruitment as per rule. BCIC recruit personnel from both the (a) External and (b) Internal Sources.

Recruitment from External Sources:

The facts on the ground collected through surveys, observation, interviews, office files etc. Recruitment is made only against the sanctioned and vacant posts. For the purpose of direct recruitment, posts with job specification, qualification, experience etc. are widely be advertised in the national dailies after obtaining necessary clearance from the Ministry (in case of those recruitment upon which embargo has been imposes by the Government.

Application for job shall be made in the prescribed application form or in plain paper supporting with crossed postal Order/Bank Draft of an amount and other required papers as specified in the advertisement. Departmental candidates are also allowed to apply, if they have required eligibility for the job advertised. On receipt of the applications, the personnel division thoroughly scrutinizes the applications received and prepares a comprehensive list for the written examination. who pass in the examination are then called for interview. The respective standing selection committee (S.S.C) conducts the interview and recommend for final selection. There are five standing

selection committee (S.S.C). Structure of S.S.C is given in table number 1.3 to 1.7 On the basis of recommendation of the S.S.C the suitable candidates are appointed on probation for a period of six months.

During the probationary period, the candidates are required to undergo training in different Dept/Section, especially in the Department for which they are selected. After successful completion of probationary period, the candidates are absorbed in regular services of the corporation.

Table number 1.3 Composition of Standing Selection Committee No-1 (For the post of senior General Manager/Managing Director)

i.	Senior most director, BCIC	Chairman
ii.	All directors, BCIC	Member
iii.	Joint secretary Ministry of Industries Govt. of Bangladesh	Member
iv.	Chief of personnel, BCIC	Member Secretary

Table number 1.4 Composition of Standing Selection Committee No-2 (In case of selection of candidates in the scale of Taka 43000-69850/- and above)

i.	Senior most director, BCIC	: Chairman	
ii.	Functional director, BCIC	: Member	
iii.	Another director nominated by the	: Member	
	chairman, BCIC		
iv.	Deputy secretary, Ministry of	: Member	
	Industries Govt. of Bangladesh.		
٧.	One external specialist nominated by	: Member	
	the chairman, BCIC		
vi.	Chief of personnel, BCIC	Member secretary	

Table number 1.5 Composition of Standing Selection Committee No-3 (In case of selection of candidates in the scale of Taka 22000 -53060/- and above)

i.	One director, nominated by the	: Chairman
	chairman, BCIC	
ii.	Functional director, BCIC	: Member
iii.	One representative from the	: Member
	Ministry of Industries not bellow	
	the rank of deputy secretary	
iv.	One divisional head, nominated by	: Member
	the chairman, BCIC	
٧.	Chief of Personnel, BCIC	Member secretary

Table number 1.6 Composition of Standing Selection Committee No-4 For BCIC (Head Office)

(Staff to staff and staff to junior Officer)

i.	Secretary, BCIC	: Chairman
ii.	Controller of accounts BCIC	: Member
iii.	One divisional head, nominated	: Member
	by the chairman, BCIC	
iv.	Chief of personnel, BCIC	Member secretary
٧.	One representative from the	: Member
	Ministry of Industries in the	
	rank of Senior Asstt. secretary	

Table number 1.7 Composition of Standing Selection Committee No-5 (In case of selection of candidates of all categories of staff and workers of Enterprise)

i.	Head of the respective enterprise	: Chairman	
ii.	Head of the concerned division	: Member	
iii.	Head of the accounts division	: Member	
iv.	Head of the administration division	: Member	
٧.	One representative from the BCIC	: Member	
	head of office not below the rank		
	of manager.		

Recruitment from Internal sources:

Recruitment is also made from in service employees by promotion. Selection of such eligible employees for promotion is made on the basis of recommendation of the respective standing selection committee. Seniority and merit are taken into account for promotion.

In BCIC Service Rule, there is no mention of any standard system of performance appraisal. The performance appraisal is done by the form of ACR which is commonly known as "Annual Confidential Report"/

In BCIC head office performance of an officer/employee is evaluated by his controlling officer and is countersigned by the head of the respective department/division, An officer/employee do not have access to his/her evaluation report but he is informed of adverse remarks relating to his defects, if any, in order to give him opportunity to explain his position or to rectify himself. It is done once in a calendar year for the preceding year. The item of evaluation is 20 in number in case of officer. There are also 5 (Five) rating scale column against each field of evaluation viz. Excellent, Good, Average, below Average & Poor. The rather by putting his initial sign on the rating scale column of the ACR form evaluates the performance of the rated person.

RESULTS AND ANALYSIS

relaxation.

In the question number 11 respondents were asked that whether there is any recruitment and selection policy in BCIC. In response to the above mentioned question most of the respondents (84%) answered affirmatively. But survey findings are different. Actually there is no recruitment and selection policy in BCIC.

Responding to the question number 12 most of the respondents (78%) said that there is provision. Research showed that there is no demand based job analysis in BCIC.

In the question number 13 majorities of the respondents (87%) answered that there is independent department for conducting recruitment and selection in BCIC. Research found this incorrect.

In response to the question number 14 in the questionnaire, respondents (88%) answered that there is adequate manpower for conducting recruitment and selection activities. In the research it is found that manpower is inadequate.

In question number 15 the respondents were asked, should there be any position of director personnel like other directors. Most of the respondents (93%) said yes. This finding is same as the research finding.

In the question number 16 respondents were asked about the media which attracts prospective employees for applying the vacant job. Majorities of the respondents (91%) answered about the advertisement in the daily newspaper. Research found this correct. Respondents were asked in the question number 17 whether the quota system is followed in recruitment and selection. Most of the respondents (81%) answered that quota system followed. But research found that quota system is not followed properly. In response to the question number 18 most of the respondents (69%) responded that there is relaxation of age limit for internal candidate and 21% answered that there is no

age relaxation. 10% did not answer. In the research it is found that there is no age

Respondents were asked about the priority of cadre in recruitment in BCIC. (96%) replied that technical cadre are given priority. 4% said no cadre is given any priority. Research findings showed that technical cadre got the priority in recruitment of BCIC. Respondents were asked in question number 19 about the basis of promotion in BCIC. 68% respondents answered that the basis of promotion is merit and seniority. Research found this correct.

In response to the question number 20 when respondents were asked whether promotion criteria has been informed to the candidates before their promotion (77%) respondents replied that they do not have such prior information. Research found the same.

In question number 21 respondents were asked whether there is any marks allocation for training in promotion policy. (72%) answered that no marks allocation exists. Research found that there is no marks allocation for training in promotion policy. In question number 22 respondents were asked whether they are informed about the selection criteria of a position before call for promotion. 70% answered that they are not informed. Research found this correct.

Table showing the answers of questionnaire (Annexure-1) Answers:

Question No	Yes	No	No Response
11	84	12	04
12	78	20	02
13	87	09	04
14	88	06	08
15	93	02	05
16	91	03	06
17	81	12	07
18	69	20	11
19	96	04	00
20	68	15	17
21	77	19	04
22	05	70	25
23	79	12	09
24	60	22	18

In response to the question number 23 respondents were asked that whether psychological test is conducted by professional in Selection process. Majority respondents 79% answered that there is no such test in selection process. Research found that there is no psychological test.

In response to the question number 24 when respondents were asked about the fairness of recruitment and promotion process then 60% replied that the process is not that much fair. Research found this correct.

FINDINGS AND RECOMMENDATION

There is no recruitment and selection policy in BCIC. Actually there is no human resource planning in the corporation. Positions are filled-up when they become vacant. As a result, no recruitment and selection taken place on a planned basis. Therefore, it can be said that recruitment and selection of BCIC is not systematic and not effective. Being one of the largest production oriented corporations, functions of BCIC is getting technical day by day. Also there are continuous changes in the technology and process

which lead to continuous change in job nature. To perform such jobs more educated, skilled and competent employees are required. Job analysis is not done in relation to the existing demand of the work environment. Thus opportunity for selection of skilled and competent people is getting lean gradually.

Job analysis need to be revised and improved in the light of demand by the Skill levels. In this connection personnel records must be complete, up-to-date and readily available and the degree of accuracy is required to meet the changing environment.

Though there is a quota for recruitment but that is not well maintained. Specially women quota. Therefore, quota system should not be ignored for equity.

Although there is no relaxation of age limit for internal candidates but there should be provision of age relaxation. As because candidates those were not eligible at the entrance of their service eventually many of acquired accrued their necessary qualification, experiences and training to be eligible for the higher position. In this regard candidate would have find opportunity to proceed on their career.

BCIC has four different cadre of officers. But of technical cadre people gets the highest priority. The recruitment of other cadres does not get due importance. The study however, showed that though technical cadre gets the priority, the priority should also be attached to the other cadre as well.

Most people do not have any idea about the indicators of getting promotion. As a result, many employees despite their higher level of intellectual ability do not get the attention of the departmental promotion committee.

Performance appraisal at BCIC is influenced by many Ways. In addition to that lack of knowledge and training of supervisor really makes the selection of competent employees difficult.

Promotion criteria for respective promotion to be well circulated to the employees. So, that the employee can have the opportunity to develop accordingly.

In the case of promotion there is certain discreminary cases. It is said employees of head office, personnel division and BCIC Board, along with people working directly with the authority are being privileged in the case of being promoted.

In BCIC there is a tendency to fill up the posts by promotion than to recruit directly. As a result people having merit. Innovative idea and dynamicity cannot enter to the organization which is a big hindrance for development.

Training is imparted without need assessment of the employees in BCIC. As a result, potential candidates for promotion do not have relevant training. Moreover, training is not valued in promotion policy. Hence, employees are not interested about receiving training. Absence of training makes an employee less effective on the job. It needs to be

mentioned here that employee placement Is not done following the education background of the employees. It leads to demotivation of employees.

At present many promotee officers are holding important positions in different departments of BCIC. Specially in head office. In a way encouraging but limitations of such personnel irrespective of their attitude and behavior do not bring any success in the policy formulation and implementation.

We know while selecting employees psychological tests are conducted to determine the intelligence, tendency, interest, personality, ability, behavior, motivation etc. of a candidate. Since recruitment and Selection is not done professionally in BCIC the whole process is based on individual judgment which has no scientific basis. All steps of selection process should be followed for recruitment and selection.

It is to be noted that there is no independent department/ branch in the Corporation for operating recruitment activities. The department responsible for recruitment and selection is named as Recruitment and Training department. Structurally this department is under the control of personnel division. Because of absence of independent structure importance of recruitment activities have not yet been realized. Therefore, for effective recruitment and selection independent department need to be established in BCIC.

There is a trend to engage less competent personnel in Recruitment and Training department and more eligible persons are posted in other departments. Officers who are responsible for recruitment and selection have no relevant qualifications. Specially educational qualifications are also deficient among senior personnel engaged in recruitment and selection activities. Moreover, they are promoted from non managerial positions. All officers and staffs who are working in this department are not working dedicatedly for recruitment and selection only rather they also look after the training activities. The concerned authority should impose immense importance for developing effective recruitment and selection structure. Eligible and properly qualified personnel should be placed in recruitment structure for conducting recruitment activates. Besides number of recruitment personnel should be increased. There is no post of Director personnel in the organogram of BCIC. So recruitment and selection activities become less important compared to other departmental activities. Naturally, like in other department there should be director personnel for the recruitment department.

Although a structure and system exists for recruitment and selection but still political interference, nepotism and favoritism hinders the objective of hiring the right people. Nepotism, favoritism and political interference should be prevented to make the recruitment and selection fair.

CONCLUSION

The problems related to the recruitment and selection of BCIC cannot be solved overnight. If this sectors are given due importance and accordingly if necessary measures are taken, then public sector manufacturing corporations would achieve their desirable goal. To do so, the issue should be considered as an investment. The policy making and policy implementation bodies would have to change their paradigm, so that integrated initiative is taken without any hindrance.

REFERENCES

Annual Report 2004-2005, Bangladesh Chemical Industries Corporation, MIS and PR Division BCIC, Dhaka.

Aswathappa, K (2008), Human Resource and Personnel Management, Tata McGraw-Hill, New Delhi.

Chisty, Shamsul Haque Md. (1985), 'The Experience of Bangladesh – Privatization Policies Methods and Procedures', Asian Development Bank, Manila.

Chruden, Herbert J. and Sherman Arthur W. (1976), Managing Human Resources, South-Western Publishing Co. NY.

Dessler Gary (2005), Human Resource Management Pearson Education Inc. New Jersey.

Flippo Edwin B (1984), Personnel Management, McGraw Hill Company, Boston.

Ivancevich, M John (2004), Human Resource Management, Mc Graw-Hill Companies, NewYork.

Jucious Michael J (1979), Personnel Management, Irwin Inc. Homewood Illinois,

Koontz, H. O. Donnel and K. Weihrich (1985), Principles of Management, McGraw-Hill Company, New York.

Rahman, M Shamsur (1993), Adhunik Loke Proshation, Bangla Academy, Dhaka.

Robbins, Stephen P (1978), Personnel: The Management of Human Resources, Prentice-Hall, Englewood Cliffs.

Report of the Task Forces on Bangladesh Development Strategies for the 1990's, Managing the Development Process, Volume Two.

Recruitment & Selection in Public Sector. Ahmed D. P., (2015), Management Development, 29(3&4)

Price Alan (2007), Human Resource Management in a Business context, Cengage learning India Private Limited, New Delhi.

Noe, A Roymond, Hollen Beck RJohn, Gerhart Barry and Wright M Patrick (2004), Fundamentals of Human Resource Management, The Mcgraw-Hill Companies, Inc. NewYork.

The facts on the ground collected through surveys, observation, Interviews, Office files etc.

Werther and Davis Keith (1989), Human Resources and Personnel Management McGraw-Hill. Inc. New York.

Yoder Dale (1972), Personnel Management and Industrial Relations, Prentice Hall India Private Ltd., New Delhi.

Corruption In Bangladesh: Root Causes, Implications and Remedial Suggestions

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1. Introduction

Corruption is as old as human society, which literally means a broken object. Theoretically, it is a form of behavior departed from expected ethics, morality, tradition, laws and civil virtue. Corruption means committing crime and mischief to the country. It is a social malady that can harm any sector of the country. According to the equation discovered by Professor Robert Cligaurd of South Africa: Corruption = monopoly + Discretion – Accountability – Salary.

2. Root Causes of Corruption

Nature and extent of corruption vary from country to country. But its root causes are almost same, which includes: lack of patriotism; poverty; poor administrative structures and governance; weak judicial, legislative and regulatory frameworks; inadequate education; massive unemployment; crack in cultural and social value systems, inadequate remuneration for government officials, political unrest; too broad discretionary powers of civil servants, absence of neutral monitoring, and lack of accountability and transparency.

3. Prevailing State of Corruption in Bangladesh

Corruption Perception Index released by the Berlin-based Transparency International reported that Bangladesh is in the list of the countries where corruption is perceived to be highest in the world. This country was ranked on top of the list for five successive years from 2001 to 2005, while it became third in 2006 and seventh in 2007. Transparency International Bangladesh (TIB) have also demonstrated the depth and breadth of corruption in Bangladesh and according to their Corruption Perceptions Index Bangladesh ranks 139th least corrupt nation out of 175 countries in 2015. However, Survey conducted on extent of corruption in different sectors reveals that highest proportion (72.2%) interacted with or received services from education sector, followed by electricity (60.0%), health (44.9%) and NGOs (39.6%). Around

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one-fourth of households interacted with different institutions under land administration while around 11% households had interactions with law enforcement agencies and the judiciary.

4. Analysis of Corruption in Bangladesh from Various Perspectives

- (a) Political perspective: lack of transparency in the activities of political parties is liable for storming corruption in Bangladesh. The condition reminds us one of the proverbs: "A person having no principle enters into politics". It has become literally true in this country. Corruption is increasing here not only due to lack of transparency but also because of poor practice of democracy within the political parties.
- **(b) Sociological perspective:** social corruption aggravates due to lack of trust between family members, dishonesty in educational institutions, misinterpretation of religious prescriptions by the so called religious leaders and involvement in different anti-social activities by social organizations.
- **(c) Economical perspective:** corruption is still present in Bangladesh in the spheres of trade and commerce and construction of economic infrastructure and in the inclination to use politics for own interest.

5. Who are liable for Corruption in Bangladesh

Prevailing state of corruption and its analysis from various perspectives clearly indicates that corruption has become a complex multi-faceted social phenomenon in Bangladesh. It takes place as an outcome of deficiencies in the existing public administration apparatuses and systems as well as cultural, economic, political and social factors. The liability of aggravated corruption can be fixed upon various segments of the society including the politicians, civil servants, business community, judiciary and law enforcing agencies, service providers of both public and private sectors etc. However, common people who have no control over social or political power structure are not anyway blameworthy for corruption.

6. How Public Sector Corruption affects the Development Process in Bangladesh

Development process in Bangladesh is largely dependent on the role public sectors duly administered by the civil servants. Since the civil servants are provided with power and authority to execute national policies to the end of development, their deviated performance may ruin the services and achievements of public sector. If the civil servants are deviated from expected ethics, morality and laws in performing their responsibility, public sector will be collapsed resulting set back or backward direction in development process.

7. Role of Civil Servant to Curb Pervasive Corruption in Bangladesh

Civil servants can play the most vital role to curb pervasive corruption in Bangladesh. If they are professional and well-motivated and guided by moral ethics and law and perform their responsibility without compromising with threat, pressure and greed, corruption will be protected automatically. This kind of civil service will emerge if the selection and promotion is based on merit rather than patronage. We can reasonably assume that a well-performing civil service will not only resist corruption but also protect the integrity in government system through proper evaluation of tender and bids, performance and audits.

8. Can lack of Patriotism be one of the Causes of Corruption

Lack of Patriotism is undoubtedly one of the root causes of corruption. According to the opinions of most of the sociologists, lack of patriotism is not only a cause but the most terrible cause of corruption.

9. Corruption in Bangladesh: Remedial Suggestions

Considering corruption as the biggest threat to development we can adopt following measures to get rid of it: (a) Inspiration for Civil Servants towards Patriotism; (b) Establishment of Good Governance; (c) Eradication of Poverty; (d) Arrangement of more opportunities for Employment; (e) Establishment of Rules of Law; (f) Expansion of Education; (g) Reduction of Political Unrest; (h) Enhancement of Remuneration of Public Servants considering the market price; (i) Restoration of Cultural and Social Value Systems; (j) Establishment of Neutral Monitoring System; and (k) Establishment of Accountability and Transparency at all levels.

REFERENCES

Dr. Abdullah Al Faruque (2010), Essential of Legal Research, Palal Prokashoni, Dhaka -1000

Dr. Mizanur Rahman (2007), Human Right and Corruption, Palal Prokashoni, Aziz Market, Shahbag, Dhaka.

www.assignmentpoint.com/arts/social-science/corruption-bangladesh.html, Accessed on 18.03.2016

www1.worldbank.org/publicsector/anticorruption/corruption/cor06.htm, Accessed on 19.03.2016

Building Peaceful World through Marketing Practices

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ABSTRACT

The attempt of this article is to identify the role of marketing practice in all kinds of organization and individual level of the world in building a peaceful world. This research shows that all individuals and organizations in society are offering numerous tangible and intangible products in solving problems of human in the world. Thus marketing as a social process is continuously trying to eliminate problems from the society to keep the world in peace. But some shot of unethical marketing practice in economical or commercial organizations are creating conflict in society as well as the world. In fact, a large number of non-profit social and political organizations are also marketing services to control unethical marketing practice of these organizations. However, the evolving of brand image of marketing is calling for ethical practice of marketing. This research has identified that people those who are involved in economic and social activities, all they are marketing something for others to solve their problems under a social process in the world knowingly or unknowingly using marketing tools. It is observed that the cross functional marketing activities of all individuals and organizations are involved to rectify the problems of the world. Therefore, problem free world would be a peaceful world. As the conclusion of this study, all individuals, commercial, political and social organizations of the world should practice formal marketing philosophy in building a peaceful world.

Key words: Problem, Solution, Product, Conflict, Marketing, World Socio-economic Organizations, World peace

INTRODUCTION

World peace is an idea of freedom, peace, and happiness among and within all nations and/or people. World peace is an idea of planetary non-violence by which nations willingly cooperate, either voluntarily or by virtue of a system of governance that prevents warfare. The term is sometimes used to refer to a termination of all hostility amongst all humanity. Peace, like many theoretical terms are difficult to define, like happiness, harmony, justice and freedom, peace is something we often recognize by its absence. In this connection, the cross-functional marketing activities of the world is

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playing and significant role silently to terminate the problems in society for human happiness, justice and freedom. "Marketing is a societal process by which individuals and groups obtain what they want and need through creating, offerings and freely exchanging of products and services of value with others" (Kotler 2002). In this view, people those who are involved in economic activities are marketing something for earning money either individually or in groups of the world. In the broader perspective of marketing, offering solutions of problems are the main objective of marketing. "Problem free people" means happy people. The anatomy of peace is conflict/unhappiness and there is a correlation between problem and conflict. In this connection, where problem is solved, peace is keeping. On the other hand, Marketing is the planning and executing of the conception, pricing, promotion and distribution of ideas, goods and services that create exchanges to satisfy the individual and organizational goals. -American Marketing Association (AMA). In this view, all products and services are basically ideas which are being served on numerous platforms. Hence, marketing means generating new ideas, making and implementing plans to satisfy the individual and organizational goals. The other meaning of marketing is building and maintaining relationship between two parties or even countries by offering products or services, donations, foreign loans technological supports, political supports etc. For an example, there was a problem between Israel and Palestine. Syria offers a proposal on the basis of an idea to solve the problem to the conflicting countries by highlighting the benefits of the offering. When these two countries are convinced on the benefits of the offering through communication, they accept the offering as a solution of the problem caused conflict. As a result, there is a peace. In this context, the bundle of benefits of the proposal is a product, Syria is a marketer, Israel and Palestine are the market, and the efforts of convincing the conflicting countries are the marketing communication and accepting the proposal is delivering the product. Another major cause of conflict is poverty. Marketing system in a society of a country as well as the world is identifying needs and wants and inventing solution by setting up cottage, medium and larger industries or agricultural farms where employment is generating and poverty is eliminating. Thus poverty related conflicts are being solved in the world.

World-peace is problematic. Because, solving some problems for ensuring problems and conflicts free society, new problems and conflicts take place in the societies, countries as well as the world. Generally, problems and conflicts free country is a peaceful country, similarly, problems and conflicts free world is a peaceful world. In the new economy, marketing concept is disseminating at all types of organizations through offering different types of offerings to solve the social and economic problems in a country. All marketing efforts in the society of any country are product centered.

Product means anything that can be offered to a market for solving a problem or a bundle of benefits to solve a problem. Sometimes it is said that every product is a problem solving packet. Products may be tangible or intangible. Individuals or groups in the society offer either tangible goods or services to solve numerous problems domestically or internationally. There are conflicts everywhere in the world. In fact, problems are responsible for conflicts. The main functions of marketing are to identify a problem through conducting marketing research, creating something to solve the problem, communication with the group of people those are suffering from the problem and finally, serving the solution in the target group of people to solve the problem. Conflicts are generating from problems. Suppose poverty sometimes may be the cause of conflict which is a major problem in Bangladesh. If the country undertakes such programs which will create job opportunities for this group of people, the workless people will not make conflicts specially to satisfy their material needs. (Spicker 2007) classifies various definitions of poverty into three broad categories according to Material need, Economic position and Social relations. These are the major causes of antipeaceful world. The marketing system across the world is trying to meet the material needs by offering numerous goods, semi durable goods and durable goods by ensuring efficient use of limited resources under the public and private industries and encouraging individual entrepreneurship. On the other hand, firm products under agricultural sector, agro-based industry of a country are marketing by individual farmers to solve the feeding problems as well as the world. UN Food and Agriculture Organization are undertaking and designing different programs to solve the world food crisis related problems. Additionally, low income and little education have shown to be strong predictors of a range of physical and mental health problems, Education in higher socio-economic families is typically stressed as a more important in topic in the household and local community. In poorer areas, where food and safety are priority, education can take a backseat. Youth audiences are particularly at risk for many health and social issues in any country, such as unwanted pregnancies drug abuse and obesity. A large number of government organizations and NGOs are trying to solve these socioeconomic problems designing various projects and programs for creating and delivering related services and goods to the nation as a whole. In abstract, peaceful world is dependent on the public and private economic and social organizations which are properly marketing their offerings throughout all countries of the world. On the other hand, different categories of NGOs are playing an important role to solve the socioeconomic problems related conflicts in the society throughout the world by offering and successfully implementing their marketing programs in the respective group of people under non-profit marketing. Hence, Marketing is the analysis, planning, implementation

and control of carefully formulated programs designed to bring about voluntary exchanges of values with target markets for the purpose of achieving organizational objectives. (Andresen 1982) On the other hand, social marketing concept is playing another important role in the societies by changing the behavior in favor of peaceful society. Hence, Social marketing seeks to influence social behaviors not to benefit the marketer but to benefit the target audience and the general society. Effective campaign of marketing communication can change the human behavior even culture. Suppose, communal politics in the world is the most influencing factor of bloody warfare. If the benefits of non-communal nation is highlighted avoiding the demerits of communal nation in the global perspective, the behavior of a nation would be changed. Therefore, this behavioral change might be helpful for peaceful world. Thus social marketing campaign is an important tool to bring about positive behavioral change from all the social violence and conflicts creating causes related behavior. Political cause related violence and conflicts are another major factor of anti-peaceful world. Political marketing and political services marketing by complying the terms and conditions imposed by UN (non-profit organization for peace) can keep the world peace-oriented. Consumer rights concept of marketing are ensuring the consumer autonomy and freedom to make the decisions in considering the solutions of the problems offered by numerous commercial, political, economical, and other social cause related organizations in a country as well as the world. This marketing effort ensures the social justice for peace building.

The role of Media in marketing like satellite television, FM radio, Social Media like face book, twitter, Skype, Google, etc. and mobile are playing an important role in peacekeeping by changing behavior of the people of the world. For retaining consumer or customer, branding concept of marketing is ensuring the ethical practice and stander of living through delivering the right products at the right places and right price. From the view point of marketing, around us, everything is marketing and marketing is everything (McKenna 1991). How much the social system of marketing is playing an important role in peace building of the world. To get this answer, stop the all marketing activities of the world at individual and organizational levels where there is no food, no security, no education, no medical treatment, and no relationship among the countries of the world and no income generating activities of people. This experiment might be the best measuring technique to prove the marketing role in peace building of a country as well as the world. At present, using communal feeling in politics, poverty, economic position of the countries, human rights, social justice, natural disasters etc. all these problems are the major causes of the world conflicts which can be solved by using marketing concept. Because all commercial and social organizations are directly or

indirectly trying to change the behavior of the people or society as a whole and offering problem solutions in favor of a peaceful world. Only problem free society throughout the world can be a peaceful world.

LETURATURE REVIEW

Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large. (Approved July 2013). In analyzing the given definition that all types of organization in the world have specific offerings in numerous target groups of people (customers, clients, partners and society). These organizations may be commercial, social or political in the world. They are identifying problems of the society and creating, communicating, delivering, and exchanging offering values for specific group of people or market. The societal happiness, standard of living and problem free society are depending on the cross-functional marketing activities of these institutions of the world (Galtung 1964) a founder of peace studies and peace research, has proposed the important distinction between "Positive" and "Negative" peace. "Positive" peace denotes the simultaneous presence of many desirable states of mind and society, such as harmony, justice, equity, and so on. "Negative" peace has historically denoted the "absence of war" and other forms of large-scale violent human conflict. In this connection, all economical, social and political organizations directly or indirectly identifying the social problems and offering values to solve and satisfy the desirable states of mind and society. People became unhappy when they failed to fulfill their desire. The cross-functional marketing activities of the world are continuously involved in identifying the people's desire or problems and creating, communication, delivering and exchanging solutions by offerings of values to satisfy their state of mind for happiness and inner peace. There are some unethical practices in marketing system in society but a large number of social institutes like Human Rights, Consumer Association, NGOs, government agencies and agencies of United Nations (UN) are continuously undertaking marketing programs for various services to prevent these practices for desirable society. In fact, branding concept in marketing has evolved to discourage the unethical marketing practice for ensuring best satisfaction and making desirable society for happiness. In political services marketing, a political organization or alliance is winning power by exchanging political product (basic principle + past performance + election manifesto) to serve the nation by setting large number of government's institutions. (Datta 2014) These institutions are creating, delivering, communicating and exchanging voluntary and compulsory services targeting specific

present and potential voter-markets. The executive body of any form of government directly or indirectly controlling the marketing activities of all public, private level economical, social and political organizations of a country. On the other hand each legislator body or parliament of a state as an institution is creating and offering laws targeting certain groups of people to ensure justice, equity and keeping the society in peace to solve the problems of society. In this context, every law is an intangible product because it has specific benefit in a target group of people (market) and certain group of people is exchanging the benefit of laws against an amount of costs like energy cost, psychic cost and opportunity cost etc. Each law is introducing for behavioral changes in society. (Datta 2014) But this type of exchange is different because of compulsory in nature. In broader sense, here is an offer and require two parties for making exchange, therefore, this distinctive nature of exchange may be recognized as compulsory exchange. all the religious organizations of different communities of the world are playing an important role in behavioral changes in building peace. This effort is the part of social marketing. In this context, social marketing efforts can play an important role in making a peaceful society and keeping world peace because social marketing always seeks behavioral changes for keeping the society in peace "Negative" peace means absence of war in a country as well as the world. The major reasons behind any war either boarder problems or competition in developing economic and military power between two or more countries or inside a country. Different proposal, treaty or negotiation can solve the possible war-causing conflicts of the world. A bargaining system of marketing process worked in any negotiation especially in international marketing and other issues. Here is an exchange mechanism because there are two parties, offering benefits of proposal and marketing communicating (salesmanship or personal communication) skills for persuading and voluntary exchange of mutual benefits. On the other hand social marketing approach and marketing communication (personal or impersonal marketing communication) of United Nation (UN) can change the unwholesome demand caused conflicting behavior for peaceful society highlighting the demerits and threatening results of the conflicting demands.

The World Marketing Summit (WMS) aims at "Creating a better world through Marketing" by leveraging marketing knowledge to trigger behavioral change in human society. Professor Kotler proposed the application of marketing principles backed by a business model to ensure poverty alleviation while meeting MGDs. He states that since marketing has already been successful in the case of social products, its role in creating a better world will be of no small measure by engendering sustained behavioral change in critical areas. (Kotler 2012) Social causes can be advanced more successfully through

applying principles of marketing analysis, planning and control to problems of social changes like brotherhood, safe driving and family planning. (Kotler & Zalthman1971) The social marketing approach applies generic marketing and marketing research strategies to the promotion of social programs or products (e.g programs or products that benefit society). (Maibach 1993) The academic discipline of marketing faces concerns of relevance, which scholars ignore at their peril. These concerns evolve from three sources; (1) theoretical disregard of the majority of people in favor of a narrow, affluent socio-economic subset; (2) languages of research and practice that dehumanize people with whom marketers engage and exchange; and (3) paradigmatic constructs that eliminate systemic realities and challenges from consideration. (Hill & Kelly 2014) Business polices in developing countries should aim to empower subsistence entrepreneurs and consumers, embrace emergent solutions, help build bridges between informal and formal economics, and adapt a bottom-up orientation to policy development. (Viswanathan S.S 2012) Stakeholder marketing is slowly coalescing with the broader thinking that has occurred in the stakeholder management and ethics literature streams during the past quarter century. (Gene et al., 2012)

Non-profit and social marketing represent the most complex and difficult contests in which marketing activities are carried out and that the appropriate classification of commercial applications is only one simplified variety of this complexity, principally the sales of products and services. (Andresen 2012) Marketers, policy makers, and social entrepreneurs can harness evolved human tendencies to lessen or even eradicate environmental and social problems. From an evolutionary perspective, optimally effective influence strategies must work with humans' evolved tendencies, rather than ignoring them or working against them. (Vicius 2012) Social entrepreneurship covers a broad domain, including social enterprise, defined as the use of for-profit strategies by nonprofit organizations. Driven by multiple factors, nonprofit organizations have increasingly turned to social enterprise in the hopes of funding their social missions. (Brett et al. 2012) In the wake of major disaster, it is not only appropriate but also beneficial for governments to spend public funds to support official gratitude campaigns in response to outside assistance. These assertions are based on results of multiple studies on gratitude from both psychology and marketing that show that expressions of gratitude can offer both economic and social marketing benefits (Raggio & False 2011). Urgent social problems increasingly arise at the intersection of the interests of business leader's policy makers, and consumers. The deliberative democracy offers a fruitful approach for understanding marketing's impact on society by revealing the complex and often conflicting network of interests among stakeholders. (Juile et al. 2009) The benefits marketing delivers to consumer are similar to the conditions required for

representative democracy. This perspective encompasses a broader range of benefits them is usually considered in the marketing literature and could provide a possible template for evaluating marketing actions (Katherine & Queleh 2008). People have a variety of reasons for not aggressing. Some people oppose aggression because it invites retaliation, punishment and social disapproval, whereas others do so on moral, ethical and ideological grounds. (Kool & Keyes 1990) The nonviolent predispositions are positively related to the value types of universalism, benevolence, and conformity. (Mayton, Diessner & Granby 1996) Active nonviolence serves as both a means to achieve cultures of peace and represents the end goal of global cultures of peace (Mayton & Daniel 2001). The evolution of Ashoka's big idea, its role as a driver of social change, and the various collaborations and institutions it has helped build and is still in the process of building to promote social entrepreneurship. (Sen 2007) China's rapidly proliferating global interests and evolving political environment have begun to change the international and domestic context for its foreign policy making. (Deutsch & Morton 1993) Outlines a program of what schools can do to encourage the values, attitudes, and knowledge that foster constructive rather than destructive relations, which prepare children to live in a peaceful world (Christic, Daniel & Barbara 2008). Twenty five years ago, the allied nations gathered at San Francisco in the warning glow of victory and signed a solemn treaty giving effect to their determination "to save succeeding generations from the scourge of war" and to ensure by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest. (Frank 1970) The process of attitude change underlying man communication impact are of two kinds: with low involvement to persuasive stimuli one might look for gradual shifts in perceptual structure, aided by repetition activated by behavioral choice situations, and followed at some time by attitude change, while with high involvement one could look instead for the classic and familiar conflict of ideas at the level of conscious opinion and attitude that precedes changes in behavior. (Krugman 1966) The media can be an instrument of conflict resolution, when the information it presents is reliable, respects human rights, and represents diverse views. It's the kind of media that enables a society to make well-informed choices, which is the precursor of democratic governance, it is a media that reduces conflict and fosters human security. It is intended for donors, agencies and non-governmental organizations media practitioners, governments and others, and conflict managers of peacekeepers. (Howard 2002) To face with the task of post conflict peace building, the world's leading international organizations seemed almost predisposed to adopt strategies promoting liberal market democracy as a remedy for conflict. Many of these organizations had, in fact, become active and vocal proponents of liberal democracy market-oriented economics, or both, at the end of the cold war. (Pairs 2004) Political services marketing is the political and societal process of planning and executing of carefully formulated programs designed to satisfy the voter market and facilitating the social, commercial organizations and individuals through crating, delivering, pricing (monitory cost + time cost + psychic cost + energy cost). and communicating superior services which directly or indirectly benefits the nation of a country for the next election." Political Services marketing always benefits the voter market not to benefit the political marketers. Therefore, in marketing literature, every product or service is a problem solving package. Hence, problem free society depends on marketing activities. (Datta 2014)

Evolutions in communication technologies have significantly altered the conduct of conflict, warfare and conflict resolution. Evolutions in communication technologies have changed the meaning of power in international political process and the strategies. (Gilboa 2009) Most practitioners assume that media must have the power to influence the development of peace in conflict. Environment practitioners and authors assume that if media can motivate people to engage in conflict, they must also have the power to exert influence in the opposite direction. In the field of peace studies, poverty is considered a form of structural violence relating to ideas of systematic inequity, discrimination and social justice. Poverty is related to the concept of peace as a form of systematic discrimination exercised through power imbalances in society (Bratic 2006). Various definitions of poverty are classified into three broad categories according to material need, economic position, and social relationship. (Spicker 2007) A campaign that mimics commercial public relations, arriving at his conclusion through the example of the British government's War Propaganda Bureau's successful use of mass media, alongside lecture tours and rallies to support armed conflict during World War 1 (Bratic 2008). In particular, given the present state of the world today, mired in economic stagnation, joblessness, government debt burdens, income disparities, health burdens, environmental degradation and a plethora of attendant woes, new ideas must emerge to address the travails of the times. Marketing is well-positioned to make these contributions. In fact, marketing has been evolving since its early days, changing with and changing the world around it: from the functionalist paradigm to the marketing management paradigm, thereafter setting into the exchange paradigm and the network paradigm. Marketing has even embraced the idea of social marketing. (Andaleeb 2012) "The theme of World Marketing Summit is clearly stated as creating a better world through marketing. Its objective is to bring together global leaders of marketing and branding to discuss how marketing philosophies, ethos and insight can work to find innovative solutions to some of the challenges of the world". (Kotler 2012)

RESEARCH GAP

It is found in the above sections of literature review that many marketing researches have been conducted in identifying different social field of marketing practice in touch of problem solving products marketing in society. For example, marketing practice in public service, marketing 's changing social responsibilities, The growing responsibilities of marketing, political marketing, political services marketing, media marketing, cause marketing, social marketing for environment, service marketing, relationship marketing, education marketing, marketing impacts on society, the measurement of environment, media and conflict resolution etc. but no research has not yet been conducted in building peaceful world through marketing practice. In the literature review it is also observed that marketing concept has been used mostly in commercial or economical organizations in creating and delivering tangible and intangible products in society. Due to the business flavor of marketing concept, no social organizations are practicing formal marketing though they are performing all marketing activities. But in the last decade, some social and political organizations of the developed countries are using marketing philosophy in achieving their strategic goals. The research fields on growing interest in marketing are broadening from commercial organizations into social organizations as a new social science. In this context, it is very urgent to study, how formal practice of marketing can identify the social problems through offering problem solving tangible and intangible products in building a peaceful world.

There are many definitions and branches of marketing such as marketing for commercial organizations, marketing for non-profit organizations, social marketing, political marketing, political services marketing, E-marketing, M-marketing, Relationship marketing etc. but no holistic definition at the broader perspective considering individuals economical, social organizations of the world. In this context, a new wider definition is demanded to ensure the best use of marketing concept at individual and all type of organizations in the world. On the basis of literature review and analyzing the different definitions, a new wider definition can be made. Therefore, the conceptual wider definition,

Conceptual Wider Definition of Marketing; "Marketing means identifying problems of the target groups of people and creating problems solving tangible and intangible products to rectify those problems individually and setting public and private level of economical, social organizations for the happiness and standard of livings of society in the world in order for ensuring the desire states in people's mind and society."

OBJECTIVE OF THE STUDY

The main objective of this article is to identify the cross functional role of marketing activities in society for building peace and encourage marketing practice at all type of social, commercial organizations and individuals who are involved in economic activities or any other social activities for building a peaceful world through identifying problems and developing marketing programs to solve the problems for ensuring simultaneously presence of desire states in minds and society of the world.

The other objectives are;

- 1. To identify the fundamental problems of the world and find solutions through marketing practice at all level of organizations.
- Encouraging marketing practice in politics as the government of a country is responsible to identify the fundamental problems and undertaking services generating projects to solve these problems by using a number of government organizations.
- 3. Disseminating the benefits of marketing practice at all social institutions including NGOs of the world who are involved to change the behavior of the people for peacekeeping directly or indirectly.
- 4. To encourage marketing practice in the life of every individual as s/he is developing himself like a product to sell at a higher price in the job market/workplace and becoming a good man in the society by changing behavior in favor of peace.
- To encourage the United Nations for applying marketing polices and strategies by identifying the major problems of the world and undertaking programs to solve those problems to build a peaceful world.

METHODOLOGY

The identified problem of this study is to find out the cross functional role of the all individual marketing and organizational marketing of the world in identifying and solving problems from the society for building a peaceful world. Both secondary and primary data have been collected in the wake of escalating role of marketing in world peace. Qualitative data has been collected from primary sources on a sample of five high officials by using justified method under non-random sampling technique from the peace-oriented social marketing organizations in Bangladesh as the representative of non-profit marketing practitioners through face to face personal interview. The author

of this article has personally conducted the interviews and collected qualitative data by using mobile device. They are requested to give their consensus on how social and commercial organization and individuals' marketing can play vital role in building a peaceful world. A focus group discussion has been conducted on ten marketing executives on a non-randomly selected sample of ten commercial marketing organizations of Bangladesh at Bangladesh Institute of Management (BIM) as they are the representatives of marketing practitioners. This study is an exploratory research design in nature. Theoretical explanation has been used to analyze the qualitative data.

FINDINGS

DISCUSSION WITH FIVE SOCIAL AND ECONOMICAL EXPERTS

Rahman, M. (2015) said that marketing is a commercial term with business flavor. This term only indicates the economical organizations and their activities. Human needs and wants are the main causes of conflicts because these needs and wants are unlimited but the resource is limited in a country for meeting unlimited needs and wants. Marketing is a social process where individuals and groups are working in an economic system to meet their needs and wants. Thus individuals and groups in the society identify the human needs and offer solutions for conflict free happy life. In fact, human beings of capitalist economic revolution create inner contradiction and conflicts, but then 'market' creates demands and consumers at times use unfair means to obtain what they need and want which causes conflicts in the society. Sometimes people use force to meet-up their needs. In this context, political and social organizations have emerged in a country as well as the world for ensuring human rights in meeting their fundamental needs and equal justice to bring about the behavioral changes in building peace in society. Marketing communications in electronic and print media can play an important role to bring the behavioral changes for conflict free society. Therefore, the non-profit oriented social and political organizations are offering services or products in building a better peaceful society like National Human Rights Commission, Bangladesh, all Government Agencies, NGOs etc. In this connection, development and peace of the society is a synthesis of all individual and organizational activities and performances. Your new concept is appreciable in peace-keeping but unlimited needs create problems and conflicts always. So marketing is a continuous process of identifying problems and creating solutions for ever. After all we can build a better peaceful world through marketing practice. In the conclusion, I think marketing is a very wide term, a new definition is urgent to disseminate the concept at all kind of organizations in building a peaceful world.

Barman, D.C. (2015) said, According to the father of peace studies Professor Johan Gultung, peace is a social goal. The marketing is a social process where individuals and groups are involved in this process for ensuring happiness for each other in the society. Therefore, here is a relationship between peace and marketing as a social process. Keeping the society in peace is a complicated process but it is obtainable by the socioeconomic actors of a country. In fact, problems are the causes of conflict in the society. Marketing system is always identifying and solving problems by offering huge number of tangible and intangible products because, every product is a problem solving packet. On the other hand marketing means building and maintaining relationship between two parties. Exchange is the core concept of marketing system. Relationship depends on give and take system or exchanges something in the society. All political, economical and social organizations like educational, cultural, government agencies, NGOs, citizen action groups are involved in peace-keeping through offerings under the holistic approach of marketing as the social and continuous process. The social marketing always influences the behavioral change by using effective marketing communicating system. In this context, behavioral changes are the significantly important for peacekeeping. Overall marketing system in the country is continuously trying to ensure happy life of the people. There are some conflicts in the society for unethical marketing practice but there is no chance for unethical practice in the social concept of marketing. Thus the marketing process is everywhere as the global network. I think, if the individuals, all kinds of organizations of the world follow the marketing and social concept for identifying and solving problems, it would be easier to build a peaceful world. In fact, it is a continuous social process.

Rahman, G. (2015) said, marketing involves exchanging of ideas, goods, services or any benefits. All these are products. Marketing system in the society can solve any problem through creating exchange. So exchange is the core area of marketing. All profit making and non-profit making organizations in the society are creating numerous exchanges for solving numerous problems for the happiness of the people. Without exchange, no problem will be resolved. Interaction between providers and receivers, we can solve any problem in society. Every product is basically an idea and idea can solve problems. New ideas can meet unsatisfied demands in society. But there could be bad marketing on the basis of bad idea in society. In this context social organizations should undertake adequate measures so that fundamentalism and destructive ideas cannot be introduced in the process of marketing. It should be checked and balanced. He also said, all type of organizations together can build a peaceful world.

Ahmed, K.A.U (2015) Human behavioral changes are very important for peaceful society. Marketing involves bringing about the behavioral changes. Market is a target group who are facing specific problem. There are many types of need in society as well as a country. Needs and requirements create problems in society. Marketers try to identify the actual needs and requirements of markets and to know their behavior for identifying how the problems can be solved in better ways to best satisfy them. Sometimes marketers try to bring about the behavioral changes for adapting their offerings. Marketing is a very important technique and marketing people is very important. They should know the behavior of the target groups to best fit their marketing tools. For building a peaceful society, it needs peaceful people. When people will be satisfied through marketing, then it will be easier to build peaceful society. Marketing is everywhere; even we are marketing in our family. In the conclusion, he said, marketing practice of the society can be the significantly important technique in building a peaceful country as well as the world.

Alam, S (2015) said, market means a group of people who share a similar problem or need or want. On the other hand, marketing means continuous serving of products or services in solving or mitigating a problem of a group of people or market. Product means any utility satisfying goods or services. In this context, all ministries and their agencies are undertaking goods and services generating projects targeting to solve the specific problems for specific group of people as the non-profit social and political organizations in civil society. In this connection, every ministry is working in a multisegment market by offering a series of services to solve the national problems towards satisfying social/individual utilities. There are many international organizations and the departments of United Nations are also offering a large number of social, economical and political services to solve global problems in the world. But sometimes unethical marketing practice by profit making economic organizations creates social problems. This effort should be controlled strictly. In fact, government agencies, NGOs and other social and cultural organizations are offering social services to rectify the unethical practice of marketing. The Planning Commission of Bangladesh approves different projects to solve the problems of specific group of people. In the view point of marketing, all these projects for delivering services are to solve the national problems. Problem free society tends to a peaceful society. I think the cross functional marketing efforts of all organizations in a country, as well as, the world are trying to solve the numerous problems to build a better peaceful world.

DISCUSSION WITH TEN MARKETING EXECUTIVES OF BANGLADESH

A focus group discussion has been conducted for collecting opinions of some marketing executives of Bangladesh in terms of the role of profit making marketing in building peaceful world at Bangladesh Institute of Management (BIM) as they work in some reputed profit making economic organizations. The author has been played the role of a moderator over the FGD. Mobile device has been used to collect qualitative data. The Marketing and Sales Manager, C.P. Bangladesh Ltd. said that marketing is a societal process. From the beginning of the civilization, many important ideas have been marketed by some scholars in the world and behind the present material culture of the world, there are marketing of numerous ideas. Basically, every product or service is an idea which is being transforming into a tangible or intangible product.

The Senior Executive, Navana Toyta Ltd. said that whatever is created in the world, it is the idea. Democracy for peaceful country is also an idea which has been marketed to solve the political problem. He added that democracy is basically market-oriented for creating peace in civil society. Socratic was the first idea marketer in ancient world. An executive of R.A.K. Paint said that every marketer should offer any product as the people need and want in building peace. Suppose what the people need of a country, government should do that for peace as the government is controlling all type of profit making and non-profit marketing organization directly or indirectly. He also said that all organizations should be market-oriented in building peaceful society. It requires developing a unified marketing process in the society by all social, political and commercial organizations. The executive of Partext Group said that arms business is creating conflict in the world. On the other hand, United Nations is using arms for peace keeping in middle-east countries and some African countries. He also added that the campaigning of discouraging more production of arms is also marketing for peace. He said that the merits of marketing are greater than the demerits of marketing in building a peaceful world. He also said that conflicts are occurring in marketing due to using selling concept, in spite of this, marketing concept always run after peaceful society. The marketing executive of Burger Paint said that marketing people know good manner in convincing buyers or consumers in society. They can change the buyers or consumer's attitudes, believes and perceptions in touch of peace. In this connection, behavioral changes are essential in building a conflicts free peaceful world. He added that the main objective of marketing is to best satisfy the target people and the satisfied people can build peaceful society as well as the world.

The executive of Pedrello Pump said that the all individuals and organizations have to give more emphasis in identifying the human actual needs and wants and they should

offer their products in ethical manner for peaceful society. He also said that economics seeks the limitations of the resources and marketing makes balance between demand and supply of products in society. He added that problems are generating in society and marketing is identifying these problems to create solutions as offering products. Thus marketing is a social process of peacekeeping in society. The executive of Amin Muhammad Group said that all organizations should follow marketing and social marketing concept in building peaceful world. He also said that all literate and illiterate people are marketing. In this context, all should know the formal marketing concept in building peaceful society as well as the world.

The Deputy Manager of Akij Group said that every country in the world has a different culture which affects their demand pattern. He added that the common issue for building world peace is disseminating proper educational services marketing. Only education marketing can bring about behavioral changes in favor of peaceful country as well as the world. Marketing communication is playing an important role in educating the society informing how to solve problems in society. At the eleventh hour of the focus group discussion, the participants are requested to draw their conclusion regarding to build a peaceful world through marketing practice. All they agreed that all individuals and the organizations can build a better peaceful world through marketing practice. The author of this article as the moderator gave thanks requesting to practice marketing at every stage of their daily life in building a peaceful world.

POLICY IMPLICATIONS

- 1. All political organizations should apply marketing tools and techniques for winning power to avoid any political violence for ensuring a peaceful political competitive environment where all socio-economic actors like commercial and social organizations, individuals' marketing would be involved in identifying the problems of the society to create solutions or products to satisfy the simultaneously presence of desire states in mind and society facilitated by the ruling political organization in any State. This initiative ensure negative peace according to Johan Glutton (founder of peace)
- 2. All commercial organizations should avoid any unethical practice to build brand equity by offering marketing programs to solve the problems in a society in creating and delivering in their overall marketing operations for ensuring happiness and standard of livings throughout the world.
- **3.** All social organizations should indentify social problems by conducting marketing research to offer carefully formulated programs to bring about the

behavioral changes to prevent conflicts in society. This effort will ensure **positive peace.**

- 4. All individual marketers involving in social and commercial marketing should also identify of others' problems to offer problem solutions for others of the society.
- **5.** United Nations should apply marketing philosophy in designing and implementing the problem solving packages to keep the nations in peace in all States of the world.

CONCLUSION

This research has observed that marketing is a social process for identifying problems from the society to offer problem solving tangible and intangible products in a country as well as the world by setting numerous economical, social and political institutions. Once upon a time, marketing is being considered as a means of profit earning in exchanging physical products. But after publishing the article named "Broadening the Marketing Concept" (Kotler, 1969) marketing practice is gradually shifting in social and political organizations in the world. New fields are creating for practicing marketing in society. In the world, there are three levels of organizations engaging to benefit the society. They are commercial, political and societal organizations. According to these research findings, it is found that individuals and groups are obtaining what they need and want through creating, offering and exchanging solutions of the problems for others in society. Thus marketing always involves in identifying problems of the people and solving these problems by creating benefits generating products. This research is also observed that every product is a problem solving packet. Product means any benefit offering in society for growing attention, acquisition, using or disposing to solve a problem in society. In this connection, people who are involved in socio-economic activities individually or in organizations are marketing benefits in satisfying their problem generated needs in a country. Thus problems are always solving in this social process of marketing continuously in a country as well as the world. But in the capitalist country, some profit-making organizations are trying to earn profit by using unfair means which causes conflict in society. In fact, all government agencies, social organizations (political organizations) are also marketing their services to control their bad efforts in keeping the society in peace. On the other hand, for sustainable economical, political and social organizations of the world, they are trying to establish their brand image by using fair marketing practice. Therefore, unethical marketing practice is discouraging and ethical marketing techniques are encouraging gradually in

society of the world. The conflict and problem free world is a peaceful world. On the other hand, United Nations (UN) are also identifying world problems and undertaking numerous programs to solve those problems to keep the world peace through social marketing process. As the marketing system is eliminating problems from the world by the cross functional marketing activities of all individuals and organizations of a country as well as the world, it would be concluded that marketing practice at all levels in society can build a peaceful society.

REFERENCES

Andreasen, Alan R. (2012), 'Rethinking the Relationship Between Social/Nonprofit Marketing and Commercial Marketing.' Journal of Public Policy & Marketing: Spring 2012, Vol. 31, no. 1

Ahmed, K..A.U 2015, Discussion with Kazi Akram Uddin Ahmed, President, the Federation of Bangladesh Chambers of Commerce & Industry (FBCCI), Chairman, Standard Bank Limited, Former Chairman, Bangladesh Association of Banks (BAB), Managing Director, The Eastern Engineering Works Ltd, Bright Steel Wire Rope Mfg. Co. Ltd., Bright Traders (Overseas) Ltd. International Director Endorsee, Multiple District 315, Bangladesh, The International Association of Lions Clubs.

Alam. S. 2015, Discussion with Dr. Shamsul Alam, Member (Senior Secretary), Planning Commission, Ministry of Planning, Government of Bangladesh

World Marketing Summit 2012, Andaleeb, S.S. Conference proceedings paper

Barman, D.C. 2015, Discussion with Professor Dalem Chandra Barman, Ex. Founder Chairman, Peace and Conflict Department, University of Dhaka, Vice Chancellor, ASA University of Bangladesh

Benét DeBerry-Spence, Akon Elizabeth Ekpo, Mopelola Adelakun, Hande Gunay (2013), 'Toward Marketplace Diversity: A Multi-measure, Multi-dimensional Study of the Journal of Public Policy & Marketing.' Journal of Public Policy & Marketing: May 2013, Vol. 32, special issue

Brett R. Smith, Maria L. Cronley., Terri F. B (2012), 'Funding Implications of Social Enterprise: The Role of Mission Consistency, Entrepreneurial Competence, and Attitude Toward Social Enterprise on Donor Behavior.' Journal of Public Policy & Marketing: Spring 2012, Vol. 31, no. 1

Christie, D. J., Tint, B. S., Wagner, R. V., & Winter, D. D (2008), 'Peace psychology for a peaceful world.' American Psychologist, Vol. 63, no. 6

Deutsch, M (1993), 'Educating for a peaceful world.' American Psychologist, Vo.48, no.5

Datta. U. K (2012), 'Political Services Marketing for Peaceful Bangladesh.' The Dhaka University Journal of Marketing, Vol no. 15, 2012

Franck, T. M (1970), 'Changing norms governing the use of force by states. American Journal of International Law,' Vo.2, no.4

Feldman, L. P (1971), 'Societal adaptation: a new challenge for marketing.' The Journal of Marketing, Vo. 2, no. 3

Glaser, B. S., & Medeiros, E. S (2007), 'The changing ecology of foreign policy-making in China: the ascension and demise of the theory of "peaceful rise.' The China Quarterly, Vol. 190, no.1

Greenwald, A. G., & Leavitt, C (1984), 'Audience involvement in advertising: Four levels.' Journal of consumer research, Vol. 11, no.1

Gilboa, E (2009), 'Media and conflict resolution: a framework for analysis.' Marq. L. Rev., 93, 87.

Gene R. Laczniak, Patrick E. Murphy (2012), 'Stakeholder Theory and Marketing: Moving from a Firm-Centric to a Societal Perspective.' Journal of Public Policy & Marketing. Vol. 31, No. 2

Julie L. Ozanne, C., Corus, Bige. Saatcioglu (2009), 'The Philosophy and Methods of Deliberative Democracy: Implications for Public Policy and Marketing.' Journal of Public Policy & Marketing: Spring 2009, Vol. 28, No. 1

Kotler,P & Zaltman, G (1971), 'Social marketing: an approach to planned social change.' The Journal of Marketing, 3-12.

Krugman, H. E (1966), 'The measurement of advertising involvement.' Public Opinion Quarterly, Vol. 30, no.4.

Katherine E. Jocz, John A. Quelch (2008), 'An Exploration of Marketing's Impacts on Society: A Perspective Linked to Democracy.' Journal of Public Policy & Marketing: Fall 2008, Vol. 27, No. 2

Lazer, W. (1969), 'Marketing's changing social relationships.' The journal of Marketing, Vol. 10. no.2

Lavidge, R. J (1970), 'The growing responsibilities of marketing.' The Journal of Marketing, Vol.11, no. 1

Maibach, E (1993), 'Social marketing for the environment: using information campaigns to promote environmental awareness and behavior change.' Health promotion international, Vo. 8, no.3

M. Joseph Sirgy (2008), 'Ethics and Public Policy Implications of Research on Consumer Well-Being.' Journal of Public Policy & Marketing: Fall 2008, Vol. 27, No. 2

Mayton, D. M., Diessner, R., & Granby, C. D (1996), 'Nonviolence and human values: Empirical support for theoretical relations. Peace and Conflict.' Journal of Peace Psychology, Vol. 2, No.3

Mayton, I. I & Daniel, M (2001), 'Nonviolence within cultures of peace: A means and an ends.' Peace and Conflict: Journal of Peace Psychology, Vol.7. no. 2

N. Craig Smith, Daniel G. Goldstein, and Eric J. Johnson (2013), 'Choice without Awareness: Ethical and Policy Implications of Defaults.' Journal of Public Policy & Marketing' Vol. 32, No. 2

Paris, R (2004), At war's end: building peace after civil conflict. Cambridge University Press.

Randle D. Raggio, Judith Anne Garretson Folse (2011), 'Expressions of Gratitude in Disaster Management: An Economic, Social Marketing, and Public Policy Perspective on Post-Katrina Campaigns.' Journal of Public Policy & Marketing: Fall 2011, Vol. 30, No. 2

Rahman, M 2015, Discussion with Professor Dr. Mizanur Rahman, Chairman, National Human Rights Commission, Bangladesh, Gulpheshan Plaza, 8, Shahid Sangbadik Selina Parveen Sarak, Moghbazar, Dhaka-1207

Rahman, G 2015, Discussion with Ghulam Rahman, President, Consumer Association of Bangladesh, (CAB), Formerly: Chairman, Anti Corruption Commission (ACC); Chairman, Energy Regulatory Commission (BERC); Secretary, Government of Bangladesh.

Ronald Paul Hill and Kelly D. Martin (2014). 'Broadening the Paradigm of Marketing as Exchange: A Public Policy and Marketing Perspective.' Journal of Public Policy & Marketing: Spring 2014, Vol. 33, No. 1

Rohit Varman, Per Skålén, Russell W. Belk (2012), Conflicts at the Bottom of the Pyramid: Profitability, Poverty Alleviation, and Neoliberal Governmentality. Journal of Public Policy & Marketing: Spring 2012, Vol. 31, No. 1

Taylor, M. (2000), 'Media relations in Bosnia: A role for public relations in building civil society.' Public Relations Review, Vol.26, no.1

Tomas M. Frank (1970), 'Changing Norms Governing the use of force by states.' American Journal of International Law, Vol 64, No.5

Risk Factor Analysis for Supply Chain Effectiveness: A Case Study on Textile Industry of Bangladesh

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ABSTRACT

Supply chains often differ substantially from each other. Hence, their impact and the way in which the affect the risk profile of firms differ, too. Over the years, attempts have been made to classify the related risk factors, but it was found that there are too many distinctive sources of risk and related variables. This study is an attempt to sort out major risk factors affecting supply chain effectiveness in the textiles industry of Bangladesh. The result of the exploratory research has clearly point to man-made disruptions as the most important factor, with customer dynamics, innovation, public policy factor and natural disruption factors on the ranks behind them. Interestingly, the factor which apparently is least controllable and predictable among all factors under consideration ends up in last place in our analysis, even though Bangladesh is among the most vulnerable and severely affected countries with respect to the impact of climate change. A possible interpretation of this finding is that the familiarity of the population with natural disasters, and the pro-active measures taken to limit their impact, weakens the perceived severity of the event types behind the natural disruption factor. In contrast, political instability, labor unrest and terrorism, which make up the man-made disruption factor, are perceived as the major threats to the industry.

Key words: Risk Factors, Supply chain, Textile Industry.

INTRODUCTION

Supply chains vary considerably, depending on what is being produced as well as on how and where production takes place. Supply chains of mass-market consumer products tend to differ markedly from those for goods with lower turnover and smaller markets; moreover, the importance of technology, the need for very specific components, and the market structure are of significant importance. Clearly visible

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differences can, for instance, be observed between the agricultural supply chains, natural resource supply chains, and newly focused service supply chains. Every individual supply chain has different characteristics, is exposed to different challenges, and requires different operating and policy environments. This adds complexity and it needs to be accounted for in related analyses (Elms & Low, 2013).

Almost every operational aspect of Supply Chain Management (SCM), such as operations management, materials handling, distribution, logistics, transportation, warehouse management, purchasing, marketing and information technology has been extensively studied, as Giunipero et al. (2008) point out. However, according to Christopher and Holweg (2011), there is rather limited literature that addresses risk management as a separate function that impacts contemporary SCM. It is on this aspect that the research presented here has focused.

Due to the heterogeneity of individual supply chains, the risk factors might vary with the particular type under investigation, causing their perceived impact on business to differ in magnitude from case to case. A typical example of such is the PRAM methodology was developed by Dow Chemical Company to identify and measure supply chain risks, and to assess their respective impact. The authors base their approach on four specific factors, which supply market risk, supplier risk, organization risk and supply strategy risk (Trkman and McCormack, 2009). While the same factors are also impacting supply chains in, e.g., the IT or Textile industries, the form they take and the strength of their respective impact can be expected to differ. In the literature of Supply Chain Risk Management (SCRM), past research does not seem to have led to a clear consensus about methodology and topic priorities (Behnezhad et al., 2013).

In many countries and regions, supply chains of several companies faced considerable challenges which, in some cases, ultimately stretched their capabilities to the breaking point. In some regions, this was due to the occurrence of natural disasters, but on a global scale, the economic turbulences due to the world financial crisis of 2007-2009 were the driving force behind this development. Supply chains, which once were thought of almost as an autopilot, in fact face many dangers from domestic and international sources. Due to its global nature and significant impact supply disruptions may have on the firm's financial performance, the supply chain arguably is a key element of a company's the risk profile. Risk is virtually all-pervasive and certainly a fact of life for any supply chain, given that it involves dealing with issues like quality and safety challenges, supply shortages, legal issues, security problems, regulatory and environmental compliance, weather and natural disasters, and terrorism(see Global Supply Chain Institute,2014). Standing up to this challenge is rendered even more

demanding by the increased competitive pressure and the globalization of markets (Ouabouch & Amri, 2013).

The textile industry is considered by many the lifeline Bangladeshi economy. Its earnings of USD 12233.23 million amounted to a staggering81.7 percent of the country's total exports in the first eight months(July-February) of the fiscal year (FY) 2013-14,up from USD 10225.68 (80.2 percent of total export receipts)during the corresponding period of FY 2012-13 (source: Bangladesh Economic Update, 2014). Even after the devastating fire at Tazreen Fashion Garments in November, 2012, and the collapse of Rana Plaza, an eight-story commercial building, in April 2013, it is felt that there is no alternative to Bangladesh, of which the textile industry accounts for 13 percent share of GDP and recently boasted growth rates of 12 percent per annum. While Bangladesh offers some very promising incentives for enterprise establishment, including low production costs and the provision of specialized export processing zones, a number of challenges may also hurdles for companies targeting to source from here (Apparel, Fashion & Luxury Practice, 2011).

In order to add sustainability to the recently experienced growth of the country's textile industry, it is important for supply chain management professionals to know about potential risks factors from where disruption may arise in severe form, which means identifying them, get priorities right and take carefully targeted steps to mitigate. The current paper is intended to be a step into this direction.

LITERATURE REVIEW

In everyday language, the term "risk" is commonly used to denote the possibility of losing something of value. Given the large variety of its manifestations and potential sources, "risk" is by necessity a multidimensional construct. In a business context, on one hand, risk can arise from internal sources, e.g. inadequate or failed internal processes or systems, human error or misbehavior. On the other, risk can have its origin in external sources, e.g. price falls or slumps in demand for own products, supply disruptions or price increases for key inputs, or the failure of contracting partners to fulfill their obligations.

According to Juttner et al. (2003), supply chain risks hence comprise "any risks for the information, material and product flows from original supplier to the delivery of the final product for the end user". Slightly further down below, the author's state: "In simple terms, supply chain risks refer to the possibility and effect of a mismatch between supply and demand. 'Risk sources' are the environmental, organizational or supply chain-related variables which cannot be predicted with certainty and which

impact on the supply chain outcome variables. Risk consequences are the focused supply chain outcome variables such as costs or quality, i.e., the different forms in which the variance becomes manifest" (Juttner et al. 2003).

Each particular supply chain has distinct characteristics, faces different challenges, and depends different operating and policy environments. Consumption patterns and production are changing around the globe, which is eventually forcing the people in charge to rethink the traditional assumptions about their functioning. One of the dominant drivers for today's globalized supply chain is the power of information.

On the other hand, new demands on the environment and the threat of depleting natural resources require attention from both business and government. To a growing number of observes, it seems clearly evident now that traditional growth models and patterns of consuming natural resources may be unsuited for a changing world. This calls for innovation efforts directed at making both production and consumption more sustainable.

Sustainability has another important side — that of social inclusion and distributional equity. A further challenge is how to manage the numerous risks relating to production models, market uncertainties and unpredictable consumer behavior. Technology and technological innovation, apart from being fascinating, place considerable demands on both public policy and industry (Elms & Low, 2013). Moreover, the arrival of just-in-time (JIT) and lean manufacturing technologies in industrial sector opens lots of opportunities and hopes. However, according to Engardio (2001) and Svensson (2002), JIT supply chains have specific risks of their own which may go unnoticed unless the related sources of vulnerability are thoroughly explored (Juttner et al. 2003).

In a country like Bangladesh, there is at least one supplier one virtually every day that has to deal with a threat to its business. More common and less publicized examples include power outages, labor unrest, cyber crime, local political scandals or problems to obtain bank funding. There is a danger that at least some of these potential supplier problems mayflies under the radar of supply management professionals, although they can lead to major business issues that ultimately flare up into supply chain disruption, legal issues or reputational damages.

As discussed by Lessard (2013), "many discussions of supply chain risk begin with graphic depictions of situations where a small disruption leads to an unexpectedly large impact". Sheffi (2005) describes the sequence of events beginning with a lighting strike to a Philips factory in New Mexico that led to the disruption of a generation of cell phones, with Nokia successfully overcoming the disruption through proactive management while Ericsson lost out", thus allowing a glimpse into the vulnerability of today's globalized supply chains, which is due to their high degree of complexity, the

strong interdependence among its elements, and their considerable geographic dispersion and organizational fragmentation.

The typical length of supply chains in the textile industry is considerable since it includes, among others, raw materials production, complement production, and clothing production. Against this background, it does make sense to apply supply chain management to the textile industry, particularly in Bangladesh, where the enhancement of competencies in this field this is considered one of the most promising tools. (Ali & Habib, 2012). This is what motivates the authors to work in this arena.

Each of these varieties of supply chain has quite different characteristics, facing different challenges, and requiring different operating and policy environments. Consumption patterns and production are changing around the globe, and it's eventually forcing all of us to rethink the traditional assumptions about the workings of supply chains and the public policy shape. One of the dominant drivers for today's globalized supply chain is the power of information.

On the other hand, the necessity to protect the environment and avoid excessive depletion of natural resources requires attention from both business and government. Sustainability has another important aspect, which is the one of social inclusion and distributional fairness. There is a growing consensus that traditional growth models and consumption patterns are often at odds with these demands, and that human activity in business and government needs to focus more on sustainably and on promoting innovation.

Technology and technological innovation are fascinating issues, both for policy and industry (Elms & Low, 2013). Arrival of JIT and lean manufacturing technology in industry opens many opportunities and gives rise to great hopes; however, as Engardio (2001) and Svensson (2002)maintain, just-in-time supply chains have a number of specific risk that are concealed from the casual view, and some of the related vulnerability issues remain unexplored (Juttner *et al.* 2003).

Among the problems faced by developing countries like Bangladesh when nourishing textile industries, the most important tribulations persist in the field of financing, infrastructure, taxes and regulations, compliance, sustainability issues and - perhaps most importantly - political stability.

In this paper, an attempt will be made to explore the risk factors affecting the supply chain of textile industry in Bangladesh. The outcomes are intended to enhance the ability of decision makers in both business and government to set the priorities right and finding ways of mitigating risks and reducing unnecessary complexity.

Managing today's global supply chains involves the need to cater for variations in customer demand (Lee, 2002), as well as to cope with possible disruptions. Origins of

possible disruptions have often been classified into three types, which are a) internal to the firm, b) internal to the firm's supply chain, and c) external to the firm (Schmidt and Raman, 2012). Due to its relative novelty, the concept of Supply Chain Risk Management (SCRM) still tends to be somewhat incoherent (Behnezhad *et al.*, 2013),and no clear consensus about what might be a useful classification of risks has yet developed. Nevertheless, several classification patterns for the related risks, and a number of methodologies have been suggested, most of which mainly focus on predicting disruptive events rather than attempting to identify the root causes of uncertainties for a single business, an economic sector, or the economy as a whole. This task is, however, made difficult by the near-continuous continuous changes due to turbulences in the natural as well as the political, social and economic environment. In line with Trkman and McCormack (2009) we therefore advocate a comprehensive holistic approach to SCRM which does not focus exclusively on supplier-associated turbulences but takes various sources of uncertainty into account.

When it comes to disruptions originating from natural disasters, in Bangladesh, the Indian Ocean earthquake and tsunami of 2004 represents of the costliest natural disasters on record, wreaking some US\$235 billion worth of damage, according to World Bank estimates. (In comparison, the cost inflicted by Hurricane Katrina on the State of Louisiana amounted to about \$81 billion).

The earthquake and tsunami that struck Japan in 2011 is a powerful example how a natural disaster originating in one part of the world can have far-reaching consequences in areas that are very remote. Since Japan produces about 60 percent of the world's silicon for semiconductor chips, global prices for computer memory components spiked by 20 percent right after the disaster. Moreover, a considerable number of U.S. auto plants were forced to halt production until shipments of specialized paints and computer chips resumed. The full economic, cultural and sociological aftershocks of the earthquake in Japan—the worst disaster to hit the country since World War II— were felt in many industries and among many customers. Manufacturers scrambled to replace disrupted supplies, and some were even forced to close down. With the benefit of hindsight, Professor Willy Shih of Harvard Business School has given a conclusive explanation how deficiencies in the field of risk identification can exacerbate the consequences of such disaster: "In the race to provide better quality at lower prices, manufacturers picked very narrow, optimized supply chains," he says, manufacturers "put all of their eggs with one supplier that had the best product at the lowest price" (Park et al., 2013). As a consequence, disruption risk has recently received increasing attention. The reason is undoubtedly that, with longer transport routes and a seemingly ever-increasing need for speed, the impacts of disruptions have become more severe

and the time and space for corrective action has shrunk. Becoming aware of the considerable fragility of their supply chains, many companies of different industries currently seek to rethink and adopt their supply chain strategies.

Labor actions, too, are of high significance to the flows of global trade. Improvements in infrastructure and logistics that are deemed desirable by decision makers in business and public policy often collide with the interests of those parts of the population that are required to relocates a consequence, which may give rise to considerable social unrest and hence add to the existing supply chain risks (Cowen, 2014). In many countries, terrorism and political instability are even more dangerous sources of risk. While the event that has received most attention in recent history certainly is the 9/11/2001 World Trade Center attack, sabotage and other destructive actions, and politically motivated violence have development into near-permanent threats in some countries. This, too, increasingly affects supply chains because of the increasing trend to global outsourcing and the attendant increase in the length and complexity of supply chains. (Kleindorfer & Saad, 2005). Hence, these risks call for constant vigilance.

The global financial crisis of 2007-09 came as a powerful reminder of the risks that can emerge from fragile financial systems. Moreover, uncertainties prevail with regard to the costs and availability of trade and investment financing. Since such risks affect both government and business, it appears obvious that acting on shared responsibilities can make much difference in enhancing the human capacity to deal with such uncertainties. The revolution in manufacturing known as 'global value chains' has changed the world of trade policy as much as it has changed the global industrial landscape. Recent research suggests that border management as well as transport and telecommunications infrastructure services have a far higher impact than trade tariffs do. This has led to the supposition that improving infrastructure and management can increase global GDP to a much larger extent than the complete elimination of tariffs could. This supports the view that trade policy, financial policy, and regulations are also risk factors for supply chains.

Product and process innovation are further key factor of success in business. Kenna (2011) exemplifies this by pointing to the case of Zara, one of the World's top retailer brands of textile fashion. Zara uses air shipment nearly for all its shipments includes sourcing from Asia. Despite high costs of air shipping, Zara is still one of the most profitable clothing retailer with high brand value and a great deal of customer satisfaction because their business model is strongly focused on fashion. Zara' plans to move in the online retail world, Zara's strategic online presence will help in expansion may even enable the company to surpass H&M in the U.S. market.

Compared to other retailers and fashion, Zara stocks only clothing in limited quantity. The company Zara has a design team of 200 people (compared to competitors who have significantly smaller design teams). With such a stronger team all new styles became available in Zara stores much faster than in those of its competitors, enabling Zara to be "ahead of the curve" in the world of fashion.

Another source of competitive advantage for Zara's is its pricing model. Zara tends to price its products based on its styles and - perhaps surprisingly - on location. Its charges higher prices in the American market and in some parts of Asia than in Europe. The combination of the above factors makes Zara a role model as to how business model, organization, and technology are important variables in supply chain.

RESEARCH OBJECTIVES

The main objective of the study is to find out the Risk factors of Supply chain that the entrepreneur or executives/professionals involved in supply chain management consider when they choose for their industry.

RESEARCH METHODOLOGY

The survey for the research has been conducted in the very densely industrialized areas of Gazipur, Tongi, Savar, Mirpur, Narayngonj and Narsinghdi, which are part of the Greater Dhaka industrial area. The respondents were approached at their respective manufacturing location. The questionnaire consisted of 15 Liker scaled statements on which the respondents were asked to provide their opinion, resulting in 15 variables. There is a direct relationship between the number of scale points and the reliability score. The scale used in the current study was from "1" meaning "Strongly Agree" to "5" meaning "Strongly Disagree" (Rahman, 2009). All the Liker scaled statements were randomized throughout the questionnaire to reduce any potential bias that could result from answering statements that represented the same concept. Most of the respondents held management positions in logistics and supply chain management. The primary data required collected through personal interviews. In addition, supplementary information was collected from a number of sources including academic books, journals, and websites in order to and thus to identify the key variables. The research is exploratory in nature.

Sampling Methods

The sample was gathered by simple random sampling. The respondents were representatives or professionals involved in supply chain operations of 100% export

oriented textile manufacturers. 135 questionnaires were distributed and 104 questionnaires were received back. Therefore there are 104 usable cases were obtained, implying a response rate of 77%. The data collection procedure for the survey took one-and-a-half months.

Method of Data Analysis

The data gathered data from the survey were been analyzed with factor analysis, using the statistical software package SPSS, version 17. Factor analysis is a statistical tool to reduce and compound variables that have high degree of mutual dependency in statistical terms. Here, it was used determine the major risk factors.

Limitations of the Research

The sample size is comparatively small for conducting such an investigation research. The fact that there are only 104 respondents, which appears to be a small number given the size of the textile Industry in Bangladesh, may give rise to concerns regarding the representativeness of the results. This limitation resulted from time and funding constraints. However, since similar research activities have not yet been carried out for Bangladesh, the current investigation may nevertheless serve as a starting point for further related research efforts.

Another possible limitation of this investigation is that there was no open-ended question by which one would have been able to identify previously unnoticed risk factors encountered by supply chain management professionals. The reason for this having occurred is that the respondents were frequently found to be very reluctant to share strategically relevant information about their organization. As a consequence, the limited number of questions asked, and their standardized nature, was means of encouragement for the interviewees to participate in the survey.

FINDINGS

The following sections present the business area of the respondents, the principal factors or components that are considered major risk factors for supply chain of Textile Industry, the variables that constitute the principal factors or components and the model fit.

Profile of the respondents

The total number of respondents for this study was 104 (Appendix 1), all of whom came from a specific category, namely textile manufacturers that are 100% export oriented. 30.77% of the respondents were from the yarn manufacturing sector, 16.35% from the sector of dyeing and 52.88% from the clothing sectors. All respondents were either

managers or from even higher ranks within the respective companies, and all of them worked in supply chain management.

Correlation Matrix Analysis

The variables must be correlated for the factor analysis to be applied in a meaningful manner (Malhotra, 2004). If all of the selected variables have weak pair wise correlations, the resulting factors will not extract important information but simply reproduce the original variables. From the correlation matrix (see Appendix 3), it was, however, found that statistically significant correlations do exist between several variables of our sample. "Technology" is highly correlated (0.650) with variable "Organization". Similarly TECH and BM, SEI and ER, BFCT and SEI, TERR and PI, LU and TERR, EARTHQ and CLFL, TSUNAMI and EARTHQ, TP and REGU, FINP and TP, BFCT and ER, LU and PI, ORGA and BM, FINP and REGU, TSUNAMI and CLFL are correlated and significant correlation is evident (Appendix 3). The definitions of these variables are presented in Appendix 2. The anti-image correlation matrix is used to measure the sampling adequacy. Variables that have anti-image correlation below the acceptable level (0.05) can be excluded from the factor analysis. The correlation matrix (Appendix 3) shows that all the variables used in the study have anti-image correlation coefficients above the acceptance threshold.

The Model Fit

The basic assumption underlying factor analysis is that the difference between the observed correlations (as given in be input correlation matrix) and the reproduced correlation (as estimated from the factor matrix) can be examined to determine the model fit (Malhotra, 2006). The differences between estimated and reproduced correlations are named the residuals. If there are many large residuals, the factor model does not provide a good fit to the data and the model should be reconsidered. In the case of our sample, there are only29residuals (27%), which are larger than 0.05. This it indicates that the fit of factor model used in the study is acceptable (Appendix4)

Risk Factors for Effective supply chain in Textile industry of Bangladesh

A principal component analysis (PCA) with varimax rotation was performed to extract those factors that are essential for professionals involved in supply chain management. PCA is recommended when the primary concern is to determine the minimum numbers of factors that would be account for maximum variance in the data (Malhotra, 2006). Formal statistics are available for testing the appropriateness of the factor model. In order to measure the appropriateness of the factor analysis, Kaiser-Mayer-Olkin (KMO) measure of sample adequacy was examined. The KMO (Kaiser-Meyer-Olkin) statistics varies between 0 and 1.Avalue of 0 indicates that the factor analysis is likely to be

inappropriate because sum of partial correlations is minimal. In our sample, tgevalue of KMO was 0.676_{2} which is an indication of sampling adequacy and thus the appropriateness of the factor analysis (Appendix 5). Bartlett's test of sphericity, which is another indication of the strength of the relationship among variables, is also significant for our sample (Appendix 5).

The Scree Plot is graphs that display the Eigen values against all the factors. The graph is useful for determining how many factors to retain. The point of interest is where the curve starts to flatten. It can be seen that the curve begins to flatten between factors 6 and 7. Note also that factor 6 has an Eigen value of less than 1, so only five factors have been retained (Appendix 7).

From the result we observe factors extractable from the analysis along with their Eigen values, the percent of variance attributable to each factor, and the cumulative variance of the factor and the previous factors. Notice that the first factor accounts for 26.219% of the variance, the second 22.50% and the third 14.217%, fourth 10.651%, and the fifth 7.106%. All of the remaining factors are not significant (Appendix 6).

Moreover, a rotated component (factor) matrix analysis is used. The idea of rotation is to reduce the number factors on which the variables under investigation have high loadings. Rotation makes the interpretation of the analysis easier. From result we can see that political instability, labor unrest and terrorism are substantially loaded on Factor (Component) 1 while economic recessions, buyers' frequent changes in taste, social and environmental impact are substantially loaded on Factor 2.Business model, organization and technology are substantially loaded on Factor 3, and regulation, financial policy and trade policy are loaded on factor 4. Finally, factor 5 is substantially loaded with variables earthquake, cyclone and flooding as well as tsunamis (seeAppendices8 and 9).From the result of the factor analysis, it can be inferred that there are five factors which founds responsible for the major disruption of an effective supply chain considering Textile Industry. These are the Manmade Disruption factor (MMDF), the Customer Dynamics factor (CUDF), the Innovation factor (INNF), the State Policy factor (SPF) and the Natural Disruption factor (NADF).

Table 1: Risk factors for effective supply chain in Textile Industry of Bangladesh

Component	Factors	Rotation Sums of Squared Loadings						
Component	raciois	Total	% of Variance	Cumulative %				
1	Man-made disruption	3.110	20.736	20.736				
2	Customer Dynamics	2.655	17.700	38.436				
3	Innovation	2.296	15.309	53.745				
4	State Policy Factor	2.046	13.638	67.383				
5	Natural Disruption	1.996	13.309	80.692				

Extraction Method: Principal Component Analysis

The Eigen value represents the total variance explained by each factor. The table shows that the Eigen value of Man-made Disruption factor is **3.110**, which implies that the variance explained by the first factor is **20.736%**. The corresponding outcome for the Customer Dynamics factor is **2.665**, which implies that the variance explained by the second factor is **17.700%**. The variances explained by the factor Innovation is**15.309%** with and Eigen value of **2.296**. The result of the factor analysis shows that these five factors collectively produce about **60.00%** of the variance observed in the data set. The total variance explained by each of the factors with initial Eigen values is presented in the appendix section (Appendix 6).

Determinants of Manmade Disruption Factor (MMDF)

Manmade Disruption factor has three elements –Political Instability (PI), Labor Unrest (LU) and Terrorism (TERR), the associated factor loading of first element or variable (PI) is 0.950, which implies that Manmade disruption factor is highly correlated with the first factor Political instability (PI). Factor loading indicate the correlations between the variables and the resulting factor and loadings greater than 0.5 collectively construct the factor.

Variable Number	Name of the Variable	Factor Loading									
5	Political Instability(PI)	0.950									
13	Terrorism(TERR)	0.933									
9	Lahor Unrest(III)	0.930									

Table 2: Manmade Disruption Factor (MMDF)

The MMD factor is also highly correlated with variable Terrorism (TERR) with loading 0.933 and Labor Unrest (LU) with loading 0.930. The factor loading associated with each of the element or variable is presented in the rotated component matrix in the appendix (see Appendix 8).

Determinants of Customer Dynamics Factor (CDF)

The second factor – Customer Dynamics factor (CDF) – is the result of three elements or variables. These are Economic Recession (ER), Buyers' Frequent Change in Taste (BFCT), and Social and Environmental Impact(SEI).

	•	,		
Variable Number	Name of the Variable	Factor Loading		
10	Buyers Frequent Change in Taste(BFCT)	0.938		
4	Economic Recession (ER)	0.892		
14	Social and Environmental Impact(SEI)	0.770		

Table3: Customer Dynamics Factor (CDF)

The BFCT variable has highest correlation with the determinants of Customer Dynamics factor as indicated by its factor loading of 0.938. This factor is also highly correlated with the variable Economic Recession(ER) and Social and Environmental Impact (SEI). The associated loadings for these two elements or variables are 0.892and 0.770respectively.

Determinants Innovation Factor (INNF)

Three variables constitute third factor - Innovation factor. The Innovation factor is highly correlated factor with variable Business Model (BM), which has loading of 0.892. The other element or variable that makes up the Innovation factor is the Organization (ORGA) and Technology (TECH). The associated factor loading of this variable are 0.870 and 0.693 respectively as indicated in the following table.

Variable NumberName of the VariableFactor Loading2Business Model (BM)0.8928Organization(ORGA)0.87015Technology(TECH)0.693

Table 4: Innovation Factor (INNF)

Determinants of State Policy Factor (SPF)

Regulation (REGU), Financial Policy (FINP) and Trade Policy (TP) are the three variables that jointly produce the fourth factor- State Policy Factor. The State Policy Factor is highly correlated with the Business Model variable of Supply chain Risks, which has loading of 0.827. The other two variables have factor loadings of 0.760 and 0.752, respectively, which indicates a strong correlation with the State Policy factor.

Variable Number	Name of the Variable	Factor Loading			
3	Regulation(REGU)	0.827			
7	Financial Policy (FINP)	0.760			
11	Trade Policy (TP)	0.752			

Table 5: State Policy Factor (SPF)

Determinants of Natural Disruption Factor (NADF)

Earthquake (EARTHQ), Cyclone and Flooding (CLFL), and Tsunamis are the three variables that produce the fifth factor. Natural Disruption Factor is highly correlated with the Earthquake (EARTHQ variable of the risk factors for Supply chain in Textile Industry, which has loading of 0.862. The other two variable Cyclone and Flooding has

6

factor loading of 0.840and Tsunamis has factor loading of 0.568 indicate correlation to the Manmade Disruption factor.

 Variable Number
 Name of the Variable
 Factor Loading

 12
 Earthquake (EARTHQ)
 0.862

 1
 Cyclone and Flooding (CLFL)
 0.840

0.568

Tsunamis (TSUNAMI)

Table 6: Natural Disruption Factor (NADF)

CONCLUSION

This study was a first attempt to identify the risk factors relevant for the textile industry in Bangladesh. Factor-analytic techniques were used to identify those variables which represent important sources of disruption in all dimensions of a company, and to group them in accordance with their mutual correlation.

According to the WTO (2012) Bangladesh, with its estimated US\$ 20 billion of textile exports accounts for 4.8% of related world trade, is the second largest exporter in the World, trailing only(US\$154 billion and 37.3% of the world trade). This indicates the present strong position of the Bangladeshi textile industry on world markets. On the other hand, there is clear evidence that this industry is very vulnerable to labor conflicts and social unrest losses. A recent estimate by (Roy and Borsha, 2013) indicated that one nationwide strike day causes the readymade garments Industry to lose 3.6 billion Bangladeshi Taka (around USD 63m) in revenues, which translates in a1.56 % loss in the country's GDP per year.

One main finding of this study is that man-made disruptions are considered the most momentous source of perceived supply chain risk in the Bangladeshi textile industry, leaving even natural disasters like earthquakes, tsunamis, or flooding, to which Bangladesh is particularly susceptible, far behind. This striking outcome clearly points to the outstanding importance of the prevailing social and political framework for the long-term success of business. Sustainable economic growth requires government policies that support legal security and enforceable rights, promotes innovation, and encourages fair competition. Failure to enforce, for instance, employment laws in full scale can cause labor unrest issues and may even give rise to sabotage, other destructive activities or even terrorism. Given the highly competitive nature of today's market environment, it is hence vital that governments are aware of this connection and create a favorable environment for business development.

REFERENCES

Ali, Mohammad, & Habib, Md., Mamun. (2012), 'Supply Chain Management of Textile Industry: A Case Study on Bangladesh', Int. J Sup. Chain. Mgt Vol. 1(2)

Apparel, Fashion & Luxury Practice. (2011), 'Bangladesh's ready-made garments landscape: The challenge of growth', Retrieved http://www.mckinsey.de/sites/mck files/files/2011 Mckinsey Bangladesh.pdf

Bangladesh Economic Update (2014). External Sector: Current Trends, Bangladesh

Behnezhad, Ali, Connett, Brian I. & Nair, Manjula, (2013), 'The Evolution of Supply Chain Risk Management', Journal of Supply Chain and Operations Management, Volume 11(1)

Cowen, Deborah (2014), Disrupting Distribution: Subversion, the Social Factory, and the "State" of Supply Chains. Current Issues in Viewpoint Magazine,4(3), Retrieved from https://viewpointmag.com/2014/10/29/disrupting-distribution-subversion-the-social-factory-and-the-state-of-supply-chains/

Elms, Deborah K., & Low, Patrick. (2013), 'Global value chains in a changing world', Switzerland: WTO Publications.

Giunipero, L. C., Hooker, R. E., Joseph-Matthews, S., Yoon, T. E., & Brudvig, S. (2008), 'A decade of scm literature: past, present and future implications', Journal of Supply Chain Management, 44(4),

Global Supply chain Institute. (2014). Game-Changing Trends in supply Chain: Number three in the series.

Juttner, Uta, Peck, Helen, & Christopher, Martin, (2003), 'Supply chain risk management: outlining an agenda for future research', International Journal of Logistics: Research and Applications, Vol.6 (4)

Kleindorfer, Paul, R., Saad, Germaine, H. (2005), 'Managing Disruption Risks in Supply Chains', Production and Operations Management Society, Volume no. 00

Lessard, Donald. (2013), 'Global value chains in a changing world Elms', Deborah K., & Low, Patrick (Eds.), 'Uncertainty and risk in global supply chains', Switzerland: WTO Publications.

Malhotra, N.K. (2004), Marketing Research: *An Applied Orientation*, (4th ed), Prentice Hall International; Inc., New York

Malhotra, N.K. (2006), Marketing Research: *An Applied Orientation*, (6th ed), Prentice Hall International; Inc., New York

Ouabouch, Lhoussaine & Amri2, Mostapha (2013), 'Analysing Supply Chain Risk Factors: A Probability-Impact Matrix Applied to Pharmaceutical Industry', Journal of Logistics Management, Volume 2(2)

Papadakis, I. S., & Ziemba., W. T. (2001), Derivative effects of the 1999 earthquake in Taiwan to U.S. personal computer manufacturers in Mitigation and Financing of Seismic Risks, Kleindorfer, P. R., & Sertel, M. R. (eds.), Kluwer Academic Publishers, Boston

Park, Young, Won, Hong, Paul, & Roh, James, Jungbae (2013), 'Supply Chain Lessons from the Catastrophic Natural Disaster in Japan', Business Horizons, vol. 56(1)

Trkman, P., & McCormack, K. (2009), 'A conceptual model for managing supply chain risk in turbulent environment', International Journal of Production Economics, Vol 119(2)

WTO (2012). International Trade Statistics 2012. World Trade Organization, Geneva.

APPENDICES

Appendix 1: Demographic Profiles of the Respondents

Industry	Frequency	Percent
Yarn manufacturing Industry	32	30.77
Dyeing Industry	17	16.35
Clothing Industry	55	52.88
Total	104	100

Source: Primary Data

Appendix 2: Acronym and Description of Variables and Factors

Variable	Description of the Variables
CLFL	Cyclone and Flooding
BM	Business Model
REGU	Regulation
ER	Economic Recessions
PI	Political Instability
TSUNAMI	T-sunamis
FINP	Financial policy
ORGA	Organization
LU	Labor unrest
BFCT	Buyer frequent change in taste
TP	Trade policy
EARTHQ	Earthquake
TERR	Terrorism
SEI	Social and Environmental Impact
TECH	Technology

Factor	Description of Factors					
MMD	Man-made disruption					
CUD	Customer Dynamics					
INN	Innovation					
SPF	State Policy Factor					
NAD	Natural Disruption					

Appendix 3: Correlation and Anti Image Correlation Matrix

						Corr	elation and	d Anti -Ima	ge Correla	tion Matrix	(
	CLF L	ВМ	REG U	ER	PI	TSU NA MI	FIN P	ORA G	LU	BFC T	TP	EAR THQ	TERR	SEI	TEC H	Anti- image correl ation
CLFL	1.000															.581
BM	018	1.000														.633
REGU	.071	.073	1.000													.522*
ER	.041	.076	.092	1.000												.632
PI	357	158	037	.102	1.000											.746
TSUN AMI	.371	206	119	448	315	1.000										.790
FINP	150	022	.460	110	156	.092	1.000									.585
ORA G	062	.690* *	.331	.161	304	238	.244	1.000								.579
LU	418	179	041	.119	.972* *	333	153	315	1.000							.689*
BFCT	.062	.112	.210	.847* *	028	425	121	.188	.015	1.000						.669°
ΤP	034	032	.476* *	188	228	042	.384*	.191	199	053	1.000					.734
EART HQ	.631* *	123	186	061	285	.578* *	042	097	339	115	223	1.000				.569 [*]
TERR	366	206	.031	.079	.928*	323	132	332	.946* *	012	119	296	1.000			.801
SEI	.030	.050	.261	.512*	286	196	.131	.111	215	.636*	.139	085	244	1.000		.681
TECH	002	.516*	.343	.206	309	314	.086	.650*	295	.356	.252	273	283	.347	1.000	.802 [*]

^{*}Measure of Sampling Adequacy (MSA)

Appendix 4: Residuals Representing the Model Fit

						TSUNAM									
	CLFL	BM	REGU	ER	PI	ı	FNP	ORGA	Ш	BFCT	TP	EARTQ	TERR	SE	TECH
O.FL.		429	238	339	000	000	064	267	000	265	367	000	000	379	490
BM			232	221	055	018	.412	000	034	.130	374	.107	018	307	000
REGU				.175	355	.115	000	000	341	016	000	029	378	004	000
ER					.151	000	.132	051	.114	000	028	269	211	000	018
A						001	0.57	.001	000	389	010	002	000	002	001
TSUNAM							.175	007	000	000	337	000	000	023	001

^{**}Correlation is significant at the 0.01 level (1 Tailed).

	QAL	BM	REGU	₽	P	TSUNAM	FNP	ORGA	Ш	BFCT	TP	EARTQ	TERR	SEI	TEOH
FNP								006	060	.111	000	336	.091	093	.192
ORAG									001	028	026	.163	000	.132	000
Ш										.441	021	000	000	014	001
BFCT											295	.122	454	000	000
TP												011	.115	080	005
EARTHQ													001	.197	002
TERR														006	002
SE															000
TECH															

Extraction Method: Principal Component Analysis.

a. Residuals are computed between observed and reproduced correlations. There are 29 (27%) non-redundant residuals with absolute values greater than 0.05

Appendix 5: KMO and Bartlett's Test

KMO and Bartlett's Test								
Kaiser-Meyer-Olkin Measure	.676							
Bartlett's Test of Sphericity	Approx. Chi-Square	1218.426						
	df	105						
	Sig.	.000						

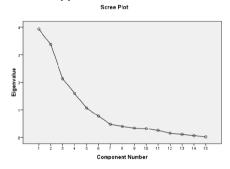
Appendix 6: Total Variance Explained

				Extr	action Sums	of Squared		Rotation Sums of Squared			
	Ini	itial Eigen va	lues		Loading	gs		Loadings			
Compone nt	Total	% of Variance	Cumulat ive %	Total	% of Variance	Cumulat ive %	To	otal	% of Variance	Cumulat ive %	
1	3.933	26.219	26.219	3.933	26.219	26.219	3.:	110	20.736	20.736	
2	3.375	22.500	48.719	3.375	22.500	48.719	2.0	655	17.700	38.436	
3	2.133	14.217	62.936	2.133	14.217	62.936	2.3	296	15.309	53.745	
4	1.598	10.651	73.587	1.598	10.651	73.587	2.0	046	13.638	67.383	
5	1.066	7.106	80.692	1.066	7.106	80.692	1.9	996	13.309	80.692	
6	.771	5.139	85.832								
7	.477	3.182	89.014								
8	.402	2.680	91.693								
9	.338	2.255	93.949								
10	.318	2.123	96.072								

				Extr	action Sums	of Squared	Rotation Sums of Squared					
	In	itial Eigen va	lues	Loadings				Loadings				
Compone	Total		Total	% of	Cumulat	_	otal	% of	Cumulat			
nt	Total	Variance	e %	Total	Variance	ive %	ļ '	Otai	Variance	ive %		
11	.251	1.672	97.743									
12	.149	.991	98.735									
13	.109	.725	99.460									
14	.063	.418	99.878									
15	.018	.122	100.000									

Extraction Method: Principal Component Analysis

Appendix 7: Scree Plot



Appendix 8: Rotated Component Matrix and Correlation

	Component/ Factor									
Variables	MMD	CUD	INN	SPF	NAD					
CLFL	221	.109	.015	017	.840					
BM	076	017	.892	113	039					
REGU	.140	.224	.228	.827	.101					
ER	.149	.892	.112	134	.035					
PI	.950	029	128	109	172					
TSUNAMI	306	448	298	.044	.568					
FINP	097	104	.011	.760	033					
ORGA	182	.078	.870	.223	042					
LU	.930	.015	164	096	243					
BFCT	.022	.938	.137	030	008					
TP	198	060	.008	.752	198					
EARTHQ	186	092	128	150	.862					
TERR	.933	009	174	017	194					
SEI	318	.770	053	.209	100					
TECH	252	.305	.693	.219	186					

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

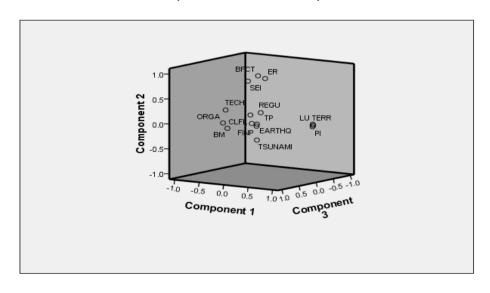
a. Rotation converged in 5 iterations.

Appendix 9: Rotated Component Matrix Between Variables and Factors

Rotated Component Matrix												
Variables		Component or Factor										
	1	1 2 3 4										
PI	.950											
TERR	.933											
LU	.930											
BFCT		.938										
ER		.892										
SEI		.770										
BM			.892									
ORGA			.870									
TECH			.693									
REGU				.827								
FINP				.760								
TP				.752								
EARTHQ					.862							
CLFL					.840							
TSUNAMI					.568							

Appendix 10: Component Plot in Rotated Space

Component Plot in Rotated Space



Assessment of Performance of Upazila Parishads in Seven Districts of Bangladesh to introduce Competitive Performance Based Grants

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ABSTRACT

Competitive performance based grants (PBGs) for the local government institutions are still under experimentation and continuous review in the developing and least developed countries. Donor agencies are showing increasing interest for such scheme to related governance performance and rewards at the local levels. There are still questions about the effectiveness of such grants as a component of intergovernmental financial transfers as well as probability of increasing development divide as well performer will get better financial advantages. However, instead of theoretical justification of PBGs or comparative analysis of different policy options, this paper remains confined with only presenting the results of quantitative assessment of the performance of Upazila Parishads in seven districts of Bangladesh. The assessment was done with a target to introduce a Competitive Performance Based Grant Systems (PBGs) in the Upazila level. Identification of strength and weakness of the individual Upazila Parishad is essential for future development of the Upazila administration for better coordination of citizenry services delivery.

INTRODUCTION

Background of the Assessment

Performance based Grants (PBGs) are one of the modes of intergovernmental financial transfers* (IGFTs) which is drawing an increasing attention of the policy-makers, donors and governance experts in recent days. A considerably large collection of reports and literatures on cross country experiences of designing and implementing Performance-Based Grant Systems (PBGSs) for Local Governments (LGs) is making it easier to understand and review the different options of integrating Performance-Based Grant Systems (PBGSs) into the national Intergovernmental Fiscal Transfers Systems (IGFTs). Bangladesh has gained experiences of introducing PBG in recent time. The PBGs are

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introduced in Union Parishads, the lowest tier of local government and also in Upazila parishads which play the most vital coordinating role in the local government of the country. Introducing PBGSs are expected to provide LGs with tangible incentives to improve their institutional, organisational and functional performance, thereby reducing the risks associated with IGFTs and making decentralisation more effective, efficient and responsive as a strategy for delivering public goods and services.

Among other agencies, United Nation Capital Development Fund (UNCDF) has been involved in piloting the use of performance-based grants. In Bangladesh, UNCDF had taken the initiative through the Upazila Governance Project (UZGP) which has been working to strengthen the capacity of Upazila Parishads and other stakeholders to promote participatory decision for local development and foster public service delivery with special emphasis on Upazila Parishads' coordination role in realization of Millennium Development Goals (MDGs). The project encourages citizen's involvement to improve the functional and institutional capacity, and democratic accountability of Upazila Parishads. One of the UZGP's endeavor was to set up a fiscal support process, through performance based block grants for improving upazila governance, that integrating all resources flowing to the Upazila, facilitating bottom-up integrated planning with Union Parishads on the one hand, and discretionary utilization of resources for local development.

The performance based grants for selected Upazila Parishad was piloted and introduced in a limited manner in FY 2012/2013 by UZGP. In FY 2014/2015, to be eligible for the PBGs, the Upazilas need to have compliant with a number of performance conditions and complete for the first time through a performance assessment process done by external assessors. The external assessment was done to cover 65 Upazila Parishads, which were being considered for grant support, to identify the best performing 14 Upazila Parishads, two from each of the seven UZGP Districts.

Objectives of the Assessment

The main objectives of the assignment was to review compliance with and effectiveness of 65 selected Upazila Parishads in performing administrative and financial management practices to finally identify best performing 14 Upazila Parishads, two from each of the seven UZGP Districts.

Bangladesh Institute of Management (BIM), a government autonomous body, and one of the prime capacity development centers of the country, was appointed to carry out the assessment on the basis of a set of performance indicators. BIM was provided with a specific Terms of Reference for carrying out the whole assessment process. BIM had to

work closely with the UZGP officials and Local Government offices in the seven administrative districts of seven divisions of Bangladesh.

Scope of the Assessment Work

Preparatory activities: the assessors' team had to thoroughly study the list of performance indicators and internalize the essence and spirit of the assessment in the light of the broad goals of UZGP. In consultation with UZGP and UNCDF representatives, BIM prepared an elaborate work plan detailing the composition of field teams. UZGP organized an orientation for the assessment team to present the Terms of Reference in detail to ensure a shared understanding. The orientation was to cover, among others the background to the assessment, objectives and rationale, discussion of the indicators and assessment procedures, reporting formats and obligations as well as team organization/ coordination and logistical arrangements. The orientation enabled a standardized assessment across all the units under assessment process.

METHODOLOGY

Evidence based assessment

Each Upazla Parishad was visited by the assessment team set up by the contracted entity, and consisted of two members: (i) a BIM official, as an expert and (ii) a research associate. The team held discussions with Upazila Nirbahi Officer (UNO) and other the relevant officials of Upazila Parishad. The team also met Upazila Parishad Chairman and vice chairman (both male and female) subject to availability of their appointment within the visiting period to the specific Upazila. The team received the necessary documents from the relevant officials through UNO and reviewed the specified primary and secondary documentation. For qualitative data and validation of some information, the team members had also dialogue with members of community and selected key informants, such as, journalist. But qualitative data is only used for clarity of understanding. For a solid and uniform implementation of the assessment tool, the assessment process, calculation of score, is done based on documentary evidence. On an average, the team spent three working days at each Upazila Parishad.

Before start of assessment in any Upazila, the assessment team debriefed and discussed assessment method to the UNO and his associate colleagues working in that upazila parishad and after the assessment, the team discussed the assessment results with the Upazila Parishad officials. The debriefing intended to give a quick on-the-spot feedback to the Upazila Parishad, without giving formal results. Preparation of the final result went through a rigorous scrutiny process.

Assessment process:

Each Upazila Parishad was subjected to a performance review by the assessment team set up by BIM, and the assessment carried out using the tools provided by an international expert appointed by UNCDF.

The UZPs were informed in advance about the performance assessments through letters from the official government channels prior to commencement of the assessments. The UZPs was also given orientation about assessment indicators and requested to conduct an internal assessment of the performance of their UZP, using the indicators in the UZP Performance Assessment Manual prior to the external assessment, and provide the UZPs with the options to review their own strengths and weaknesses. The District Facilitator of UZGP supported the UZPs to fully understand the methodology of assessments. In some cases, the internal assessment was ready when the external assessment team arrived. It also facilitated the work of the external assessors, as documentation was ready upon arrival to conduct the assessments.

Timing:

The Assessment Team Members prepared a strict time frame to organize and accomplish the total work within that time frame. Accordingly, the team started the work 3rd week of January, 2015 and completed the field work 2nd week of March, 2015, simultaneously, data entry work started, and the same was completed soon after completion of field work.

Documents Applied:

The documents applied/consulted were as under:

- Relevant literature, guideline, report and document collected from the UNDP/ Project Office;
- b) Printed documents collected from the concerned Upazila Parishds, such as, Plan Book of the Upazila Parishad, List of chairman and member of 17 committee, Minutes of bi-monthly committee meetings, Summary of the monthly meetings of Upazila Parishad, Attendance sheets of the meetings, Document on formation of scheme selection committee, Minutes of the meeting of the scheme selection committee, Documents on annual budget; Screen shot of web page containing uploaded budget, Annual financial report/ statement of the assessment year, Report send to District Commissioner on utilization of the annual development fund, Tender documents, Bank statement
- c) and accounts book of the Upazila Parishad, Plan Book of the Upazila Parishad, Quarterly progress reports description of schemes, . List of approved schemes, etc.
- d) Filled-in Data Collection Formats.

Overview of the Results:

	UZP/District	Perfor	Final									
SI.		mance	Score									
No.		area-1	area-2	area3	area4	area5	area6	area7	area8	area9	area	(&
											10	Rank)
	Sunamganj District	t:		•			•			•		
1	Jogonnathpur	10	6	7	8	8	8	6	6	7	8	74 (1)
2	Sunamgonj Sadar	6	7	10	4	7	0	6	0	2	5	47 (2)
3	Dakkin	8	7	9	6	5	0	0	0	6	1	42 (3)
3	Sunamgonj	0	,	9	0	3	0	0	U	0	1	42 (3)
4	Dowara Bazar	6	8	8	4	6	0	4	0	3	3	42 (3)
5	Biswamborpur	6	9	2	6	3	0	5	0	0	3	34 (4)
6	Shalla	8	7	3	4	3	8	0	0	0	1	34 (4)
7	Chatok	5	8	7	4	5	0	2	0	0	0	31 (5)
8	Dirai	6	5	0	2	6	2	2	0	3	4	30 (6)
9	Jamalgonj	5	8	2	2	3	0	0	0	0	4	24 (7)
10	Dhormopasha	4	7	6	0	5	0	0	0	0	0	22 (8)
11	Tahirpur	4	6	0	2	4	0	0	0	0	1	17 (9)
	Kishorgonj District	:										
12	Kishorgonj Sadar	8	9	10	6	6	4	7	2	9	4	65 (1)

13	Mithamoin	7	10	8	8	6	3	4	2	9	4	61 (2)
14	Kuliarchar	8	7	7	6	6	0	2	0	3	3	42 (3)
15	Karimgonj	8	10	8	2	6	0	4	0	2	2	42 (3)
16	Etna	7	8	8	2	6	0	4	0	0	3	38 (4)
17	Pakundia	7	6	6	6	6	0	1	0	2	4	38 (4)
18	Ostogram	7	9	8	4	4	0	0	0	3	3	38 (4)
19	Kotiadi	7	7	6	6	6	0	0	0	5	1	38 (4)
20	Bhoirob	7	9	5	6	6	0	0	0	0	4	37 (5)
21	Hossainpur	9	7	2	6	6	0	2	0	2	0	34 (6)
22	Nikli	4	8	2	6	7	0	1	0	2	3	33 (7)
23	Bajitpur	7	8	2	4	6	0	0	0	4	2	33 (7)
24	Tarail	6	8	2	2	5	0	2	0	0	1	26 (8)
	B-Baria District:											
25	B-Baria Sadar	8	8	8	4	2	3	0	4	9	4	50 (1)
26	Bancharampur	8	8	9	8	0	5	6	1	0	1	46 (2)
27	Ashugonj	6	4	8	6	3	0	1	0	0	9	37 (3)
28	Sarail	6	6	6	6	2	0	4	0	0	2	32 (4)
29	Akhaura	7	5	9	6	3	0	0	0	0	1	31 (5)
30	Kasba	7	6	8	4	1	0	1	0	0	3	30 (6)
31	Bijoynagar	6	5	6	4	1	0	0	0	0	6	28 (7)
32	Nasirnagar	6	6	8	4	0	0	0	0	0	4	28 (7)
33	Nobinagar	6	4	1	4	0	2	0	0	0	5	22 (8)

	Sirajganj District:											
34	Ullahpara	10	8	9	6	5	7	2	0	1	4	52 (1)
35	Kazipur	8	8	5	4	5	1	7	0	7	4	49 (2)
36	Tarash	5	8	8	4	3	3	7	0	5	4	47 (3)
37	Belkuchi	5	10	7	6	6	0	3	0	2	6	45 (4)
38	Sirajgonj Sadar	6	8	6	4	5	0	1	0	0	3	33 (5)
39	Kamarkhando	8	2	6	4	0	0	2	0	0	1	23 (6)
40	Raygonj	3	6	7	2	2	0	1	0	0	2	23 (6)
41	Shahjadpur	3	3	4	3	4	0	0	0	0	0	17 (7)
42	Chowkhali	2	1	0	0	5	0	0	0	0	1	9 (8)
	Rangpur District:											
43	Pirgonj	7	10	7	2	7	0	2	0	6	8	49 (1)
44	Rangpur Sadar	8	10	4	4	7	0	1	0	9	5	48 (2)
45	Pirgacha	6	10	6	4	6	0	5	0	2	6	45 (3)
46	Gongachora	5	9	8	6	3	0	1	0	2	4	38 (4)
47	Taragonj	6	9	3	4	3	0	1	0	5	2	33 (5)
48	Kawnia	6	10	6	0	3	0	0	0	0	1	26 (6)
49	Bodargonj	5	2	0	4	3	0	6	0	3	0	23 (7)
50	Mithapukur	4	10	5	0	3	0	0	0	0	1	23 (7)
	Khulna District:											
51	Digholia	8	10	8	6	3	2	2	0	5	3	47 (1)

52	Dumuria	7	7	8	6	5	1	0	0	4	5	43 (2)
53	Paikgacha	7	8	5	4	4	0	3	0	0	5	36 (3)
54	Batiaghata	7	7	10	4	2	0	0	0	4	0	34 (4)
55	Dacop	7	8	1	6	2	0	0	0	2	1	27 (5)
56	Fultola	5	6	6	2	2	0	0	0	0	2	23 (6)
57	Rupsha	4	8	5	2	2	0	0	0	0	0	21 (7)
58	Koyra	4	7	0	4	2	0	1	0	0	1	19 (8)
59	Terokhada	5	6	0	2	2	0	0	0	4	0	19 (8)
	Borguna District:											
60	Borguna Sadar	8	9	8	4	6	0	0	0	0	4	39 (1)
61	Betagi	7	9	4	2	5	0	0	0	3	2	32 (2)
62	Amtali	3	7	8	2	8	0	0	0	1	0	29 (3)
63	Patharghata	5	7	4	4	6	0	1	0	0	2	29 (3)
64	Bamna	5	6	4	4	5	0	0	0	0	1	25 (4)
65	Taltoli*	0	0	0	0	0	0	0	0	0	0	0 (5)

^{*}Newly formed UZP, Couldn't be assessed due to not having the data of previous year

PA-1: Forming of committees (structuring the decision making bodies), Conducting meeting, participation in the meeting, Decision processing; PA-2: Compliance of Budgeting format, completeness, exclusiveness and publication of budget, PA-3: Financial (Income-expenditure) management, generation, utilization and growth of own fund. , PA-4: Project proposal, reporting, compliance of procurement rules, monthly update of the accounts book with bank statement., PA-5: UZP Development Plan and quarterly reportingPA-6: Involvement of committees and relevant officials in Project (scheme) preparation, PA-7: Consideration of social sector (MDG) in project (scheme) selection, PA-8: Consideration of co-financing in project (schemes) selection, PA-9: Coordination among inter union Development Schemes (scheme involving more than 1 union), PA-10: Transparency, Monitoring and Community feedback about UZP activities.

Analysis and Results on the Performance Measures, and General Comments

The cut-off point, for the grant receivers, was limited by the number of maximum number of selection, i.e. 14 nos. of Upazila parishads, which is not a feasible proposition from minimum qualifying marks point of view. However, as maximum 14 Upazilas were selected by-passing the marks obtained by individual Upazilas, so there should not be any question in this regard. Another rigid feature of this judgment was the decision of taking 02 Upazilas from each project district, which largely defeated the importance of ranking on the basis of attainment of individual marks. However, it took care of the administrative as well as geographical distributional equity to disburse the fund to all the administrative divisions.

One of the most important limitations of performance-wise mark distribution, which is 10 marks in each performance area, irrespective of degree of importance of each performance compared to others. This needs redistribution of individual performance.

Performance	Description of Performance	Comment on weightage of
area no.		performance score
Performance	Forming of committees (structuring the	Can be decreased as its effects
area no1	decision making bodies), Conducting	may be found in the later
	meeting, participation in the meeting,	performance areas.
	Decision processing.	
Performance	Compliance of Budgeting format,	Can remain unchanged.
area no2	completeness, exclusiveness and	
	publication of budget.	
Performance	Financial (Income-expenditure)	Can remain unchanged.
area no3	management, generation, utilization	
	and growth of own fund.	
Performance	Project proposal, reporting, compliance	Can be increased
area no4	of procurement rules, monthly update	
	of the accounts book with bank	
	statement	
Performance	UZP Development Plan and quarterly	Can be increased
area no5	reporting	
Performance	Involvement of committees and	Can remain unchanged.
area no6	relevant officials in Project (scheme)	
	preparation	
Performance	Consideration of social sector (MDG) in	Can be decreased slightly.
area no7	project (scheme) selection	

Performance	Description of	f Per	formance	Comment on weightage of	
area no.					performance score
Performance	Co-financing	in	project	(schemes)	As most of the UZPs, other than
area no8	funding.				UZGP pilot UZPs, have little idea
					and do not practice co-financing
					so this performance area can be
					dropped as long as all the UZPs
					are not well acquainted of it to

		ensure an level playing field for all UZPs.
Performance area no9	Coordination among inter union Development Schemes (scheme involving more than 1 union)	Can be decreased and this performance area can be combined with performance area-7.
Performance area no10	Transparency, Monitoring and Community feedback about UZP activities budgeting and scheme implementation.	Can remain unchanged.

Overview of Stronger and Weaker Areas of UZP Performance, Summarizing the Performance on each Composite Performance Area

According to the assessment score, performance area-2 (Compliance of Budgeting format, completeness, exclusiveness and publication of budget) is found as the strongest for all the UZPs based on their average value which is 7.37 out of 10 and this strongest performance area remains strongest even after dividing the assessed UZPs into two groups i.e., UZGP pilot UZPs (14 nos) and Non- UZGP UZPs (49 nos). Table-1 presents the average performance score by performance areas for all UZPs, UZGP pilot UZPs and Non-UZGP UZPs and the figure-1 shows the degree of strong and weak performance areas of assessed UZPs wholly and dividedly.

	Table-1: average performance score by performance areas													
	PA-1	PA-2	PA-3	PA-4	PA-5	PA-6	PA-7	PA-8	PA-9	PA-10	Tota I			
All the UZPs * assessed	6.30	7.37	5.60	4.14	4.16	0.75	1.75	0.24	2.16	2.79	35.2 5			
UZGP pilot UZPs assessed	7.79	8.36	6.64	5.14	4.71	2.71	2.79	1.07	4.21	4.00	47.4 3			
Non- UZGP UZPs assessed	5.80	6.92	5.27	3.73	3.86	0.18	1.43	0.00	1.53	2.39	31.1 0			

^{*} performance score of 2 UZPs (Chowhaly of Sirajgonj district and Taltoly of Barguna District) is not included

The PA-1 (Forming of committees, conducting and participation in meeting, decision processing) is also another strong performance area of the assessed UZPs where the average performance score of all the UZPs is 6.30.

It is also observed that the weakest performance area is PA-8, (Co-financing in project funding)., where average score of all UZPs is only 0.24. In this performance area UZGP pilot UZPs earned an average score of 1.07, whereas, none of the Non- UZGP UZPs got a single score. From verbal statement of the respondent it can be understood that the

public representatives and the officials of most of the UZPs are not aware of or not interested for exploring opportunities of co-financing of the development schemes. The UZGP has introduced co-financing to five of its pilot UZPs, namely, Jogonnathpur, Kishorgong Sadar, Mithmohon, Brahmanbaria Sadar and Bancharampur Upazilas. No other UZPs could be able to provide any documentary evidence on co-financing and get score in this performance area.

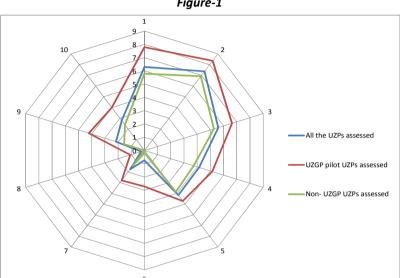
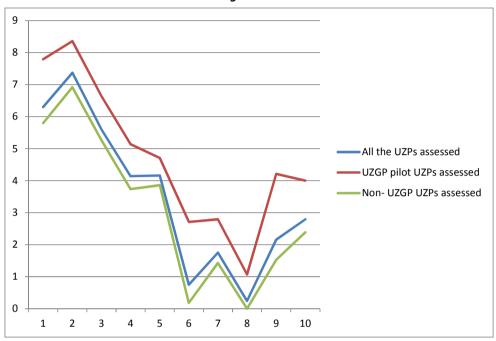


Figure-1

Another very weak performance area is PA-6 (Involvement of committees and relevant officials in Project preparation). A very few of the Non-UZGP UZPs, Dirai, Nabinagar, Tarash and Digholia Upazilas exceptionally got a few (1 or 2) score in this performance area. However, UZGP pilot UZPs got an average score of 2.71 that pushed out the average score of all UZPs up to 0.75. So, practice of involving relevant committee and concern officials in the project (scheme) preparation is not evident on document in the Non-UZGP UZPs with exception to the four mentioned UZPs. The 14 UZGP UZPs have different degrees of involvement of mentioned stakeholders in the project preparation activities. Among them, the degree of involvement is remarkably high in Shalla, Ullapara, Jogonnathpur and Bancharampur Upazilas. These UZPs got a score of at least 5 in this performance area.

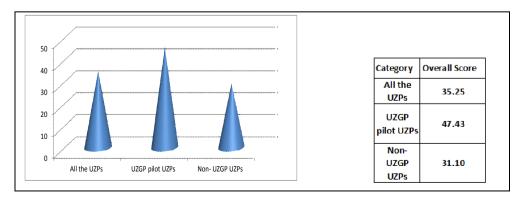
The average scores in the different performance areas are found in a consistent relation, even after dividing the assessed UZPs into two groups: 14 UZGP pilot UZPs and 49 Non-UZGP UZPs. So, it depicts that, performance areas are weak for almost every UZP without some certain exceptions. Most of the exceptions occurred as an outcome of the facilitation of UZGP. Figure-2 also reflets the massage of Figure-1.

Figure-2



Other than the facilitation of UZGP, the true strength to be succeeded to earn better score than other upazila parishad could be rarely evident. Only some logical assumptions can be made, and those have been discussed later. However, the Figure-3 below illustrates the average overall score of the assessed UZPs wholly and grouped in UZGP pilot UZPs and non-UZGP UZPs.

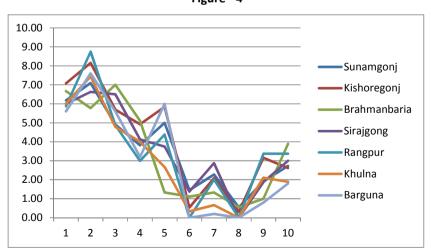
Figure-3



The average scores in the different performance area in different districts also show the similar trend when it is analyzed on the basis of district wise performance i.e., weak performing areas are weak performance for all districts. Interestingly, the average highest scores of individual performance areas are not concentrated to any of the districts. All of the districts, except Khulna, have the highest average score, at least in one performance area. Each of the five districts has the highest average score in five distinct performance areas, where Brahmanbaria district alone performed best in four performance areas, but Khulna could perform at none of the Upazilas. Table-2 and Figure-4 below visualize district-wise average performance score in different performance areas.

	Table-2 : District-wise average performance score by performance areas									
District's Name	PA-1	PA-2	PA-3	PA-4	PA-5	PA-6	PA-7	PA-8	PA-9	PA-10
Sunamgonj	6.18	7.09	4.91	3.82	5.00	1.45	2.27	0.55	1.91	2.73
Kishoregonj	7.08	8.15	5.69	4.92	5.85	0.54	2.08	0.31	3.15	2.62
Brahmanbaria	6.67	5.78	7.00	5.11	1.33	1.11	1.33	0.56	1.00	3.89
Sirajgonj	6.00	6.63	6.50	4.13	3.75	1.38	2.88	0.00	1.88	3.00
Rangpur	5.88	8.75	4.88	3.00	4.38	0.00	2.00	0.00	3.38	3.38
Khulna	6.00	7.44	4.78	4.00	2.67	0.33	0.67	0.00	2.11	1.89
Barguna	5.60	7.60	5.60	3.20	6.00	0.00	0.20	0.00	0.80	1.80

^{*} performance score of 2 UZPs (Chowhaly of Sirajgonj district and Taltoly of Barguna District) is not included



Overview of the Various Areas of Compliance by the top scoring UZPs and their close competitors

Top scoring UZPs have shown excellent performance in most of the performance areas, but, there are areas still left for further improvement. Contrary to that, comparatively low scoring UPZs have at least shown excellent performance in some areas. The following Tables and Figures will reveal this fact:

List of 14 success stories, including areas of excellence:

SI. No.	UPZs/District	Areas where received 8 to 10 marks
01	Jogonnathpur, Sunamganj	All the committees have been formed, meetings were conducted in line with the UPZ Regulation(10 marks), Fund management and utilization (8 marks), UPZ Development Plan has been prepared (8 marks), In preparing Schemes, relevant committees and officials were involved (8 marks) and maintenance of transparency and Monitoring of the scheme were recorded (8 marks)
02	Sunamgonj Sadar, Sunamganj	Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (10 marks)
03	Kishorganj Sadar, Kishorganj	Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (10 points), Planning and Budget-related administrative process has been completed (9 marks), More than 01 Union are under UPZ Development Schemes (9 marks) and Framework has been prepared on the basis of UPZ Regulation and approved by LGD, and accordingly works are being accomplished (8 marks)
04	Mithamoin, Kishorganj	Planning and Budget-related administrative process has been completed (10 marks), More than 01 Union are under UPZ Development Schemes (9 marks), Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (8 marks) and Fund management and utilization (8 marks)
05	B-Baria Sadar, B-Baria	More than 01 Union are under UPZ Development Schemes (9 marks), Framework has been prepared on the basis of UPZ Regulation and approved by LGD, and accordingly works are being accomplished (8 marks), Planning and Budget-related administrative process has been completed (8 marks) and Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (8 marks)

06	Bancharampur, B-Baria	Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (9 marks), Framework has been prepared on the basis of UPZ Regulation and approved by LGD, and accordingly works are being accomplished (8 marks), Planning and Budget-related administrative process has been completed (8 marks) and Fund management and utilization (8 marks)
07	Ullapara, Sirajganj	Framework has been prepared on the basis of UPZ Regulation and approved by LGD, and accordingly works are being accomplished (10 points), Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (9 marks) and Planning and Budget-related administrative process has been completed (8 marks).
08	Kazipur, Sirajganj	Framework has been prepared on the basis of UPZ Regulation and approved by LGD, and accordingly works are being accomplished (8 marks) and Planning and Budget-related administrative process has been completed (8 marks)
09	Pirganj, Rangpur	Planning and Budget-related administrative process has been completed (10 points) and UPZ Committee has been transparent and supervising all relevant matters (8 marks)
10	Rangpur Sadar, Rangpur	Planning and Budget-related administrative process has been completed (10 marks), More than 01 Union are under UPZ Development Schemes (9 marks) and Framework has been prepared on the basis of UPZ Regulation and approved by LGD, and accordingly works are being accomplished (8 marks)
11	Dumuria, Khulna	Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (9 points)
12	Paikgacha, Khulna	Planning and Budget-related administrative process has been completed (8 marks)
13	Borguna Sadar, Borguna	Planning and Budget-related administrative process has been completed (9 marks), Framework has been prepared on the basis of UPZ Regulation and approved by LGD, and accordingly works are being accomplished (8 marks) and Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (8 marks)
14	Betagi, Borguna	Planning and Budget-related administrative process has been completed (9 marks)

List of 14 UZPs, not top performer, but which, of course with some areas of excellence:

SI.	UPZs	Areas where received 8 to 10 marks
No.		
01	Dakkin Sunamgonj, Sunamganj	Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (9 marks) and Framework has been prepared on the basis of UPZ Regulation and approved by LGD, and accordingly works are being accomplished (8 marks)
02	Dowara Bazar, Sunamganj	Planning and Budget-related administrative process has been completed (8 marks) and Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (8 marks)
03	Biswamborpur, Sunamganj	Planning and Budget-related administrative process has been completed (9 marks)
04	Karimgonj, Kishorgonj	Planning and Budget-related administrative process has been completed (10 marks), Planning and Budget-related administrative process has been completed (8 marks) and Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (8 marks)
05	Etna, Kishorgonj	Planning and Budget-related administrative process has been completed (8 marks) and Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (8 marks)
06	Ostogram, Kishorgonj	Planning and Budget-related administrative process has been completed (9 marks) and Financial (Income- expenditure) management has been done keeping conformity with the Rules & Regulations (8 marks)
07	Tarash, Sirajganj	Planning and Budget-related administrative process has been completed (8 marks) and Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (8 marks)
08	Pirgacha, Rangpur	Planning and Budget-related administrative process has been completed (10 points)
09	Gongachora, Rangpur	Planning and Budget-related administrative process has been completed (9 marks) and Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (8 marks)
10	Digholia, Rangpur	Planning and Budget-related administrative process has been completed (10 points), Framework has been prepared on the basis of UPZ Regulation and approved by LGD, and accordingly works are being accomplished (8 marks) and Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (8 marks)
11	Batiaghata, Khulna	Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (10 points)

12	Dacop, Khulna	Planning and Budget-related administrative process has
		been completed (8 marks)
13	Amtoli, Borguna	Financial (Income-expenditure) management has been done keeping conformity with the Rules & Regulations (8 marks) and UPZ Development Plan has been prepared (8 marks)

The above scenario indicates that, many of the UPZs, which showed excellence in many matters and got better score, but was not recommended for selection to obtain grant because of District quota. Moreover, it is not always true that, which to-day has cut bad figures will never succeed in attaining good figures. It is only a matter of bringing necessary and effective rectifications in all deficiencies, which would ultimately give birth to desired success in all operational and management matters of the presently close competing UPZs.

MAIN CHALLENGES FOR THE UZPS

Overview of the Core Problems/Challenges in the Areas Assessed

- In many cases, UZPs public representative and officials are not aware about the process of doing their job and many of the tasks are done in a traditionally practiced manner.
- In some cases, UZPs public representative and officials are in deficiency of information about their task, such as, performance area no. 7, 8 and 9.
- the Sense of team work among UPZ personnel, including sense of positive direction among them for attaining organizational (UPZ) objectives seldom exist;
- Lack of long-term commitment of the personnel are seldom found because transferable job locations;
- In most of the UZPs, the process of proposing and selecting development projects (schemes) are not properly maintained, so the average score in the PA-6 is very law.
- The Upazila Parishad Chairmen and Vice-chairmen rarely have documentary skills and thorough know-how on administrative process executing administrative responsibilities and implementation of development projects;
- Persons in doing critical works like accounts maintenance, recording and filing, planning and budgeting have been found with lack of professional knowledge and skills.
- In some cases, there are understandable evidence of performance but documentation is not properly done, such as, visiting and supervision of the schemes

Need for Future Capacity Development Support of UZPs

It is not only the need for capacity development support of UZPs, but also the need for election or selection of right person in right posts/jobs (as the case may be), which are important to address for overall development of UZPs for serving the people living in the UZP areas. It should be remembered that, the capacity of each and every UZP is mostly dependent of the human qualities, education and job skill of the UZP Office-bearers. Any dearth in one of these basic qualities will remain to be the root causes of the sufferings of the UZPs, which will ultimately push UZPs backward, rather than forward in matter of providing services.

Now, we come to the point of assessing the need for future capacity development of UZPs. With the introduction of new idea and innovative projects, advanced short trainings are needed for the UZP Office-bearers for their concerned skill development so that they can take the challenge for effectively implementing the concerned innovative project or new ideas.

The Way Forward in Addressing these Issues

It is important to effectively identify UZP-wise and aggregate problems, which are being faced by the UZPs in terms of administration, management, operation, recruitment, HRD and other relevant issues. Most of the problems, which are being faced by most of the less capable UZPs have been depicted in this study findings, as have been visualized through the extent of marks obtained by the assessed Upazilas those which received average, below average poor and extremely poor marks. For this, further intensive study is a pre-requisite for their amelioration.

CONCLUSION

The way this assessment has been done is part of the total game. To make this assessment really gainful for the UZPs, is to, inter-alias, collect the reasons why the most of the UZPs' performances were average, below average poor and extremely poor. These problems need to be objectively identified and addressed for mitigation. Otherwise, no appreciable achievement will be made in the performance management of the UZPs.

REFERENCES

Abdin, M.J., (2015), Investment Climate in Bangladesh: Performance and Possibilities, International Journal of Economics & Management Sciences, Volume 4, Issue 9.

Anwar Shah, (2006), A Practitioner's Guide to Intergovernmental Fiscal Transfers, World Bank Policy Research Working Paper no 4039.

A Performance Management Framework for State and Local Government: From Measurement and Reporting to Management and Improving, 2010, National Performance Management Advisory Commission, Chicago, Illinois.

Bahl, R. (2008), 'The pillars of fiscal decentralization.' CAF Working paper N° 2008/07 (December). Caracas, Venezuela.

Fox, W. and B. Menon (2008). 'Decentralization in Bangladesh: change has been illusive.' International Studies Program Working Paper 08-29 (Dec). Andrew Young School of Policy Studies, Georgia State University.

Intergovernmental Fiscal Transfers: Theory and Practice (ed. By Anwar Shah and Robin Boadway), 2007, Washington, D.C. The World Bank.

Jesper Steffensen, Fiscal Decentralization and Sector Funding Principles and Practices: Grant Allocation principles, an international comparison of allocation criteria and modalities, 2010, DANIDA.

Leandro Medina (2015), Assessing Fiscal Risks in Bangladesh, International Monetary Fund (IMF), Working Paper No. 15/110

Odd-Helge Fjeldstad (2014), Fiscal decentralisation in developing countries: Lessons for Bangladesh, CMI Brief, Volume 13 No.2, CHR Michelsen Institute, Norway.

Performance-based Grant systems: Concepts and International Experience (2010), United Nation Capital Development Fund (UNCDF).

Schroeder, L., and P. Smoke, 2003, "Intergovernmental Fiscal Transfers: Concepts, International Practice and Policy Issues." In P. Smoke and Y. H. Kim, eds., Intergovernmental Fiscal Transfers in Asia.

Importance of Ergonomics: An Emerging Issue for Occupational Health in Bangladesh

Dr. Kazi Reshad Agaz¹

ABSTRACT

Occupational health is specifically concerned with safety and wellbeing of the workers, as well as its motive is to improve productivity, using optimum level of human cost comparing the productivity outcome. In normal circumstances, occupational stress appears as an unavoidable part of working life.

Neglect of occupational stress and safety may result in unseen burden to the economy, which, in some cases, may be significant major occupational hazards concerning work motivation and quality productivity. This issue is considered under the concept of fitting the working environment and tools to human comfort and productivity—scientifically called Ergonomics. This fact has not been accepted by many industrial organizations. Lack of understanding of the concepts of ergonomics and the roles of its principles for designing a realistic approach in improving awkward posture, and force leading to developing early fatigue and work place acquired health problems. this article discusses and describe the importance and impact of occupational safety in terms of ergonomics.

Key words: Occupational health, occupational safety, productivity, Ergonomics

INTRODUCTION

Occupational health is specifically concerned with safety and wellbeing of the workers, as well as its motive is to improve productivity, using optimum level of human cost comparing the productivity outcome. In normal circumstances, occupational stress appears as an unavoidable part of working life.

A strong relationship exists between the occupational stress of workers and their productivity. Occupational stress of the workers results in reduced production due to inefficiency of the workers and sickness absenteeism. Moreover, the workers have to be paid sickness benefits and compensation wherever applicable. In many cases workers have to face the loss i.e., no work no pay.

Neglect of occupational stress and safety may result in unseen burden to the economy, which, in some cases, may be significant major occupational hazards concerning work motivation and quality productivity. The most commonly occurred work related

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occupational stress musculoskeletal disorder are found in upper extremities, and neck-back, and have been described by a number of generic terms including cumulative trauma disorders, work related upper limb disorders, occupational over use syndrome, etc. This issue is considered under the concept of fitting the working environment and tools to human comfort and productivity—scientifically called Ergonomics. Ergonomics is very important concept for enhancing human productivity.

Objective of this discussion is to describe the importance and impact of occupational safety in terms of ergonomics.

LITERATURE REVIEW

(Bhattacharyya and Chakrabarti 2016)Ergonomics is an emerging concept in our country compared to its development in the west. It is still an emerging area with heterogeneous nature of research and practices in different spheres of technological needs A strong relationship exists between the comfort and productivity. Unfortunately, this fact has not been accepted by many industrial organizations. This is an indication of lack of understanding of the concepts of ergonomics and the roles of its principles for designing a realistic approach in improving awkward posture, and force leading to developing early fatigue and work place acquired health problems.

(McCormick and Saunders 1993)The term "ergonomics" is derived from two Greek words: "ergon," meaning work, and "nomoi," meaning natural laws. Ergonomists study human capabilities in relationship to work demands. "Ergonomics applies information about human behavior, abilities and limitations and other characteristics to the design of tools, machines, tasks, jobs and environments for productive, safe, comfortable and effective human use".

(Dul et al 1993) A number of factors play a role in Ergonomics; these include body posture and movement (sitting, standing, lifting, pulling and pushing), and environmental factors (noise, lighting, temperature, humidity).

PROBLEMS

Ergonomics: (The Study of Work, 2000, U.S. Department of Labor Occupational Safety and Health Administration) Industries increasingly require higher production rates and advances in technology to remain competitive and stay in business. As a result, jobs today can involve:

- -Frequent lifting, carrying, and pushing or pulling loads without help from other workers or devices:
- -Increasing specialization that requires the worker to perform only one function or movement for a long period of time or day after day;
- -Working more than 8 hours a day;
- -Working at a quicker pace of work, such as faster assembly line speeds; and
- -Having tighter grips when using tools.

These factors—especially if coupled with poor machine design, tool, and workplace design or the use of improper tools—create physical stress on workers' bodies, which can lead to injury.

If work tasks and equipment do not include ergonomic principles in their design, workers may have exposure to undue physical stress, strain, and overexertion, including vibration, awkward postures, forceful exertions, repetitive motion, and heavy lifting. Recognizing ergonomic risk factors in the workplace is an essential first step in correcting hazards and improving worker protection.

Work-related musculoskeletal disorders (MSDs) occur when the physical capabilities of the worker do not match the physical requirements of the job. Prolonged exposure to ergonomic risk factors can cause damage a worker's body and lead to MSDs.

THE IMPACT OF ERGONOMICS

(Ergonomics: The Study of Work, 2000, U.S. Department of Labor Occupational Safety and Health Administration) The goal of Ergonomics is to provide maximum productivity withminimal cost; in this context cost is expressed as the physiological orhealth cost to the worker. In a workplace setting there are seldom alarge number of tasks that exceed the capabilities of most of the workforce. There may be jobs that will include a specific task that requiresextended reaches or overhead work that cannot be sustained for long periods, by using Ergonomic principles to design these tasks; more people should be able to perform the job without the risk of injury.

Ergonomics has already been defined and its primary focus is on the design of work activity that suits the person in that it takes account of their capabilities and limitations. Matching the requirements of a job

with the capabilities of the worker is the approach to be adopted in order to reduce the risks of musculoskeletal injuries resulting from handling materials manually.

Ergonomics emphasizes the prevention of work related musculoskeletal disorders through recognizing, anticipating and reducing risk factors in the planning stages of new systems of work or workplaces. In effect, to design operations that ensure proper selection and use of tools, job methods, workstation layouts and materials that impose no undue stress and strain on the worker. Additional costs are

incurred in redesigning or modifying work processes therefore it is more cost effective to reduce risk factors at the design stage. A proactive approach to Ergonomics will ensure that:

- -Designers will receive training in ergonomics and have appropriate information and guidelines regarding risk reduction
- -Decision-makers planning new work processes should have knowledge of Ergonomics principles that contribute to the reduction or elimination of risk.
- -Design strategies emphasize fitting job demands to the capabilities and limitations of workers. For example, for tasks requiring heavy materials handling, use of mechanical assist devices to reduce the need for manual handling would be designed into the process
- -Other aspects of design should be considered including load design, layout of the workplace to allow for ease of access when using mechanical aids and eliminating unnecessary lifting activities.

Recommendations:

RECOMMENDATIONS

Ergonomic principles provide possibilities for optimizing tasks in the workplace.

(Fernandez and Goodman,1990) Some ergonomics principles that should be applied to the workplace, whether in an industrial or an office environment, include the following:

(1) Aim at dynamic work, avoid static work (work where there is no movement). Static work or static

loading of the muscles is inefficient and accelerates fatigue. Static work can occur when the workplace is too high or too low, when holding a weight in one's arms for an extended period, or when there is constant bending of the back to portfolio a task.

(2) Adjust work surface heights to the size (anthropometry) of the worker and the type of task performed (precision, light assembly, or heavy manual).

- (3) Work within 30 per cent of one's maximum voluntary contraction (strength). Avoid overloading
- of the muscular system.
- (4) Place primary controls, devices, and work pieces within the normal working area. Secondary controls
- should be placed within the 'maximum working area so as to reduce extended reaches and fatigue.
- (5) Strive for best mechanical advantage of the skeletal system.
- (6) Work with both hands. Do not use one hand (non preferred hand) as a biological holding device.
- (7) Hands should move in symmetrical and opposite directions.
- (8) Use the feet as well as the hands.
- (9) Design knowing the capacity of the fingers. Do not overload the fingers.
- (10) Use gravity. Do not oppose it to dispose of unbreakable products.
- (11) Avoid unnatural posture. Bend the handle of the tool. not the wrist.
- (12) Permit change of posture. Maintain a proper sitting posture.
- (13) Counter-balance tools when possible to reduce the weight and forces.
- (14) Accommodate the large individual and give him or her sufficient room.
- (15) Use bins with lips for storage and manual retrieval of small parts instead of boxes. Incline containers so as to reduce awkward postures of the body.
- (16) Train the individual to use the workplace, facility and equipment properly.

(Ergonomics: The Study of Work, 2000, U.S. Department of Labor Occupational Safety and Health Administration) The goal for the design of workplaces is to design for as many people as possible and to have an understanding of the Ergonomic principles of posture and movement which play a central role in the provision of a safe, healthy and comfortable work environment. Posture and movement at work will be dictated by the task and the workplace, the body's muscles, ligaments and joints are involved in adopting posture, carrying out a movement and applying a force. The muscles provide the force necessary to adopt a posture or make a movement. Poor posture and movement can contribute to local mechanical stress on the muscles, ligaments and joints, resulting in complaints of the neck, back, shoulder, wrist and other parts of the musculoskeletal system.

According to International Ergonomics Association Cognitive ergonomics is concerned with mental processes, such as perception, memory, reasoning, and motor response, as they affect interactions

among humans and other elements of a system. Relevant topics include mental workload, decision-making, skilled performance, human computer interaction, human reliability, work stress and training as these may relate to human-system design. This should be applied universally [International Ergonomics Association (2016) Definition and domains ofergonomics1].

Ergonomists, industrial engineers, occupational safety and health professionals, and other trained individuals believe that reducing physical stress in the workplace could eliminate up to half of the serious injuries each year. Employers can learn to anticipate what might go wrong and alter tools and the work environment to make tasks safer for their workers.

Work related discomfort and pains are a major occupational health problem amongst the workers in industries. Controlling these problems by using ergonomics begins with identifying exposure to the known risk factors through an on-site assessment of the work being performed. e ergonomics problem-solving technique leads the user through the identification of ergonomic risk factors by body parts first. By generating multiple reasons, each risk is evaluated by asking why it is present. Strategies are generated to reduce the risk; specific short-term and long-term solutions are developed. e preferred solution may be the one that improves the ergonomics of the job and reduces the risk for injury substantially at a relatively low price.

(Bhattacharyya and Chakrabarti 2016) Work related risk factors in development of work related body pains can be reduced, even be avoided with ergonomic interventions. is can be achieved by identifying the risk factors in the activity and finding the proper solution with design intervention. For user friendly design, if participatory ergonomics approach is taken into consideration for design development process, the results become fruitful.

CONCLUSION

(Jeffrey E. Fernandez and Michael Goodman)Recognizing the importance of ergonomics in occupational health and safety, it is worthy to setup ergonomics standard. the standard will affect a wide-ranging sector of American business and industry, from heavy manufacturing to office settings. The proposed standard identifies six elements for a full ergonomics program: management leadership and employee participation, hazard information and reporting, job hazard analysis and control, training, MSD management and program evaluation. The ergonomics programs should be job-based,

i.e., cover just the specific job where the risk of developing an MSD exists and jobs like it that expose other workers to the same hazard.

Recent developments in the regulatory arena clearly show that understanding of ergonomics and applying good ergonomic practices is key to successful management of human resources. Many companies are realizing that making ergonomic changes before major problems occur (proactive ergonomics) is more cost effective than simply responding to work-related injuries (reactive ergonomics).

Ergonomics is no longer just a buzzword; it now encompasses every aspect of our lives both at work and at home.

REFERENCES:

- 1. Bhattacharyya N, Chakrabarti D (2016), Ergonomics-A Way to Occupational Wellness of Workers Engaged in Industrial Activities)
- 2. *Sanders*, M.M. and *McCormick*, E.J. (1993), Human Factors in Engineering & Design, 7th ed., McGraw-Hill, NY.
- 3. Dul, Jan (2012), 'A strategy for human factors/ergonomics: developing the discipline and profession', Ergonomics 55.4
- 4. Ergonomics: The Study of Work, 2000, U.S. Department of Labor Occupational Safety and Health Administration

Douglas McGregor Theory X and Theory Y Mentalities of Managers and Its Impact on Subordinate's Organizational Commitment: Bangladesh Perspective

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ABSTRACT

Commitment is the sense of obligation, engagement and belongingness of employees towards their organization. Employee commitment is the life blood of the organizational existence. The present study takes an attempt to investigate the impact of mangers or supervisors mentality on employee's commitment. The researchers in this study conceptualize the Theory X as the negative mentality and Theory Y as the positive mentality of the managers. The study adopts a conclusive descriptive research design approach to meet the study objective. The study considers employees having manger or supervisor ranging from entry level to top level working full-time in varieties of organizations in Dhaka city as the population. A probability simple random sampling technique is used to select 220 respondents from the targeted population as the sample of the study. A well-structured pre tested questionnaire is used to collect data from the respondents. The study found that mangers mentality highly influence the factors of commitment and these are humanitarian treatment, autonomy, empowerment, recognition, inspiration, chance of involvement, easy communication, and interpersonal relationship, managerial trust, managerial care, better interpersonal relationship, emotional attachment and sense of obligation which in turns affect the employee commitment. The study employs statistical test descriptive and multiple regressions to analyze the data. The study found there is a significant relationship exists between managers mentality and employee commitment. In conclusion study likes to say mangers positive mentality can bring loyal and committed employs in work place.

Key word: Employee, Commitment, Manager, Mentality, Theory X and Y.

INTRODUCTION

Employee's commitment to his or her organization and the willingness to perform beyond expectations has become a focus area for management. Commitment is more than mere job satisfaction; fully committed employees are motivated and dedicated to make the organization a successful one. Organizational commitment is an individual's willingness to dedicate efforts and loyalty to an organization (Jalonen et.al. 2006 &

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Wagner 2007). Organizational commitment means the members of an organization have active and highly positive inclination toward the organization, and such inclination includes identification with an organization's goals and values, dedication to a job, and loyalty to an organization (Trimble 2006). At the most simplistic level, committed employees lead to happy, loyal customers and repeat business. Commitment also leads to improvement in retention levels. Past research studies have discovered that although there are multiple factors affecting commitment, the personal relationships between a manager and his or her direct reports is the most influential. And logically it is the most vital relationship in the workplace. The very basic two parties of organization are manager/ subordinate. The quest for organizational efficiency, high performance and customer satisfaction has led to a growing body of literature demonstrating the relationship between employees' attitude and behavior. (Hassan & Chandaran 2005).It is said that employees don't leave companies; they leave people. What managers do, how they behave, what they say and importantly how they say it affects employees' attitudes about their jobs and the organization as a whole (Dale 2012). It is also reported that supervisors as managers play an important role in shaping the attitude and behavior of their subordinates (Dansereau, Graen & Haga 1975). Employees who are unhappy and dissatisfied with their immediate supervisors are less likely to identify with the organization's vision and more likely to be absent or to resign. Employees who are committed take pride in their work, support organizational goals and are less willing to change jobs for a minor increase in salary. It is important to note that fully committed employees express feelings of enthusiasm, empowerment, confidence and value based on their interactions with their direct managers (Dale 2012). While a good supervisor makes all employees feel valued and confident, a poor supervisor irritates them and makes them feel uncomfortable. The importance of this cannot be overstated; the relationship to the immediate supervisor impacts the investment an organization makes in its people. When supervisors communicate positive emotions, the employee feels good about the organization as a whole. Likewise, negative reactions cause a decrease in productivity and morale, leading to less commitment. This is more relevant in the workplace now than ever before, especially when management style is being scrutinized, and Leadership is becoming the preferred method of empowering employees, clients, colleagues and peers (Elaine 2012). McGregor's X-Y Theory is a guiding principle of positive approaches to management, to organizational development, and to improving organizational culture. Effective managers estimate the need level of their people and apply the appropriate approach to capitalize on employees' motivation and commitment. The present study tries to investigate the impact of managers X and Y Mentality on subordinate's commitment.

Douglas McGregor's Managers Mentalities - Theory X and Theory Y

The body of leadership literature is filled by the extensive study of supervisor and subordinate interaction. And the managerial behavior towards employees is an explored field of ongoing importance. Douglas McGregor (1906-1964) developed a philosophical view of humankind in his book "The Human Side of Enterprise" 1960 with his Theory X and Theory Y. These are two opposing perceptions about how managers view human behavior at work and organizational life. It encapsulated a fundamental distinction between management styles and has formed the basis for much subsequent writing on the subject.

Theory X is an authoritarian style where the emphasis is on "productivity, on the concept of a fair day's work, on the evils of feather-bedding and restriction of output, on rewards for performance (Tim 2003). Latterly Theory X has been considered as a negative way of dealing with employees. In this theory its assume that employees are, by nature, reluctant to fulfill the obligations of their job and instead will find ways to avoid work or otherwise reduce their work output in a bid to expend the least amount of effort possible. In this theory mangers pose negative mentality about their subordinate regarding their performance and personality.

Theory Y is a participative style of management which "assumes that people will exercise self-direction and self-control in the achievement of organizational objectives to the degree that they are committed to those objectives". It is management's main task in such a system to maximize that commitment (Tim 2003). In many ways, Theory Y is, the diverse to that of Theory X. Theory Y states that employees actually become more productive when more trust and responsibility is delegated to them. According to Theory Y, employees do wish to work and be productive and the act of doing well at work is itself a strong motivator. Regarding to Charles (2005), McGregor theory Y stands in a unique place in management history and advocated a heightened awareness of management's responsibility for the human side of employer-employee relations. In this theory mangers pose positive mentality about their subordinate regarding their performance and personality.

Rationale of the study

Committed employees are the prime mover for any organization. The word "commitment" is simple in spelling but complex in meaning. From the past studies is found that employee commitment depends on both organizational and personal factors. Managers themselves a great part of organization and their mentality or perception towards employees are truly an immense factor. There are basically two types of management mentality perceived by managers and by others in authority positions

either positive or negative. Mangers negative mentality can easily trigger the demotivation button of employees which in turns dissatisfy them and give the result in the form of absenteeism and turnover. On the other hand, mangers positive mentality can easily trigger the motivational button of employees which in turns satisfy them and give the result in the form of loyalty and commitment. Mangers mentality is one of the very influential ways of making subordinate committed. It is highly required to bring this important fact into the light in the form of research findings that is why the present study has been taken.

LITERATURE REVIEW

A review of the available literature is important in order to know the progress made in the concerned area. A very few number of researches so far have been made on the study topic, but for X and Y mentality it is inadequate. For the preparation of this study closely related literature have been reviewed

The Relationship between Organizational Commitment and Manager Behaviors

Reichers (1986) claimed that organizational commitment was in reality a collection of commitments to multiple coalitions and constituencies (e.g. owners/managers). In an examination of this claim, Reichers (1986) undertook a study to measure the commitment of 124 mental health professionals. Her only significant correlation was between organizational commitment and top management's goals and values. In another study involving 763 employees, Becker (1992) found whether employees' commitment to different constituencies or to the overall organization were better predictors of job satisfaction, intention to quit, and prosocial behavior. He discovered that employees' commitment to top management, supervisors, and work groups contributed significantly beyond commitment to the organization. During later research, Becker et al. (1996) also explored whether commitment to the supervisor or to the organization had the greatest impact on the performance ratings that supervisors gave to newly hired employees. From their study of 281 participants, the researchers found that commitment to the supervisor and the supervisor's values was more strongly related to performance ratings than was employee commitment to the organization. Summarizing these multiple constituency findings, Meyer & Allen (1997) offered the following: It should be kept in mind, however, that when we as researchers measure commitment to the organization as a whole, we are probably measuring employees' commitment to "top management" (Reichers 1986) or to a combination of top management and more local foci (Becker & Billings 1993; Hunt & Morgan 1994). If, on the one hand, our intention is to use commitment as a means of understanding or predicting behavior of relevance to the organization as a whole (or top management specifically), it would seem that our purpose can be well served with global measures of organizational commitment.

Douglas McGregor's Managers Mentalities - Theory X and Theory Y and commitment

McGregor's (1960) Theory X (task-oriented) and Theory Y (relations-oriented) Model proposed two distinct theories of human beings: One basically negative, labeled Theory X; and the other basically positive, labeled Theory Y. McGregor (1960) uses the term managerial to describe both Theory X and Theory Y behaviors. His theories contend that managerial behaviors are based on assumptions about employees. A Theory X assumption involves the belief that employees dislike work and will avoid it if at all possible. Managerial behaviors in this instance will include coercing employees, controlling their tasks and activities, and directing their behaviors. A Theory Y assumption involves the belief that employees can view work as a positive experience given the right conditions. Managerial behaviors in this instance include providing encouragement, positive reinforcement, and rewards. Meyer (1968) investigated the effect of leadership perceptions regarding Theory X and Theory Y. He explored these theories by studying two plants of employees, one managed according to Theory X and the other according to Theory Y. Findings revealed that workers who were exposed to Theory Y leadership behaviors had a more positive experience and as a result felt greater responsibility, more warmth, and personally rewarded. Some of the most profound evidence attesting to the superior effects of relations-oriented leadership behaviors comes from studies conducted at the University of Michigan. During their 20 years of research (1950 to 1970), researchers discovered that democratic leadership behaviors resulted in greater job satisfaction and productivity than autocratic leadership behaviors (Bass 1990). For instance, Lewin & Lippitt (1938) undertook a study of several groups, composed of five members each, of fifth and sixth graders. Their goal was to investigate the types of behaviors that distinguished authoritarian/autocratic (taskoriented) groups from democratic (relations-oriented) groups. They found that authoritarian/autocratic (task-oriented) leadership behaviors involved a focus on goals and tasks, as well as denying others involvement in the decision-making process. Contrarily, democratic (relations-oriented) leadership behaviors included praise, invitation to participate, and encouragement. Nelson (1949; 1950) too looked at democratic (relations-oriented) leadership. However, he juxtaposed democratic (relations-oriented) leadership with leadership behaviors that were directive, regulative, and manipulative (task-oriented). Two conclusions he drew from studies of the leadership styles of 220 foremen in a manufacturing organization were that (a) task-

directed leadership behaviors involved initiating structure, providing information about tasks, issuing rules, and threatening punishment for disobedience; and (b) democratic leadership behaviors included two-way interactions with workers and emphasis on human relations. Fleishman's (1953) conclusions regarding the relations-oriented versus task-oriented dimensions of leadership evolved from his validity and reliability studies on the Leader Behavior Description Questionnaire (LBDQ), which measured the two constructs of consideration and initiating structure. Consideration included relationsoriented behaviors such as expresses appreciation, considers subordinates feelings, and provides rewards for a job well-done. Initiating structure included task-oriented behaviors such as offers approaches to problem solving, tries out new ideas, and makes task assignments. Stogdill (1963) also looked at the types of behaviors that represented consideration and initiating structure. He included the following in his descriptions: (a) consideration (relations oriented)- regards comfort, well-being. status. and contributions of followers, and (b) initiating structure (task-oriented)-applies pressure for product output, clearly defines own role, and lets followers know what is expected. In a further discussion of consideration and initiating structure, Akhtar & Haleem (1979) offered the following comment regarding the variety of terms: Review of the literature in this area brings to light a few facts. Firstly, 'employee oriented', 'employee-centered,' 'supportive,' and 'considerate' are the various terms that have been used interchangeably. Similarly, 'production-centered,' job-centered,' and 'initiating structure' have been used. Jermier & Berkes (1979) discovered that employees who were allowed to participate in decision-making had higher levels of commitment to the organization. DeCotiis & Summers (1987) found that when employees were treated with consideration, they displayed greater levels of commitment. Bycio, Hackett & Allen (1995) reported positive correlations between the leadership behaviors of charisma, intellectual stimulation, individualized consideration, and contingent reward and affective, continuance, and normative commitment. Meyer et al. (2002) and Park (2007) found strong positive correlations between organizational characteristics, like perceived organizational support, and affective commitment organizational commitment from variables such as years of experience, level of education, and receipt of support (Reyes 1990; Riehl & Sipple 1996; Rosenholtz & Simpson 1990; Shaw & Reyes 1992). However, transformational leadership is charismatic, inspirational, intellectually stimulating, and individually considerate (Avolio, Bass & Jung 1999). These leaders help individuals transcend their self-interest for the sake of the larger vision of the firm. They believe in people, and they are driven by a strong set of values such as loyalty, trust, and personal attention to employees, something that could positively influence organizational commitment. Lee (2004) find out that transformational leadership has positive

correlation with organizational commitment. Hayward, Goss & Tolmay (2004) noted that transformational & transactional leadership has moderate positive relationship with affective commitment. Lower level of relationship coefficients between transformational leadership and normative and continuance commitment. Transformational leadership helps to increase trust, commitment and team efficacy (Arnold, Barling & Kelloway 2001). Other researchers such as Kent & Chelladurai (2001) stated that individualized consideration has positive link with both affective commitment and normative commitment. Similarly, positive correlations was found between intellectual stimulation and both affective commitment and normative commitment. Bass & Avolio (1994) revealed that transformational leaders who encourage their followers to think critically and creatively can have positive influence on their followers' commitment. This is further supported by Walumbwa & Lawler (2003) that transformational leaders can motivate and increase followers' motivational level and organizational commitment by getting involved to solve problems creatively and also understanding their needs. Moreover, employees are far more likely to be committed to the organization if they have confidence with their leaders.

Manger's Support and Organizational Commitment

With the importance of organizational support, many researchers have scrutinized the importance of supervisor support and found that employees also expect supervisors to be caring and supportive (Eisenberger et al. 2002; Kottke & Sharafinski 1988) found that supervisor's support has strong relationship with job satisfaction and Ogilvie (1986) confirmed that supervisors' actions directly impact the commitment of employees. Armstrong (1998) proved that organizational support has more impact on organizational commitment. Hutchison (1997) concluded that although both organizational support and supervisor support have positive effect on organizational commitment, organizational support will help employees more.

OBJECTIVE OF THE STUDY

To investigate the impact of manger's/supervisor's mentality on employees commitment

Research Gap

It is evident from the review of related literature that not much work has been done on the said field in Bangladesh. This study found that previously so many studies had been conducted only regarding commitment .Since there is a scope for further exploration; this study had adopted both exploratory and conclusive descriptive research design in order to examine the impact of manager's mentality on subordinate commitment. In view of this fact, the present problem is taken for investigation

METHODOLOGY OF THE STUDY

Research Question

Q.Is employee commitment depends on mangers mentality?

Q. How mangers mentalities affect employee commitment (positively/ negatively)?

Theoretical frame work and hypothesis development

Existence of organizational commitment depends on some certain factors and most of the cases organizational commitment absolutely depends on job related factors. The study adopted organizational commitment as dependent variable and identified some independent variables through literature review and current occupational context of the said field in Bangladesh which has impact on organizational commitment. The independent variables are drawn from the interaction of manager's mentality and subordinate situation of commitment, variables include humanitarian treatment, autonomy, empowerment, recognition, inspiration, chance of involvement, easy communication, and interpersonal relationship, managerial trust, managerial care, better interpersonal relationship, emotional attachment and sense of obligation. The study projected that the identified commitment completely depends on the availability of identified independents variable in organizational settings. Based on the frame work outlined the study also constructs the regression model using multiple regression analysis. The model is as follows:

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + \cdots + b_n x_n$$
. Where,
$$Y = \text{Organizational Commitment}$$

$$x_1, x_2, x_3, \text{ and } x_n = \text{The independent variables}$$

$$a = \text{constant}$$

$$b_1, b_2, b_3, \text{ and } b_{n=} \text{ the coefficient}$$

Hypothesis: in order to test the assumption made in theoretical frame work following hypothesis is adopted

H_a= There is a significant relationship exist between manger's mentality and subordinates commitment.

Research design

It is the guideline for conducting the study that helps to achieve intend research objectives. It helps to plan and implement the study in a way that will help the

researcher to obtain intended results, thus increasing the chances of obtaining information that could be associated with the real situation (Burns & Grove 2001). A conclusive descriptive research approach was adapted to carry out the study. Descriptive studies are usually the best methods for collecting information that will demonstrate relationships and describe the world as it exists. Bickman & Rog (1998) suggest that descriptive studies can answer questions such as "what is" or "what was." The study conducted a field survey method to have available information and meet the research objectives.

Population of the study

Polit & Hungler (1999) refer to the population as an aggregate or totality of all the objects, subjects or members that conform to a set of specifications. The population of the present study consisted of all the employees having superior or manager in which they are bound to abide by the instruction and are accountable for their deeds at Dhaka city in Bangladesh.

Sampling and Sample

The process of selecting a portion of the population to represent the entire population is known as sampling (LoBiondo-Wood & Haber 1998). A sample is a subset of a population selected to participate in the study, it is a fraction of the whole, selected to participate in the research project (Brink 1996). The study selects simple random sample technique to choose respondents from different fields. The preliminary survey and discussion with the respondents helped a lot to construct an appropriate sample size. To reach a valid conclusion and make sample more representative, the study purposively selects 220 employees who have direct manager or supervisor as the respondents.

Sample area and sample distribution

The study was confined within the Dhaka city, Bangladesh. A survey research design was used in this study to investigate the mangers mentality towards subordinate and its impact on them in a randomly selected organization in Dhaka city in Bangladesh. The researchers selected employees from both private to public sector ranging from entry to top level management to conduct the questionnaire survey.

Sources of data

Both the primary and secondary data were used in the present study. The primary data were collected with the help of a questionnaire using face to face interview technique from the employees ranging from entry to top level working in Dhaka city. In order to make the primary data valid the study extensively surveyed available source of secondary data. The secondary data was also used to investigate the facts and issues

closely related to the research topics. The secondary data were collected from the existing literature in the said field including different studies, published journals, reports, magazines, educational hand book, newspapers and manuscripts, websites and online articles.

Questionnaire design

The required information was collected through a questionnaire survey. The research questionnaire titled "A survey on manager's mentality towards subordinate and its impact on commitment" was used to gather data for the study. Before developing the questionnaire researchers interviewed some managerial and subordinate level employees working both government and non government organization. This assists a lot to make an appropriate questionnaire. The questionnaire included both demographic and job related questions. The questionnaire had two sections, Section "A" of the research questionnaire describes respondents' Demographic information, and categories included: gender, age, marital status, educational qualification, and length of service. Section "B", on the other hand describes possible opinions of commitment variables. The questionnaire was made up of 6 items in section 'A' and 14 items in section 'B'. Respondents were asked to mark some possible statements on commitment, productivity and work life balance from the questionnaire in section B and it and was constructed along a five-point likert-type scale of 1= strongly agree, 2 = agree, 3= neutral (neither agree nor disagree), 4= disagree, and 5= strongly disagree.

Reliability of data

Reliability is the degree of consistency with which the instrument measures an attribute (Polit & Hungler 1999). The initial reliability of the items was verified by computing the Cronbach's alpha. The Cronbach's alpha suggests that a minimum alpha of .60 is sufficed for early stage of research (Nunnally 1978). The Cronbach's alpha estimated for all of the variables was .913 therefore deemed to have adequate reliability.

Table:1Reliablity Statistics

		Scale			Cronbach's
		Variance if	Corrected	Squared	Alpha if
	Scale Mean if	Item	Item-Total	Multiple	Item
	Item Deleted	Deleted	Correlation	Correlation	Deleted
Humanitarian	35.2409	125.937	.831	.774	.899
Treatment	35.2409	125.937	.831	.774	.899
Freedom at work	35.0409	130.971	.721	.584	.903
Empowerment	35.3091	129.758	.725	.599	.903
Chance of	34.5909	139.640	.368	.213	.915
Involvement	31.3303	133.010	.500	.213	.515

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Inspiration	34.8364	134.375	.501	.332	.911
Recognition	34.7273	139.222	.380	.220	.915
Easy communication	34.8864	134.722	.467	.346	.912
Equity and justice	34.6045	140.277	.319	.277	.917
Managerial Trust	34.9773	130.515	.629	.501	.906
Managerial Care	35.3091	129.977	.735	.712	.903
Good interpersonal relation	35.0091	123.160	.793	.747	.899
Increase emotional attachment	35.2545	130.163	.726	.602	.903
Create sense of obligation	34.7545	125.008	.745	.715	.901
Commitment	34.9091	125.937	.806	.803	.899

In table 2 the column marked 'Corrected Item Total Correlation' give an indication of the degree to which each item correlates with the total score and low values (less than 3.00) here indicate that the item is measuring something different to the scale as a whole. In the column headed 'Alpha if Item deleted' is representing the impact of removing each item from the scale. Hence it was absolutely confirmed that the Cronbach alpha coefficient (0.913) and Cronbach alpha based on standardized item (.912) was optimum.

Validity of data

Validity is the state or quality of being valid of a concept, conclusion or measurement. Alderson, Clapham & Wall (1995) cited Henning's definition of validity as Validity in general refers to the appropriateness of a given test or any of its component parts as a measure of what it is purported to measure. A test is said to be valid to the extent that is measures what it is supposed to measure. It follows that the term is valid when used to describe a test may be valid for some purpose, but not for other. There are three types of validity: content validity, predictive validity, and construct validity (Siddiqi 2010). To justify the validity concept of measurement, the present study used content validity. It is Kerlinger defined content validity (1973) cited in Alderson, Clapham & Wall (1995), the representative or sampling adequacy of the content-the substance, the matter, the topic- of a measuring instrument. Usually, content validity can be verified by the

professional knowledge of the researchers (Sharafi & Shahrokh 2012). A literature review and the assistance of experts can be used for appropriate and relevant measurements for a study (Sharafi & Shahrokh 2012). This study rigorously reviewed sufficient amount of past literature and also adapted instruments which were used in previous studies to meet the content validity requirements.

Data Analysis

After having the collected data from the field the researcher made the data sheet with proper caution and check. Data was analyzed using SPSS version 17 through different statistical techniques. Demographic factors were analyzed through simple descriptive statistics and job related factors were analyzed using multiple regressions.

Time frame

Each and every study should allow considerable time to be ethically responsible in results. The present study mainly consumed time for research design, questionnaire development, field survey, data collection, data analysis and report writing. The study was carried on from July, 2015 to December, 2015.

RESULT AND DISCUSSION

Descriptive Statistic

Descriptive statistics are used to describe or summarize data in ways that are meaningful and useful. Descriptive status provides simple summaries about the sample and about the observations that have been made.

Table: 2 Demographic profile of the respondents

Gender of the respondents					
Particulars	No of Respondents	Percentage [%]			
Male	147	66.8			
Female	73	33.2			
Total	220	100.0			
Marital status of the respondents					
20-30	97	44.1			
30-40	73	33.2			
40-50	33	15.0			
50-60	16	7.3			
60-70	1	.5			
Total	220	100.0			

Educational qualification						
Graduation	85	38.6				
level	83	36.0				
Post-						
Graduation	135	61.4				
Level						
Total	220	100.0				
Job title						
Entry level	78	35.5				
Mid-level	125	56.8				
Top level	17	7.7				
Total	220	100.0				
Total work expe	rience					
1-3 Years	105	47.7				
3-6 Years	61	27.7				
6-9 Years	15	6.8				
9-12Years	10	4.5				
12-15 Years	29	13.2				
Total	220	100.0				
Nature of organi	zation					
Private	143	65.0				
Public	77	35.0				
Total	220	100.0				
Nature of Busin	ess					
Manufacturing	69	31.4				
Service	151	68.6				
Total	220	100.0				
Situation of emp	Situation of employees					
positive	176	80.0				
negative	44	20.0				
Total	220	100.0				

From the above table 2 it is seen that among 220 respondents 147 persons are male that means 66.6% are male respondents and rest are female. The male and female ratio of respondent is 2:1. It is also seen that most of the respondents belong to the age group 20 to 30 and there percentage is 44.1. Next highest percentage consist the respondents group whose age are from 30-40. Table shows that in this study 56.8% respondents are doing mid-level job. Only 17 persons are involved with top level job where 78 respondents are occupied with entry level job. Among the respondents 135 respondents qualified post graduate level and there percentage is 61.4. Rest of the respondents completed their graduation level. In this study all the respondents have some experiences to work with their manager. 13.2% respondents have 12 to 15 years work experiences and around 48% respondents have 1-3 years job experiences. The

table demonstrates that most of the respondents which is around 65% are involved with private company as in Bangladesh the number of private companies are greater than public company. Rest 35% respondents are doing public job. In this study 68.6% respondents are taken from service sector while 31% are from manufacturing division. 20% respondents of this study fall in the situation of negative behavior from their manager and 80% respondents encounter positive behavior from their manager.

Evaluating the model obtained from standard multiple regressions

From the table below (table 3) it is found that the value of R is .896, it indicates that the relations between the dependent variable and the independent variables are strong enough to represent the model. It is to be noted that the 'Adjusted R Square Statistics' corrects the value of R square, in case of small sample size, to provide better estimate of the true population value. It is also seen that the value of Adjusted R² is .791, i.e. the dependent variable is 79% explained by the independent variable that are included in the model.

Table-3: Model Summary (b) of the Standard Multiple Regression

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.896(a)	.803	.791	.59938

a Predictors: (Constant), create sense of obligation, Equity and justice, Chance of Involvement, Recognition, Inspiration, Easy communication, Managerial Trust, Increase emotional attachment, Freedom at work, Empowerment, Managerial care, Humanitarian Treatment, good interpersonal relation

b Dependent Variable: commitment

Assessment of hypothesis by simple linear regression in enter method

In table 4, the F Value was derived from dividing the Mean Square Model (23.248) by the Mean Square Residual (0.359), which was equal to 64.711. Consequently, the P value associated with this F value, shown under the column headed 'Sig.', was less than 0.001. It indicated that independent variables (create sense of obligation, Equity and justice, Chance of Involvement, Recognition, Inspiration, Easy communication, managerial Trust, Increase emotional attachment, Freedom at work, Empowerment, managerial care, Humanitarian Treatment, good interpersonal relation) of this study reliably predicted the dependent variable (Commitment) providing strong in favor of alternative hypothesis. As a result, the study hypothesis had been accepted finally without any doubt.

Table-4: Analysis of Variance (ANOVA)(b)

		Sum of				
Model		Squares	df	Mean Square	F	Sig.
1	Regression	302.224	13	23.248	64.711	.000(a)
	Residual	74.007	206	.359		
	Total	376.232	219			

a Predictors: (Constant), create sense of obligation, Equity and justice, Chance of Involvement, Recognition, Inspiration, Easy communication, Managerial Trust, Increase emotional attachment, Freedom at work, Empowerment, Managerial care, Humanitarian Treatment, good interpersonal relation

b Dependent Variable: commitment

Assessment of Normality

Normality was assessed by 'Normal Probability Plot of Regression Standardized Residuals' which is illustrated by figure 2 below. Here it can be observed that points were positioned in a reasonably straight diagonal line from bottom left to top right indicating no major deviation from normality.

Normal P-P Plot of Regression Standardized Residual

Figure 1: Normal P-P Plot of Regression Standardized Residuals

Analysis of regression between independent variables and dependent variable: testing the multi co linearity:

Table 5 represents the outputs of Co linearity Diagnostics which was actually performed as part of multiple regression programs. In multiple regression, the variance inflation factor (VIF) is used as an indicator of multi co linearity. Computationally, it is defined as the reciprocal of tolerance: 1 / (1 - R²). All other things equal, researchers desire lower levels of VIF, as higher levels of VIF are known to affect adversely the results associated with a multiple regression analysis. In fact, the utility of VIF, as distinct from tolerance, is that VIF specifically indicates the magnitude of the inflation in the standard errors associated with a particular beta weight that is due to multi co linearity. Various recommendations for acceptable levels of VIF have been published in the literature. Perhaps most commonly, a value of 10 has been recommended as the maximum level of VIF (Hair et al.1995; Kennedy 1992; Marquardt 1970; Neter, Wasserman & Kutner 1989). So the lower the VIF lower the chances of multi co linearity. For the present study the maximum value of VIF is 3.94 which completely comply with the assumption. On the other hand in multiple regressions, tolerance is used as an indicator of multi co linearity. Tolerance is estimated by 1 - R², where R² is calculated by regression the independent variable of interest onto the remaining independent variables included in the multiple regression analysis. All other things equal, researchers desire higher levels of tolerance, as low levels of tolerance are known to affect adversely the results associated with a multiple regression analysis.

Various recommendations for acceptable levels of tolerance have been published in the literature. Perhaps most commonly, a value of .10 is recommended as the minimum level of tolerance (Tabachnick & Fidell 2001). The present study complies with the assumption completely.

Table 5: Coefficients (a) on create sense of obligation, Equity and justice, Chance of Involvement, Recognition, Inspiration, Easy communication, Managerial Trust, Increase emotional attachment, Freedom at work, Empowerment, Managerialcare, Humanitarian Treatment, good interpersonal relation

		Unstandardized		Standardized			Co	linearity
		Coeffic	ients	Coefficients	t	Sig.	Statisti	cs
								Std.
Model		В	Std. Error	Beta	Tolerance	VIF	В	Error
1	(Constant)	.280	.166		1.691	.092		
	Humanitarian Treatment	.358	.062	.349	5.783	.000	.262	3.815
	Freedom at work	.033	.054	.029	.604	.547	.417	2.397
	Empowerment	056	.052	052	-1.066	.287	.403	2.481

	Chance of Involvement	001	.038	001	036	.972	.787	1.270
	Inspiration	012	.038	012	319	.750	.668	1.496
	Recognition	.043	.038	.039	1.112	.267	.784	1.275
	Easy communication	014	.037	014	369	.713	.654	1.528
	Equity and justice	090	.037	087	-2.415	.017	.743	1.345
	Managerial Trust	009	.043	009	205	.838	.499	2.005
	Managerial care	.193	.062	.175	3.111	.002	.301	3.320
	Good interpersonal relation	.039	.054	.044	.722	.471	.254	3.944
	Increase emotional attachment	.138	.053	.126	2.610	.010	.411	2.431
	Create sense of obligation	.348	.046	.386	7.550	.000	.364	2.744

a. Dependent Variable: commitment

CONCLUSION AND RECOMMENDATION

High level of employee commitments means that employees are really enthusiastic about their job and their performance will be better as well as the effectiveness and productivity of their work will be higher. The Manager performs a pivotal role. He or she is the primary conduit for the flow of information within an organization. Organization imparts its goals and values through the managers who can best explain to individuals what these mean and how they may affect employees. Manger ensures that employees' voices are heard, listens to their concerns and responds to them, and passes that feedback to management. These consistent, positive interactions with employees promote a spirit of teamwork and cooperation. It pays dividends for managers to get to know their staff as this translates into higher levels of commitment and all the consequent positive effects on the organization. Employees perceive their value as an individual through the prism of the managers. Recognition of their contribution, along with feedback and encouragement on their performance from their manager, leads to increased confidence, commitment and achievement. Failure to recognize and reward good work can negatively impact employee morale and productivity. An employee wants to feel that the manger is interested in him or her as a person and cares about his or her life outside work and its effects on job performance. Managers who get to know their employees positively and behave accordingly helps to make his employees committed. This positive mentality is of the most important drivers of commitment. Employees have a positive relationship with managers who pose positive mentality. From the present study it is found that manger's mentality has an important impact towards the employees' commitment. Mangers mentality leads to have sense of obligation, Equity and justice, Chance of Involvement, Recognition, Inspiration, Easy communication, Managerial Trust, Increase emotional attachment, Freedom at work, Empowerment, Managerial care, Humanitarian Treatment, good interpersonal relation which in turns feel employees loyal, oblige, engage and finally committed.

Recommendation

Employee commitment is the relative strength of the individual's identification with and involvement in a particular organization. A committed employee has a strong desire to remain a member of the organization, a strong belief in and acceptance of the values and goals of the organization and readiness to exert considerable effort on behalf of the organization. The study likes to make some recommendation that mangers should practice and provide the identified independent factors in organizational setting to make their subordinate committed in organization.

Limitations of the study

Since, in locally and internationally not so many research attempts have been made, it was hard to find scholarly article on the said topic for literature review, as a result, the researchers had to rely mostly on related literature of the topic. Since the present study is confined within the mangers mentality and its impact on subordinates' commitment the results cannot be generalized to other factor related to commitment.

Future research implication

The present study confined within the scope of finding out only the responsible factors of teachers job satisfaction. The results presented here suggest that mangers mentality has influential impact on subordinates' commitment. The present study result can be tested further to know their exact impact on subordinates' commitment.

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REFERENCES

Akhtar, S. and Haleem, A., 1979. Differences between newly-promoted supervisors and workers with regard to consideration and initiating structure. *Journal of Psychological Research*, 24(2), pp.90-95.

Alderson, J.C., Clapham, C. and Wall, D., 1995. *Language test construction and evaluation*. Ernst KlettSprachen.

Armstrong-Stassen, M., 1997. The effect of repeated management downsizing and surplus designation on remaining managers: An exploratory study. *Anxiety, Stress, and Coping*, *10*(4), pp.377-384.

Arnold, K.A., Barling, J. and Kevin Kelloway, E., 2001. Transformational leadership or the iron cage: which predicts trust, commitment and team efficacy? *Leadership & Organization Development Journal*, 22(7), pp.315-320.

Avolio, B.J., Bass, B.M. and Jung, D.I., 1999. Re-examining the components of transformational and transactional leadership using the Multifactor Leadership. *Journal of occupational and organizational psychology*, 72(4), pp.441-462.

Bass, B. & Avolio, B., 1994. *MLQ Multifactor leadership questionnaire*. Redwood City, CA: Mind Garden.

Bass, B., 1990. Bass & Stogdill's Handbook of Leadership (3rd ed.). New York: The Free Press.

Becker, T.E., 1992. Foci and bases of commitment: are they distinctions worth making?. *Academy of management Journal*, 35(1), pp.232-244.

Becker, T.E. and Billings, R.S., 1993. Profiles of commitment: An empirical test. *Journal of organizational behavior*, 14(2), pp.177-190.

Becker, T. E., Billings, R. S., Eveleth, D. M., & Gilbert, N. L.,1996. Foci and bases of employee commitment: Implications for job performance. *Academy of ManagementJournal*, *39*(2), pp 464-482.

Organizational Commitment. Hasan M. M. & Alam M. J. (2015), Management Development, 29(3&4)

Bickman, L. &Rog, D. J., 1998. *Handbook of applied social research methods* (pp. ix-xix). Thousand Oaks, CA: Sage.

Brink, H., Van der Walt, C. and Van Rensburg, G., 2006. *Fundamentals of research methodology for health care professionals*. Juta and Company Ltd.

Burns, N.andGrove, S.K., 2005. The Practice of Nursing Research: Conduct, Critique, & Utilization.

Bycio, P., Hackett, R.D. and Allen, J.S., 1995. Further assessments of Bass's (1985) conceptualization of transactional and transformational leadership. *Journal of applied psychology*, 80(4), p.468.

Carson, C.M., 2005. A historical view of Douglas McGregor's Theory Y. *Management Decision*, 43(3), pp.450-460.

Dansereau, F., Graen, G. and Haga, W.J., 1975. A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational behavior and human performance*, *13*(1), pp.46-78.

DeCotiis, T.A. and Summers, T.P., 1987. A path analysis of a model of the antecedents and consequences of organizational commitment. *Human relations*, 40(7), pp.445-470.

Dale C., 2012. ENHANCING EMPLOYEE ENGAGEMENT: THE ROLE OF THE IMMEDIATE SUPERVISOR, DALE CARNEGIE TRAINING WHITE PAPER. Available at: www.dalecarnegie.com/white-papers/improving-employeeengagement

Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P.D. and Rhoades, L., 2001 .Reciprocation of perceived organizational support. *Journal of Applied Psychology*, 86(1), pp.42-51.

Elaine, R., 2012. *Management Style Theory X and Theory Y*. Available at: http://tweakyourbiz.com/management/2012/04/02/management-styles-theory-x-and-theory-y/

Fleishman, E.A., 1953. The description of supervisory behavior. *Journal of applied psychology*, *37*(1), p.1.

Hair, J. F. Jr., Anderson, R. E., Tatham, R. L., and Black, W. C., 1995. *Multivariate Data Analysis (3rd ed)*. New York: Macmillan.

Hassan, A. and Chandaran, S., 2005. Quality of supervisor-subordinate relationship and work outcome: Organizational justice as mediator. *International Journal of Economics, Management and Accounting*, 13(1).

Hayward, Q., Goss, M. and Tolmay, R., 2004. The relationship between transformational and transactional leadership and employee commitment. *Grahamstown, Rhodes University: Business Report*.

Hunt, S.D. and Morgan, R.M., 1994. Organizational commitment: one of many commitments or key mediating construct? *Academy of Management Journal*, *37*(6), pp.1568-1587.

Hutchison, S., 1997. A path model of perceived organizational support. *Journal of Social Behavior and Personality*, 12(1), p.159.

Jalonen, P., Virtanen, M., Vahtera, J., Elovainio, M. and Kivimaki, M., 2006. Predictors of sustained organizational commitment among nurses with temporary job contracts. *Journal of Nursing Administration*, *36*(5), pp.268-276.

Jermier, J.M. and Berkes, L.J., 1979. Leader behavior in a police command bureaucracy: A closer look at the quasi-military model. *Administrative science quarterly*, pp.1-23.

Kennedy, P., 1992. A Guide to Econometrics. Oxford: Blackwell.

Kent, A. and Chelladurai, P., 2001. Perceived transformational leadership, organizational commitment, and citizenship behavior: A case study in intercollegiate athletics. *Journal of sport management*, 15(2), pp.135-159.

Kottke, J.L. and Sharafinski, C.E., 1988. Measuring perceived supervisory and organizational support. *Educational and Psychological Measurement*, 48(4), pp.1075-1079.

Kim Jean Lee, S. and Yu, K., 2004. Corporate culture and organizational performance. *Journal of managerial psychology*, *19*(4), pp.340-359.

Organizational Commitment. Hasan M. M. & Alam M. J. (2015), Management Development, 29(3&4)

Lewin, K. and Lippitt, R., 1938. An experimental approach to the study of autocracy and democracy: A preliminary note. *Sociometry*, 1(3/4), pp.292-300.

LoBiondo-W.G., and Haber, J., 1998. *Nursing research: Methods, critical appraisal, and utilization*. (4th ed). St. Louis, MO: Mosby

Lorsch, J.W., andMorse, J.J., 1970. *Beyond theory Y* (pp. 650-660). Harvard Business Review.

Marquardt, D. W., 1970. Generalized inverses, ridge regression, biased linear estimation, and nonlinear estimation. *Technometrics*, 12, pp.591–256. McGregor, D., 1966. Leadership and motivation.

Meyer, J.P., Stanley, D.J., Herscovitch, L. and Topolnytsky, L., 2002. Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of vocational behavior*, *61*(1), pp.20-52.

Meyer, M.W., 1968. The Two Authority Structures of Bureaucratic Organizatino. *Administrative Science Quarterly*, pp.211-228.

Meyer, J.P., and Allen, N.J., 1997. Commitment in the workplace: Theory, research and application. *Thousand Oaks*.

Mohamed, R.K.M.H. and Nor, C.S.M., 2013. The Relationship between McGregor's XY Theory Management Style and Fulfillment of Psychological Contract: A Literature Review. *International Journal of Academic Research in Business and Social Sciences*, *3*(5), p.715.

Nelson, C.W., 1949. *Development and evaluation of a leadership attitude scale for foremen*. Department of Photoreproduction, University of Chicago..

Nelson, C.W., 1950. Differential concepts of leadership and their function in an industrial organization. *Paper, American Psychological Association, State College, PA*.

Neter, J., Wasserman, W., and Kutner, M. H., 1989. *Applied Linear Regression Models*. Homewood, IL: Irwin.

Nunnally, J., 1978. Psychometric Theory (2nd eel.). New York, Iv\ cGrow-Hill.

Ogilvie, J.R., 1986. The role of human resource management practices in predicting organizational commitment. *Group & Organization Management*, 11(4), pp.335-359.

Park, S., 2007. Relationships among managerial coaching in organizations and the outcomes of personal learning, organizational commitment, and turnover intention. ProQuest.

Polit, D.F. and Hungler, B.P., 1998. *Study guide to accompany nursing research: Principles and methods*. Lippincott Williams & Wilkins.

Reyes, P., 1990. Individual work orientation and teacher outcomes. *The Journal of Educational Research*, 83(6), pp.327-335.

Reichers, A. E., 1986. Conflict and organizational commitment. *Journal of Applied Psychology*, 71, pp.508-514.

Richer, S.F., Blanchard, C. and Vallerand, R.J., 2002. A motivational model of work turnover. *Journal of Applied Social Psychology*, *32*(10), pp.2089-2113.

Riehl, C. and Sipple, J.W., 1996. Making the most of time and talent: Secondary school organizational climates, teaching task environments, and teacher commitment. *American Educational Research Journal*, *33*(4), pp.873-901.

Rosenholtz, S.J. and Simpson, C., 1990. Workplace conditions and the rise and fall of teachers' commitment. *Sociology of education*, pp.241-257.

Shaw, J. and Reyes, P., 1992. School cultures: Organizational value orientation and commitment. *The Journal of Educational Research*, 85(5), pp.295-302.

Siddiqi, K.O., 2011. Interrelations between service quality attributes, customer satisfaction and customer loyalty in the retail banking sector in Bangladesh. *International Journal of Business and Management*, *6*(3), p.12.

Sharafi, T., 2012. The relationship between family-to-work conflict of employee and coworkers' turnover intention. *Management Science Letters*, *2*(1), pp.1-10.

Stogdill, R.M., 1963. *Manual for the leader behavior description questionnaire-Form XII:* An experimental revision. Bureau of Business Research, College of Commerce and Administration, Ohio State University.

Tabachnick, B. G., and Fidell, L. S., 2001. *Using Multivariate Statistics (4th ed.)*. Boston, MA: Allyn and Bacon

Tim, H., 2003. Guide to Management Ideas and Gurus. *The Economist* (Profile Books; 322 pp.20).

Trimble, D.E., 2006. ORGANIZATIONAL COMMITMENT, JOB SATISFACTION, AND TURNOVER INTENTION OF MISSIONARIES. *Journal of Psychology & Theology*, *34*(4).

Walumbwa, F.O., Orwa, B., Wang, P. and Lawler, J.J., 2005. Transformational leadership, organizational commitment, and job satisfaction: A comparative study of Kenyan and US financial firms. *Human resource development quarterly*, *16*(2), pp.235-256.