

Journal of Business Studies
JBS-ISSN 2303-9884
Volume - 11, No. 2, pp.: 1-20

The Application of Theory of Planned Behavior in Event Tourism: An Empirical Study at Rajshahi University in Bangladesh

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Abstract

Behavioral theories have been used in many tourism studies since its inception, but how event's visitors' behavioral intention in choosing an event destination is developed has rarely been investigated. This empirical study is conducted to test the fitness of the Theory of Planned Behavior (TPB) with potential visitors from Rajshahi University as the sample (n=321). The result of the study showed that data fitted the TPB model moderately well and explained respondents' visiting intention. Attitude, subjective norm and perceived behavioral control were found to be related to respondents' visiting intention. Recommendations were provided for government and tourism bodies to market Rajshahi University (RU) as a Baishakhi event destination for the visitors.

Keywords: *Attitude, Subjective Norm, Perceived Behavioral Control, Past Behavior, and Pohala Baishakh.*

Introduction

Tourism sector is one of the fast growing sectors in Bangladesh. According to the economic impact of travel and tourism in Bangladesh by World Travel and Tourism Council (2017), the direct contribution of travel and tourism to GDP (gross domestic product) was BDT. 421.4bn in 201, and is forecasted to rise by 6.2% in 2017, and to rise by 6.1% pa from 2017-2027, to BDT 806.6bn in 2027. It also forecasted that the total contribution of Travel and Tourism to employment in Bangladesh, including jobs indirectly supported by industry was 3.8% of total employment (2,187,000) in 2016. This is expected to rise by 2.7% in 2017. In addition to that, the growth of tourism industry

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was ranked among the 184 countries in the world where the rank of Bangladesh forecasted 21 in 2017, and for long term growth Bangladesh rank will be 6 in 2027. So, it's indicated the future prospect of this industry for the economic development and remarkable employment opportunity in Bangladesh. These growth of this industry indicated light of further scope by maximizing use of existing resources (Islam & Nuruzzaman, 2009). Valle, Mendes and Gurreiro (2012) stated that tourism industry is no longer concerned with offering basic services such as goods lodging, restaurants, or landscape only, nowadays tourists seek memorable experience in memorable places, and their participation in events of that place can contribute to fulfill these feelings (Boniface & Fowler, 1996; Craik, 1995; Pine & Gilmore, 1999).

Event is one of the most attractive tourism products for visitors and it can be said as the cultural resource which is able to provide unique experience (Munsters, 1996). Visitors feel as an actor when they participate in an event (Boniface & Fowler, 1996; Kotler, Asplund, Rein, & Heider, 1999; Pine & Gilmore, 1999). Getz (2008) also stated that events are important motivator of tourism, and its figure prominently in the development and marketing plans of most destinations. The Pohala Baishakah is one of the most attractive events in Bangladesh that are directly related with language movement, liberation, and the traditional Bengali customs and norms (Bangaliana). It is also the celebration of heritage, as the first day of Bangla New Year, aimed festivity and cultural carnival (Khan & Khan, 2014). They also stated that people, irrespective of caste or creed and age are ushering in new hope for their peace and prosperity and the capital and other parts of the country wear a festival look, and Ramna Batamul, Dhaka University campus, Bangla Academy, Chayanat, Dhanmondi Rabindra Sarabar and Shaheed Suhrawardy Udyan are the main venues for the celebrations of this event in the capital city of Bangladesh. Rajshahi University (RU) is one of the renounce destinations for this event outside the capital city in Bangladesh, and arranging this event effectively from its inception. Therefore, this study is conducted on this tourism spot to understand the decision making process of visitors considering the theory of planned behavior (TPB).

Literature Review

Tourist behavior theories have been the focus in many tourism research studies. Tourist motivation is the considerable factor to tourism researchers (Crompton, 1979; Dann, 1981; Uysal & Hagan, 1993). The study of tourist motivation is based on the concept of pull and push factors which are accepted in different studies (Crompton, 1979; Dann, 1981; Jamrozy & Uysal, 1994; Lam & Hsu, 2004; Zhang & Lam, 1999). However, how these pull and push factors help to develop visitors' attitudes and how these attitudes lead to develop behavioral intention have rarely investigated. In fact, the decision making process of choosing a destination is very much complex. It influences by social (subjective norm) and psychological (attitude) factors (Lam & Hsu, 2004). In addition to that past behavior and facilitating factors have also a direct impact on visitors' behavioral intention (Quellette & Wood, 1998; Triandis, 1977). The questions then become as follows:

Tourist behavior theories have been focused in many tourism research studies. The pull and push factors help to develop visitors' attitudes and how these attitudes lead to develop behavioral intention have rarely investigated. In fact, the decision making process of choosing a destination is very much complex. It influences by social (subjective norm) and psychological (attitude) factors (Lam & Hsu, 2004). In addition to that past behavior and facilitating factors have also a direct impact on visitors' behavioral intention (Quellette & Wood, 1998; Triandis, 1977). The questions then become as follows:

1. Will visitors past experiences toward event affect their choice of the destination again in future?
2. Are visitors influenced by personal expectation and experiences?
3. Will expectation of others affect visitors' choice of a destination event?
4. What is the role of social influence of visitors' decisions?
5. Will facilitating or inhibiting factors affect the visitors' decision?

Ajzen (1988, 1991) proposed the theory of planned behavior (TPB) which is the extended version of theory of reasoned and action (Ajzen & Fishbein, 1980). TPB offers a framework that could help to answer the above mentioned questions. This theory has been employed to predict individuals' behavior in hotel marketing and social psychology studies (Buttle & Bok, 1996; Conner, Kirk, Cade & Barret, 2001) and social science studies related to international tourists attitudes and behavioral intentions (Lam & Hsu, 2004; Lee, Lee & Wicks, 2004) but seldom used in social science research studies in Bangladesh context, even though significance differences between Bangladesh and Western cultures attributed to the development of different attitudes and behavioral intention have been documented in the literature (Bond & Forgas, 1984; Bond, Leung & Wan, 1982; Lam & Hsu, 2004). It is also stated in some studies that the TPB might not be accurate in predicting behavioral intentions (Bentler & Speckart, 1979; Shimp & Kavas, 1984) and there have questioned of the role of subjective norm components in the model (Pomazal & Jaccard, 1976). However, TPB has been successfully applied in a wide variety of behavioral studies (Buttle & Bok, 1996; Chaiken & Stangor, 1987; Cialdini, Petty & Cacioppo, 1981; Copper & Croyle, 1984; Lam & Hsu, 2004) for the decades.

This current study attempts to test the fitness of the TPB model in the context of Rajshahi University's Pohala Baishakh events at Rajshahi in Bangladesh. Specifically, the objectives of the study were to (a) investigate how behavioral beliefs of the pull and push factors lead to the formation of attitude; (b) investigate how normative beliefs lead to the formation of subjective norm; (c) explore the influence of control beliefs on perceived behavioral control; and (d) examine the impacts of attitude, subjective norm, perceived behavioral control, and past behavior on behavioral intention.

Theoretical Framework

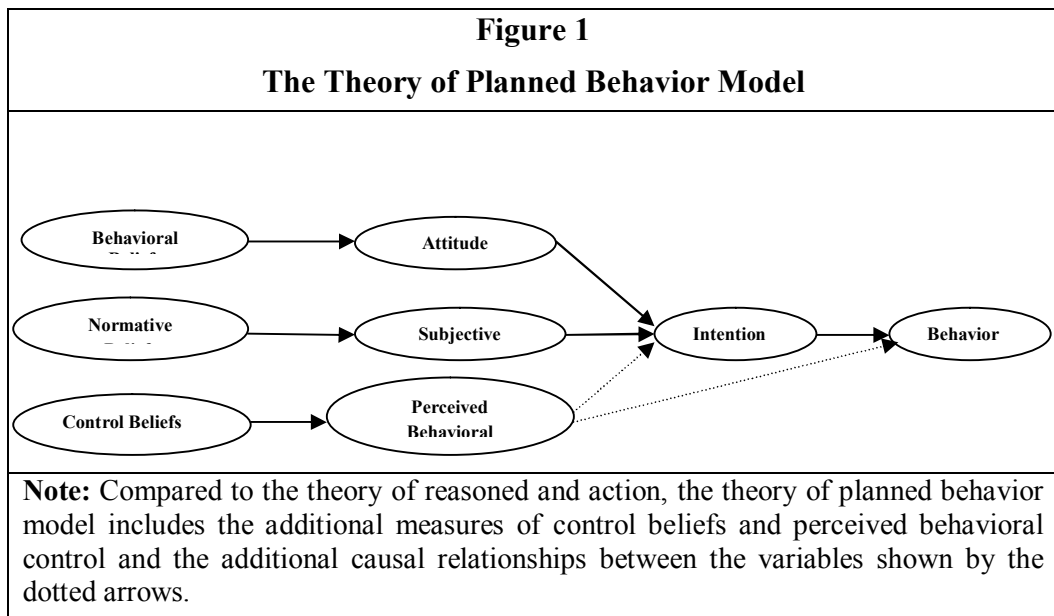
Lam and Hsu (2004) stated that one of the travel motivation models related to travelers' decision making choosing a destination revolves around the concept of push and pull factors (Crompton, 1979; Uysal & Hagan, 1993). These motivational factors describe how individuals are pushed by internal motives and pulled or attracted by destination attributes in making their travel decision (Uysal & Hagan, 1993). They also revealed that push factors are considered as socio-psychological motivations that influence individuals to travel. On the other hand pull factors are those that attract individuals to a specific destination once the decision to travel has been made. So, the push motivations are related in explaining the desire for travel, whereas the pull motivations illustrate the actual destination choice (Christensen, 1983; Crompton, 1979; Lam & Hsu, 2004). Although several studies have attempted to investigate tourist motivations, few grounded their research in behavioral theories. The current study extended existing motivational theories by incorporating TPB with push and pull factors in the investigation of visiting intention.

Theory of Reasoned Action

Theory of reasoned and action (TRA) was developed and refined by Fishbein and Ajzen over time (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1972, 1975). This theory was utilized in the discipline of marketing and social psychology by researchers to investigate human behavior (Armitage & Conner, 2001; Buttle & Bok, 1996; Conner et al., 2001). Sheppard, Hartwick and Warshaw (1998) conducted a meta analysis to investigate the effectiveness of the theory of reasoned and action. They concluded that the model has strong predictive/analytical utility, even when applied to situation and activities that didn't fall in the boundary conditions originally specified in the model (Lam & Hsu, 2004).

The key proposition of the theory is the concept of intention. Intention is regarded as the motivation necessary to engage in a particular behavior (Lam & Hsu, 2004, pp. 465). They also suggested that an individual's intention to perform a specific act, or behavioral intention with respect to a given stimulus object, in a given situation is a function of the individual's attitude toward the behavior and his or her subjective norm (Fishbein, 1967a). A person's attitude toward an object is obtained by measuring his or her beliefs of salient attributes that the object has and his or her evaluation of each attribute (Fishbein & Ajzen, 1975). Belief is defined as a person's estimation of probability of attaining an attribute that links to the object (Lam & Hsu, 2004). Therefore, the first determinant of intention is attitude that is conceptualized as the overall positive or negative evaluation of a behavior. It is derived from salient behavioral beliefs which are the perceived likelihood of particular outcomes occurring, weighted by the evaluation of those outcomes (Lam & Hsu, 2004). If individuals have a positive attitude toward an object, they are more likely to perform a behavior (Lam & Hsu, 2004). Subjective norm (SN) is the second determinant of intention that is defined as a person's own estimate of general social pressures to perform or not to perform a particular behavior (Francis, Eccles, Johnston, Walker, Grimshaw, Foy, Kaner, Smith & Bonetti, 2004; Lam & Hsu,

2004). Subjective norms are assumed to have two components multiplicatively combined (Fishbein, 1967b; Francis et al., 2004; Lam & Hsu, 2004). The first component is individual's beliefs about the perceived social pressure from salient referents or normative belief and the second component is the motivation to comply, or outcome evaluation with those referents (Francis et al., 2004; Lam & Hsu, 2004). Individuals are more likely to perform a behavior if they perceive the greater social pressure of salient referents to perform that behavior (Lam & Hsu, 2004).



Theory of Planned Behavior

The theory of reasoned and action are used in different studies in prediction of social behaviors (Sheppard, Hartwick & Warshaw, 1988; Van Den Putte, 1991). Nevertheless, this theory (TRA) was developed explicitly to deal with purely volitional behaviors, approved by Ajzen in 1988. Later on behavior appeared not to be 100% voluntary and under control, this resulted in the addition of perceived behavioral control. Therefore, an extension of the TRA known as theory of planned behavior (TPB) was then proposed by Ajzen (1988, 1991). The theory of planned behavior is a theory which predicts deliberate behavior, because behavior can be deliberative and planned. It includes the additional measures of control beliefs and perceived behavioral control (see figure 1). The proposed relationship between perceived behavioral control and behavioral intention/behavior is based on two key assumptions. First, an increase of perceived behavioral control will result in an increase in behavioral intention and the likelihood of the performing the act (Lam & Hsu, 2004; pp.466). Second, perceived behavioral control will influence behavior directly the extent that perceived behavioral control reflects actual control (Armitage & Conner, 2001; Lam & Hsu, 2004).

Intention can be defined as an individual's anticipated or planned future behavior (Lam & Hsu, 2004; Swan, 1981). Intention can be used as proximal measure of behavior (Francis et al., 2004). An individual's expectancies about a particular behavior in a given setting can represent by intention and can be operationalized as the likelihood to act (Fishbein & Ajzen, 1975). Intention is the immediate determinant of a behavior to act a certain way according to the TPB (Ajzen, 1985). When there is an opportunity to act, intention results in behavior. If intention is measured accurately, it will provide the best predictor of behavior (Fishbein & Ajzen, 1975). In this study, intention was defined as an individual's anticipation of a future visit to Baishaki event at RU for entertainment and festival purpose.

According to the theory of planned behavior (TPB), behavior is predicted by an individual's intention to perform the behavior and also by his or perceived behavioral control, such as facilitating factors (Triandis, 1977), the context of opportunity (Sarver, 1983), and available resources (Liska, 1984). The perception of behavioral control among the global people is the product of control beliefs (the perceived frequency of occurrence of salient facilitating or inhibiting factors) multiplied by the power of those factors that facilitate or inhibit the behavior in question (Lam & Hsu, 2004). Theory of planned behavior has been widely used to examine variety of behavior (Ajzen, 1991; Armitage & Conner, 2001; Conner & Sparks, 1996; Lam & Hsu, 2004; Sparks, 1994; Van Den Putte, 1991). The efficacy of the model has been validated in predicting a wide range of intentions and behaviors (Lam & Hsu, 2004). Therefore, TRA could adequately predict behavioral intentions which are under volitional control. If there are constraints for action, the mere formation of an intention is insufficient to predict the behavior by using TRA (Lam & Hsu, 2004). In this regard, perceived behavioral control (PBC) is included that provides information about the potential constraints on the action perceived by an actor. Thus, TPB postulates that a behavior is directly predicted by the intention to perform and indirectly by the perceived behavioral control when the behavior is not under volitional control (Lum & Hsu, 2004, pp. 467).

The inclusion of PBC was deemed necessary as the target behavior and subjects under investigating in this study. It is the extent to which a person feels able to enact the behavior (Francis et al., 2004). Shubho Nababarsha means Happy Bangla New Year and it is that season of colour and magic when the Bangalee celebrates his heritage and, through that celebration, attempts an understanding of her place in the universal scheme of things. For the Bangalee, like millions of others across the globe, has a claim on history based on the cultural tradition his ancestors shaped for him, one that he renews annually through Baishakh. It is these underpinnings of the season, indeed the beginning of a new year that the Bangalee remembers today. The haal khata, the closing off of a year just ended and the commencement of a new one, a taking stock of crops, indeed of productivity are the underpinnings we speak of. There is, then, about Baishakh something of the pastoral. It is a symbolism of all the good the Bangalee can claim for himself through the poetry flowing from the minds of its greatest men. Rabindranath Tagore,

Kazi Nazrul Islam, Dwijendra Lal Roy, Atulprasad and so many others have sung paeans to Bengal through the media of song and dance. Through the mysticism which defines faith, through the devotional songs of Lalon and Hason Raja, Baishakh rediscovers the aesthetics of life in these parts.

At daybreak today, it is truly a celebration of the past that Bangladeshi plunge into. Baishakh is all about losing oneself into reinvent oneself. The Bangalee spirit that has all so often been a hallmark of its politics and its poetry once more goes back to the magic inherent in its heritage to widen the cultural parameters of the future (Ahsan, 2014). These events are arranged all over the Bangladesh and the visitors have an equal chance to enjoy it with full pleasure and fun in any place where the visitors will feel comfortable and enjoyable. The available of different alternatives, may diminish the visitor intention to enjoy the Baishakhi event at RU. Therefore, perceived behavioral control was expected to have a significant influence on the target behavior.

Parsimonious account of purposive behavior is one of the advantages of TPB though its sufficiency was questioned. Lam and Hsu (2004) also suggested in this regard that many researchers proposed additional components to address self-identity processes (Spark & Shephard, 1992), moral norms (Parker, Manstead & Stradling, 1995), distinction between perceptions of control and perceptions of self-efficacy (Armitage & Conner, 1999; Terry & O'leary, 1995), and anticipated emotions (Parker et al., 1995; Perugini & Bagozzi, 2001; Richard, Van der Pligt & de Vries, 1995). It is also argued by other researchers that attitude, SN, and PBC provide reasons for an act, but don't explicitly incorporate the motivational aspect needed to induce an intention to act (Lam & Hsu, 2004). Having said that, the TPB has been widely used in social psychology, and the model has been supported by many studies (Lam & Hsu, 2004; Perugini & Bagozzi, 2001).

Past Behavior

Ajzen (1991) criticized the use of past behavior on ground that it offers no explanatory content although he agreed to use past behavior in testing the sufficiency of any model designed to predict future behavior (p.202). TPB found that past behavior can enhance prediction of intention and/or future behavior in previous empirical tests (Ajzen & Driver, 1992; Bagozzi & Kimmel, 1995; Beck & Ajzen, 1991; Bentler & Spekart, 1979; Leone, Perugini & Ercolani, 1999; Norman & Conner, 1996; Norman & Smith, 1995; Quelling & Wood, 1998). Therefore, the questions have been raised about the type of effect of past behavior might represent (Lam & Hsu, 2004). Past behavior affected both intentions and future behaviors are examined by a meta-analysis of 64 studies by Quelling and Wood in 1998. It can also be noted when a behavior is well practiced in a constant environment, the frequency of past behavior reflects the habit strength and therefore has a direct effect on future behavior. If behavior is not well exercised or carried out in an unstable context, the frequency of past behavior contributes indirectly through intentions (Lam & Hsu, 2004). Because people are likely to perform favorable intentions about acts, they have frequently performed in the past (Quelling & Wood, 1998). So, it can be concluded that the frequency of past behavior could guide future behavior (Lam & Hsu, 2004). In this study, it was hypothesized that the frequency of past visit to RU Baishaki event can affect future visit intention.

Methodology

Sampling Procedure

The population of the study consisted of the visitors of Pohala Baishakh events at Rajshahi University. A structured questionnaire was used to collect data from the five spots at RU (Tukatuki, Iblish Chattar, Back side of Library, Charukola and Business Faculty). A total 321 questionnaires were deemed to consider for final analysis after checking the completeness.

Questionnaire Development

A set of questionnaire was developed for obtaining information on the likely outcomes of choosing RU as an event destination (behavioral beliefs), groups or individuals whose views might influence respondents' visiting intention (normative beliefs) and factors that might facilitate or inhibit visiting intention (control beliefs) based on the measurement scale of TPB (Ajzen, 1988, 1991).

Measurement Design

The behavioral beliefs construct consisted of two components: the perceived likelihood of the behavior's outcomes (BB) and the evaluation of those outcomes (OE). A 10-item measurement was developed with 7-point Likert scales ranging from strongly agree (7) to strongly disagree (1) for BB statements and very important (7) to very unimportant (1) for OE statements.

Normative belief also had two components: a) perception of referents' opinions on whether an individual should or should not perform a behavior or normative beliefs (NB), and b) motivation to comply with the wishes of the specific referents, or motivation to comply (MC). These two are also multiplicatively combined. The referents groups in this study included family, friends & relatives, and well-wishers. A three-item measurement with a 7-point Likert scales was used to examine respondents' NB, from should (7) to should not (1), and MC, extremely likely (7) to extremely unlikely (1).

Control beliefs consisted of two components as well: a) occurrence frequency of the facilitators or inhibitors of the behavior, or control beliefs (CB), and b) perception of the strength of the facilitators or inhibitors, or power (P). These two components were multiplied by (i.e. $CB \times P$) to obtain the overall level of control beliefs. Six items were used to measure the control beliefs. In both cases 7-point Likert scales were used: from strongly agree (7) to strongly disagree (1) for CB measurement, and extremely likely (7) to extremely unlikely (1) for P measurement.

Past behavior was measured with two statements adopted from Quellette and Wood (1998). Respondents were first asked to indicate whether they had ever visited RU events before, and the choices were "Yes" and "No." If the reply was yes, the respondents were then asked of the frequency of their visit (s) with a question, "How many times have you visited RU Pahala Baishakh events in the past?" Five frequency categories were provided: once, 2 to 3, 4 to 5, 6 to 10 times, and more than 10 times. Behavioral intention

of visiting RU events was measured by four statements with a 7-point Likert scales, ranging from strongly agree (7) to strongly disagree (1). A sample statement of behavioral intention is as follows: "I intend to visit RU Pohala Boishakh event next time."

Attitude was measured by five statements using 7-point semantic differential scale: "All things considered, I think visiting RU events would be.....) enjoyable-unenjoyable, positive-negative, fun-boring, pleasant-unpleasant, and favorable-unfavorable. Three questions were asked to evaluate subjective norm: "Most people I know would choice RU as Pahala Baishakh Event", with 7= strongly agree and 1=strongly disagree; "People who are important to me would think I should/should not visit RU", with 7= should and 1=should not; "People who are important to me would approve/disapprove of my visit to RU events", with 7=approve and 1=disapprove. Three statements were used also to measure perceived behavioral control. A sample of the statement is "There are factors outside to my control that could prevent me from visiting RU events," ranging from strongly agree (7) to strongly disagree (1).

Measurement Model

Scale reliability analysis was used to measure the internal consistency of each construct, and the generally agreed upon lower limit for the Cronbach's alpha was set at .70 (Hair, Anderson, Tatham, & Black, 2002). Factor loading <0.50 was considered as acceptable in the study. Structural Equation Modeling (SEM) and measures of correlation were applied to test causal relationships in the model. By using SEM, important latent constructs can be modeled, while taking into account the unreliability of the indicators. Furthermore, the SEM considers unknown reliability of the measures and ranks the measures in terms of their importance (Bacon, Bacon, & Associates, SPSS inc., 1998).

Findings and Discussion

The useable questionnaires are distributed to 321 respondents, representing 70.4% male and 29.6% female respectively. Most of the visitors are in the age group of 21-30 years, representing 61.1% of the respondents. The visitors' professional background includes students 58.3%, government employees 14% and private organization employees 19%. In addition, the survey reveals that the education level of visitors at the event is relatively high, with 45.5% completed 16 years education. With regards to personal monthly income measures in taka (1US\$=84 BDT), the survey reveals that 19% of the visitors report their monthly income in the range between 10,001 BDT to 20,000 BDT and 15.3% of the respondents earn less than 10,000 BDT. It denotes that most of the visitors fall in middle level income group. While 62.3% of the respondents are single and 37.7% are married respectively. In addition to that over half of the respondents 53.6% are from the Rajshahi division which indicates that most of the visitors are local people. Whereas, 29.3% of respondents visit this place 2-3 times and 24.9% of the respondents are 4-5 times and 22.1% of the respondents reveal 6-10 times at the event. It also denotes that the event is very popular among the respondents and they repeatedly visit the event. Over half, 66.7% of the respondents visit the event with friends and 27.1% of the respondents reveal their visiting here with family.

Table-1: Correlation Matrix between Measuring Variables

	BBXOE	NBXMCMC	CBXP	ATT	SBN	PBC	BI	PB
BBXOE	1							
NBXMCMC	.567(**)	1						
CBXP	.529(**)	.360(**)	1					
ATT	.518(**)	.447(**)	.395(**)	1				
SBN	.546(**)	.508(**)	.403(**)	.696(**)	1			
PBC	-.191(**)	-.184(**)	-.293(**)	-.124(*)	-.157(**)	1		
BI	.479(**)	.411(**)	.364(**)	.577(**)	.566(**)	-.182(**)	1	
PB	.213(**)	.103	.175(**)	.172(**)	.108	-.086	.184(**)	1

Note: BB x OE: behavioral beliefs multiplied by outcome evaluations. NB x MC: normative beliefs multiplied by motivation to comply. CB x P: control beliefs multiplied by power. ATT: direct measure of attitude. SN: direct measure of subjective norm. PBC: direct measure of perceived behavior control. BI: behavioral intention. PB: past behavior.
*p < .05. **p < .01.

Cronbach's alpha for the direct measure of four intention statements was .87, for the five attitude statements .90, for the three subjective norm statements .80, for the four perceived behavioral control statements .74. As for the measures of behavioral beliefs, normative beliefs, and control beliefs in the TPB, they were considered as formative rather than reflective indicators (Lam & Hsu, 2004). Measures of Cronbach's alpha were not appropriate for such indicators and were therefore not reported in the study (Ajzen, 1988).

Pearson correlations between the various components of TPB and the measure of past behavior are shown in the table 1. The direct measures of attitude, subjective norm, and perceived behavioral control were positively correlated with their respective set of beliefs. That is, behavioral beliefs were correlated with attitude, normative beliefs with subjective norm, and control beliefs with perceived behavioral control. In addition, past behavior was positively correlated with behavioral intention.

Factor analysis was conducted to reduce 10 attributes of behavioral beliefs to sets of uncorrelated factors for subsequent use in the SEM analysis (Table-2). The two factors of behavioral beliefs were extracted. In the scale of behavioral beliefs the two factors were "Experience and Travelling" (5 items) and "Entertainment" (3 items). The cumulative

percentage of variance extracted by the two factors was 59.56, with Kaiser-Meyer-Okin (KMO) measure of sampling adequacy of .83, which met the recommended index of .60. The Bartlett Test of Sphericity was 792.91 ($p = .000$). The Cronbach's alpha of the total scale was .82.

Table -2: Factor Analysis of Behavioral Beliefs

Behavioral Beliefs	Factor Loadings	Eigen-value	% of variance	Reliability
F1: Experience and Travelling		3.582	45.11	.81
Different Place	.779			
Natural beauties of RU	.752			
Campus scenery	.739			
Sharing travel experience	.694			
Interaction with RU people	.683			
F2: Art and Culture		1.134	14.45	.70
Arts exhibition	.820			
Different dances	.816			
Cultural animation	.644			
Total			59.56	

Note: KMO = .825; Bartlett's Test = 792.91 with significance = .000

Table-3: Fit Indices for the Revised Measurement Model

Fit Indices	Recommended Value	Measurement Model
Goodness-of-fit (GFI)	0.90	0.887
Adjusted goodness-of-fit (AGFI)	0.80	0.863
Normed fit index (NFI)	0.90	0.866
Comparative fit index (CFI)	0.90	0.934
Incremental fit index (IFI)	0.90	0.935
Tucker-Lewis index (TLI)	0.90	0.926
Root-mean-square error of approximation (RMSEA)	<0.09	0.051

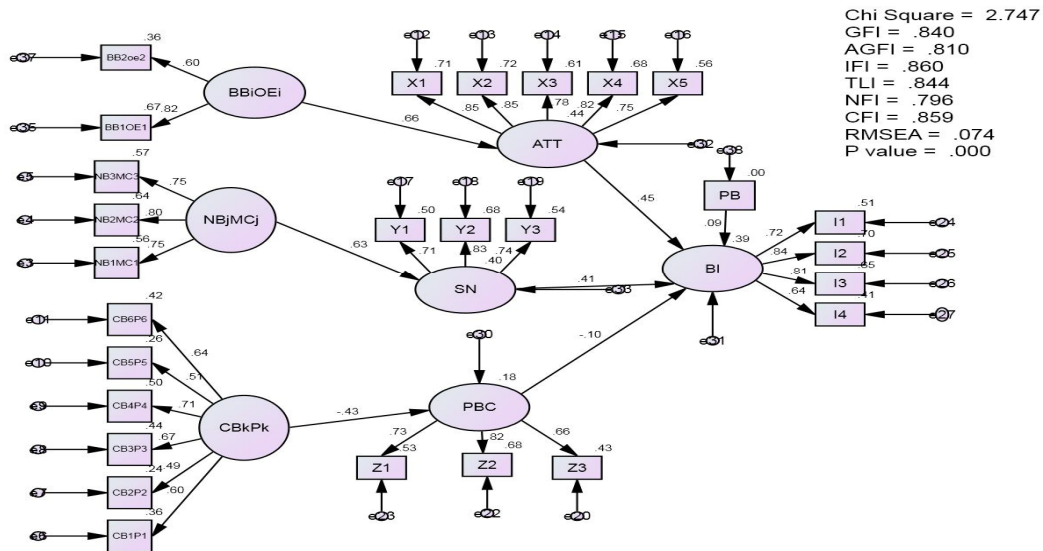
Model Testing

SEM was performed to investigate relationships between the criterion variable of behavioral intention and the respective predictor variables of attitude, subjective norm, perceived behavioral control, and past behavior (Table-3). Seven common model fit measures were used to assess the model's overall goodness of fit: goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), norm fit index (NFI), comparative fit index (CFI), incremental fit index (IFI), tucker-lewis index (TLI), and root-mean-square error

of approximation (RMSEA). The paths coefficients were reviewed to see if any of the paths in the initial model should be deleted; if an attributed loaded with an absolute t value of lower than 1.96 ($p > .05$), it would be eliminated from the model (Hatcher, 1994). Furthermore, if the fit of the initial model was not adequate, modification indices for each fixed parameter were used as indicators for model modification, by adding parameters to improve the fit. The value of a given modification index was the minimum amount that the chi-square statistics was expected to decrease if the corresponding parameter was freed/unchained. When a parameter was freed at each step, it produced the largest improvement in fit; this process was continued until an adequate fit was reached.

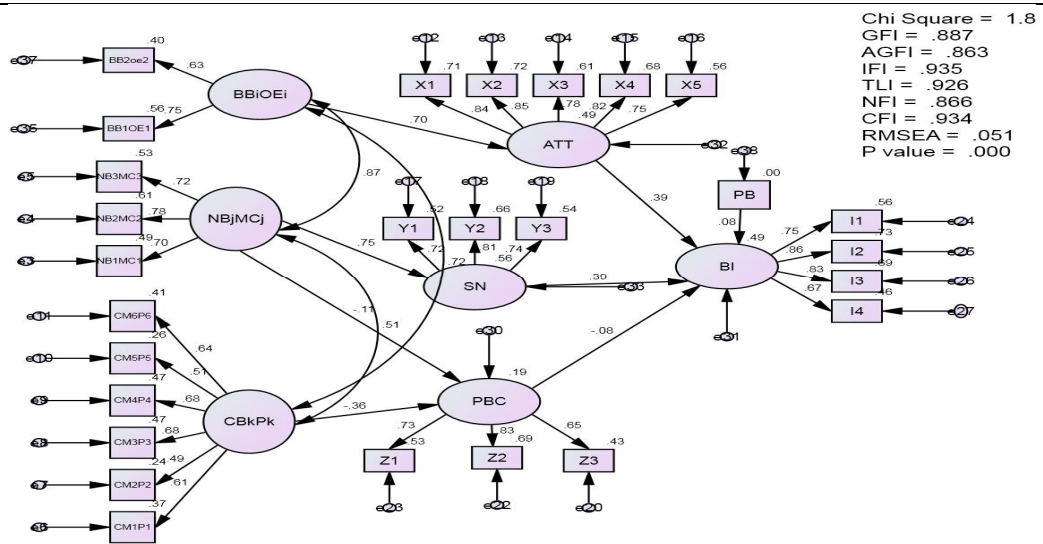
In the first SEM procedure, the initial hypothetical model showed that the six indices (GFI=.84, AGFI=0.81, IFI=0.86, TLI=0.84, NFI=0.80, and CFI=0.86) were below their respective common acceptance levels suggested by previous research (e.g., Browne & Cudeck, 1993), and RMSEA reached 0.07. Thus, the initial model was not acceptable and required modification (Figure-1).

Figure-1: The Initial TPB Model



A revised model was developed. The modification indices also suggested the need to add three covariances among behavioral beliefs, normative beliefs, and control beliefs. All the model-fit indices became close to or over their respective common acceptance levels as suggested by previous research (e.g., Browne & Cudeck, 1993) in the revised model, thus demonstrating that the model was improved, and responses from RU events visitors in the study fitted the revised model relatively well (Figure-2).

Figure-2: Modified Model
Casual Relationships Between Predictor Variables and Behavioral Intention



Note: BB₁OE₁ for belief “Experience & Travelling”, BB₂OE₂ for belief “Entertainment”. NB₁MC₁ for referent “Family.” NB₂MC₂ for referent “Friend & Relative.” NB₃MC₃ for referent “Well-wisher.” CB₁P₁ for belief “Safe Place.” CB₂P₂ for belief “Expensive.” CB₃P₃ for “Personal Safety.” CB₄P₄ for belief “Relaxation.” CB₅P₅ for belief “Hygienic Food.” CB₆P₆ for “Transportation.” PB for “Past Behavior.” X₁ – X₅ for direct measure of attitude (ATT), Y₁–Y₃ for direct measures of subjective norm (SN), Z₁ –Z₃ for direct measure of perceived behavioral control (PBC), I₁–I₄ for direct measure of behavioral intention (BI).# value 1.0 for computational purposes. All stated estimated standardized regression coefficient were significant at p =0.05 **p< 0.01.

To measure the convergent and discriminant validities of the underlying constructs, the covariance structure analysis was utilized (Anderson & Gerbing, 1988; Bagozzi & Yi, 1988; Fornell & Larcker, 1981). Under the covariance structure analysis, the magnitudes and significance levels associated with factor loading estimates were assessed to determine the degree of convergence of each attribute to the underlying construct (Anderson & Gerbing, 1988) where t values greater than 2.0 indicate that the associated factor loading is statistically significant (Table-4). Furthermore, average variance extracted by an underlying construct from its indicators is used as an index of convergent validity. An average variance extracted in excess of 0.50 provides evidence of convergent validity. To assess the discriminant validity of the underlying constructs shared variances between constructs (i.e., the squared correlation between two constructs) were computed. For the evidence of discriminant validity, shared variance between constructs should be smaller than the “average variance extracted” by each construct (Fornell & Larcker, 1981).

Table-4: Convergent and Discriminant Validity of the Instrument

Variable	Factor Loading	t-value	Average Variance	Shared Variance	
Control belief					
CB1	.533	10.94	.48	CB/NB	0.13
CB2	.692	11.74		CB/BB	0.28
CB3	.786	10.12		CB/PBC	0.08
CB4	.726	10.10		CB/SN	0.16
CB5	.733	11.62		CB/ATT	0.16
CB6	.661	11.67		CB/BI	0.13
Normative belief					
NB1	.867	10.50	.69		
NB2	.819	9.08			
NB3	.810	10.17		NB/BB	0.32
Behavioral belief				NB/PBC	0.03
BB1	.866	7.69	.72	NB/SN	0.26
BB2	.827	11.05		NB/ATT	0.20
Perceived behavioral control				NB/BI	0.17
PBC1	.833	10.18	.68		
PBC2	.853	5.56		BB/PBC	0.04
PBC3	.791	8.60		BB/SN	0.30
Subjective norm				BB/ATT	0.27
SN1	.840	9.94	.67	BB/BI	0.23
SN2	.830	7.80			
SN3	.781	9.69		PBC/SN	0.02
Attitude				PBC/ATT	0.02
ATT1	.860	9.72	.66	PBC/BI	0.03
ATT2	.837	9.59			
ATT3	.797	10.83		SN/ATT	0.48
ATT4	.812	10.13		SN/BI	0.32
				ATT/BI	0.33
ATT5	.756	11.12			
Behavioral intention					
BI1	.789	10.56	.63		
BI2	.773	7.99			
BI3	.854	8.86			
BI4	.761	11.27			

All indicators of constructs in the study had factor loadings is greater than 0.50 and their t values exceed 2.0. The average variances extracted were greater than 0.50 in six of seven constructs, with the construct of control belief having an average **variance of 0.48**. The result also shows that all shared variances were smaller than the respective average variance extracted. Thus, these results provided support for the convergent and

discriminant validities of the measures used in the study. Past behavior had a positive casual relationship with behavioral intention though the correlation was weak (.08). It's revealed that the intention of revisiting RU event by the visitors became stronger with an increase in the number of prior visit in the event. To a certain extent, these results are consistent with the Ajzen's (1991) argument that when people deliberately form conscious intentions, past behaviors having a contributing factor. RU could serve the event with full of fun, pleasure, and good experiences and an event for art and cultural exhibition. However, the relatively weak correlation could be a reflection of the variety of events available to RU event visitors who might want to explore new destination event before returning to RU event as a repeat visitors.

Subjective norm had a positive casual relationship with behavioral intention and the correlation was strong (.39). It's indicated that visitors' intention to visit RU event was strongly associated with perceived social pressure from important referents.

Last, covariance among the belief components of TPB (i.e., $\sum BBOE$, $\sum NBMC$ and $\sum CBP$) were significant. There have been debates on whether there are interactions or crossing effect among behavioral beliefs, normative beliefs, and control beliefs in the literature (Shimp & Kavaz, 1984; Taylor & Todd, 1995). In this study, such crossing effects seemed to be significant in the RU event sample under investigation.

Conclusion and Implication

This study is conducted to investigate the adaptability of the TPB to Baishakhi event visitors in Bangladesh. It's also identified relationships among various components of TPB and past behavior. The study results showed that the TPB model explained Baishakhi events visitors' intention moderately well. Attitude, subjective norm, perceived behavioral control, and past behavior were found to be related to the intention of choosing RU as a Baishakhi event destination. Analyses of the standardized path coefficients indicated that the influence of past behavior on intention was weaker than that of attitude, subjective norm, and perceived behavioral control. Though, it is suggested by researchers to add past behavior to the theory of planned behavior model to predict behavior and intention (Quellette & wood, 1998) there are few studies that considered past behavior as an important predictor to predict behavior and intention. Although the study of Lam and Hsu (2004) considers past behavior as potential predictor, they denied the influence of other component (subjective norm) to predict intention and behavior (Lam & Hsu, 2004). The current study filled this gap and considered all the components of TPB model with past behavior to investigate the RU event visitors' intention of choosing this destination. Past behavior also found in this study as a significant predictor event visitors of choosing a destination. However, the correlation between past behavior and intention was found so weak (.08) that suggested the requirement of more studies to investigate this variable in other settings.

Limitation of the study included the sampling frame, which only had the five main spots at RU, and the convenience sampling method used to select the subject. Therefore, the population from which sample was drawn might not be representative of the general Baishakhi event visitors in Bangladesh, and the result cannot be generalized to other

Baishakhi events in Bangladesh. Future studies may include a larger sample size with greater geographic region of Bangladesh. In addition, the attitude, subjective norm, perceived behavioral control, and past behavior only explained 49% of respondents' behavioral intention indicating that other factors not included in this study may also condition behavioral intention. In future research, a broader variety of factors may be included to ensure the comprehensiveness of the prediction model. These additional variables may be the emotional factors, prior visit satisfaction, competition from other destinations, and respondents' personal characteristics. The nature of past visit such as their satisfaction level and patterns (time laps between visits) could be incorporated into the extended model.

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Journal of Business Studies
JBS-ISSN 2303-9884
Volume - 11, No. 2, pp.: 21-36

Employee Motivation and Job Satisfaction: Role of Hygiene and Motivation Factors at Work

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Abstract

Employee motivation is attached to the human civilization when people work collectively then motivation comes into reality. The widely practiced two-factor theory of motivation reveals the motivational dual structure phenomenon. On the basis of the underlying manifestation of this theory, this study empirically verifies the constructs of hygiene and motivation factors in effectuating the employee motivation and satisfaction in commercial banks. The KMO and Alpha value of the study are 0.91 and 0.95 respectively, therefore, the study is internally consistent and considered to be highly reliable. The Regression statistics indicate both of the hygiene and motivation factors that are good predictors of employees motivation and satisfaction. The study also demonstrates that the employee motivation is the major source of reifying the satisfied workforce. This study would add value to the existing theory of motivation and prescribes the sources of motivation in terms of hygiene and motivation factors for inducing the motivated and satisfied workforce at organizational interfaces.

Keywords: Commercial Banks, Hygiene Factor, Job Satisfaction, Motivation Factor

JEL Classification: M12, M52

1. Introduction

Motivation is a popular topic that relates directly to all of us, particularly to those of us whose job is to accomplish organizational goals through the efforts of other people. Motivation is a buzzword in virtually all work settings. Folklore on the topic dates back at least as far as the literature on any other managerial topic, and, as noted already, newspapers and magazines regularly feature stories and essays on it (Pinder, 2014). In an organizational setting, work motivation is related to the mental state of the employees and effective utilization of human resources. Employees bring psychological

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fabricate and being affected by feelings, emotion, and sentiment. Therefore it is one of the most important and challenging tasks of management to understand employees psychological contract. Motivation is one of the key constituents of management that is related to attained organizational effectiveness and bringing employees attention to gain the strategic fitness of organization in the competitive market scenario. Employees join in the organization because of the fulfillment of their personal goals and objectives. Here the task of management is to fulfill their needs, wishes, want, aims, goal, motives, and incentives by working with them to know what is being expected by them. The employee-organization relationship can be entrusted as an exchange relationship and it is justified in equity perception of the employee. Employees work in favor of organization by devoting their valuable time, cognition, loyalty, skills, experiences, and expecting something better inducement from the organization for their contribution in organization (Wellin, 2016). There is a considerable change of managerial outlook towards the treatment of employees nowadays. Employees are treated nowadays as psychological capital and regarded as a catalyst for progressive organizational success. The world leading and successful companies such as Google, Samsung, Apple, Microsoft, and IBM excel their human resources by utilizing their full potential for the critical strategic market positioning by fostering employee creativity and innovativeness in their product and services (Dolata, 2017). These companies become the most promising and leading market leader by capitalizing their human resource capacities by applying motivational tools and techniques.

In the last 10 years, commercial banks have played a significant role in the upward movement of the economy of Bangladesh. In the commercial banks of Bangladesh, the meritorious youth of higher educational institutes take the banking profession as a challenging job. Therefore it is an important task to consistently motivate them by strengthening their professional skills for effective banking operations. Usually, those who are motivated, they feel happy to work for a certain period of steady motivation. Whenever employees feel happy consistently in their work, they will be attached to the organization. The management exponents commended various motivational tools, techniques, models, empirical research findings and theories in this regard. Most of the motivational exponents presumed that employee motivation and their job satisfaction are inclusively interrelated. The motivated employees work to achieve organizational goals and work for the peak of organizational success. Professor Omar Ali (2009) acknowledges that motivation is initiated from the inside of human beings. Motivated workforce never gets frustrated and their positive attitude remains themselves in optimistic and functional. Motivated behavior keeps employee away from the dysfunctional aspects of work. Motivated behavior is controllable on the other side frustrated behavior cannot be controlled. Since motivation is a complex matter, managers have to stay attached to bringing motivated workforce. The same incentives do not prompt a person's work motivation repeatedly in different situations. The same incentive may not be effective for others at the same time. For this reason, a mix of motivational

incentive needs to be activated for the employee to attain employee motivation and satisfaction. The employees now a days are facing a variety of physical and psychological deficiencies in their life. The management needs to understand, predicts and manage this set of expectations to keep them happy.

There is a variety of motivational incentives used to motivate the employees. Maslow's Hierarchy Theory (1943) recommended 27 benefit programs for motivating the workforce. Most of the motivational theories and research have recommended motivational incentives as financial and nonfinancial in nature to exhilarate work drive of employees. The commended and well practiced financial incentives include- pay/salary, bonus, profit sharing program, various types of financial benefits and allowances, pension, insurance premium, educational allowance, holiday day and holiday allowance, yearly holiday, national holiday, salaries with work-related sick leaves. The organizations use financial incentives to increase the performance and productivity of the individual as well as group. The monetary incentives significantly affect the task performance. The organizational behavior modification intervention based on monetary incentives to increase the task performance. It also indicates that the monetary incentives improve performance, but not under all circumstances. The review suggests that an understanding of human behavior is an important matter of thinking more deeply to enhance people performance in the organization (Durant et al. 2006).

According to various influential motivational theorists (Maslow, 1943; Alderfer, 1969; McClelland, 1967; Herzberg, Mausner, & Snyderman, 1959; Adams, 1963; Vroom, 1964; Locke & Latham, 1994) people do not work for the financial benefit only. They, assert that work is an integral part of one's healthy adult life. Work is imperative to stay mentally and physically healthy. People work for their social safety, affiliation, friendship, ego, and status. For organizational effectiveness, the employee needs to be empowered by delegating work autonomy to some extent. Positive feedback is an important concern of work. The feedback should be task-oriented, non-threatening constructive and timely given. The constructive work feedback associated with positive employee performance. By participating in the decisions, employees feel they are an important part of the management. The interpersonal collegial relationship plays a vital role in promoting social interactions and group cohesiveness. Due to technological changes- the nature of work also reshape frequently, therefore the employee needs to keep up to date with need-based training and managerial education program. The management carries out all the activities of the organization with their employees through effective leadership. Various scientific investigations show that democratic leadership plays an important role in promoting the financial as well as the societal index of an organization. Employees have to be creative and innovative to brings newness in organizational products and services. The top management needs to create a promising organizational culture for organizational sustain growth and development.

In this study, the work on motivation has been investigated on the basis of one of the widely practiced two factor-theory of motivation. Considering this dual consideration, this study is designed to empirically verify the effect of hygiene and motivational factors on employee motivation and job satisfaction in commercial banks in Bangladesh.

2. Literature Review and Hypotheses Development

2.1. The insight of Two-Factor Theory of Motivation

One of the leading need-based theory of motivation is the two-factor theory. This theory has played a major role in managerial thinking about motivation. Development of the Theory Frederick Herzberg and his associates developed the dual-structure theory in the late 1950s and early 1960s (Herzberg, Mausner, & Snyderman, 1959). Herzberg et al. began by interviewing approximately 200 accountants and engineers in Pittsburgh. Herzberg and his research associates asked interviewees to recall times when they felt especially satisfied and motivated by their jobs and times when they felt particularly dissatisfied and unmotivated. They then asked them to describe what caused the good and bad feelings. The responses to the questions were recorded by the interviewers and later subjected to content analysis. In content analysis, the words, phrases, and sentences used by respondents are analyzed and categorized according to their meanings. To their surprise, Herzberg et al. found that entirely different sets of factors were associated with the two kinds of feelings about work. For example, a person who indicated “low pay” as a source of dissatisfaction would not necessarily identify “high pay” as a source of satisfaction and motivation. Instead, people associated entirely different causes, such as achievement, recognition, the work itself, responsibility, advancement and growth with satisfaction and motivation.

In addition, the primary factors identified in Herzberg’s interviews. Motivation factors such as achievement, recognition, the work itself, responsibility, advancement, and growth were often cited by interviewees as primary causes of satisfaction and motivation. When these factors present in a job, these factors apparently could cause satisfaction and motivation; when they were absent, the result was feelings of no satisfaction rather than dissatisfaction.

The other set of factors, hygiene factors such as supervision, working conditions, interpersonal relationships, pay, job security, company policies came out in response to the questions about dissatisfaction and lack of motivation. The interviewees suggested that pay, job security, supervision, working conditions, interpersonal relationships, company policies are seen as inadequate, could lead to feelings of dissatisfaction. When these factors were considered acceptable, however, the interviewee still was not necessarily satisfied; rather, they were simply not dissatisfied.

2.2. Motivation-Hygiene Factors and Employee Motivation-Job Satisfaction

The upper layer motivational factors prescribed by Need Hierarchy Theory (Maslow, 1943) is concerned with employee motivation and satisfaction (Lindner, 1998) latter it is supported by ERG theory (Alderfer, 1969). Achievement Motivation Theory

(McClelland, 1967) identified three dominant motivators such as the needs for achievement, the needs for power and the needs for affiliation as upper layer motivators at the workplace. Two-Factor Theory (Herzberg, Mausner, & Snyderman, 1959) prescribed achievement, recognition, the work itself, responsibility, advancement and growth with satisfaction and motivation. There are considerable scientific empirical confirms regarding the motivational factors such as career advancement (Chattopadhyay & Choudhury, 2017), recognition at work (Sanjeev & Surya, 2016), the work itself (Hackman & Oldham, 1980), autonomy (Lunenburg, 2011; Zhang, & Bartol, 2010), appreciation (Hackman and Oldham's (1976), reward (Latham and Huber 1991), feedback (Luthans, 2011; Eisele, Grohnert, Beausaert, & Segers, 2013), participation in decision making (Fernandez & Moldogaziev, 2013), promotion (Mayhew, 2016; Luthans, 2011) and creativity at work (Dallal, Ahmadi, & Barzegar, 2013) affect employee motivation as well as their job satisfaction. On the foundation of the extended review of the literature the following hypotheses have been produced to test:

H₁: There is a significant association between motivation factors and the employee motivation of commercial banks in Bangladesh.

H₂: There is a significant association between motivation factors and the job satisfaction of employee of commercial banks in Bangladesh.

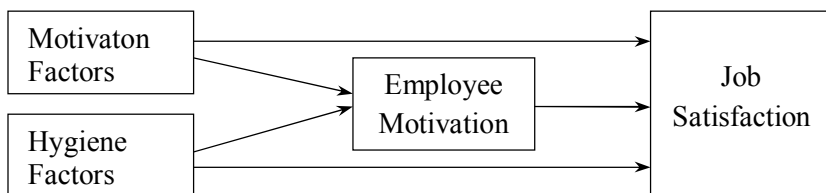


Figure-1: Conceptual Framework
Developed Based on Review of Literature

Rahman (2013) emphatically unfold moderately high mean score of hygiene factors such as salary, job security, fringe benefits, security for future, good interpersonal relations in commercial banks. The study contended that the hygiene factors are the important motivational driver for attracting and retaining employees of commercial banks in Bangladesh. Safiullah (2015) claimed that sufficient financial benefit is important factors of motivating and satisfying workforce in Bangladesh. The hygiene factors such as Pay (Chamorro-Premuzic, 2013; Chiu, 1999; Ali & Akram, 2012) job security ((Pearce, 1998), supervision (Adebayo & Ogunsina, 2011; Sarjono, 2014) working conditions (Bakotic & Babic, 2013), interpersonal relationship (Ducharme & Martin, 2000), policy and administration (Alshmemri, Shahwan-Akl, & Maude, 2017), provident fund scheme (Kotun, Adeoye, & Alaka, 2016), pension plan (Lewis & Stoycheva, 2016), health insurance (Lazaroiu, 2015), work disease compensation (Müller, Heiden, Herbig, Poppe, & Angerer, 2016) are found important drivers for employee motivation and satisfaction for many people in many countries. On the basis of the extensive review of the literature the following hypotheses can be further proffered to test:

H₃: There is a significant association between hygiene factors and the employee motivation of commercial banks in Bangladesh.

H₄: There is a significant association between hygiene factors and the job satisfaction of employee of commercial banks in Bangladesh.

The review of extensive literature confirms that Motivation Factors (MF) and Hygiene Factors (HF) constitute the employee motivation which affects the satisfaction at work. Therefore, following hypotheses can be further proposed to test:

H₅: There is a significant association between employee motivation and the job satisfaction of employee of commercial banks in Bangladesh.

3. Materials and Methods

3.1 Sampling Procedure

The Population of the Study: The population of this study consists of the officers/executives in different layers of management in commercial banks in Bangladesh.

Sample Frame: The target population of this study consists of 45 commercial banks in Bangladesh including 6 public banks and 39 private commercial banks incorporated in Bangladesh. Four (4) public banks, eight (8) private commercial banks have been identified for better representation of the population of the study (population coverage 70.4%). Krejcie & Morgan (1970) determine optimum sample size at best 384 for the finite population in their optimum sample determination formula. For the best comparison between public and private banks, this study surveyed 400 respondents, including 200 from public and 200 from private commercial banks

3.2 Procedure for Data Collection

Primary Data: The primary data of the study collected through the questionnaire by survey method. The survey of the study conducted from 2016 to 2017. This study used a structured questionnaire to assess perception of bankers relating to Motivation-Hygiene Factors and Employee Motivation-Job Satisfaction. The questionnaire is developed by reviewing relevant literature. Five-point Likert type scale has been used to measure the perception of the employee on identified factors of the study.

Focus Group Discussion (FGD): The focus discussion of the study consists of five members, including two renowned professors, who are high expertise in research in organizational behavior, two practicing managers from sample banks, including public and other private commercial banks, and the researcher of the study.

Secondary Data: The review of relevant literature is the main source of secondary data. Different published books on organizational behavior, human resource management, and industrial psychology have been reviewed for developing the conceptual framework of the study. Published scientific articles, dissertations on national and international levels have been reviewed to identify the elements of Motivation-Hygiene Factors and Employee Motivation-Job Satisfaction.

3.3 Field Work

After identifying the different leading factor of Motivation-Hygiene Factors and Employee Motivation-Job Satisfaction. The questionnaire is developed for collecting employee perception regarding Motivation-Hygiene Factors and Employee Motivation-Job Satisfaction. After completing the questionnaire the pilot study is conducted to ensure the items on the questionnaire was clear to the respondents.

3.4 Tools for Data Processing, Analysis, and Presentation

After a successful survey of the questionnaire, a carefully scrutinize and edit of the inconsistency of the responses are verified and edited for serving the purposes of the study. The study data were analyzed by the statistical package for the social science (SPSS). The Descriptive Statistics like mean, the standard deviation was used to compute the general understandings of Motivation-Hygiene Factors and Employee Motivation-Job Satisfaction. The inferential statistics like Multiple Regression Analysis were used to explain the association of independent and dependent variables (Motivation-Hygiene Factors and Employee Motivation-Job Satisfaction).

3.5 Data Reliability

Reliability of data has measured by using the Cronbach's Alpha. Cronbach's Alpha is a coefficient of reliability and consistency. The Cronbach's Alpha of 35 items is 0.95 and Kaiser-Meyer-Olkin measure of sampling adequacy is 0.91.

Table-1: KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.91
Bartlett's Test of Sphericity	Approx. Chi-Square	2823.49
	df	190
	Sig.	0.00

These Alpha and KMO values are higher than that is suggested and therefore data collected can be considered to be highly reliable.

4. Analysis and Discussion

4.1. Respondents' Demographics

The questionnaires were administered among the banking executive among them, 220 from first line comprising 55%, 97 samples from mid-level comprising 24.3%, 83 samples from top-level comprising 20.8% of 400 samples. Respondent's age under 25 years are 5, comprising 1.3%, within 25 to 35 years are 193, comprising 48.3%, within 35 to 45 years are 97, comprising 24.3%, within 45 to 55 years are 59, comprising 14.8% and age 55 and above years are 46, comprising 11.5% of 400 samples.

Table-2: Respondents' Demographics

<i>Variables</i>	<i>Frequency</i>	<i>%</i>
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Level of Management

First Line Employee	220	55.0
Mid Level Employee	97	24.3
Top Level Employee	83	20.8
Total	400	100.0

Age (Year)

Below 25	5	1.3
25 to 35	193	48.3
35 to 45	97	24.3
45 to 55	59	14.8
55 and above	46	11.5
Total	400	100.0

Experience in Banking Job (Year)

Below 5	107	26.8
5 to 10	131	32.8
10 to 15	39	9.8
15 to 20	43	10.8
20 and above	80	20.0
Total	400	100.0

Educational Attainment

SSC	2	.5
Bachelor	28	7.0
Masters	368	92.0
Ph.D	2	.5
Total	400	100.0

<i>Variables</i>	<i>Frequency</i>	<i>%</i>
------------------	------------------	----------

Educational Attainment

SSC	2	.5
Bachelor	28	7.0
Masters	368	92.0
Ph.D	2	.5
Total	400	100.0

Gender

Male	362	90.5
Female	38	9.5
Total	400	100.0

Marital Status

Married	369	92.3
Unmarried	31	7.8
Total	400	100.0

Gross Salary (Taka)

Below 30000	45	11.3
30000 to 45000	130	32.5
45000 to 60000	88	22.0
60000 to 75000	43	10.8
75000 and above	94	23.5
Total	400	100.0

Respondent's banking experience below 5 years are 107, comprising 26.8%, within 5 to 10 years are 131, comprising 32.8%, experience within 10 to 15 years are 39, comprising 9.8%, experience within 15 to 20 years are 43; comprising 10.8% and experience 20 years and above are 80, comprising 20% of 400 samples. Respondent's educational attainment at SSC level is 2, comprising .5%, HSC level is NIL, Bachelor level are 28, comprising 7%, Master level are 368, comprising 92% and at the Ph.D. level are 2, comprising .5% of 400 samples. 362 male comprising 90.5% and 38 female respondents comprising 9.5% of 400 samples. 369 married respondents comprising 92.3% and 31 unmarried respondents comprising 7.8% of 400 samples. 45 respondents' salaried bellow Tk., 30,000 appraise 11.5%, 130 respondents within Tk., 30,000 to 45,000 appraise 32.5%, 88 respondents within Tk., 45,000 to 60,000 appraise 22%, 43 respondents within Tk., 60,000 to 75,000 appraise 10% and 94 respondents salaried Tk., 75,000 and above appraise 23.5% of 400 samples.

4.2. Descriptive Statistics

Table-3: Descriptive Statistics of Hygiene Factors (HF) and Motivation Factors (MF)

Hygiene Factors (HF)	\bar{x}	σ	Motivation Factors (MF)		
Supervision	3.76	0.75	Career Advancement	3.81	0.85
Working Conditions	3.74	0.93	Recognition at Work	3.38	0.95
Interpersonal Relationship	4.33	0.57	The Work itself	3.40	1.07
Pay	3.65	1.07	Autonomy	3.10	0.99
Job Security	3.62	0.98	Appreciation	3.66	0.86
Policy and Administration	3.70	0.92	Reward	3.16	0.97
Provident Fund Scheme	3.80	0.92	Feedback	3.30	0.92
Pension Plan	3.13	1.27	Participation in Decision Making	3.63	0.85
Health Insurance	2.50	1.12	Promotion	4.17	0.62
Work Disease Compensation	2.78	1.12	Creativity at Work	3.53	0.93
HF	3.50	0.55	MF	3.51	0.61
Employee Motivation (HF+MF) $\bar{x} = 3.51, \sigma = 0.54$					

The traditional rule of thumb of describing the mean score of five-point scale as 4.5 and above=highest, 4 to 4.49= high, 3.5 to 3.99= average high. 3 to 4.49= average, up to 2.99= low mean score. Table-3 indicates interpersonal relationships as high perceived, provident fund scheme, supervision, working conditions, policy and administration, pay, job security as average high, pension plan as average and work disease compensation, health insurance as low mean scored hygiene factors at work. Table-3 also indicates promotion as high perceived, career advancement, appreciation, participation in decision making, creativity at work as average high the work itself, recognition at work, feedback, reward, autonomy as average mean scored motivation factors at work.

Table-4: Descriptive Statistics of Job Satisfaction (JS)

Job Satisfaction (JS)	\bar{x}	σ
Satisfaction from the work itself	3.47	0.98
Pay Satisfaction	3.57	1.10
Satisfaction at Career Advancement	3.48	1.03
Satisfaction at Supervision	3.77	0.85
Satisfaction at Workplace Interpersonal Relations	4.08	0.68
Satisfaction at Training Provided	3.43	1.06
Satisfaction at Work Recognition	3.64	0.87
Satisfaction to Perform Creativity Work	3.56	0.98
Satisfaction at Feedback Provided	3.35	0.89
Satisfaction at HRM Policies and Practices	3.27	1.05
Satisfaction at Technology Provided	3.68	0.86
Satisfaction at Facility Provided	3.51	0.89
Satisfaction of Working Conditions	3.59	0.97
Satisfaction at Workload Assigned	3.74	0.87
Emotional Intelligence	4.02	0.65
Job Satisfaction (JS)	3.61	0.63

Table-4 indicates satisfaction at workplace interpersonal relations, emotional intelligence as high perceived, satisfaction at supervision, workload assigned, technology provided, work recognition, working conditions, pay, creativity work, facility provided as average high and satisfaction at career advancement, the work itself, training provided, feedback provided, HRM policies and practices as average mean scored job satisfaction related factors at work.

4.3. Correlations

Table-5: Correlations

Correlations		Job Satisfaction	Employee Motivation	Motivation Factors
Employee Motivation	Pearson Correlation	0.85**		
	Sig. (1-tailed)	0.00		
	N	400		
Motivation Factors	Pearson Correlation	0.83**	0.94**	
	Sig. (1-tailed)	0.000	0.00	
	N	400	400	
Hygiene Factors	Pearson Correlation	0.75**	0.93**	0.74**
	Sig. (1-tailed)	0.00	0.00	0.00
	N	400	400	400
**. Correlation is significant at the 0.01 level (1-tailed).				

Table-5 shows a strong high positive significant relationship between the job satisfaction - employee motivation, job satisfaction- motivation factors, job satisfaction-hygiene factors, motivation factors- hygiene factors with coefficient correlation $r=0.85$, 0.83 , 0.75 and 0.74 respectively with $p=.000$ at 0.00 (1-tailed) level of significance. There is a very strong positive significant relationship between the employee motivation- hygiene factors and employee motivation-motivation factors with coefficient correlation $r=0.93$, 0.94 respectively with $p=0.000$ at 0.01 (1-tailed) level of significance.

4.3. Regression Analysis

Multiple regression analysis applies to test the proposed hypotheses (H_1 , H_2 , H_3 , H_4 , and H_5) and to understand the relationship between dependent and independent variables.

Table-6: The Effects of Motivation Factors and Hygiene Factors on Employee Motivation

Multiple R	0.99 ^a
Multiple R Square	0.99
Adjusted R Square	0.99
Standard error of estimates	0.05
F value	23639.62
Significance F	0.000 ^a
Coefficients ^b	

Model 1	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.04	.02		-2.21	0.027
Motivation Factors (MF)	0.52	.01	.58	86.15	0.000
Hygiene Factors (HF)	0.54	.01	.49	71.68	0.000
^a . Predictors: (Constant), Motivation Factors (MF), Hygiene Factors (HF)					
^b . Dependent Variable: Employee Motivation (EM)					

The regression test results shows In table-6 ($R^2 = 0.99$, F-value = 23639.62 and Significance $F = 0.000 < 0.05$). It indicates that the Motivation Factors (MF) and Hygiene Factors (HF) are good predictors of Employee Motivation (EM) of commercial banks in Bangladesh.

The value of R Square indicates that this study explains 99% variance. The two independent variables shows the results (Standardized, $\beta = 0.58$, $t = 86.15$, $p = 0.000$; Standardized, $\beta = 0.49$, $t = 71.68$, $p = 0.000$) respectively which indicate the positive relationship of these independent variables with the dependent variable Employee Motivation (EM). Therefore the null hypotheses H_1 and H_2 accepted at 95 % confidence level.

Table-7: The Effect of Hygiene and Motivation Factors on Job Satisfaction					
Multiple R			0.85 ^a		
Multiple R Square			0.77		
Adjusted R Square			0.73		
Standard error of estimates			0.33		
F value			526		
Significance F			0.000 ^a		
Coefficients ^b					
Model 2	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.20	0.11		1.85	0.065
Hygiene Factors (HF)	0.33	0.05	0.29	7.42	0.000
Motivation Factor (MF)	0.64	0.04	0.61	15.64	0.000
^a . Predictors: (Constant), Motivation Factors (MF), Hygiene Factors (HF)					
^b . Dependent Variable: Job Satisfaction (JS)					

The regression test results shows In table-7 ($R^2 = 0.77$, F-value = 526.62 and Significance $F = 0.000 < 0.05$). It indicates that the Motivation Factors (MF) and Hygiene Factors (HF) are good predictors of Job Satisfaction (JS) of commercial banks in Bangladesh.

The value of R Square indicates that this study explains 77% variance. The two independent variables shows the results (Standardized, $\beta = 0.29$, $t = 7.42$, $p = 0.000$; Standardized, $\beta = 0.619$, $t = 15.64$, $p = 0.000$) respectively which indicate the positive

relationship of these independent variables with the dependent variable Job Satisfaction (JS). Therefore the null hypotheses H_3 and H_4 accepted at 95 % confidence level.

Table-8: The Effects of Employee Motivation on Job Satisfaction					
Multiple R			0.85 ^a		
Multiple R Square			0.72		
Adjusted R Square			0.72		
Standard error of estimates			0.34		
F value			1004.05		
Significance F			0.000 ^a		
Coefficients ^b					
Model 3	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.14	0.11		1.30	0.195
Employee Motivation (EM)	0.99	0.03	0.85	31.69	0.000
^a .Predictor: (Constant), Employee Motivation (EM)					
^b . Dependent Variable: Job Satisfaction (JS)					

The regression test results shows In table-8 ($R^2 = 0.72$, F-value = 1004.05 and Significance $F = 0.000 < 0.05$). It indicates that the Employee Motivation (EM) IS good predictors of Job Satisfaction (JS) of commercial banks in Bangladesh.

The value of R Square indicates that this study explains 72% variance. The independent variable shows the results (Standardized, $\beta = 0.85$, $t = 31.69$, $p = 0.000$), which indicate the positive relationship of independent variable with the dependent variable Job Satisfaction (JS). Therefore the null hypotheses H_5 accepted at 95 % confidence level.

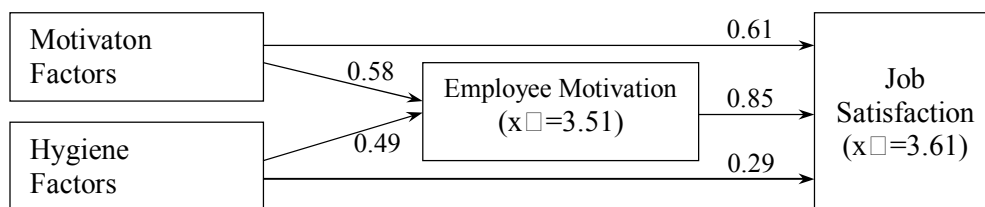


Figure-2: Empirical Configuration of the Study Framework

Hypotheses

Results

H₁: There is a significant association between motivation factors and the employee motivation of commercial banks in Bangladesh. Accepted

H₂: There is a significant association between motivation factors and the job satisfaction of employee of commercial banks in Bangladesh. Accepted

H₃: There is a significant association between hygiene factors and the employee motivation of commercial banks in Bangladesh. Accepted

H₄: There is a significant association between hygiene factors and the job satisfaction of employee of commercial banks in Bangladesh. Accepted

H₅: There is a significant association between employee motivation and the job satisfaction of employee of commercial banks in Bangladesh. Accepted

5. Conclusions

The theories of work motivation have been tried to convince motivation in many ways. Currently, the most manager uses the two-factor theories in their respective fields of management. Two aspects of motivating employee were presented in this theory. Two-factor theorists claim that only motivational factors are effectuating motivated and satisfied workforce. The hygiene factor has been called as a resistor of being dissatisfiers. But in the context of socioeconomic conditions of Bangladesh, this study is applied based on two-factor theory in the context of the commercial bank in Bangladesh to see how the hygiene and motivation factors effectuate and refine the motivated and satisfied workforce. The results show that both the motivation factor and the hygiene factor are activating to bring motivating and satisfied employees of the commercial bank in Bangladesh. The test statistics can be seen as usual because the behavioral theory cannot be work hundred percent accurately in the context of people management. The application of any theory depends on the quality of life, culture, economic system, lifestyle, social security, political environment, international relations, purchasing power, employment, income generation, educational system and peaceful co-existence of the people. Due to the huge population in Bangladesh, the considerable number of people do not get the job for earning for the better livelihood. To get a job itself is a motivational reality most of the unemployed youth in Bangladesh. People join the organization because they work for a variety of financial and non-financial benefits, which can meet their needs and expectations. The people in low-income countries, developing countries, low middle-income countries, and middle-income countries like Bangladesh effectuate by hygiene and motivation factors to bring work motivation and job satisfaction. Therefore, in organizational management, managers must use the motivation factor as well as the hygiene factor to trigger work motivation and job satisfaction.

To use the dual-structure theory in the workplace, Herzberg recommended the two-stage process.

Firstly, the manager should try to eliminate situations that cause dissatisfaction. The manager needs to use the dual-structure theory to enhance the motivation of the employee. The managers need to achieve a state of no dissatisfaction by addressing hygiene factors. Management needs to discover what is expected by them. The manager should be responsive regarding hygiene factors and try to prevent if any dissatisfaction exists regarding the pay, job security, supervision, working conditions, interpersonal relationship, policy and administration, provident fund scheme, pension plan, health insurance, and work disease compensation try to eliminate these.

Secondly, once a state of no dissatisfaction exists, managers need to improve motivation further through activating motivation factor at work. At that point, the motivation factors enter the picture. When manager successfully manages the hygiene issues, the next street forward job of management is to increase opportunities for achievement, recognition, responsibility, advancement, and growth for motivated and satisfied human resources.

Acknowledgment

This study is a part of my¹ unpublished Ph.D. dissertation under the supervision of Professor Sheikh M. Nurullah² and Professor Dr. Md. Zafor Sadique³, Department of Management Studies, Rajshahi University, Rajshahi-6205, Bangladesh; approved for the Degree of Doctor of Philosophy (Ph.D.) in the Pabna University of Science and Technology, Pabna-6600, Bangladesh.

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Journal of Business Studies
JBS-ISSN 2303-9884
Volume - 11, No. 2, pp.: 37-46

Halal Tourism Development in Bangladesh: The Conceptual Issues

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Abstract

Understanding the concepts of halal tourism will have a momentous bearing on the attaining sustainable development goal and employment opportunities for them who are involved in its development process. Thus, the concept of halal tourism can stimulate the conventional concepts of tourism, and bring socio-economic and environmental well-being of the host community ensuring sustainable development of a particular country. However, research on halal tourism is extremely limited in different context. Thus, the aim of this paper is to identify the prospects of halal tourism development in Bangladesh. The study has been conducted based on secondary sources of information. Meta analysis reveals that halal tourism is one of the most prospective tourism sectors in Bangladesh that can bring Muslim tourists from the whole world. This paper identifies some weaknesses of halal tourism development and provides some recommendations to overcome those weaknesses. For the development of this potential sector, it needs proper policy formulation, infrastructure development, investment for halal services and facilities in the destination areas as well. Finally, this paper focuses on how halal tourism of Bangladesh can be advanced through appropriate tourism policy whilst also ensuring involvement of the host community.

Keywords: *Halal Tourism, Muslim Tourists, Conceptual Issues, Bangladesh.*

1. Introduction

From the time when the independence of Bangladesh, the government of Bangladesh has been giving outstanding consideration on some essential sectors like agriculture, manufacturing, infrastructure, readymade garments, service sector, SME sector etc. But tourism, as a significant revenue making segment, has botched to pull accurate consideration of the concerned authorities in Bangladesh. Halal tourism development in Bangladesh is not at all measured at any level, either in public or in private sector. The National Tourism Policy of 1992 and 2010 did not also reflect the halal tourism concept and the development of halal tourism there. But the development of a strong concept on halal tourism development involving the Muslim community there is absolutely useful for

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a country like us where Bangladesh is the world's fourth largest population of any country, the Muslim population is approximately around 148 million (Worldatlas, 2019). As like Indonesia, Malaysia; Bangladesh also be a halal tourism hub for the Muslim tourists as well as non-Muslim tourists. Bangladesh has huge potentials to flourish its halal tourism sector and contribute to economic development through job creation, earning from foreign Muslim tourists, empowerment of local people, and protection of environment, Muslim society, Islamic culture, etc. There are a large number of Islamic heritage sites in Bangladesh and visitors can find unique designed mosques, tombs, shrines in almost all the areas of Bangladesh.

2. Objective of the Study

- ✓ To get a conceptual idea on halal tourism and its development in Bangladesh;
- ✓ To find out the significance of halal tourism development in Bangladesh and its current scenario;
- ✓ To identify the weaknesses of halal tourism development in Bangladesh; and
- ✓ To provide some guidelines for the development of halal tourism in Bangladesh and the involvement of host community in halal tourism activities.

3. Methodology

This study is mainly conceptual in nature. Qualitative analysis has been conducted based on the relevant issues and secondary information to understand the concept of halal tourism development in Bangladesh. For the purpose of analysis the data have been collected mainly from different publications of Bangladesh Parjatan Corporation (BPC), Bangladesh Tourism Board (BTB), Bangladesh Bureau of Statistics, World Tourism Organization, World Travel and Tourism Council, OIC publications and Global Muslim Travel Index report by Mastercard & Cresentrating. Besides, books, journal articles, daily newspapers, websites, etc. have also been used widely. As meta-analysis is the procedure for combining data from multiple studies to know the previous study areas as well as the available opportunity for future study so this study primarily based on this methodology which ensured the paucity of halal tourism perspective in Bangladesh.

4. Literature review

The available and relevant literatures on this area have been reviewed and summarized here. The term of halal tourism in the literature generally equated with terms such as Islamic tourism, Shariah tourism, Shariah travel, halal-friendly tourism destination, Muslim-friendly travel destinations, halal lifestyle, and others (Jaelani, 2017). The instance of Halal tourism as previously known, the Hajj (the central pilgrimage) is a journey mandatory for every Muslim who has touched the age of puberty and is of sound mind, and this must be performed at least once in one's life provided that he or she is physically capable and has the means to do so (Jafari and Scott, 2014). On the other hand, it is claimed that Islamic tourism attracts many travelers entirely interested in what is termed 'Islamic culture' (Henderson, 2009; Javed, 2007). Zamani-Farahani and Henderson (2010) in the same study reported that Islamic tourism could be extended to target non-Muslims which is against their definition of Islamic tourism. However, in line

with Al-Hamarneh and Steiner (2004) Zamani-Farahani and Henderson (2010) highlighted the benefits of Islamic tourism for non-Muslims tourists visiting the Muslim world.

The space of halal tourism is not solely designed for only Muslims, but inclusively covers the services for all tourists (Muslim and non-Muslim). Additionally to the good servicing practices, the core of halal tourism stresses on the principles of Shariah compliant aspects in both tourism management and services (Jaelani, 2017). The improvement of the concept of Halal tourism in the recent years denotes the vibrant growing demand from the Muslim tourist market.

As a niche market halal tourism includes; halal hotel services, halal services of airlines, halal food services in restaurants, halal activities of tour packages and halal financing (Zulkifli et al., 2011). Beside these, halal tourism also includes gender segregation. Islamic instruction insists on strict gender segregation, especially with regards to public facilities. This has been in practice since the time of the Prophet Muhammad, where the mosques during those times were segregated, with different sections for both men and women (Jibreen, 1996). The prohibition of free mixing of men and women is firmly stated in the Quran (Al-Ahzab: verse 53). Both men and women are also required to dress conservatively in public spaces; Muslim men are obliged to cover their torsos and upper legs, while women need to cover their entire bodies leaving only their hands and faces exposed (Din, 1989).

Muslim tourists can get many benefit from halal tourism and it helps tourists to reduce boring, anxiety, tension and rest their mind, as well as souls from any quandaries. Muslim tourist can gain knowledge and information by thinking the beauty of Allah's (swt) creations (Al-Hamarneh & Steiner, 2004). All alive things in this world are made from water (Al-Quran 21:30). Islamic tourists should think about the initiation of this creations. Islamic tourists should also visit the historical places to learn the history of past generations.

Saudi Arabia has been the most important international tourism destination mainly due to the annual pilgrimage to *Makkah* by Muslims worldwide (Ahmed, 1992). The concept of multi-ethnic-oriented cultural and pilgrim tourism has been the main focus of tourism development in Saudi Arabia (Al-Hamarneh and Steiner, 2004). Billions of dollars were transferred internationally every year for the transportation, accommodation, entertainment, food and beverages in the tourism industry (Ahmed, 1992). Over the recent decades, Saudi Arabia has shifted their tourism development beyond the Islamic traditional pilgrimage (Al-Hamarneh and Steiner, 2004).

According to the Global Muslim Travel Index (GMTI) in 2018, Malaysia stays to top for the ninth time in a row. The country has constantly been able to keep its standing amongst the main three themes of Family-friendly holiday and safe travel destination Muslim-friendly services and conveniences at the destination, and halal awareness and destination marketing (GMTI, 2018). In the prior era, Malaysia put in a lot of dynamisms in enlightening halal tourism in Malaysia and the effort meeting for the great accomplishment of Malaysia in halal tourism field. Tourism Malaysia endorsed the

country's booming Halal industry and growing Islamic tourism. Government of Indonesia also concentrations on halal tourism for the past few years. In the development of halal tourism, the Law of Ministry of Tourism No.2/2014 on guidelines for implementation of Shariah hotel business, article 1, which referred to the principles of Shariah law as restricted fatwa and/or approved by the Indonesian Ulama Council (Majelis Ulama Indonesia, MUI). Halal tourism in Indonesia has respectable economic prospects as part of the national tourism industry (Jaelani, 2017).

The Iran Islamic Revolution gave a great impact to the tourism industry (Arasteh and Eilami, 2011). The government had made a clear statement to only earn revenue from halal sources. Iran want to make the halal tourism as an emerging economic powerhouse to materialize the goal of attracting 20 million tourists annually by 2025 (TehranTimes, 2017). Though the halal tourism concept in Turkey is primarily useful in the accommodation facilities but Turkey has been the key reference point for other Middle East countries in developing the halal tourism concept and continues to improve their services in this concept (Duman, 2011; Carboni et al., 2017).

Beside the Muslim countries some non-Muslim countries also have taken actions regarding Muslim friendly facilities and services to attract Muslim travelers' from all over the world. Like, Thailand's halal tourism has deemed to be one of the unique strategies to promote and develop of its sustainable tourism since 2015. It is anticipated that Muslim tourists will increase to 150 million by 2020 or equivalent to 11% of the overall tourism industry and projected to be worth 6.7 trillion Thai baht (\$200 billion) (Piyachat Puangniyom, 2017). The Halal market is growing in prominence day by day in New Zealand. Projected travel expenditure values are at US\$195 million for 2020 (Tomahawk, 2018). New Zealand, a non-Muslim country has taken interest in providing halal food for the tourists (Hassan and Hall, 2003). Tourism New Zealand stated that New Zealand has the potential to the tourism destination for Muslim tourists due to the availability of halal slaughtered meat in the country (Hassan and Hall, 2003). Australia is one of the top ten non-OIC destinations in the last year by Mastercard & Crescentrating Global Muslim Travel Index 2018 (GMTI, 2018). Australia is one of the most preferred destinations for Muslim travelers around the world, especially for Middle Eastern tourists.

A review of aforementioned halal tourism literatures highlights the paucity of studies in Bangladesh. This readily lends itself to a detailed exploration of the same. In Bangladesh, tourism was identified as a thrust sector, but very few papers have focused on the halal tourism issues. Among the papers, very few are remarkable. These studies did not even highlight how to improve the halal tourism for the tourism sector in Bangladesh. As such, the present study deserves an utmost importance for the present day purpose of halal tourism development in the country.

5. Findings and Discussion

5.1. The Concept of Halal Tourism

Halal tourism is a subcategory of tourism which is geared towards Muslim families who abide by rules of Islam (Wikipedia contributors, 2011). Battour et al. (2012) also define halal tourism as,

“Halal tourism is a type of religious tourism that represents allowable activities under the Islamic teachings in terms of behavior, dress, conduct, and diet.”

Some researchers have tried to define Islamic tourism and Halal tourism in tourism and destination marketing literatures (Battour et al., 2014; Carboni, Perelli, & Sistu, 2014; Jafari & Scott, 2014;). However most have not taken into consideration the Islamic law (Shariah), the target customers (i.e. Muslims or non-Muslims), the location of activity (i.e. Muslim vs non-Muslim country), the product and service offered (i.e. food, facilities), and the purpose of travel. Most of these definitions are loosely defined and used interchangeably. In other words, Halal tourism and Islamic tourism are treated as similar concepts. As, Jafari and Scott (2014) defined Islamic tourism,

“The encouragement of tourists likely to meet the requirements of Sharia law.”

5.2. Halal tourism is an alternative to conventional tourism

By avoiding of religiously prohibited products and services that is called haram in Islam in the tourist packages it is possible to create halal tourism is an alternative to conventional tourism. By offering non-tangible, qualitative ingredients or contents in the tourist package, especially as defined in spiritual-moral terms it is also possible to create space for halal tourism. Halal tourism is not just about visiting holy places, mosques, shrines and tombs, and other popular religious sites that are limited to the history of Islam but objects of sight-seeing or touristic sights such as the pre-Islamic historical sites and the natural wonders targeted by conventional eco-tourism may be incorporated and indeed projected as part of halal tourism provided that the Islamic perspectives on eco-tourism and the pre-Islamic historical sites are always made clear to the tour operators and the potential tourists.

5.3. Significance of Halal Tourism

The Muslim travel market is on course to continue its fast-paced growth to reach US\$220 billion by 2020 and it is expected to grow a further US\$80 billion to reach US\$300 billion by 2026 so the prospects of halal tourism is incredible in the Muslim world as well as non-Islamic world (GMTI, 2018). In 2016, there were an estimated 121 million Muslim visitor arrivals, in 2017 it was 131 million and this is forecasted to grow to 156 million visitors by 2020 representing 10 percent of the travel segment (GMTI, 2018). As Muslim tourists are increasing day by day so halal tourism can be a greater scope for Bangladesh to attract the international tourists and earn foreign money that will help the country to continue its developing cycle. Our neighboring countries like Malaysia, Indonesia, and Pakistan even some non-Islamic countries like Thailand, Philippines are rigorously developing the concept and practice of halal tourism in their country.

5.4. State of Halal Tourism Development

Halal tourism has drawn attention in past few years of many developing countries. But the development of halal tourism in Bangladesh is still in a take off stage which could be developed in a sustainable way. From the last OIC conference in Dhaka the concern authority is talking about halal tourism. Bangladesh is set to officially celebrate its capital Dhaka's achievement as "OIC City of Tourism 2019" in this year aiming at showcasing rich Muslim heritage of the 400-year old city before the global community, especially Muslim tourists.

5.5. Attractive Halal Tourism Destinations in Bangladesh

As near about 90% people of Bangladesh are Muslims in terms of religion, the concept of halal tourism can be applied here as a subcategory of tourism. However, there are some specific destinations in our country where the concept of halal tourism can be applied more smoothly. Among these one of most attractive halal tourism destinations may be the Ijtema¹ field at Tungi, commonly known as "Biswa Ijtema²". This is considered as the host of the second largest event in terms of Muslim participants each year. People from almost all countries of the world visit Bangladesh to join this gathering that usually held during January each year (World Bulletin, 2015). Besides this various renowned mosques (e.g. Sixty Dome Mosque, Baitul Mukaram Mosque, Shahi Mosque, Binot Bibir Mosque, Chak Mosque, Seven Dome Mosque, Tara Mosque etc.) various shrine of Muslim scholars (e.g. Shrine of Shah Sultan, Shrine of Shah Mukhdum, Shrine of Khan Zahan Ali etc.) are the potential halal tourism destinations in Bangladesh.

5.6. Halal Tourism Development in Bangladesh

As Bangladesh is one of the largest Muslim populated countries so it is very easy to develop halal tourism aspects that means halal hotel service, halal airline services, halal food service in restaurants, halal activities off tour packages, gender segregation, halal financing etc. in our country. As like Indonesia, Malaysia; Bangladesh also be a halal tourism hub for the international Muslim as well as non-Muslim tourists. Bangladesh Parjatan Corporation (BPC) is the sole National Tourism Organization (NTO) in Bangladesh. NTO has been functioning since its independence under the patronage of the Ministry of Civil Aviation and Tourism, concerned about the issues of tourism in Bangladesh. One of the major functions of NTO is to promote tourism. With developing the halal tourism in Bangladesh the BPC has to promote it internationally extensively.

5.7. Weaknesses of Halal Tourism Development

Muslim tourists friendly and Shariah obedience presentation is necessary for halal tourism development in any country. These presentations can fulfill halal tourism necessities in tourist attraction engagements, accommodations, airlines, foods and travel agents. Granting Bangladesh is a Muslim populated country, it hasn't developed Shariah

¹ Ijtema means gathering of Muslim pilgrims.

² Biswa means the World. As the participants come from all over the world, it is called so.

obedience submission in all tourism related services. The tour operators our country have botched to generate Muslim tourists friendly packages and services, halal travel opportunities, halal market segment and halal cultural mementoes. Their travel packages not properly alliance the halal tourism necessities such as halal food, stay in halal lodgings, arrange prayer timing, and recruit Muslim tour guides and visit the Muslim monuments to attract the tourists from the Muslim countries. The maximum lodgings in our country are not ensuing Shariah based operation system in their hotel and hospitality management. The practitioners and employees in the tourism industry are not sound cultivated and proficient regarding the halal issues for effective halal tourism operation. Most of the people of the country do not have sufficient familiarity and awareness about halal tourism practices. Bangladesh still has no special tactics in the tourism policies to give stress and highlight the halal tourism development. The country has inadequate devotion and ineffectual marketing to engage Bangladesh as a halal tourism pivot in nationally as well as internationally.

A survey table of meta-analysis is given below which represents the paucity of halal tourism studies in Bangladesh:

Authors/Year	Title	Journal	Area	Major Findings
Jaelani, 2017	Halal tourism industry in Indonesia: Potential and prospects	Munich Personal RePEc Archive	Indonesia	1. Lot of potential 2. Developing sharia travel 3. Learn from other countries 4. Implementation of sharia hotel 5. Master plan for tourism development
Battour et al., 2014	Islamic tourism: An empirical examination of travel motivation and satisfaction in Malaysia	Current Issues in Tourism	Malaysia & Egypt	1. Awareness among Muslim increased 2. Fastest developing market segments 3. Muslim friendly guide is published 4. Halal food availability 5. Muslim friendly airport 6. Availability of Muslim swimming suit for women
Carboni et al., 2017	Developing tourism products in line with Islamic beliefs: some insights from Nabeul– Hammamet	Journal of North African Studies	Tunisia	1. Becoming familiar with global products for Muslim consumers 2. Consider tourism as a differentiation tool
Henderson, 2009	Islamic tourism reviewed	Tourism Recreation Research	Malaysia & Singapore	1. Majority, or sizeable minority Muslim communities 2. Competitive advantages 3. Availability of Halal food 4. Friendly to inbound Muslim tourists

Authors/Year	Title	Journal	Area	Major Findings
Puangniyom et. al., 2017	Halal Tourism Strategy to Promote Sustainable Cultural Tourism in Thailand	International Conference on Studies in Arts, Social Sciences and Humanities	Thailand	1. Muslim-friendly Destination 2. Highlighting Halal restaurants 3. Launched a new mobile app for Muslim visitors 4. Islamic facilities to attract Muslim tourists
Jafari, J., & Scott, N., 2014	Muslim World and Its Tourisms	Annals of Tourism Research	Whole Muslim world	1. distinctive requirements of Muslims 2. Increasing numbers of Muslim tourist 3. Sustainable tourism projects
Zulkifli et. al., 2011	Developing the Framework for Halal Friendly Tourism in Malaysia	International Business Management	Malaysia	1. Increasing number of Chinese Muslim tourists 2. Islamic Tourism Centre has been established in 2009 3. Availability of halal foods and services 4. Practices of Islamic banking/halal financing

6. Recommendations

Bangladesh can raise halal tourism marketplace in the country with a durable and optimistic role. The country can stimulate halal tourism through improving products, services and facilities with Shariah obedience. Bangladesh can stimulate its halal food to attract Muslim tourists from home and abroad to create its image as a halal tourism hub. Halal hotel is the most picking preferences to Muslim tourists. These hotels are not limited only with the halal food (slaughtered in the name of Allah and excluding all pork products and certain other items) service also the operation of the service and the management of the hotel have to organize with Islamic principles. Quran, prayer mats and arrows indicating the direction of Qibla in every room, beds and toilets positioned so as not to face the direction of Mecca, bidets in bathrooms, Prayer rooms, Predominantly Muslim staff, conservative staff dress, separate recreational facilities for men and women, no entertainment venues such as nightclubs are some of the indicators of halal hotel (Henderson, 2010; Rosenberg & Choufany, 2009). The tourism attractions and community sites i.e. hospitals, shopping complexes and offices ought to be arranged with prayer facilities for the tourists. The content of the tour packages must be based on an Islamic themed. The Islamic tour packages include visits to the mosques, Islamic monuments and promote and event during the Ramadan. Halal indicators in airlines are cleanliness, non-alcoholic drinks and publications which are coherent with Islam that Bangladesh Biman can promise to the Muslim tourists. Islamic instruction insists on strict gender segregation, especially with regards to public facilities. The prohibition of free mixing of men and women is firmly stated in the Quran (Al-Ahzab: verse 53). This has been in practice since the time of the Prophet Muhammad, where the mosques during those times were segregated, with different sections for both men and women (Jibreen, 1996). This issue should be considered in case of developing the halal tourism in Bangladesh. For the expansion of halal tourism in Bangladesh the concern authority and

the host community should be aware of. The authority should have taken policies to develop halal tourism and includes this issue in their tourism and hospitality related education and training with the lively involvement of the host community.

7. Conclusion

The idea of halal tourism development is still to perceive by Bangladesh. The country is filled with bounty of halal attractions and heritage sites with their exclusive prettiness and appeals. Although it has a lot of chances to embellishment, halal tourism in Bangladesh is in a take off stage and has been developing at a very sluggish step. Bangladesh has many prospects to develop its halal tourism with its bounty of halal attractions and heritage sites by ensuring the various aspects of halal tourism that includes halal food, halal accommodation and other related halal services to the Muslim travelers. If a suitable tourism policy is taken for halal tourism development, it could bring lots of benefit to our country and can be a vital tool to achieve sustainable development goal through poverty mitigation.

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Journal of Business Studies
JBS-ISSN 2303-9884
Volume - 11, No. 2, pp.: 47-71

Consumer Perception towards Different Toothpaste Brands of Bangladesh

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Abstract

The core of the study is to examine the perception of consumers towards different toothpaste brands of Bangladesh. When consumer choice a brand of toothpaste they give special emphasis on some important attributes. This study has identified those important attributes. Total 5 brands and 12 attributes have taken into consideration for the study. In total 350 samples are taken to examine perception. Perception is measured on the basis of analysis procedures used by Fishbein's for measuring salient belief of consumers toward brands. It reveals from the study that Pepsodent bears highest and Whiteplus bears lowest brand image in the market. Mean differences of different attributes for different brands are measured through ANOVA for test of significance. Tukey test is applied to find out the exact perception differences among different brands on the basis of different attributes. Outcomes of the paper may be used as an index by the toothpaste manufacturing companies for improvement of their product and formulating marketing strategies as well.

Keywords: Consumer Perception, Toothpaste, Brand, Attributes, ANOVA, Tukey Test

Introduction

In the era of modernization, people rely on experience for decision making. Experience is gained from learning. People learn and enlighten themselves through the interaction of knowledge. Product knowledge make consumer experienced about the product and the experience branded that product. Successful brands are like a motivating force containing

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enough energy to enlighten distant territories holding colossal appeal for consumers (Sheena, Mohanan and Naresh, 2012). Sarker, Yousuf and Monzoor (2013) state that Brands not only represent the symbol of the company or product but to a larger extent define the general life of a person. At present brand means experience. It is both of good or bad experience. Long term good experiences make good brand and bad experience unworthy brand. Consumers position both the good and bad experience in their mind and branding means positioning good experience about product in consumers mind. Consumers do not wait a single moment to cut relation with the brand which has bad experience. If any product makes a position in consumers mind with its good experience that could be brand. Positive feelings about any brand discourage customers to choose a substitute one (Rooney 1995; Sarker, Yousuf and Monzoor, 2013).

A brand is a product, service or concept that is publicly distinguished from other products, services or concepts. For distinguish characteristics it can be communicated easily and usually marketed. Differentiation makes a brand distinguish and unique design, sign, symbol, words or combination of all these make differentiated products and also create an image of good experience about the product. Overtime this image becomes associated in the consumers mind with a level of credibility, quality and satisfaction and converts a product to a strong brand. Actually Brands are built and developed to magnetize consumers and sustain them thereby increasing its value, image, credibility, lifestyle and so on (Sheena, Mohanan and Naresh, 2012). Because of good brand image, some customers purchase a specific brand seeing its brand name (Sarker, Yousuf and Monzoor, 2013). Customers also become loyal to a specific brand for its expected level of perceived quality. Government policies to promote education in rural areas and with the blessing of cable TV network, rural consumers are now more aware about brand (Daud, 2013).

Globalization and Social media make consumer more aware and their end of brand awareness of consumer is increasing day by day (Gupta and Kaur, 2013). The definition of brand becomes unmoored and different people start using the same word to mean entirely different things. The word brand is widely used but unevenly understood. People in rural area use branded products as they consider the brand as a status up gradation tool (Majeed, 2014). This word is now applied to entire corporate identity as well as to individual product and service names. The bowling sensation of Bangladesh “Mustafiz” is now a brand as a cutter master in cricket, the concept “Non Violence” of “Mahatma Gandhi”, the organization “United Nations (UN)” are also brand. The high involvement products BMW Car, Walton Refrigerator, Apple iPhone are also brand. The low involvement products such as Lux soap, Coca-Cola, Catbarry chocolate are also brand itself. Even Fast Moveable Consumer Goods (FMCG) toothpaste has also some brand like Pepsodent, Colgate, Mediplus, Close Up etc. This study attempts to analyze different toothpaste brand in Bangladesh.

In modern civilization where standard of living is increasing day by day, it is hard to pass any day without using toothpaste and toothbrush. The main purpose of using the toothpaste is to reduce oral bacterial flora and deliver fluoride to the teeth (Okpalugo et al, 2009). Oral hygiene was a top priority in society as early as 5000 BC. Even though the

brands of toothpaste that we have today are the most effective in preventing oral disease, the concoctions up until now haven't been too far off. Colgate Palmolive Company, USA state that the world's oldest known formula for toothpaste was created by Egyptians. The ingredients of ancient toothpastes were however very different and varied. Ingredients used included a powder of ox hooves' ashes and burnt eggshells that was combined with pumice. The company described in their toothpaste brand website that the Greeks and Romans favoured more abrasiveness and their toothpaste ingredients included crushed bones and oyster shells and the Romans added more flavouring to help with bad breath, as well as powdered charcoal and bark. The Chinese used a wide variety of substances in toothpastes over times that have included ginseng, herbal mints and salt. British Broadcasting Company, UK has also published a newsletter on history of toothpaste. The newsletter mentioned that in 1780, people were known to scrub their teeth with a powder that was made up of mainly burnt bread. In 1824, a dentist named Peabody added soap to toothpaste for added cleanliness. Soap was later replaced by sodium lauryl sulphate to create a smooth paste. The first commercially produced, nice-smelling toothpaste was launched by Colgate and sold in a jar in 1873 and in 1892, Dr. Washington Sheffield is the first person to put toothpaste in a collapsible tube. It has been suggested that this version of toothpaste is the most similar to today's version. BBC also broadcasted that Fluoride is added to toothpastes in 1914 after discovering it significantly decreased dental cavities. Later herbal toothpastes, such as Tom's, become available in 1914 as an alternative to cleaning teeth without fluoride. These toothpastes include ingredients like peppermint oil, myrrh and plant extracts. NASA invented a category of toothpaste in 1987 named Edible toothpaste. It used by children just learning to brush their teeth and used by NASA so astronauts could brush their teeth without spitting into a zero gravity abyss. Finally in 1989, Rembrandt invented the first toothpaste that claimed to whiten and brighten smile.

Toothpastes today typically contain fluoride, colouring, flavouring, sweetener, as well as ingredients that make the toothpaste a smooth paste, foam and stay moist. Individual toothpastes also may contain special ingredients, such as triclosan (Rule, Vikeshland and Ebbett, 2005). Toothpaste in tubes is used throughout the world and has been a very successful invention. The world gets uncountable number of toothpaste from this invention. More than 30 toothpastes are available in Bangladesh. Some of them manufacture locally and some are imported (Kashfia and Shabnam, 2013). Pepsodent, Colgate, Mediplus, White Plus are the famous brands of them. Customers use brands name as a tool to select different toothpaste brands (Sharda and Sharda, 2010). This paper attempts to measure students' perception on different toothpaste brands in Bangladesh.

Literature Review

Gupta and Kaur, (2013) conducted a study on brand awareness among consumers on daily consuming goods. The study found that brand awareness is increasing everywhere. They also examine brand preferences of different products- Tea, Toothpaste, Soap & Shampoo in rural market. In case of toothpaste the result reveals that Close Up is the highest preferred branded toothpaste in rural areas. Pepsodent, Colgate and Sensodine got 2nd, 3rd and 4th preferred position respectively.

Sarker, Yousuf and Monzoor (2013) explored some factors that affect to select a toothpaste brand in Khulna city. Results show that several factors are influential for the toothpaste brand selection e.g. quality, advantages of using product, duration of freshness, Smell, perceived performance, brand awareness, product Attribute. The study found that some of the factors like Perceived performance, Brand awareness, Product Attribute, Taste, Credibility of the company, Availability of product information, Herbal Ingredients seem to be most important factors from customer's point of view. At the same time some factors are less important to the customers to select toothpaste brand. This includes; Product Availability, Uniqueness or Innovation, Doctor's Instruction, Parents influence, Country of Origin, Price, TV Advertisement. Again customers don't consider some factors like peer group influence, Design or packaging to select toothpaste.

Cyril, Siam and Muhammad (2012) run a study for exploring the role cue plays on low involvement product purchase intention and product evaluation of Malaysian consumers. They chose toothpaste as a low involvement product. The study reveals that customer of the specific country prefers products produced by developed countries and they tend to less preference to the less developed countries. In case of specific countries, consumers prefer toothpaste made in Australia not made in China. They perceived that the products of developed countries are more qualitiful because of economic and technological advancement of the countries.

Sharda and Sharda (2010) conducted a study in Udaipur, India. The aim of the study was to know the factors that influence on choice of oral hygiene. The study concludes that Colgate is the mostly used toothpaste and information from media or advertisement, flavor are the most influential factor to choice toothpaste. Again advice of dentist, cost and color consider as the less important factor. The study also concludes that brand name is also an influential factor.

Moisescu and Allen (2010) take an endeavour to investigate the interrelationships among various brand dimensions for a successful brand. The result show that different brand dimensions- perfection of fit, brand attributes, brand associations have positive relationship among them. The study observed that consumers prefer brand by considering brand image of a firm rather than level of quality, brand attitude and usage level. The author summarized that perception of fit, brand attributes and brand associations are indeed irrefutable for a brand's success.

Majeed (2014) took an initiative for assessing the brand awareness of fast moveable consumer goods in rural areas. The most important findings of this study that consumers awareness is increasing in case of FMCG in rural areas. Rural consumers are now aware on average 60% about different brands of tea, soap, toothpaste. It also found that they are becoming aware through Television Communication (TVC). In terms of toothpaste, consumers prefer Colgate (1st), Close UP (2nd), Pepsodent (3rd), and Miswak (4th).

Daud (2013) conducted a study to know consumers interest in branded products in rural areas. The study reveals that young generation prefers branded products. They are experienced from variety of entertainment sources. There has a positive perception about branded products that is not limited to any demographic characteristics (age, gender or education).

Vani, Babu and Panchanatham (2010) run a study to find out the consumer behavior, analyze the preference of consumers and consumer awareness about toothpaste brands. The study found some important information such as 80% consumers use toothpaste and they purchase it two or more than twice in one month. The consumers are about different brands like Colgate, Close Up, Pepsodent, Dabur, Anchor, Ajanta. The most important finding is that there perception about toothpaste brands is constituted on the basis of dentist recommendation, price, availability, packaging, quality, brand, flavor, healthy tooth & gums, freshness, prevention of tooth erosion, whiteness and influence of friends, kids or parents.

Polster and Jodecke (2010), completed their thesis on differences in attribute pretences of manufacturer and private label buyers when they making purchase decision. The study has shown all four buyer groups to perceive quality and health-related attributes to be most important. Especially a good price quality ratio was found to be of high importance across all four groups. Interestingly, private label brand buyers of toothpaste state to be equally loyal prone as buyers of manufacturer brands are, indicating a stronger bond to private label products in this category. Across categories results have shown toothpaste buyers to have a significantly more positive opinion on familiarity, category involvement and attitude towards private labels, as well as a higher brand sensitivity indicating them to be rather risk averse compared to buyers of orange juice due to the complexity of toothpastes in general.

Hong (2013), investigate the competitiveness of some selected brands of toothpaste, detergent powder and shampoo by taking into account of several attributes and functional values. The study found that 80% customers are like to use branded products. The customers have deep interest on products ranging superior quality. The author also found that 91% customer wants new products which indicate that customers are not satisfied with present products or brands. They are mostly (71%) rely on electronic media for brand selection.

Kotler and Keller (2009) emphasis on consumers experience and perception in defining brand. They define that brand constitutes with thoughts, feeling, perceptions, image, experiences, beliefs, attitudes, and so on about a brand. Sheena, Mohanan and Naresh, (2012), defined that the perception of fit is the extent of brand awareness and reputation of the firm. Reputation is achieved through customers' positive experience about a brand by providing superior benefit. De Chernatony and Dall'Omo Riley (1998) developed a multidimensional brand construct combining the literature with interviews of twenty brand consultants. The identified boundaries of the brand construct are shown in Figure-



Source: Chernatony D. and Riley, D. O. (1998)

The two researchers summarise from existing literature that a brand is influenced by its two key stakeholders, namely the firm's staff and the consumers. The brand is the interface of an on-going process in which a firm creates values and expectations around a product or service (firm's input) which are interpreted by the consumer (consumers' perceptions). The firm pre-determines a brand and monitors if consumers' perceptions match this pre-determination. The firm's input is either revised in order to match the consumers' perception or strengthened focussing on the most relevant aspects for the consumers. After interviews with leading brand experts, Chernatony and Riley (1998) concluded that defining the term brand must include tangible aspects, intangible aspects and consumers' perception.

Perception is hardly defined or conceptualized (Cohen S. R. and Wartofsky, 1969). Generally people's initial idea of cognitive contact on their surrounding area is called perception. Many theorists believe that perception also involves the acquisition, storage, transformation and use of information (Solomon, Benne and Previte 2013). Solomon, Benne and Previte is also draw a relation between perception and sensation in their book and overtime researchers have adopted different theoretical approaches to guide their studies of consumer sensation and perception (Foley and Maltin 2010). We live in an era where the perception of a brand is no longer reliant on the quality of a product. Instead, a brand's reputation is reliant on the perceived value to its customers and expands much further than whether or not the product works (Jon Simpson, Forbes Magazine, May 05, 2017). The sales force of Forbes magazine also reported that 55% of consumers are even willing to pay more for a brand if they know they will have a better experience. Seymour Smith, a prominent advertising researcher, found evidence for selective perception in advertising research in the early 1960s, and he defined perception to be "a procedure by which people let in, or screen out, advertising material they have an opportunity to see or hear (Boundless). They do so because of their attitudes, beliefs, usage preferences and habits, conditioning, etc. Brand owners may feel they understand exactly what their brand represents. However, this image may be more reflective of their aspirations for the brand, rather than the reality of public opinion. Brand perception is owned by consumers, not brands. Regardless of marketers' message, whatever people are thinking and saying about a brand, that is brand perception (Smith, 2015).

The above discussion seems that brands are now not only a fact of consumers' choice but also a fact of attractive academic research field. Academicians run several studies on brand. But very few studies have been conducted on brand perception in context of specific brand category. Comparative studies on measuring brand perception on specific FMCGs' like toothpaste are so rare. Thus, there is a scope of advance study to contribute socially and economically in Bangladesh. The majority of previous research on perceptions of country-of-origin cue revolved around high involvement purchases like automobiles (Kaynak, Kucukemiroglu and Hyder 2000). Low involvement products like toothpaste (Kraetke, 2000) or other everyday consumer goods were neglected (Bruning, 1997). However this study attempts to measure consumers' perception on Six (06) popular toothpaste brands in Bangladesh.

Justification of the Study

By understanding customers and the roles that brands can play in purchasing, business can better appreciate the sustainable drivers of brand value and brand equity in their businesses as well as isolating their competitive advantages over other retailers and manufacturers. Brands are an essential part of consumer choices when purchasing products, but to understand why this is the case, firms need to isolate and understand the perception or thinking of consumer about the brand and what level of perception (feelings, image, information, interpretation) lead their own brands to possess a competitive advantage in the marketplace. By understanding consumers' perception about the role of brands as market based assets and the relationships that can develop between consumers and particular store and category brands, managers can not only enhance revenue generation, but also be a better position to predict business outcomes, now and in the future. We know that consumers are the king and success largely depends on positive perception of consumers through satisfying consumer needs by delivering valued products and services. Therefore, this study will help the marketers to identify their problems and prospects and know consumers perception about their brand which will help to develop superior brand value and deliver their goods and services accordingly.

Objectives of the Study

The overall objective of this study is to measure consumers' perception towards the toothpaste brands and competitive position of different brands in Bangladesh based on different attributes. For satisfying the main objective following specific objectives are also considered in the study.

1. To find out the different brands of toothpaste those are usually used by Bangladeshi consumers.
2. To identify different trivial attributes of toothpaste those are available in the market of Bangladesh.
3. To investigate whether any significant difference(s) among different toothpaste brands for different attributes is retain or not.
4. To explore the competitive position of different brands of toothpaste in terms of salient belief of consumers.

Methodology of the Study

The main purpose of this study is to measure consumer's perception towards the toothpaste and the competitive position of different brands in Bangladesh based on different attributes. This section, includes sample, sample size, sample selection procedures; pre-test and data analyses etc. are being detailed.

Brands and Attributes Selection:

Different brands of toothpaste are presently available in Bangladesh (Table 01). Out of these brands Close Up, Colgate, Mediplus, Pepsodent, Whiteplus have regular demand supply and sales in Bangladesh. The respondents cited about 20 attributes but only 12 attributes Price, Cleanness, Freshness, Flavor, Color, Packaging, Quicker Action, Breathing, Dental Erosion, Available Pack Size, and Price& Pack Size were taken into consideration for the convenience of study based on researcher judgement from different angels.

Sample Respondents:

The student sample has been used in this study. There are many arguments in favour and against the convenience sample of students. Beltramini (1983) and Oakes (1972) have been generally cited threats to external validity as their primary concern, arguing that students are a typical of “general population” and any findings based on students samples may therefore not be generalized to other population. However some scholars disagree on this issue arguing that this situation is particularly desirable when researchers are engaged in theory testing (Chowdhury, 2002). Oakes (1972) contends that such arguments are specious because regardless of what population is sampled; generalization can be made only with caution with other populations. Busch, Wilson (1976) used student sample for the same age group and unique response. Besides, majority of consumers of toothpaste in Bangladesh are students at different levels who are aware regarding the integral ingredients and external attributes. Therefore data were collected from students. In addition, students those are studying in the university have come from all over the country. Therefore the authors think data are representative for the study.

Sample Size:

Since the population size is large enough the sample size should have been 384 (Kotheri, 2001) for proper representative. But for maintaining the consistency in the sample size is reduced into 350 for five brands. Besides, 75 respondents provided their opinions during the pretesting of the questionnaires but not included in the main data set.

Data Collection Methods and Procedures:

Data were collected from students of different years and different departments, university of Rajshahi, Bangladesh. A set of pretested structured questionnaire were used. The data were collected from the 17 dormitories including 5 female dormitories of said university on random basis. In the surface of the questionnaire it was well described that the purpose of the study is to measure the consumers’ perception towards different toothpaste brands in Bangladesh. After the surface of the page the respondents were asked to turn the page including information regarding the attributes of individual toothpaste brand that is usually using in Bangladesh. The respondents were asked through the semantic differential scale ranging from very strongly believe to very strongly disbelieve (7 to 1) to know how strong they believe that the individual brand contains the said attributes. The scales are widely used in comparing brand, product and company images (Malhotra et al.

1996). There were five sets of questionnaire for five different brands containing 70 questionnaires for each brand based on twelve attributes corresponding to each of the twelve attributes in measuring perception through measuring strength of salient belief for individual attribute.

Design of the Study:

To measure the perception of consumers towards toothpaste brands those are widely using in Bangladesh has been considered in the study. Selected five brands and twelve attributes briefly indicated; X_p= Pepsodent, X_w= White Plus, X_M= Mediplus, X_c= Close UP X_{co}= Colgate. Again X₁= Price, X₂= Cleanness, X₃= Freshness, X₄= Flavor, X₅= Color, X₆= Packaging, X₇= Quicker Action, X₈= Breathing, X₉= Germ Control, X₁₀= Dental Erosion, X₁₁= Available Pack Size, X₁₂= Price & Pack Size.

To investigate whether any significant difference(s) among different brands for different attributes is retain or not; the hypothesis have been formulated, H₀: there is no significant differences of beliefs or for different brand of toothpaste for a specific attribute i.e. P=W=M=C=Co and there is at least one significant differences of beliefs or for different brand of toothpaste for said attribute. In this context following hypotheses have been drawn for each attribute individually.

Hypotheses for individual Attributes

Attributes	Null hypotheses (H ₀ :)	Alternative Hypotheses (H _a :)
Price	H ₀₁ : $\bar{X}_{1j} = 0$	H _{a1} : $\bar{X}_{1j} \neq 0$ (At least one equality does not hold)
Cleanness	H ₀₂ : $\bar{X}_{2j} = 0$	H _{a2} : $\bar{X}_{2j} \neq 0$ (At least one equality does not hold)
Freshness	H ₀₃ : $\bar{X}_{3j} = 0$	H _{a3} : $\bar{X}_{3j} \neq 0$ (At least one equality does not hold)
Flavor	H ₀₄ : $\bar{X}_{4j} = 0$	H _{a4} : $\bar{X}_{4j} \neq 0$ (At least one equality does not hold)
Color	H ₀₅ : $\bar{X}_{5j} = 0$	H _{a5} : $\bar{X}_{5j} \neq 0$ (At least one equality does not hold)
Packaging	H ₀₆ : $\bar{X}_{6j} = 0$	H _{a6} : $\bar{X}_{6j} \neq 0$ (At least one equality does not hold)
Quicker Action	H ₀₇ : $\bar{X}_{7j} = 0$	H _{a7} : $\bar{X}_{7j} \neq 0$ (At least one equality does not hold)
Breathing	H ₀₈ : $\bar{X}_{8j} = 0$	H _{a8} : $\bar{X}_{8j} \neq 0$ (At least one equality does not hold)
Germ Control	H ₀₉ : $\bar{X}_{9j} = 0$	H _{a9} : $\bar{X}_{9j} \neq 0$ (At least one equality does not hold)
Dental Erosion	H ₀₁₀ : $\bar{X}_{10j} = 0$	H _{a10} : $\bar{X}_{10j} \neq 0$ (At least one equality does not hold)
Pack Size	H ₀₁₁ : $\bar{X}_{11j} = 0$	H _{a11} : $\bar{X}_{11j} \neq 0$ (At least one equality does not hold)
Price & Pack. Size	H ₀₁₂ : $\bar{X}_{12j} = 0$	H _{a12} : $\bar{X}_{12j} \neq 0$ (At least one equality does not hold)

j= All Brands

Data Analysis Procedure:

The collected data were analysed using computer software. The perception analysis had been done in light of the analysis procedures used by Fishbein's for measuring Salient belief of consumers towards objects. ANOVA and Tukey test were used for real conclusion.

Findings of the Study

Strength of belief (b_i) is the perceived probability of association between an object and its relevant attribute. This belief was measured by having consumer rate in probability of association for each of their salient belief (See Table 04 in Appendix). The belief reflected how favourably consumers perceived the attributes (See table 02 in appendix). It is clear from the table that perception (P_o) of different brands P_o for $X_p = 70.73$, P_o for $X_w = 63.25$, P_o for $X_M = 70.33$, P_o for $X_C = 69.33$, P_o for $X_{CO} = 65.68$ (See table 04 in appendix).

Findings suggest that brand X_p is viewed top most favourable position because it has received total (b_i) 70.73 on all desired attributes. X_M bears second top most position among the brands. Like these X_C , X_{CO} and X_w bearing positions respectively based on total perception towards object. From the table, it can be said that Pepsodent is the market leader and Mediplus faces high competition with Pepsodent to be market leader. Overall position of consumers perception towards the individual brand based on different attributes is also clear from the table but cannot be said that whether each attribute is statistically significant for all brands or not. ANOVA helped to overcome the problems where Tukey test helped for actual prediction of result.

Result Discussion

Individual perception orderings of the brands were predicted using relative perception scores. Equally successful predictions were obtained for the all brands. Consumers' beliefs and values for product attribute has been measured for individual brands, do substantially explain brand perception and better understanding.

The overall belief of consumer about attribute X_1 for different brands of TP are, $\bar{X}_p = 5.23$, $\bar{X}_w = 4.31$, $\bar{X}_M = 4.49$, $\bar{X}_C = 4.69$ and $\bar{X}_{CO} = 4.76$ (See Table 04 in Appendix). It is found for X_1 , $F = 8.395$, d.f. = 4,342, $p = .000$, which provide support for statistically significant (See Table 03 in Appendix). So, $H_01: (\bar{X}_{ij} = 0)$ is rejected and $H_{a1}: (\bar{X}_{ij} \neq 0)$ is accepted especially in respect of consumer belief about X_1 of all brands. Hence, the consumers have thought that there is 100% significant difference in all brands of TP for X_1 . But from the Tukey test (See the Table 05 in Appendix) it is clear that consumer is highly differed only for brand X_C for attribute "Reasonable Price". Therefore there are no significant differences for the rest of the brands for attribute X_1 .

The average belief of consumer about attribute X_2 for different brands of TP are, $\bar{X}_p = 4.93$, $\bar{X}_w = 4.50$, $\bar{X}_M = 4.98$, $\bar{X}_C = 4.88$ and $\bar{X}_{CO} = 4.66$ respectively (See Table 04 in Appendix). It is found for X_2 , $F = 2.218$, d.f. = 4,342 $p = .067$, which is not statistically

significant (See Table 03 in Appendix). So, $H_02: (\bar{X}_{2j} = 0)$ is accepted and $H_a2: (\bar{X}_{2j} \neq 0)$ is rejected especially in respect of consumer belief about attribute X2 of all brands. Hence, the consumers have thought that there are no significant differences among brands for X2. From the Tukey test (See the Table 06 in Appendix) it is also clear that there are no significant mean differences in all brands for X2.

The mean beliefs of consumer about freshness of different brands of TP are $\bar{X}_P = 4.89$, $\bar{X}_W = 4.63$, $\bar{X}_M = 4.91$, $\bar{X}_C = 4.89$ and $\bar{X}_{CO} = 4.53$ (See table 04 in appendix). It is noticed $F = 1.547$, d.f. = 4,342, $p = .188$, which is not statistically significant (See Table 03 in Appendix). So, $H_03: (\bar{X}_{3j} = 0)$ is accepted and $H_a3: (\bar{X}_{3j} \neq 0)$ is rejected especially in respect of consumer belief about Freshness of all brands. Hence, the consumers have thought that there is no significant difference in all brands of TP for attribute X3. From the Tukey test (See Table 07 in Appendix) it is also clear that there is no absolute significant mean differences of all brands for attribute X3.

The overall belief of consumer about attribute X4 for different brands of TP are, $\bar{X}_P = 4.64$, $\bar{X}_W = 3.91$, $\bar{X}_M = 4.79$, $\bar{X}_C = 4.79$ and $\bar{X}_{CO} = 4.39$ (See Table 04 in Appendix). It is found for X4, $F = 5.048$, d.f. = 4,342, $p = .001$, which is statistically significant (See Table 03 in Appendix). So, $H_04: (\bar{X}_{4j} = 0)$ is rejected and $H_a4: (\bar{X}_{4j} \neq 0)$ is accepted especially in respect of consumer belief about X₁ of all brands. Hence, the consumers have thought that there is significant difference in all brands of TP for X4. But from the Tukey test (See the Table 8 in Appendix) we can simply say that there are significant differences lies for brand X_{CO}. Therefore there are no significant differences for the rest of the brands for attribute comfortable flavour.

The overall belief of consumer about attribute X5 for different brands of TP are, $\bar{X}_P = 4.49$, $\bar{X}_W = 4.34$, $\bar{X}_M = 4.85$, $\bar{X}_C = 4.87$ and $\bar{X}_{CO} = 4.11$ (See Table 04 in Appendix). It is found for X5, $F = 5.825$, d.f. = 4,342, $p = .000$, which is statistically 100% significant (See Table 03 in Appendix). So, $H_05: (\bar{X}_{5j} = 0)$ is rejected and $H_a5: (\bar{X}_{5j} \neq 0)$ is accepted especially in respect of consumer belief about X5 of all brands. Hence, the consumers have thought that there is significant difference in all brands of TP for attribute attractive colour. But from the Tukey test (See the Table 09 in Appendix) we can simply say that there are significant differences lies for brand X_W and X_P. Therefore there are no significant differences for brands X_{CO}, X_M and X_C for attribute X5.

The mean belief of consumer about attribute X6 for different brands of TP are, $\bar{X}_P = 4.51$, $\bar{X}_W = 3.84$, $\bar{X}_M = 4.70$, $\bar{X}_C = 4.77$ and $\bar{X}_{CO} = 4.21$ (See Table 04 in Appendix). It is found for attribute X6, $F = 5.467$, d.f. = 4,342, $p = .000$, which is statistically 100% significant (See Table 03 in Appendix). So, $H_06: (\bar{X}_{6j} = 0)$ is rejected and $H_a6: (\bar{X}_{6j} \neq 0)$ is accepted especially in respect of consumer belief about X6 of all brands. Hence, the consumers have thought that there is significant difference in all brands of TP for X6. But from the Tukey test (See the Table 10 in Appendix) we can simply say that there are significant differences lies for brand X_{CO}. Therefore there are no significant differences for the rest of the brands for attribute Attractive Packaging.

The average belief about attribute X7 for different brands of TP are; $\bar{X}_P = 4.56$, $\bar{X}_W = 3.91$, $\bar{X}_M = 4.71$, $\bar{X}_C = 4.20$ and $\bar{X}_{CO} = 4.37$ (See Table 04 in Appendix). It is found that for attribute X7, $F = 4.978$, d.f. = 4,342, $p = .001$, which is statistically significant (See Table 03 in Appendix). So, $H_{07}: (\bar{X}_{7j} = 0)$ is rejected and $H_{a7}: (\bar{X}_{7j} \neq 0)$ is accepted especially in respect of consumer belief about X7 of all brands. Hence, the consumers have thought that there are significant differences of all brands of TP for X7. But from the Tukey test (See Table 11 in Appendix) it is clear that there are absolute significant mean differences of brands X_C and X_{CO} for attribute X7. This reveals that there are significant differences from those of others. Therefore, there are no significant differences to the consumers for the rest of the brands for X7 for attribute Quicker Action.

The overall belief of consumer about attribute X8 for different brands of TP are, $\bar{X}_P = 4.39$, $\bar{X}_W = 4.16$, $\bar{X}_M = 4.74$, $\bar{X}_C = 4.69$ and $\bar{X}_{CO} = 4.24$ (See Table 04 in Appendix). It is found for X8, $F = 3.738$, d.f. = 4,342 at 5% significant level and $p = .005$, which is statistically significant (See Table 03 in Appendix). So, $H_{08}: (\bar{X}_{8j} = 0)$ is rejected and $H_{a8}: (\bar{X}_{8j} \neq 0)$ is accepted especially in respect of consumer belief about X8 of all brands. Hence, the consumers have thought that there is significant difference in all brands of TP X8. But from the Tukey test (See the Table 12 in Appendix) we can simply say that there are significant differences lies for brand X_{CO} , X_P and X_C . Therefore there are no significant differences for brands X_W and X_M for attribute X8.

The overall belief of consumer about attribute X9 for different brands of TP are, $\bar{X}_P = 4.69$, $\bar{X}_W = 4.00$, $\bar{X}_M = 4.72$, $\bar{X}_C = 4.07$ and $\bar{X}_{CO} = 4.45$ (See Table 04 in Appendix). It is found for X9, $F = 8.413$, d.f. = 4,342 at 5% significant level and $p = .000$, which is statistically 100% significant (See Table 03 in Appendix). So, $H_{09}: (\bar{X}_{9j} = 0)$ is rejected and $H_{a9}: (\bar{X}_{9j} \neq 0)$ is accepted especially in respect of consumer belief about X9 of all brands. Hence, the consumers have thought that there is significant difference in all brands of TP for attribute Germ Control. But from the Tukey test (See the Table 13 in Appendix) we can simply say that there are significant differences lies only for brand X_{CO} . Therefore there are no significant differences for rest of the brands.

The overall belief of consumer about attribute X10 for different brands of TP are, $\bar{X}_P = 4.29$, $\bar{X}_W = 4.00$, $\bar{X}_M = 4.96$, $\bar{X}_C = 5.06$ and $\bar{X}_{CO} = 4.74$ (See Table 04 in Appendix). It is found for X10, $F = 4.986$, d.f. = 4,342 $p = .001$, which provide support for statistically significant (See Table 03 in Appendix). So, $H_{010}: (\bar{X}_{10j} = 0)$ is rejected and $H_{a10}: (\bar{X}_{10j} \neq 0)$ is accepted especially in respect of consumer belief about X10 of all brands. Hence, the consumers have thought that there is significant difference in all brands of TP for X10. But from the Tukey test (See the Table 14 in Appendix) it is clear that consumer is highly differed to brand X_W , X_{CO} and X_P for attribute Dental Erosion Therefore there are no significant differences for the rest of the brands for attribute X10.

The mean belief of consumer about Available Pack Size of different branded TP is $\bar{X}_P = 5.30$, $\bar{X}_W = 4.72$, $\bar{X}_M = 4.96$, $\bar{X}_C = 5.06$ and $\bar{X}_{CO} = 4.74$ (See table 04 in appendix). It is noticed $F = 2.5$, d.f. = 4,342, $p = .042$, which is statistically significant (See Table 03 in Appendix). So, $H_{011}: (\bar{X}_{11j} = 0)$ is rejected and $H_{a11}: (\bar{X}_{11j} \neq 0)$ is accepted especially

in respect of consumer belief about attribute X11 of all brands. Hence, the consumers have thought that there is significant difference in all brands of TP for attribute X11. From the Tukey test (See Table 15 in Appendix) it is also clear that there are absolute significant mean differences of brands X_{CO} , X_M and X_C for attribute X11.

The overall belief of consumer about attribute X12 for different brands of TP are, $\bar{X}_P = 4.79$, $\bar{X}_W = 3.56$, $\bar{X}_M = 4.07$, $\bar{X}_C = 4.53$ and $\bar{X}_{CO} = 4.03$ (See Table 04 in Appendix). It is found for X12, $F = 7.308$, d.f. = 4,342 at 5% significant level and $p = .000$, which is statistically 100% significant (See Table 03 in Appendix). So, H_{1212} ($\bar{X}_{12j} = 0$) is rejected and H_{a12} : ($\bar{X}_{12j} \neq 0$) is accepted especially in respect of consumer belief about X12 of all brands. Hence, the consumers have thought that there is significant difference in all brands of TP for attribute Suitable Price with Pack size. But from the Tukey test (See the Table 16 in Appendix) we can simply say that there are significant differences lies only for two brands, X_{CO} and X_M . Therefore there are no significant differences for rest of the brands.

Discussion of the Findings:

Findings from perception measurement refer that the overall Bangladeshi consumers perception towards Pepsodent is highest and White plus lowest than other toothpaste brands among those are usually consuming Bangladeshi. So the consumers perceived the Pepsodent brands more positively which refers that Pepsodent is performed its activities as market leader. In perception measurement the mean beliefs are multiplied and added, so the consumers overall perception of Pepsodent and Mediplus are mostly same. Individuals mean beliefs consumer perceived different brands in different ways for different attributes. It is clear that individual mean belief of consumer highest for Pepsodent than others on the basis of three attributes such as X1 (Price), X11 (Available Pack) and X12 (Price & Pack Size). Again, White plus scores highest mean belief to X2 (Cleanness) and X3 (Freshness). Mediplus gain high mean belief for the attributes X2 (Cleanness) and X3 (Freshness), X4 (Flavour), X5 (Color) and X11 (Available Pack). For attributes X2 (Cleanness) and X3 (Freshness) and and X11 (Available Pack), consumers highest perceived for Closeup. On the other hand, Colgate scores lowest mean belief for attribute X5 (Color), X10 (Dental Erosion) and X12 (Price & Pack Size) and Whiteplus scores lowest mean belief for maximum all attribute except X2, X3, X5, X10 and X11. Again the maximum hypotheses test results permit the non-acceptability of H_0 , yet some cases there is no significant difference among the difference brands of toothpaste especially in respect of X2 and X3 that means in cleanness & freshness. It refers that consumers in Bangladesh doesn't think or bother about Cleanness and power of Freshness to measure the overall perception towards toothpaste. Actually toothpaste is available in Bangladesh from urban areas to rural areas and people do not think regarding cleanness as it low involvement products. They may think that all brands of toothpaste are same in case of cleanness and freshness. Hence, ten attributes Price, Flavor, Color, Packaging, Quicker Action, Breathing, Dental Erosion, Available Pack Size, Price & Pack Size are effective dimension to measure the attitude the perception towards toothpaste individually in the market of Bangladesh.

Recommendations

Marketers stand on benefit from favourable consumer perceptions, as reflected in the consistency of consumer behaviours with respect to their brand, for example brand loyalty and word of mouth (Kim, 2002). Homogeneous respondents (as real consumer) were used for collecting data for this study. So by this study the academicians can get idea about theory application in marketing research. Any academician can easily differ among more products on basis of some influential dimensions or determinants and students can also gather knowledge about systematic procedure of operating behavioural research in marketing. From ANOVA it can only say means differences are significantly different or not, but cannot compare for saying which mean has direct influenced than those of others but Tukey test tells it that which mean rating is significantly different for different attributes. According to the test means in same column are not considered as significantly different but means are in different columns are considered significantly different. On the basis of this it can conclude the following decision for each attribute of all brands initially.

It is seen from the outcome of the study Colgate brand is significant for attributes X1 (Price), X4 (Flavour), X6 (Packaging) and X9 (Germ Control) bearing the same meaning to the consumers. The manufacturer should also take attempt to improve the attribute X1, X4, X6 and X9 so that consumers take it positively. As the first toothpaste brand in earth Colgate has a good acceptability in Indian subcontinent and the manufacturer should take this advantage to promote the brand. For the attribute X2 (Cleanness) and X3 (Freshness) we can simply say that all brands bear same importance to the consumer, where an intellectual marketer have scope to add extra features for improving his/her position than competitors by following strategic advertising or other promotional activities. In case of attribute X5 (Colour) there have absolute significant mean difference of brand Whiteplus and Pepsodent. In this situation there are a lot of scopes for marketers of these brands to improve this attribute as their product quality strategy based consumer expectation. All brands are significant except Closeup and Colgate in case of attribute X7 (Quicker Action) as the mean value is different. So it is urgent for producers to provide high concentration to think about the concern attributes as early as possible. Again we see for attribute X7 significant mean differences are among Colgate, Pepsodent and Closeup, and rest of the brands have some similarity. Here Colgate has lowest value which indicates that Colgate should be more concern about this attribute. In attributes X10 (Dental Erision), we see significant differences among all brands except Closeup and Mediplus. Marketers should concern about this attributes. For attributes X11 (Available Pack) we notice significant difference among Colgate, Whiteplus and Pepsodent. In market we notice available pack size of the significance brands. The marketers of these brands should maintain the present good position with further improvement. In case of last attribute X12 (Price & Pack Size) absolute difference is noticed in two brands- Colgate and Mediplus. Improvement action should be taken for rest of the brands. In a broad line consumers have a good perception on Closeup toothpaste and less good perception on Whiteplus. Improving action should take or not, the decision should make with caution for poor position of Whiteplus. Rest of the brands should step to increase their image following proper marketing activities.

Therefore managers can take strategies such as maintain or develop these attributes, operate effective promotion activities etc. for achieving the competitive advantage on the basis of product differentiation. Besides, producers of different brands can follow two possible attitudes changes strategies, which will add new salient belief for creating good perception. First one is, with new positive salient belief, strengthen the existing positive belief and Secondly, on the basis of customization, marketers should take various newer marketing strategies for gaining the new competitive advantage. These will help him/her to cope with the dynamic change of markets. By providing newer and superior value to the consumers, a brand gets sustainable advantage in dynamic business environment.

Conclusion

In essence the purpose of this study was to determine overall perception towards toothpaste brands those are usually used in Bangladesh. The study has run on five toothpaste brands and twelve identified attributes for each. It is seen that among the five brands Pepsodent has been enjoyed the leading position in marketplace, Mediplus is the second most favourable brand whereas Whiteplus lowest favourable brand for toothpaste in Bangladesh as per the opinions of the consumers. One way ANOVA has been used to identify whether mean differences are statistically significant or not, for different attributes among those brands. It is found that two attributes (clearness & freshness) out of twelve are insignificant for perception increase due to same meaning bear to the consumers but rest ten attributes are very important for the concern brands producers, manager and other related people for perception measurement in Bangladesh. Tukey test has provided a clear picture which attributes can be occurred to reject null hypotheses i.e. to create differences. The causal links among experience, perception, intentions and behaviour are not unfailing (Wallendorf and Zaltman, 1979). In sum, perception is a key link in the causal chain between attribute experience on the one hand and intentions and behaviour on the other. Marketers who understand the causal consequences and who apply it in decision making, have a powerful ally in their battle for severity in the marketplace (Kim, 2002). Manufacturers as well as wholesalers, retailer or distributor etc. should understand and provide proper emphasis on the twelve important attributes that influence the consumer's perception for toothpaste buying decision. The findings of the study may be used as an index for improvement of their product quality for wide acceptance and formulating marketing strategies, accordingly.

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APPENDIX**Table ≠ 1: Consumer's Opinion about Various Brands of Toothpaste**

Brand Name	Total Respondents	Actual Respondents	Percentage
Pepsodent	75	55	73.33
Mediplus	75	50	66.66
Close Up	75	41	54.66
Colgate	75	34	45.33
Whiteplus	75	27	36.00
Sensodyne	75	26	34.66
Meshwake	75	18	24.00
Freshgel	75	6	8.00
Daborred	75	5	6.66
AM PM Toothpaste	75	5	6.66
Mashrum	75	4	5.33
Brush Up	75	2	2.66
Neem	75	2	2.66
Fresh Up	75	2	2.66
Magic	75	1	1.33
Bauble	75	1	1.33
Active Plus	75	1	1.33

Table ≠ 2: Consumer's Opinion about Important Attributes of Toothpaste

Brand Name	Total Respondents	Actual Respondents	Percentage
Price	75	21	28.00
Cleaning	75	20	26.66
Freshness	75	18	24.00
Smell	75	15	20.00
Taste	75	14	18.66
Flavor	75	11	14.66
Germ Control	75	6	8.00
Package	75	6	8.00
Color	75	6	8.00
Jelly	75	4	5.33
Teeth Strong	75	3	4.00
Easy to Use	75	3	4.00
Quick Action	75	3	4.00
Size	75	2	2.66
Sensitivity	75	2	2.66
Whitening	75	1	1.33
Liquid	75	1	1.33
Good Brething	75	1	1.33
Dentist Requirement	75	1	1.33
Materials	75	1	1.33

Table \neq 3: Statistical Result of Consumers Opinions Regarding Different Attributes

	Sum of Squares		df	Mean Square	F	Sig.
Price	Between Groups	29.47	4	7.368	8.395	0.000
	Within Groups	300.132	342	0.878		
	Total	329.602	346			
Cleanness	Between Groups	7.437	4	1.859	2.218	0.067
	Within Groups	286.644	342	0.838		
	Total	294.081	346			
Freshness	Between Groups	6.224	4	1.556	1.547	0.188
	Within Groups	344.082	342	1.006		
	Total	350.305	346			
Flavor	Between Groups	24.003	4	6.001	5.048	0.001
	Within Groups	406.516	342	1.189		
	Total	430.519	346			
Color	Between Groups	25.291	4	6.323	5.825	0.000
	Within Groups	371.21	342	1.085		
	Total	396.501	346			
Packaging	Between Groups	27.64	4	6.91	5.467	0.000
	Within Groups	432.228	342	1.264		
	Total	459.867	346			
Quicker Action	Between Groups	23.37	4	5.843	4.978	0.001
	Within Groups	401.356	342	1.174		
	Total	424.726	346			
Breathing	Between Groups	16.669	4	4.167	3.738	0.005
	Within Groups	381.297	342	1.115		
	Total	397.965	346			
Germ Control	Between Groups	31.995	4	7.999	8.413	0.000
	Within Groups	325.164	342	0.951		
	Total	357.159	346			
Dental Erosion	Between Groups	25.484	4	6.371	4.986	0.001
	Within Groups	436.983	342	1.278		
	Total	462.467	346			
Available Pack Size	Between Groups	11.931	4	2.983	2.5	0.042
	Within Groups	408.023	342	1.193		
	Total	419.954	346			
Price & Pack. Size	Between Groups	47.562	4	11.89	7.308	0.000
	Within Groups	556.455	342	1.627		
	Total	604.017	346			

Table ≠ 4: Consumers Total Perceptions and Strength of beliefs For Different Brands Based on Different Attributes

Attributes	Pepsodent	Whiteplus	Mediplus	Closeup	Colgate
Q1	5.23	4.31	4.49	4.69	4.76
Q2	4.93	4.50	4.98	4.88	4.66
Q3	4.89	4.63	4.91	4.89	4.53
Q4	4.64	3.91	4.79	4.79	4.39
Q5	4.49	4.34	4.85	4.87	4.11
Q6	4.51	3.84	4.70	4.77	4.21
Q7	4.56	3.91	4.71	4.20	4.37
Q8	4.39	4.16	4.74	4.69	4.24
Q9	4.69	4.00	4.72	4.07	4.45
Q10	4.29	4.00	4.56	3.92	4.08
Q11	5.30	4.72	4.96	5.06	4.74
Q12	4.79	3.56	4.07	4.53	4.03
PERCEPTION	70.73	63.25	70.33	69.33	65.68

Table ≠ 5: Consumer's belief evaluations about Reasonable Price

Test Name	Different Brand	N	Subset for alpha = 0.05	
			1	2
Tukey	Whiteplus	32	4.3125	
	Mediplus	109	4.4862	
	Closeup	98	4.6939	
	Colgate	38	4.7632	4.7632
	Pepsodent	70		5.2286
	Sig.		.089	.072

Means for groups in homogeneous subsets are displayed.

Table ≠ 6: Consumer's belief evaluations about Clean Mouth and Teeth

Test Name	Different Brand	N	Subset for alpha = 0.05
			1
Tukey	White plus	32	4.5000
	Colgate	38	4.6579
	Closeup	98	4.8776
	Pepsodent	70	4.9286
	Mediplus	109	4.9725
	Sig.	32	.056

Means for groups in homogeneous subsets are displayed.

Table ≠ 7: Consumer's belief evaluations about Freshness

Test Name	Different Brand	N	Subset for alpha = 0.05
			1
Tukey	Colgate	38	4.5263
	White Plus	32	4.6250
	Pepsodent	70	4.8857
	Closeup	98	4.8878
	Mediplus	109	4.9174
	Sig.	38	.249

Means for groups in homogeneous subsets are displayed.

Table ≠ 8: Consumer's belief evaluations about Comfortable Flavor

Test Name	Different Brand	N	Subset for alpha = 0.05	
			1	2
Tukey	White plus	32	3.9062	
	Colgate	38	4.3947	4.3947
	Pepsodent	70		4.6429
	Closeup	98		4.7857
	Mediplus	109		4.7890
	Sig.	32	.133	.323

Means for groups in homogeneous subsets are displayed.

Table ≠ 9: Consumer's belief evaluations about Attractive Color

Test Name	Different Brand	N	Subset for alpha = 0.05	
			1	2
Tukey	Colgate	38	4.1053	
	White plus	32	4.3438	4.3438
	Pepsodent	70	4.4857	4.4857
	Mediplus	109		4.8532
	Closeup	98		4.8673
	Sig.		.313	.067

Means for groups in homogeneous subsets are displayed.

Table ≠ 10: Consumer's belief evaluations about Attractive Packaging

Test Name	Different Brand	N	Subset for alpha = 0.05	
			1	2
Tukey	White plus	32	3.8438	
	Colgate	38	4.2105	4.2105
	Pepsodent	70		4.5143
	Mediplus	109		4.7064
	Closeup	98		4.7653
	Sig.		.430	.076

Means for groups in homogeneous subsets are displayed.

Table ≠ 11: Consumer's belief evaluations about Quicker Action

Test Name	Different Brand	N	Subset for alpha = 0.05	
			1	2
Tukey	White plus	32	3.9062	
	Closeup	98	4.2041	4.2041
	Colgate	38	4.3684	4.3684
	Pepsodent	70		4.5571
	Mediplus	109		4.7064
	Sig.		.170	.111

Means for groups in homogeneous subsets are displayed.

Table ≠ 12: Consumer's belief evaluations about Breathing

Test Name	Different Brand	N	Subset for alpha = 0.05	
			1	2
Tukey	White plus	32	4.1562	
	Colgate	38	4.2368	4.2368
	Pepsodent	70	4.3857	4.3857
	Closeup	98	4.6939	4.6939
	Mediplus	109		4.7431
	Sig.		.061	.091

Means for groups in homogeneous subsets are displayed.

Table ≠ 13: Consumer's belief evaluations about Germ Control

Test Name	Different Brand	N	Subset for alpha = 0.05	
			1	2
Tukey	White plus	32	4.0000	
	Closeup	98	4.0714	
	Colgate	38	4.4474	4.4474
	Pepsodent	70		4.6857
	Mediplus	109		4.7156
	Sig.		.117	.602

Means for groups in homogeneous subsets are displayed.

Table ≠ 14: Consumer's belief evaluations about Dental Erosion

Test Name	Different Brand	N	Subset for alpha = 0.05	
			1	2
Tukey	Closeup	98	3.9184	
	White plus	32	4.0000	4.0000
	Colgate	38	4.0789	4.0789
	Pepsodent	70	4.2857	4.2857
	Mediplus	109		4.5780
	Sig.		.435	.060

Means for groups in homogeneous subsets are displayed.

Table ≠ 15: Consumer's belief evaluations about Available Pack Size

Test Name	Different Brand	N	Subset for alpha = 0.05	
			1	2
Tukey	White plus	32	4.7188	
	Colgate	38	4.7368	4.7368
	Mediplus	109	4.9633	4.9633
	Closeup	98	5.0612	5.0612
	Pepsodent	70		5.3000
	Sig.		.472	.056

Means for groups in homogeneous subsets are displayed.

Table # 16: Consumer's belief evaluations about Available Price& Pack Size

Test Name	Different Brand	N	Subset for alpha = 0.05	
			1	2
Tukey	White plus	32	3.5625	
	Colgate	38	4.0263	4.0263
	Mediplus	109	4.0734	4.0734
	Closeup	98		4.5306
	Pepsodent	70		4.7857
	Sig.		.224	.236

Means for groups in homogeneous subsets are displayed.

Journal of Business Studies
JBS-ISSN 2303-9884
Volume - 11, No. 2, pp.: 72-92

Relationship between Stock Price and Trading Volume in Dhaka Stock Exchange

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Abstract

This paper investigates the contemporaneous relationship between stock return, volatility and trading volume for the period of February 01, 2011, to January 28, 2016, in Dhaka Stock Exchange. The OLS and EGARCH model confirm the positive contemporaneous relation between stock return and trading volume, volatility and volume. The Granger causality analysis shows unidirectional causality from the stock return to trading volume for all three indices. But volatility and volume causality analysis present bidirectional causality for DSEX index, even though, trading volume causes volatility for DSEGen and DSI index. Further, Impulse response function and variance decomposition function confirm the insignificance of trading volume in explaining stock return, yet have an influence on the volatility of the stock return. Rather stock return and volatility have the information for predicting trading volume.

Keywords: Stock Return, Trading Volume, EGARCH, Impulse Response Function.

1. Introduction

The information mechanism of the secondary market trading is extensively investigated in different finance literature and very popular in both academicians and researchers. The efficient market hypothesis by Fama (1970) depicts that prices should reflect all available information and investors are trading in the absences of abnormal return. But information arrival in the market and its absorption in the market become quite fuzzy in explaining different events in the market. For explaining market structure many researchers use trading volume and stock return or volatility-volume relationship where volume used as the proxy of information arrival in the market and thus how this information affect the return of volatility in the market to explore the predictability or market mechanism for the market. Karpoff (1987) clearly presents four reasons for studying price-volume relation, firstly, to know how information spread in the market, secondly, to interpret different events from them, thirdly, to cluster speculative choices and prices in the market and, finally, to predict or suggest future market movements.

There are two basic propositions related to stock price and trading volume relationship. One is that the information received by the different investors at different points in time.

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Therefore non-simultaneous receipt of information by the investors cannot produce immediate new equilibrium rather a sequence of partial equilibrium takes place before the complete one. This process is referred to as Sequential Information Arrival Hypothesis (SIAH) developed by Copeland (1976). Another one is that information arrives as a set and in a blended format, those are received by all investors simultaneously, thus price and volume move together at the same time and shift to new equilibrium immediately. This process of interpretation is called the Mixture of Distribution Hypothesis (MDH) by Clark (1973). The MDH hypothesis claims a positive contemporaneous relationship between stock price and volume (Choi et al., 2012). On the contrary, SIAH suggests the bidirectional lagged relationship between them because of sequential information arrival (Darrat et al., 2003).

The paper is composed of the following sections. Objectives and literature review are presented in Section 2 and 3, respectively; Section 4 shows the methodology of the study. Empirical results are shown in section 5. Finally, Section 6 concludes the paper.

2. Objectives of the Study

The purpose of this study is to examine the relationship between stock return, trading volume and stock return volatility for the Dhaka Stock Exchange. The study also addresses the causal relationship between the trading volume and stock returns as well as the volatility of stock returns.

The specific objectives are to:

- i. estimate the contemporaneous relation between returns and trading volume
- ii. evaluate the contemporaneous relation between volatility and trading volume
- iii. measure causal relation between trading volume and returns
- iv. measure causal relation between trading volume and volatility
- v. find the dynamic relation between return, trading volume and volatility.

3. Literature Review

Yonis (2013) identifies both contemporaneous and dynamic relationship between stock returns, trading volume and volatility for four stock markets and shows causal interaction between Asian countries (Hong Kong, Korea, Singapore and Taiwan stock markets) and USA. He utilizes ordinary least square (OLS) and Generalized Moment of Mean (GMM) and Moving Average Generalized Autoregressive Conditional Heteroscedasticity (MAGARCH) and Moving Average Exponential Generalized Autoregressive Conditional Heteroscedasticity (MAEGARCH) models. He presents the superiority of GARCH model over other models. He finds the significant impact of trading volume on the volatility of the stock return through MAGARCH model, even though the model couldn't control GARCH effect after incorporating trading volume in the volatility equation. The EGARCH application confirms the positive volatility volume relationship in US and Asian Countries. The vector auto regression model finds two way causal connections between return and volume in Singapore. He cannot provide any significant effect of volume on stock return by using impulse response function, but presents bidirectional causality of volatility and volume for Hong Kong, Singapore and Taiwan. At last, he affirms the significant spillover effects of US stock market on Asian stock market.

Komain (2016) considers US subprime crisis for examining the relationship between stock return and volume and volatility in Thai stock market over 2004 to 2015. He uses daily data and confirms significant causality from trading volume to stock return and return volatility.

Tapa and Hussin (2016) examine the connection between stock return and trading volume in Malaysia from 2009 to 2015. They present positive connection between stock return and trading volume while negative interaction is found when stock return and lagged trading volume is investigated. They interpret that bad news is more likely to lessen return volatility and good news is more likely to intensify volatility. Therefore, they agree with Karpoff 1987 that stock price rise and fall leads to different return volume relationship.

Nor et al. (2010) try to reveal the dynamic interaction between return, volume and volatility for the period of January 1999 to September 2007 in Malaysian stock exchange. They apply different analytical tools i.e. VAR, Granger causality, GARCH methodology. They shows leverage effect and long memory in stock market. They further presents that trading volume causes stock return and volatility and rejects sequential arrival hypothesis in Malaysian stock market. They argue that volume has weaker roles than return in deciding volatility.

Pathirawasam (2011) considers the period of 2000 to 2008 in Colombo stock exchange to evaluate the interaction between stock return and trading volume. The study also confirms current trading volume positively affect stock return while past trading volume negatively connected to stock return.

Sabri (2008) studies eight Arab stock markets and uses monthly data for the period of 1994 to 2006 to investigate changes of trading volume connection to stock price volatility. He reports that stock price and volume are integrated for all Arab markets. He also finds distinguishing character of higher correlation in oil arab states than those at non-oil arab states.

Mahajan and Singh (2009) study the relationship between return, volume and volatility for the period of 1996 to 2006. They use daily data. They present the existence of significant positive correlation between stock volatility and trading volume. The causal connection is running from stock volatility to trading volume. Therefore, they argue for not only mixture distribution hypothesis but also for sequential arrival hypothesis. They interpret the evidence of declining persistence of variance after accommodating volume by advocating the volume as precise information and dispersion of information, not an alternative for information signals.

Given the mixed empirical results between price and trading volume especially in emerging markets context, more empirical research from other emerging financial markets is needed to better understand the price-volume relationship. Very few studies have examined the price volume relationship in Bangladeshi market. This study will represent one such attempt to investigate returns, volatility and trading volume relationship in Bangladeshi Stock market.

4. Data and Methodology

4.1 Data

The study uses daily data from February 01, 2011 to January 28, 2016. All the data have been collected from the library of the Dhaka Stock Exchange (DSE). Since the DSE broad index (DSEX) commenced from January 28, 2013, replacing DSE general index (DSEGen) and DSE all share price index (DSI), the study have to use the market index as DSEGen and DSI from February 01, 2011 to January 27, 2013 covering a total of 519 observation for each and DSEX from January 28, 2013 to January 28, 2016 with a total of 784 observations. The study has used the closing stock index value of DSE. The first difference in logarithmic index value is used as the stock market return.

We use turnover by volume as a day by day volume of trade in stock markets as recommended by Lo and Wang (2001). The volume data is also transformed into a logarithm form. When we derive conditional volatility from return data by the GARCH model, volatility data also transformed into a logarithm. The logarithmic form of data is used to minimize heteroscedasticity in the series.

4.2 Methodology

Preliminary statistical investigation is done through descriptive statistics and stationary test following Augmented Dickey-Fuller (1979) test, Kwiatkowski, Phillips, Schmidt, and Shin (1992) test and Phillip-Perron (1988) test considering both constant and trend in the series.

We investigate Contemporaneous relation between stock return and trading volume by using OLS, GARCH and EGARCH model. For the contemporaneous relationship, a standard ordinary least square regression prescribed by Smirlock and Starks (1988) and Brailsford (1996) is used:

$$V_t = a_0 + a_1|r_1| + a_2d_1|r_1| + e_t \quad (1)$$

where V_t is daily trading volume, r_1 is daily return and d_1 is dummy for asymmetry in return (i.e., $d_1=1$ if $r_1 < 0$ and $d_1=0$ if $r_1 > 0$).

Finally, we use ARMA GARCH (1, 1) model including the volume in the mean equation to identify the contemporaneous relationship controlling nonnormality in error term and considering conditional heteroscedasticity. We use GARCH (1, 1) process for its persistence and adequate explanation for different time series (Bollerslev, 1987).

$$r_t = a_0 + a_1r_{t-1} + a_2e_{t-1} + \theta v_t + e_t \quad (2)$$

$$h_t = \omega_0 + \gamma e_{t-1}^2 + \delta h_{t-1} \quad (3)$$

Here the r_t is stock return and v_t is trading volume and e_t is disturbance term. a_0 is constant term, a_1 is the coefficient of autoregressive process and a_2 is the coefficient of moving average process. The optimum ARMA structure has been determined by Bayesian Information Criteria. If the ARMA order is (0, 0), then the mean equation

would not use a_1 and a_2 in the equation. In volatility equation, h_t is conditional volatility of return, γ is the coefficient of ARCH term e_{t-1}^2 and δ is the coefficient of GARCH term. Here ARCH term represents past market news and GARCH term means information on clustered volatility. $(\gamma + \delta)$ must be less than 1 for stationary process.

Then, the study further extends the GARCH model including the volume in the volatility equation and excludes the volume from the mean equation to investigate only volatility and volume relation in the market:

$$r_t = a_0 + a_1 r_{t-1} + a_2 e_{t-1} + e_t \quad (4)$$

$$h_t = \omega_0 + \gamma e_{t-1}^2 + \delta h_{t-1} + \beta v_t \quad (5)$$

Where only the v_t , trading volume included in the conditional volatility model. If the β is positive then the volume would be regarded as mixing variable supporting the MDH (Lamaoureux and Lastrappe, 1990).

But, basic GARCH model cannot capture the information asymmetry. The asymmetry in the news indicates that good news and bad news must not produce the same magnitude of impact in the market, which can be captured by the model of exponential GARCH model of Nelson (1991) which also disregards the non-negativity constraints in the parameter. We follow EGARCH (1, 1) model with trading volume in the volatility equation to capture volatility volume relation considering information asymmetry in the market suggested by Yonis (2013).

$$\ln(h_t) = \omega_0 + \alpha \left[\frac{|e_{t-1}|}{\sqrt{h_{t-1}}} - \sqrt{\frac{2}{\pi}} \right] + \gamma \frac{e_{t-1}}{\sqrt{h_{t-1}}} + \delta \ln h_{t-1} + \beta v_t \quad (6)$$

In Eq. 6, logarithm of conditional volatility is used in the model, ω_0 is a constant term, α is the news effect irrespective to any asymmetry and γ stands for asymmetric information effect and δ stands for garch effect and β stands for volume effect. γ should be negative if capture the leverage effect and β should be positive for supporting MDH.

Other than investigating the contemporaneous relationship, the paper examines the dynamic relationship by bi-variate Granger causality (Granger, 1969) analysis. For bivariate causality investigation at p order determined by AIC where return, the volume used as an endogenous variable and the equations are

$$r_t = \alpha_0 + \alpha_i \sum_{i=1}^n r_{t-i} + \beta_j \sum_{j=1}^n v_{t-j} + \mu_{1t} \quad (7)$$

$$v_t = \gamma_0 + \gamma_i \sum_{i=1}^m v_{t-i} + \delta_j \sum_{j=1}^m r_{t-j} + \mu_{2t} \quad (8)$$

If β_j is significant, then trading volume granger causes stock return and if δ_j is significant then stock return granger causes trading volume. Like this bivariate model, we also use volatility and volume as an endogenous variable for a causal connection between them. Further, we use impulse response function and variance decomposition to present dynamic relation between stock return and trading volume and volatility and volume.

5. Empirical Results

5.1 Descriptive Statistics and Preliminary Analysis

Table I shows descriptive statistics of return and trading volume data. All return and volume data show more than 3 kurtosis value but volume data shows negative skewness and return data from DSEGen and DSI shows positive skewness and DSE broad index shows negative skewness. So the series is highly asymmetric and volatile. The Jarque Bera statistics confirm the non-normality of each of the series under study.

Table I: Descriptive Statistics

	DSEGen	DSI	DSEX	Volume1	Volume2
Observation	519	519	784	519	784
Mean	-0.00107	-0.00103	0.000142	-0.00288	0.00086
Maximum	0.087113	0.085278	0.036847	0.793463	0.918911
Minimum	-0.08136	-0.08022	-0.05358	-0.78537	-1.20775
Std. Dev.	0.021967	0.021738	0.009387	0.22299	0.197944
Skewness	0.027225	0.017468	-0.11037	-0.06355	-0.2684
Kurtosis	4.984294	4.944874	5.915015	3.580032	6.359074
Jarque-Bera	85.21087	81.82368	1600.829	7.624755	378.0036

5.2 Stationary test for stock return and trading volume:

The preliminary stationary check has been conducted to carry on return–volume relationship analysis. Table II shows three different stationary tests, ADF, KPSS and PP test on return and volume series. ADF and PP test rejects the null of containing unit root in all series. KPSS test cannot reject the null of stationarity for all the series. Thus, all unit root and stationary test confirm a stationary process in the series.

Table II: Results of Stationary Test

Test	DSEGen	DSI	DSEX	Volume1	Volume2
ADF(null: series has unit root)	-15.37*	-15.34*	-9.89*	-10.33*	-12.28*
	(-3.97)	(-3.97)	(-3.89)	(-3.97)	(-3.89)
KPSS(null: series is stationary)	0.03	0.03	0.04	0.02	0.02
	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)
PP (null: series has unit root)	-23.97*	-23.95*	-27.25*	-25.65*	-35.64*
	(-3.98)	(-3.98)	(-3.97)	(-3.98)	(-3.97)

Note: * indicate 1% level of significance and lag chosen based on AIC, values within bracket indicate *P* value.

5.3 Contemporaneous relation between stock return and trading volume

After checking stationary in the series, we proceed to estimate OLS and GARCH model with trading volume in the mean equation to investigate return and volume relationship. Table III presents the results of OLS regression. OLS regression models with trading volume as the dependent variable. For all three different indexes, we find a significant positive contemporaneous relationship between stock return and trading volume irrespective to return asymmetry. While significant negative asymmetry by a_2 confirms greater impact of positive return than negative return on trading volume in DSE. These findings of OLS regression are consistent with Kumar et al. 2009, Yonis 2013, Chen et al. 2001.

Table III: OLS result

$$V_t = a_0 + a_1|r_1| + a_2d_1|r_1| + e_t$$

	DSE gen	DSI	DSEX
a_0	0.031	0.031	0.109*
a_1	2.787*	2.843*	3.476*
a_2	-0.158*	-0.160*	-0.286*

Note: * indicate 1% level of significance.

We run ARCH-GARCH (1, 1) model (Table IV) taking the volume in the return equation to identify the effect of the contemporaneous effect of trading volume on the stock return. The proper ARIMA process shows optimal AR and MA order as (0, 0) by using BIC. Thus the AR and MA component is not present in the mean equation, so mean equation shows results excluding AR and MA in Table IV of GARCH (1, 1) results. The mean equation of GARCH model finds the contemporaneous effect of trading volume on stock return at 1% significance level. The presence of significant past volatility and news effect in the volatility of the market is observed in the variance equation. The adequacy of the model is confirmed by eliminating ARCH effect and autocorrelation in residuals. Thus the result of OLS regression and GARCH model indicate the contemporaneous relationship between stock return and trading volume in DSE and supports the mixture distribution hypothesis.

Table IV: GARCH (1, 1) results

$$r_t = a_0 + \theta v_t + e_t,$$

$$h_t = \omega_0 + \gamma e_{t-1}^2 + \delta h_{t-1}$$

	DSE gen	DSI	DSEX
a_0	0.00	0.00	0.00
θ	0.03*	0.03*	0.02*
ω_0	0.00*	0.00*	0.00*
γ	0.19*	0.19*	0.13*
δ	0.79*	0.78*	0.84*
ARCH	1.04	0.94	0.08
LQ(12)	7.05	6.92	8.28

Note: * indicate 1% level of significance.

5.4 Contemporaneous relationship between stock volatility and trading volume

The study further checks the relationship between stock volatility and trading volume by using GARCH model taking trading volume in the variance equation and excluding it from mean equation. The result of contemporaneous trading volume and volatility relationship is presented in Table V. Here, the variance equation of all three indexes shows positive effect of trading volume on the volatility of the return and DSE general index and DSE all share price index find it highly significant. This model also confirms the adequacy checked by diagnostic tests.

Table V: Contemporaneous relation between Stock volatility and trading volume

$$r_t = a_0 + e_t$$

$$h_t = \omega_0 + \gamma e_{t-1}^2 + \delta h_{t-1} + \beta v_t$$

	DSEgen	DSI	DSEX
a_0	0.00*	0.00*	0.00
ω_0	0.00*	0.00*	0.00**
γ	0.25*	0.19*	0.12*
δ	0.53*	0.54*	0.86*
β	0.00*	0.00*	0.00
ARCH	0.34	1.55	2.06
LQ(12)	21.40	27.32	24.00

Note: * indicate 1% level of significance.

Nelson (1991) suggested that, EGARCH model improves the basic GARCH model not only by capturing leverage effect but also by eliminating non-negativity constraints in the model. The Table VI shows results EGARCH model where significant information asymmetry is captured by γ and positive contemporaneous effect of trading volume on the volatility by β at 1% level of significance. The improvement of GARCH specification through the EGARCH model also confirmed in the diagnostic test.

Table VI: Result of EGARCH model

$$r_t = a_0 + e_t, \ln(h_t) = \omega_0 + \alpha \left[\frac{|e_{t-1}|}{\sqrt{h_{t-1}}} - \sqrt{\frac{2}{\pi}} \right] + \gamma \frac{e_{t-1}}{\sqrt{h_{t-1}}} + \delta \ln h_{t-1} + \beta v_t$$

	DSEgen	DSI	DSEX
a_0	0.00*	0.00*	0.00
ω_0	-0.53*	-0.54*	-0.40*
α	0.11*	0.12*	0.20*
γ	-0.29*	-0.29*	-0.07*
δ	0.94*	0.94*	0.97*
β	1.69*	1.69*	0.69*
ARCH	0.18	0.18	1.46
LQ(12)	9.47	9.71	23.36

Note: * indicate 1% level of significance.

Findings of volatility model contradict the Lamaoureux and Lastrapes (1990) through the persistence of lagged GARCH effect that is consistent with Chen et al (2001), Ahmed et al. (2005).

5.5 Bivariate Causality Analysis

The bi-variate Granger causality analysis using VAR specification has been conducted to reveal dynamic relation between return and volume, and volatility and volume in DSE. Table VII presents causal connection between stock return, volatility, and volume. The lag length has been chosen by using AIC. In all three different cases, it is found that stock return granger cause trading volume and trading volume granger cause volatility at 1% level of significance but no causality from trading volume to return. Thus, the information of trading volume cannot be used to predict future return directly, which is consistent with the findings of Yonis (2013) and supports the mixture distribution hypothesis.

Table VII: Causal Connection between stock return, volatility and volume

Null Hypothesis	Lag	F-statistic	P-value
For DSEGen			
Trading Volume does not cause Return	2	3.85	0.15
Return does not cause Trading Volume	2	53.32	0.00
Trading Volume does not cause Volatility	2	18.92	0.00
Volatility does not cause Trading Volume	2	0.91	0.63
For DSI			
Trading Volume does not cause Return	2	3.63	0.16
Return does not cause Trading Volume	2	53.65	0.00
Trading Volume does not cause Volatility	2	18.86	0.00
Volatility does not cause Trading Volume	2	1.14	0.57
For DSEX			
Trading Volume does not cause Return	8	6.43	0.60
Return does not cause Trading Volume	8	88.78	0.00
Trading Volume does not cause Volatility	2	22.35	0.00
Volatility does not cause Trading Volume	2	11.18	0.01

5.6 Impulse Response Function and Variance Decomposition of Return, Volatility, and Volume

The dynamic relationship between return and volume or volatility and volume is further examined using impulse response function and variance decomposition. The impulse response function presents the response of one series to the shock from its own and any other variable. The impulse response function for return and volume relationship shown in Appendix A1, where one SD innovation shock from stock return has the immediate effect on the trading volume and this effect die down within 6 for DSE general and DSI index but continues for DSEX index while an immediate positive response of stock return to trading volume is observed. On the other hand, IRF for volatility and volume relationship (Appendix A2) shows the immediate positive response of volatility to one SD innovation shock from the trading volume for all three indices but unable to show any significant response of trading volume to the shock of volatility. Thus, stock return have the power to predict future volume and trading volume can be used to predict future volatility of the market, but no direct link use trading volume to predict stock return in DSE.

The variance decomposition (Appendix B1) confirms that the variability of stock return mostly explained by shock from its own lagged value, only less than 2.5% is explained by shock from trading volume, while the variability of trading volume is contributed by stock return by 18% to 22%, though mostly contributed by own lagged shock. The contribution of volatility (Appendix B2) in explaining the variability of trading volume is in insignificant but shock from trading volume significantly affecting the variability of volatility in the market.

6. Conclusion

The paper investigates the contemporaneous and dynamic relationship between stock market return, volatility and trading volume in Dhaka Stock exchange for the period of February 1, 2011, to January 28, 2016. For this investigation, we use three different indexes namely, DSE general index (DSE Gen), DSE all-share price index (DSI) and DSE broad index (DSEX) for market return and volatility and daily turnover value for trading volume.

The paper utilizes OLS regression, GARCH model and EGARCH model for detecting contemporaneous relationship and linear Granger causality analysis for causal connection and impulse response function (IRF) and variance decomposition function (VDF) for dynamic relation between return, volatility and volume in Bangladesh.

The OLS regression analysis confirms the effect of contemporaneous return and return asymmetry in defining the trading volume for all three indices. The GARCH (1, 1) model containing trading volume in mean equation shows the significant effect of contemporaneous trading volume in explaining stock return. Then, the contemporaneous volatility and volume relationship by GARCH (1, 1) model taking the trading volume in volatility equation find the significant trading volume for two out of three indices. But when we use EGARCH (1, 1) model to incorporate leverage effect, we find simultaneous

trading volume positively explain the volatility for all three indices in DSE. The entire GARCH model satisfies the adequacy test and EGARCH model improves that robustness of the model. All these analyses confirm the Mixture distribution hypothesis (MDH).

The linear Granger causal analysis through VAR model identifies unidirectional Granger causality running from stock return to trading volume through bi-variate analysis of stock return and trading volume, on the other hand, bi-variate Granger causality analysis of volatility and trading volume finds that trading volume granger causes volatility for DSE general and DSE all share price index but bidirectional causality found in DSE broad index. Thus, past trading volume can be used as predicting stock market volatility but not the stock return.

The impulse response and variance decomposition function show the dynamic adjustment in the relationship between return-volume or volatility-volume relationship. Both impulse response and variance decomposition function approve shock from stock return influences trading volume and trading volume affects volatility. The overall findings are in the line of Lee and Rui (2000), Chen et al. (2001), Deo et al. (2008), Kumar et al. (2009).

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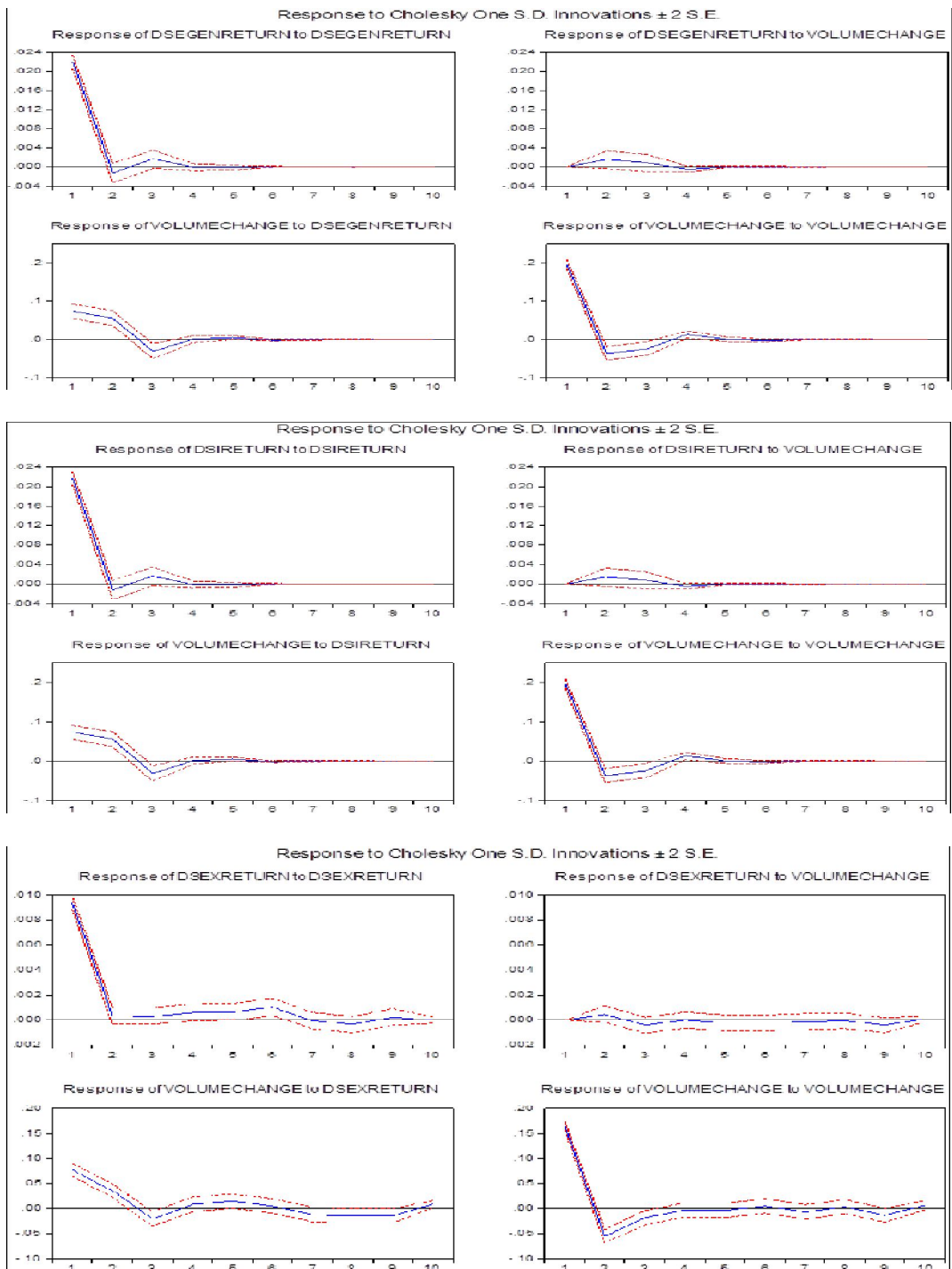
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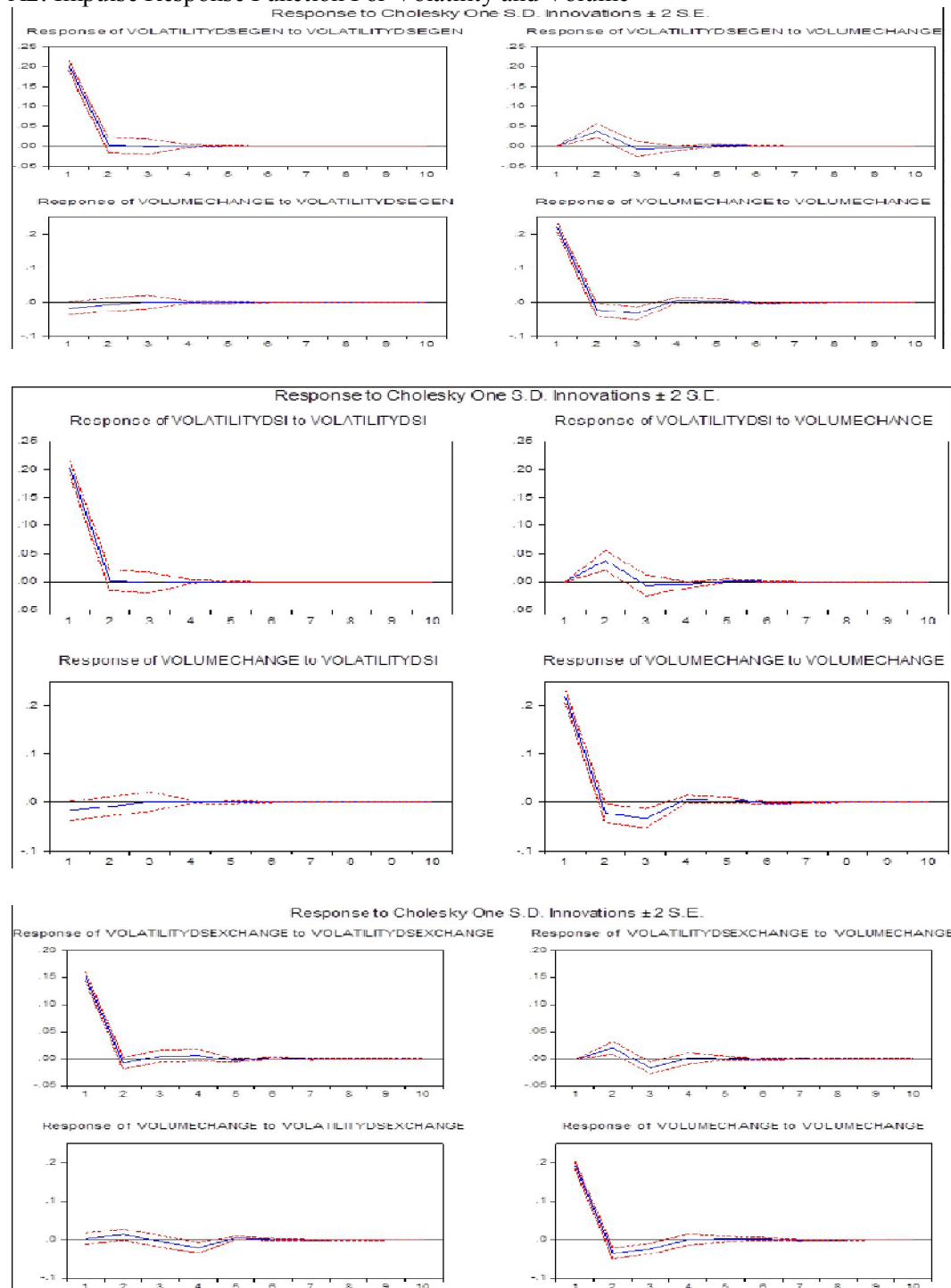
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Appendices:

A1: Impulse Response Function For Return and Volume



A2: Impulse Response Function For Volatility and Volume



B1: Variance Decompose Function For Return and Volume

Variance Decomposition of DSEGEN RETURN:

Period	S.E.	DSEGEN RETURN	VOLUME CHANGE
1	0.021926	100	0
2	0.022011	99.51073	0.489274
3	0.022089	99.36423	0.635769
4	0.022093	99.32444	0.675561
5	0.022094	99.32443	0.675569
6	0.022094	99.32333	0.676672
7	0.022094	99.32323	0.676772
8	0.022094	99.32322	0.67678
9	0.022094	99.32321	0.676786
10	0.022094	99.32321	0.676786

Variance Decomposition of VOLUME CHANGE:

Period	S.E.	DSEGEN RETURN	VOLUME CHANGE
1	0.209838	12.44137	87.55863
2	0.22022	17.79873	82.20127
3	0.223575	19.13599	80.86401
4	0.223974	19.0698	80.9302
5	0.224028	19.10862	80.89138
6	0.224045	19.11026	80.88974
7	0.224046	19.11038	80.88962
8	0.224046	19.11059	80.88941
9	0.224046	19.11058	80.88942
10	0.224046	19.11058	80.88942

Variance Decomposition of DSI RETURN:

Period	S.E.	DSI RETURN	VOLUME CHANGE
1	0.021701	100	0
2	0.021781	99.54393	0.456068
3	0.02186	99.39942	0.600579
4	0.021864	99.36238	0.637619
5	0.021864	99.36238	0.637623
6	0.021864	99.36134	0.638662
7	0.021864	99.36125	0.638751
8	0.021864	99.36124	0.638758
9	0.021864	99.36124	0.638764
10	0.021864	99.36124	0.638764

 Variance Decomposition of VOLUME CHANGE:

Period	S.E.	DSI RETURN	VOLUME CHANGE
1	0.209778	12.27846	87.72154
2	0.220212	17.70788	82.29212
3	0.223579	19.04729	80.95271
4	0.223974	18.98231	81.01769
5	0.224027	19.02041	80.97959
6	0.224044	19.02194	80.97806
7	0.224045	19.02207	80.97793
8	0.224046	19.02227	80.97773
9	0.224046	19.02227	80.97773
10	0.224046	19.02227	80.97773

 Variance Decomposition of DSEX RETURN:

Period	S.E.	DSEX RETURN	VOLUME CHANGE
1	0.009341	100	0
2	0.00936	99.73172	0.268284
3	0.009375	99.53437	0.465628
4	0.009396	99.53641	0.463587
5	0.009422	99.48415	0.51585
6	0.009484	99.43602	0.56398
7	0.009484	99.4202	0.579802
8	0.009491	99.418	0.582001
9	0.009503	99.23504	0.764958
10	0.009504	99.22506	0.774938

 Variance Decomposition of VOLUME CHANGE:

Period	S.E.	DSEX RETURN	VOLUME CHANGE
1	0.183202	17.83406	82.16594
2	0.194472	19.04462	80.95538
3	0.196494	19.79787	80.20213
4	0.196666	19.90488	80.09512
5	0.197229	20.30946	79.69054
6	0.197319	20.33653	79.66347
7	0.197864	20.63418	79.36582
8	0.198481	21.10742	78.89258
9	0.199522	21.44925	78.55075
10	0.199776	21.55684	78.44316

B2 : Variance Decompose Function For Volatility and Volume

Variance Decomposition of VOLATILITY DSEGEN:			
Period	S.E.	VOLATILITY DSEGEN	VOLUME CHANGE
1	0.202684	100	0
2	0.206211	96.62424	3.375764
3	0.206322	96.52358	3.476419
4	0.206396	96.45469	3.545308
5	0.206402	96.44925	3.550748
6	0.206403	96.44802	3.551985
7	0.206404	96.44779	3.552206
8	0.206404	96.44778	3.552224
9	0.206404	96.44777	3.552231
10	0.206404	96.44777	3.552232

Variance Decomposition of VOLUME CHANGE:			
Period	S.E.	VOLATILITY DSEGEN	VOLUME CHANGE
1	0.220299	0.639629	99.36037
2	0.221507	0.735978	99.26402
3	0.223905	0.721224	99.27878
4	0.223999	0.722743	99.27726
5	0.224047	0.722513	99.27749
6	0.224051	0.722526	99.27747
7	0.224052	0.722525	99.27748
8	0.224052	0.722524	99.27748
9	0.224052	0.722524	99.27748
10	0.224052	0.722524	99.27748

Variance Decomposition of VOLATILITY DSI:			
Period	S.E.	VOLATILITY DSI	VOLUME CHANGE
1	0.204358	100	0
2	0.207925	96.61268	3.387321
3	0.20802	9.65E+01	3.469017
4	0.208096	96.46065	3.539351
5	0.208101	96.45583	3.544167
6	0.208103	96.45455	3.545449
7	0.208103	96.45435	3.545652
8	0.208103	96.45433	3.545671
9	0.208103	96.45432	3.545678
10	0.208103	96.45432	3.545679

Variance Decomposition of VOLUME CHANGE:			
Period	S.E.	VOLATILITY DSI	VOLUME CHANGE
1	0.22025	0.604415	99.39559
2	0.221509	0.74083	99.25917
3	0.223903	0.72707	99.27293
4	0.223999	0.729364	99.27064
5	0.224046	0.729197	99.2708
6	0.224051	0.729223	99.27078
7	0.224052	0.729224	99.27078
8	0.224052	0.729224	99.27078
9	0.224052	0.729224	99.27078
10	0.224052	0.729224	99.27078

Variance Decomposition of VOLATILITYDSEX:			
Period	S.E.	VOLATILITY DSEX	VOLUME CHANGE
1	0.152344	100	0
2	0.153918	98.19659	1.803414
3	0.154876	97.10352	2.896477
4	0.155033	97.10349	2.896515
5	0.155067	97.08719	2.912811
6	0.155086	97.08521	2.914793
7	0.155086	97.08486	2.915142
8	0.155086	97.08474	2.915262
9	0.155086	97.08474	2.915258
10	0.155086	97.08472	2.915277

Variance Decomposition of VOLUMECHANGE:			
Period	S.E.	VOLATILITYDSEX	VOLUMECHANGE
1	0.19257	0.028746	99.97125
2	0.196046	0.496171	99.50383
3	0.197294	0.524337	99.47566
4	0.198248	1.478856	98.52114
5	0.198324	1.542377	98.45762
6	0.198344	1.54685	98.45315
7	0.198349	1.548944	98.45106
8	0.19835	1.548946	98.45105
9	0.19835	1.549066	98.45093
10	0.19835	1.549081	98.45092

C1: ARMA order Selection

For DSEGEN

Sample: 2/01/2011 1/27/2013

Included observations: 519

Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob
. .	. .	1 -0.055	-0.055	1.5965	0.206
. .	. .	2 0.072	0.069	4.2984	0.117
. .	. .	3 0.028	0.036	4.7134	0.194
. .	. .	4 -0.032	-0.033	5.2372	0.264
. .	. .	5 -0.052	-0.060	6.6350	0.249
. .	. .	6 -0.045	-0.048	7.6948	0.261
. .	. .	7 -0.059	-0.055	9.5412	0.216
. .	. .	8 -0.048	-0.046	10.737	0.217
. .	. .	9 0.039	0.042	11.531	0.241
. .	. .	10 0.045	0.055	12.587	0.248
. .	. .	11 0.011	0.006	12.657	0.316
. .	. .	12 0.047	0.027	13.815	0.313

Automatic ARIMA Forecasting

Selected dependent variable: DSEGEN

RETURN

Sample: 2/01/2011 1/27/2013

Included observations: 519

Forecast length: 0

Number of estimated ARMA models: 25

Number of non-converged estimations: 0

Selected ARMA model: (0,0)(0,0)

SIC value: -4.77638909141

For DSI

Sample: 2/01/2011 1/27/2013

Included observations: 519

Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob
. .	. .	1 -0.055	-0.055	1.5555	0.212
. .	. .	2 0.073	0.071	4.3650	0.113
. .	. .	3 0.025	0.033	4.7019	0.195
. .	. .	4 -0.033	-0.035	5.2582	0.262
. .	. .	5 -0.053	-0.061	6.7143	0.243
. .	. .	6 -0.046	-0.049	7.8424	0.250
. .	. .	7 -0.057	-0.053	9.5762	0.214
. .	. .	8 -0.047	-0.044	10.732	0.217
. .	. .	9 0.038	0.041	11.510	0.242
. .	. .	10 0.046	0.056	12.643	0.244
. .	. .	11 0.014	0.009	12.754	0.310
. .	. .	12 0.045	0.026	13.846	0.311

Automatic ARIMA Forecasting

Selected dependent variable: DSIRETURN

Sample: 2/01/2011 1/27/2013

Included observations: 519

Forecast length: 0

Number of estimated ARMA models: 25

Number of non-converged estimations: 0

Selected ARMA model: (0,0)(0,0)

SIC value: -4.7973050369

For DSEX

Sample: 1/28/2013 1/28/2016

Included observations: 784

Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob
.	.	1 0.048	0.048	1.7943	0.180
.	.	2 0.044	0.042	3.3272	0.189
.	.	3 0.073	0.069	7.5236	0.057
.	.	4 0.072	0.064	11.579	0.021
. *	. *	5 0.113	0.102	21.597	0.001
.	.	6 -0.002	-0.020	21.599	0.001
.	.	7 -0.037	-0.054	22.675	0.002
.	.	8 0.029	0.014	23.329	0.003
.	.	9 0.044	0.034	24.862	0.003
.	.	10 0.046	0.039	26.563	0.003
.	.	11 -0.007	-0.007	26.599	0.005
.	.	12 -0.003	-0.004	26.608	0.009

Automatic ARIMA Forecasting

Selected dependent variable: DSEX RETURN

Sample: 1/28/2013 1/28/2016

Included observations: 784

Forecast length: 0

Number of estimated ARMA models: 25

Number of non-converged estimations: 0

Selected ARMA model: (0,0)(0,0)

SIC value: -6.48335634359

Journal of Business Studies
JBS-ISSN 2303-9884
Volume - 11, No. 2, pp.: 93-115

Exploring the Impact of Behavioral Anomalies in Investment Decision of Investors of Capital Market in Bangladesh: A Behavioral Finance Approach

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Abstract

This paper aims to investigate how behavioral anomalies manipulate investors' cogent investment decisions into silly decisions and how investors' behavioral anomalies play an imperative role on investment decisions. Regression method was adopted to analyze and interpret investors' behavioral anomalies. The study highlights on how investors' behavioral anomalies (i.e. anchoring, conservatism, endowment, optimism and hindsight) influence investors' investment decisions. To conduct this study, researchers collected primary data from 120 investors under Dhaka Stock Exchange and Chittogram Stock Exchange using structured questionnaire. Conversely, secondary data were collected from different journal articles and books. Basically logistic regression technique was run using SPSS to analyze behavioral anomalies of investors in decision making. The results showed that behavioral anomalies were leading factors to contribute decision making process of investors in Bangladesh. The findings of this paper would help to understand common behavioral anomalies and their effect in investment decisions for the decision makers and researchers.

Keywords: Behavioral Anomalies, Investment Decisions, Investors, Capital Market

1.0 Introduction

A capital market is a market where investors buy and sell shares, debentures etc. (Guler & Banu, 2015; Richard, 1975; Thao & Joseph, 2012). Capital markets play a very significant role in the economy of Bangladesh (Glaser et al. 2009; Hamadi et al., 2012). Investors usually make their investment decision independently in a capital market (Kafayat, 2014; Qing et al., 2014). Through investment, they enjoy many benefits from a stock market akin to long term expansion of capital, dividend income and control over the

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inflation. The investor likes for investment in the stock market for its liquidity feature (Kim & Nofsinger, 2003; Ngoc, 2013; Aziz & Khan, 2016). Presently psychological aspect of finance is being emphasized across the globe (Al-Hilu et al, 2017; Asaad, 2012; Barberis & Thaler, 2003). The conventional part of finance does not pay attention to investors' behavioral anomalies.

Alternatively, behavioral finance has been gripping a significant role in investors' investment decisions (Garcia, 2013; Goldberg, 2007; Jiang, 2011; Kallinterakis et al., 2009). As per conventional economic theory investors are considered that they are rational, the market is efficient and then wealth can be maximized through rational investment decisions. However, the idea of wholly rational investors that have great control on their decisions to take full advantage of their utility is becoming less popular. In efficient markets, investors are considered as logical, unbiased and consistent who make best possible investment decisions with no effects of psyche and emotions. Investors do not for eternity make a rational decision while making an investment decision (Daniel et al., 1998; Kahneman & Riepe, 1998). Different anomalies are observed when investors try to make their investment decisions.

On the other hand, Efficient Market Hypothesis (EMH) states that markets are always efficient, but in reality markets are not always efficient. An abnormal market behavior can occur, such as the January effect, Monday effect, which means that human behavior, influences securities prices and, therefore, markets. Different psychological anomalies contribute to be irrational behavior (Muradoglu et al, 2005; Pikulina et al., 2017; Pompian, 2006).

The effect of this is that the behavioral aspects of finance can play impact on investors' investment decisions. Many countries like Bangladesh investors have been experiencing many times massive market collapses. Researchers have usually been investigating and relating the reasons and consequences of the market behavior using traditional finance tools like Efficient Market Hypothesis (EMH), Capital Assets Pricing Model (CAPM), capital budgeting techniques etc. for the investors' investment decision. As a result, this study would have been considered empirical evidence to contribute further to explore behavioral finance. Understanding investors' impact of behavioral anomalies on investment decision, this paper would contribute splendidly. In Bangladesh, concentrating and practising behavioral aspects of finance is inadequate. This study will undoubtedly unlock the current situations.

1.1 Research Gap

Most of the previous literature paying attention on developed North American, European, or Asian developed markets. There is a lack of research in behavioral finance covering Bangladesh capital market particularly on behavioral anomalies in investment decisions. Mobarek, & Keasey, (2000) found that developed and developing countries do not have focus on behavioral aspects of finance and insignificant studies have been conducted in the capital market of Bangladesh. This paper aims to fulfil the gap by investigating how behavioral anomalies influence investors' investment decisions and how investors' behavioral anomalies play vital role in investment decisions in the capital market of Bangladesh.

1.2 Research Question

The researchers intention is to answer the following specific research questions: i) What are the impactful behavioral anomalies in investment decisions? ii) How can behavioral anomalies play a substantial role in investment decision?

1.3 Objective of the Study

This study has some special objectives to be accomplished. The main objectives of this research is to find out effect of behavioral anomalies in investment decision. To some extent, the specific objectives (Malhotra et al., 2013) of this paper are three; first, to present the major behavioral anomalies; to find out how behavioral anomalies play a crucial role on investment decision; and third, to analyze data, interpret on findings and present some recommendations.

2.0 Review of Literature

Behavioral finance is one of the best approaches to explain investors' investment behavior in their investment decisions. Researchers attribute the behavioral biases of investors and stock market anomalies to psychological concepts (Grinblatt & Keloharju, 2009; Trinugroho & Sembel, 2011; Venkata *et al.* 2018). During decision making investors' ignore behavioral aspects of finance; they focus on traditional measures of the firm performance like EPS, DPS, past performance, money market's condition, advice of brokerage houses, family and friends while making investment decisions Akhter, R. & Ahmed, S. (2013). The people are systematically over-reacting to unexpected and dramatic news results in substantially weak form inefficiencies in the stock market. Psychological accounting is a set of cognitive operations used by individuals and households to organize evaluate and keep track of financial activities (Amar, 2013; De Bondt & Thaler, 1985). Jay R Ritter (2003) has given a brief introduction of behavioral finance published in *Pacific Basin Finance Journal*. In his research article, he rejected the traditional assumption of expected utility maximization with rational investors in efficient market. The two construction blocks of behavioral finance are cognitive psychology (How People Think) and the limit of arbitrage (when the market will be inefficient). Early investment theories recommend that investors are rational and base their decisions on maximizing returns while limiting the risks. However, recent theories challenge these suggestions and assumptions. Human mind does not always think logically, and neither do the markets still perform efficiently. Psychological factors such as greed and fear among others can affect the investment choices of people. While rational thinking might recommend that investing in say, the stock market is ideal for a particular kind of investor. However, fear of losing money and having met a peer who has lost money in the stock market, Raman (1918). Chen (2007) *et al.* found that investors were highly overconfident to make investment decision which led to poor returns from their investments. Dewri, L. V. & Islam, M. R. (2015) found that investors' investment decision depends on behavioral attributes and dividend preference.

Birau & Singh (2012) observed that investment decision is influenced in a large proportion by psychological and emotional factors. Chan (2004) examined a central subjective bias, anchoring, which was underlying many behavioral-finance theories. Researchers added that anchoring bias formed in individual's closely monitor transactions of capital market. Chen (2007) *et al.* found that investors were highly found Conservatism biased to make investment decision which led to poor investments decisions with poor returns from their investments. Hirshleifer (2015) claimed that by the endowment biased investors seemed to whatever happens they try to rely on their initial decision. Researcher also described that combination of effects generated return momentum and reversal, and an over precaution outline in response to trend in public value signals (e.g. earnings news sequences). Molla *et al.* (2018) found that investors were biased by behavioral anomalies that influence to their investment decisions. Pompian, (2006) stated that optimism would be thought of the investors that frequent selling of securities might lead high volume of costs. Soman (2004) claimed that traditionally thought of investors were rational, but practically they were optimistic regarding considering different costs which they believed, would reduce return of securities. Cherry (2001) proposed that investors behaved different way over frequent selling of securities which might be thought behind considering high volume of taxes while trading securities in the capital markets. An unusual and more literature shows that hindsight also plays a significant role in investment decisions (Statman *et al.*, 2006; Lo *et al.*, 2005; Shefrin 2002; Daniel *et al.*, 1998).

Above is some of the brief literature reviewed following behavioral finance which highlights how the individual irrational behaviors have an impact on investment decisions. There are some causes of behavior anomalies those impact on investment decisions in the capital market. People tend to attach or "anchor" their thoughts to a reference point even though that may hardly have any logical association with the decision at hand. Conservatism deters artificial inflation of earnings available for distribution to shareholders at the expense of lenders, and limits the ability to overstate earnings and be overcompensated under compensation plans (Beatriz *et al.* (2010). Khan and Watts (2009) had the same opinion that these restrictions reduce agency costs because they discourage managerial efforts to transfer wealth to themselves instead of increasing the total firm wealth. The Endowment Investment Philosophy figures portfolios using an asset allocation methodology and it offers the best possible for superior risk-adjusted returns and lower volatility through all market cycles (Robert 2016), It's a good idea to become familiar with this philosophy as it could help building a better-performing portfolio. Optimism may also result from analysts' incentives to issue buying recommendations or optimistic forecasts to make the deal look more attractive to the market. It is argued that affiliated analysts issue more optimistic forecasts and more favourable recommendations (Dechow *et al.*, 2000; Dugar and Nathan 1995; Stefano & Silvio, 2007). Shiller (2000) described hindsight bias as the tendency to think that one would have known actual events are coming before that happened. Monti and Legrenzi (2009) found strong evidence for the consequences that hindsight bias could have on the investor's portfolio decisions: the portfolio allocation perception and therefore, the risk exposure.

3.0 Theoretical Background and Research Model

Agreeing with the thought of the prospect theory which defines how people choose between different options (or prospects) and how they estimate (many times in a biased or incorrect way) the perceived likelihood of each of these options. Even though the likelihood of a costly event may be minuscule. Prospect theory depicts that people tend to value gains and losses differently from one another, and, as a result, will base decisions on perceived increases rather than on perceived failures. For that reason, a person faced with two equal choices that are presented differently (one concerning possible increases and one concerning possible losses) is likely to choose the one suggesting gains, even if the two choices yield the same result. Prospect theory suggests that losses hit investors harder. There is a more significant emotional impact associated with a loss than with an equivalent gain (Kahneman & Tversky, 1979).

According to this theory, individuals maximize a weighted sum across states of the world of value functions (utilities); value depends on gains or losses rather than levels, and where the weights are functions of probabilities. In figure 1, suggesting that value is an S-shaped function of gain or loss (dual risk attitudes) ensuing in risk aversion in the gain domain and risk seeking in the loss domain. Loss aversion is reflected in a kink in the value function at zero gain or loss.

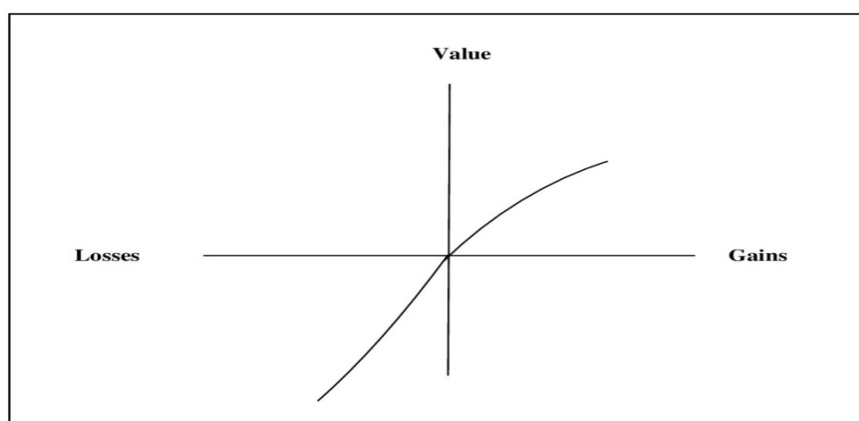


Figure 1: Prospect Theory

Source: Kahneman, D., & Tversky, A. (1979)

This paper deals with five independent psychological anomalies i.e. anchoring, conservatism, endowment, optimism and hindsight claimed by Pompian, (2006) along with dependent variable investment decisions. Molla, (2018) found that in Bangladesh investors are found behave irrationally concerning their investment decisions. Khan F. *et al.* (2015) observed that the behavioral aspects or psychological factors are liable to influence investors' investment decisions. The market is experienced volatile, repeatedly, i.e. market crash takes place, investors left from the market right away due to market

behavior which led by behavioral anomalies of investment decisions. In this study, especially five behavioral anomalies are considered as independent variables along with one dependent variable of investment decision. These variables are examined by the thirty (31) specific questions relating to the individual variable. To some extent, the study focused on why and how anchoring, conservatism, endowment, optimism and hindsight variables influence investors' investment decision. Following model is developed by the researchers specifically for this study that may uncover the fact of investment decision of Bangladeshi investors and their investment decisions in the capital market.

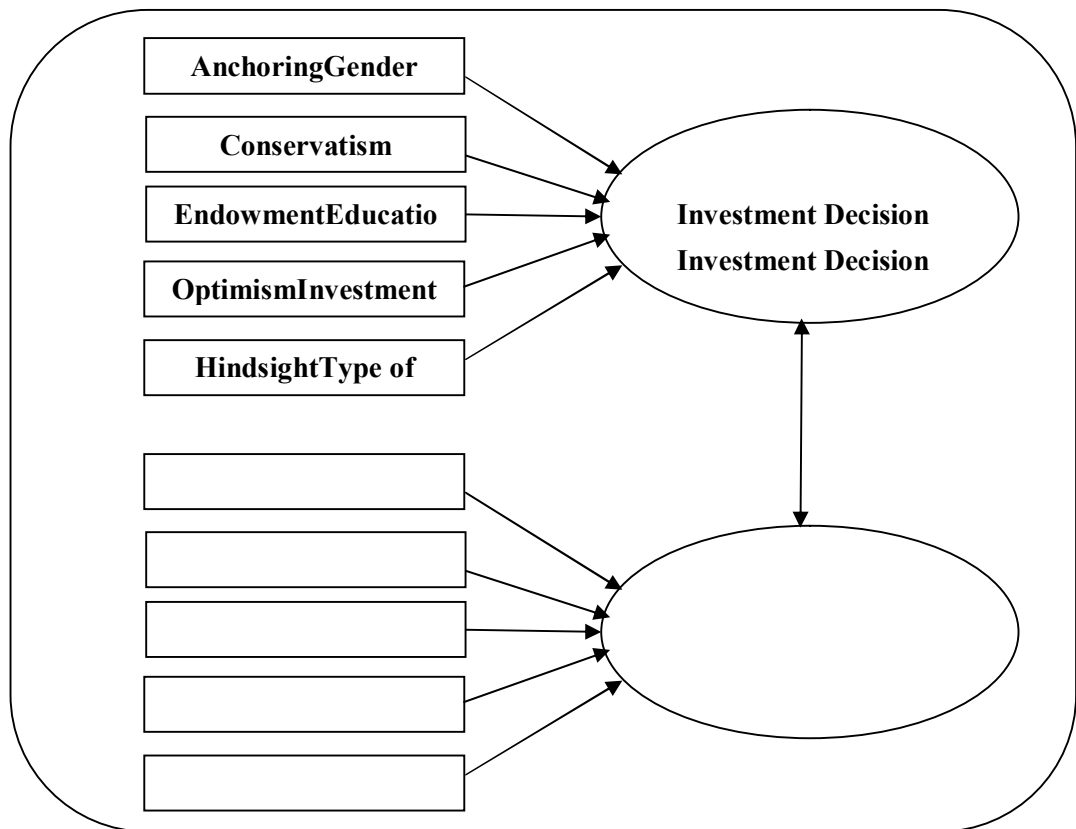


Figure 2: Conceptual model for understanding of behavioral anomalies on investment decision

Source: Researchers Proposed Model for the study

Above model in the figure 2, researchers tried to showcase different behavioral anomalies that may influence in investment decisions. Anchoring represents cognitive anomaly, by the variable researchers explain that people are generally better at estimating relative comparisons rather than absolute figure. Besides, conservatism indicates also cognitive anomaly. It is mentioned, conservatism anomaly is a mental process in which investors'

clinging to their previous views or forecasts at the expense of acknowledging new information. Endowment prescribes as the emotional anomaly. By the variables it is meant, investors are willing to pay for a good, or an object should always equal the investors' disposition to accept dispossession of the good or the object when the dispossession is quantified in the form of compensation. On the other hand, optimism prescribes as emotional behavior. By which, investors tend to be overly about the market, the economy and the potentiality for positive performance on the investment decision they make. Many of them believe that bad investment decisions not happen to them only happen to others. Last but not the least, hindsight explains as cognitive anomaly of the investors. It is precipitated by the fact that real outcomes are more eagerly grabbed by investors' mind than the infinite array of conclusions that could have but didn't materialize. This is why, investors overestimate the accuracy of their predictions. Besides, researchers would want to uncover whether there were any impact of some other variables like gender, age, education, duration of investment and type of security on investment decisions.

3.1 Research Hypotheses

H₀₁: There is no significant impact of anchoring on investors' investment decision.

H₀₂: There is no significant impact of conservatism on investors' investment decision.

H₀₃: There is no significant impact of endowment on investors' investment decision.

H₀₄: There is no significant impact of optimism on investors' investment decision.

H₀₅: There is no significant impact of hindsight on investors' investment decision.

H₀₆: There is no significant impact of gender on investors' investment decision.

H₀₇: There is no significant impact of age on investors' investment decision.

H₀₈: There is no significant impact of education on investors' investment decision.

H₀₉: There is no significant impact of duration on investors' investment decision.

H₀₁₀: There is no significant impact of type of security on investors' investment decision.

4.0 Methodology of The Study

4.1 Data Collection, Sample and Research Instrument Description

Both primary and secondary data were collected to carry out this research. This paper put emphasis on qualitative approach. Primary data were collected through a self-administered structured questionnaire consisting of 31 questions for both independent and dependent variables. The questionnaire was developed by using 5 points Likert Scale, where: 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree in the part 'B' along with some dichotomous questions in the parts 'A' and 'C'.

Primarily, Around 300 investors (from both DSE and CSE) are considered as population for conducting this research. Investors of different brokerage under DSE and CSE situated in Dhaka metropolitan area were considered as population. Among them, 120 (from DSE 80 and CSE 40) were selected as sample using stratified random sampling technique. Conversely, secondary data were collected from different published research articles of international and national journals. The researchers also studied some books and other authentic web links relating to behavioral anomalies and investors' investment decisions. In this study, popular statistical methods were applied to test of hypotheses and variables relating to the objectives of the research. Mainly logistic regression model was run to analyze data. Peng, C. Y. J. et al. (2002) found that the use of logistic regression has increased in the social sciences and in educational research - especially in higher education. Besides, test of reliability, and descriptive statistics were also run to carry out this study using popular software tools like 'Statistical Package for the Social Sciences' (SPSS) and Microsoft Excel software.

4.2 Data Reliability Test

The question of reliability rises as the function of scales is stretched to incorporate the realm of prediction. One of the most reliability statistics in use today is Cronbach's alpha - Santos (1999). Cronbach's alpha is the convenient test used to estimate reliability or internal consistency of a composite score. Usually it gives a result 0 to 1 but sometimes adverse effects may provide. A negative effect indicates data in not fit for the test. On the other hand, the general rule of thumb, Cronbach's alpha .70 and above is the excellent result, .80 and above better result and .90 and above is the best. Therefore, in the Table 1, Cronbach's alpha for the thirty one items was .81, suggesting that all factors had excellent internal consistency to carry out further analyses.

Cronbach's Alpha	Number of Items
.809	31

Table 1: Test of Reliability through Cronbach's Alpha

Source: SPSS Data Analysis Output

4.0 Results and Discussions

5.1 Descriptive Statistics

Descriptive statistics demonstrated (Appendix: Part - A), that among the investors 79.20% were male and 20.80% were female included in the study. Conversely, maximum 67.5% investors' age range was between 35 to 45 years. Furthermore, 56.70% of the investors were undergraduates and 43.3% were graduates and above. Farzana W. et al.

(2012) found that education is a significant factor to be considered while investors making their investment decision in the capital market of Bangladesh. On the other hand, 45.8% investors kept their investment for 2 to 5 years. Finally, maximum 65% liked to invest in the stocks.

5.2 Testing Hypotheses

In this part of the study, all ten null hypotheses (i.e. H_{01} , H_{02} , H_{03} , H_{04} , H_{05} , H_{06} , H_{07} , H_{08} , H_{09} and H_{010}) were tested to satisfy the questions and objectives of the research. For analyses, Logistic regression and independent sample test were run using SPSS and MS Excel software.

Logistic Regression

Logistic regression assumes that the errors are distributed binomially. Unlike Ordinary Least Square Regression, the random and systematic components of the model do not map directly onto one another and non-linear link function, known as the 'logit', is used, Hutheson, & Sofroniou (1999). In logistic regression, it is predicted the probability of Y occurring given known values of X_1 (or Xs).

Logistic Analyses

Data of 120 samples data were processed, there was no missing cases showing table 2.

Unweighted Cases ^a		N	Percent
Selected Cases	Included in Analysis	120	100.0
	Missing Cases	0	.0
	Total	120	100.0
Unselected Cases		0	.0
Total		120	100.0

a. If weight is in effect, see classification table for the total number of cases.

Table 2: Case Processing Summary
Source: SPSS Data Analysis Output

In the study every investor was requested to response whether (s)he was rational investment decision maker or irrational decision maker. If (s)he would rational then put the value 1 otherwise put value 0.

Original Value	Internal Value
No	0
Yes	1

Table 3: Dependent Variable Encoding
Source: SPSS Data Analysis Output

Categorical Variables were coding with different parameter.

		Frequency	Parameter coding			
			(1)	(2)	(3)	(4)
Age	Below 25	9	1.000	.000	.000	.000
	25-35	7	.000	1.000	.000	.000
	35-45	81	.000	.000	1.000	.000
	45-55	14	.000	.000	.000	1.000
	55 Above	9	.000	.000	.000	.000
Which type of securities do you prefer to invest?	Stocks	78	1.000	.000		
	Mutual Funds	26	.000	1.000		
	bond/debenture	16	.000	.000		
How long have you been investing in capital market?	Less than 2 years	39	1.000	.000		
	2-5 years	55	.000	1.000		
	5 years more	26	.000	.000		
Educational Qualification	Undergraduate	68	1.000			
	Graduate and above	52	.000			
Gender	Male	95	1.000			
	Female	25	.000			

Table 4: Categorical Variables Codings

Source: SPSS Data Analysis Output

The overall result of the equation was 0.41 which suggested that null hypotheses would be rejected as equation value was less than .50. Besides from the logistic regression tables (Appendix, Part- B; Block 0: Beginning Block or Base Statistics) permitted to draw empirical evidence that different statistics of the logistics model like Iteration History, Omnibus tests of model coefficients results were significant at 5% level of significance Chi-square value 72.65. Cox & Snell R Square and Nagelkerke R Square results respectively .544 and .685 advocated the model that applied was good fit predicting the independent variable. On the other hand, Classification table implied that 85.8% of the response of samples aptly classified in this study.

Block 1: Method = Enter

Iteration: Step 1: 1

-2 Log likelihood	Coefficients										
	Constant	Gender	Age	Education	Duration	Security Type	Anchoring	Conservatism	Endowment	Optimism	Hindsight
79.984	2.646	.690	-.585	-.149	-.612	-.047	-.637	-.237	-.058	.232	.057

a. Method: Enter

b. Constant is included in the model.

c. Initial -2 Log Likelihood: 130.385

d. Estimation terminated at iteration number 20 because maximum iterations has been reached

Table 5: Iteration History
Source: SPSS Data Analysis Output

		Chi-square	df	Sig.
Step 1	Step	72.657	15	.000
	Block	72.657	15	.000
	Model	72.657	15	.000

Table 6: Omnibus Tests of Model Coefficients
Source: SPSS Data Analysis Output

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	57.729 ^a	.454	.685

a. Estimation terminated at iteration number 20 because maximum iterations has been reached.

Table 7: Model Summary
Source: SPSS Data Analysis Output

	Observed		Predicted		
			I somehow rely on traditional tools and techniques measuring and predicting securities value, returns, risks etc. while making investment decision.		Percentage Correct
			No	Yes	
Step 1	I somehow rely on traditional tools and techniques measuring and predicting securities value, returns, risks etc. while making investment decision.	No	21	7	75.0
		Yes	10	82	89.1
	Overall Percentage				85.8

a. The cut value is .500

Table 8: Classification Table
Source: SPSS Data Analysis Output

All variables in the equation presented in the table where beta, standard error, Wald statistics degree of freedom, significance level, odds ratio i.e. Exp(B) were presented to include in the model's equation.

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1 ^a	Gender	2.159	1.003	4.628	1	.031	8.659	1.212	61.878
	Age	-1.568	1.755	.798	1	.372	.209	.007	6.505
	Education	-.709	.710	.999	1	.318	.492	.122	1.977
	Duration	-1.369	.970	1.993	1	.158	.254	.038	1.702
	Security Type	-.310	1.298	.057	1	.811	.733	.058	9.339
	Anchoring	-1.164	.972	1.433	1	.231	.312	.046	2.099
	Conservatism	-.575	.448	1.648	1	.199	.563	.234	1.354
	Endowment	-.267	.516	.269	1	.604	.765	.279	2.103
	Optimism	.252	.986	.065	1	.798	1.286	.186	8.877
	Hindsight	-.070	.983	.005	1	.943	.932	.136	6.394
	Constant	7.561	2.632	8.252	1	.004	1920.930		

a. Variable(s) entered on step 1: Gender, Age, Education, Duration, Security Type, Anchoring, Conservatism, Endowment, Optimism, Hindsight.

Table 9: Variables in the Equation
Source: SPSS Data Analysis Output

In this study logistic equation was applied; where coefficient, beta, independent variables value were set from the above calculated table's value

P(Y) =

$$\frac{1}{1 + e^{-(7.561 + 2.159X_{\text{Gendr}} - 1.568X_{\text{Ag}} - .709X_{\text{Edu}} - 1.369X_{\text{Dur}} - .310X_{\text{Sec}} - 1.164X_{\text{Anch}} - .575X_{\text{Conv}} - .267X_{\text{Endw}} + .252X_{\text{Opt}} - .70X_{\text{Hin}})}} \dots 1$$

Besides, in this study researchers applied probability ratio, the odds ratio: Exp(B) i.e. an indicator of the change in odds resulting from a unit change in the predictor. Following model was applied for analyses:

$$\text{odds} = \frac{P(\text{event})}{P(\text{no event})} \dots 2$$

Observed Groups and Predicted Probabilities showed the number of investors' responses toward either make rational decision (value 1) or make irrational decision (value 0) while making investment decisions.

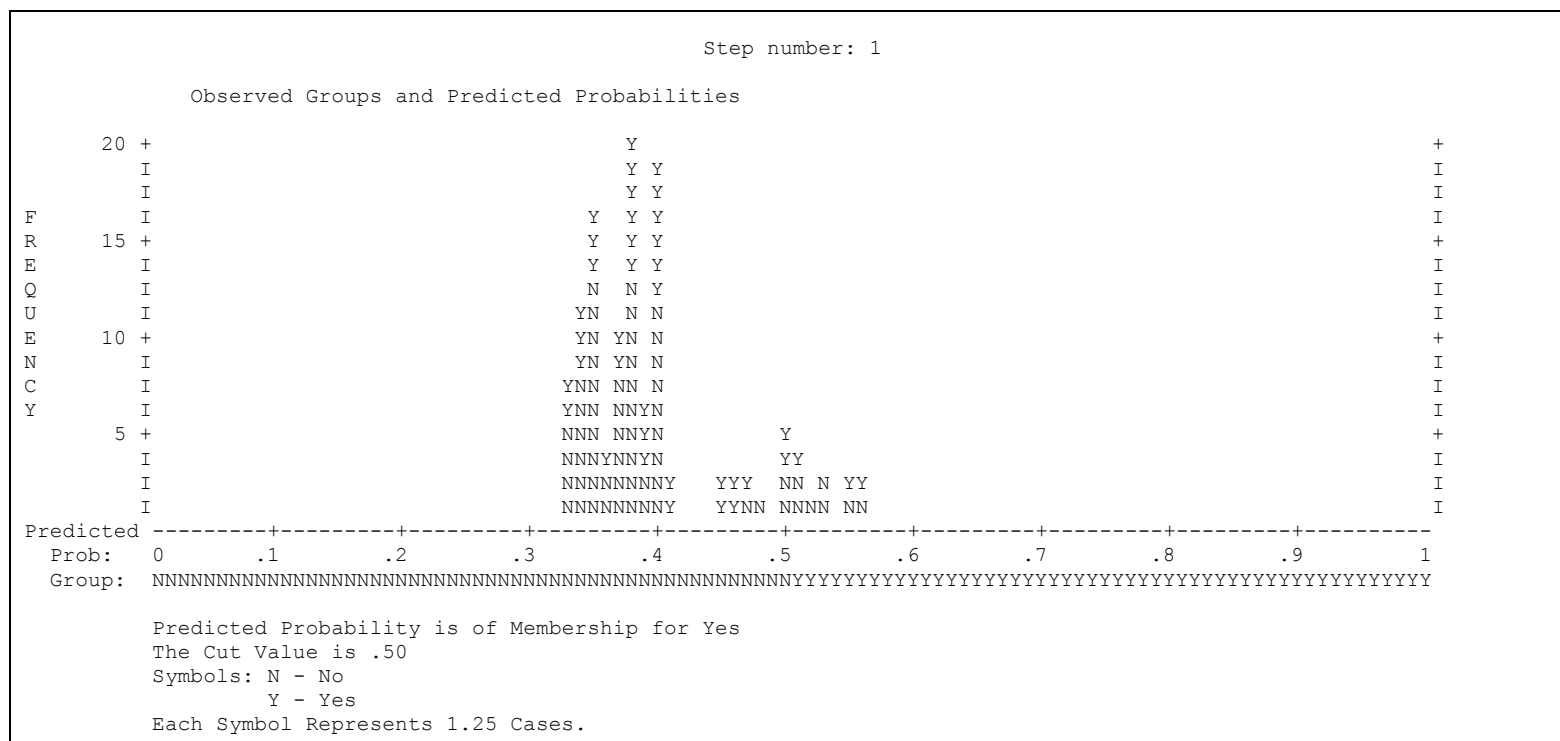


Figure 3: Observed Groups and Predicted Probabilities

Source: SPSS Data Analysis Output

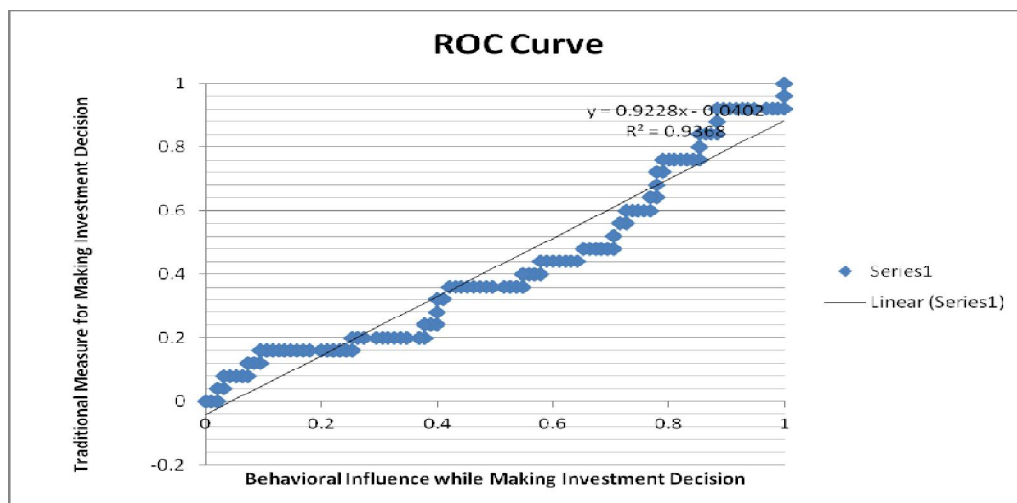


Figure 4: ROC Curve
Source: SPSS Data Analysis Output

The model presented in the ROC curve where the number of observed factors that predicted probabilities in the series 1 line. Besides, vertical axis showed rational behavior and horizontal axis presented irrational behavior of the investors. From the line, predicted probabilities implied realistic evidence to draw how immensely behavioral anomalies would impact on investors' investment decisions.

Furthermore, in this study researchers applied to test multiple independent samples (Appendix, Part-C). The tests results recommend that among the independents variables anchoring, conservatism, endowment, optimism and hindsight anomalies had huge impact on investment decision therefore null hypotheses (H_{01} , H_{02} , H_{03} , H_{04} , H_{05}) were rejected respectively. But test results surprisingly also advised to consider that gender, education, duration of investment, type of security were not impactful on investment decision. As a result, null hypotheses as per test of multiple independent samples advocated accepting.

6.0 Conclusion and Recommendation

The study is planned to understand the impact of behavioral anomalies; anchoring, conservatism, endowment, optimism and hindsight that influence investors' irrational investment decisions. Through some particular analyses during the study, specially predicting human behavior was a challenge to the researcher but successfully triumphed over with the help of logistic regression model. Besides, descriptive frequency statistics was run to present general idea on survey responses. Data set of the analyses was excellent fit to run every analysis effectively which was an evidence of Cronbach's Alpha result .81. Basically, study revealed that probability of getting influenced by behavioral anomalies of investors was very high (as null hypotheses were rejected with the calculated probability vale 0.41 under the rejection criteria i.e. $<.50$ therefore the model

was significantly fit to explain dependent variable) but investors usually ignored them while making investment decisions in the capital market of Bangladesh. Besides, this conclusive evidence was supported by some other results like Iteration History, Omnibus tests of model coefficients results were significant at 5% level of significance Chi-square value 72.65. Cox & Snell R Square and Nagelkerke R Square results respectively .544 and .685 advocated the model that applied was good fit predicting the independent variable. On the other hand, Classification table implied that 85.8% of the response of samples.

According to the analyses and their findings, investors should require to well aware regarding behavioral anomalies to make a proper decision in the time of investment in the capital market of Bangladesh. Academic and non-academic training, workshop, course work will be helpful to make investors understand impact of behavioral anomalies on investment decisions. Hence, all the related agencies should have basic knowledge on behavioral aspects of finance. Last but not the least, this paper would be helpful for the students, investors, researchers and related stakeholders in future for further studies regarding understanding the impact of behavioral anomalies on investment decision.

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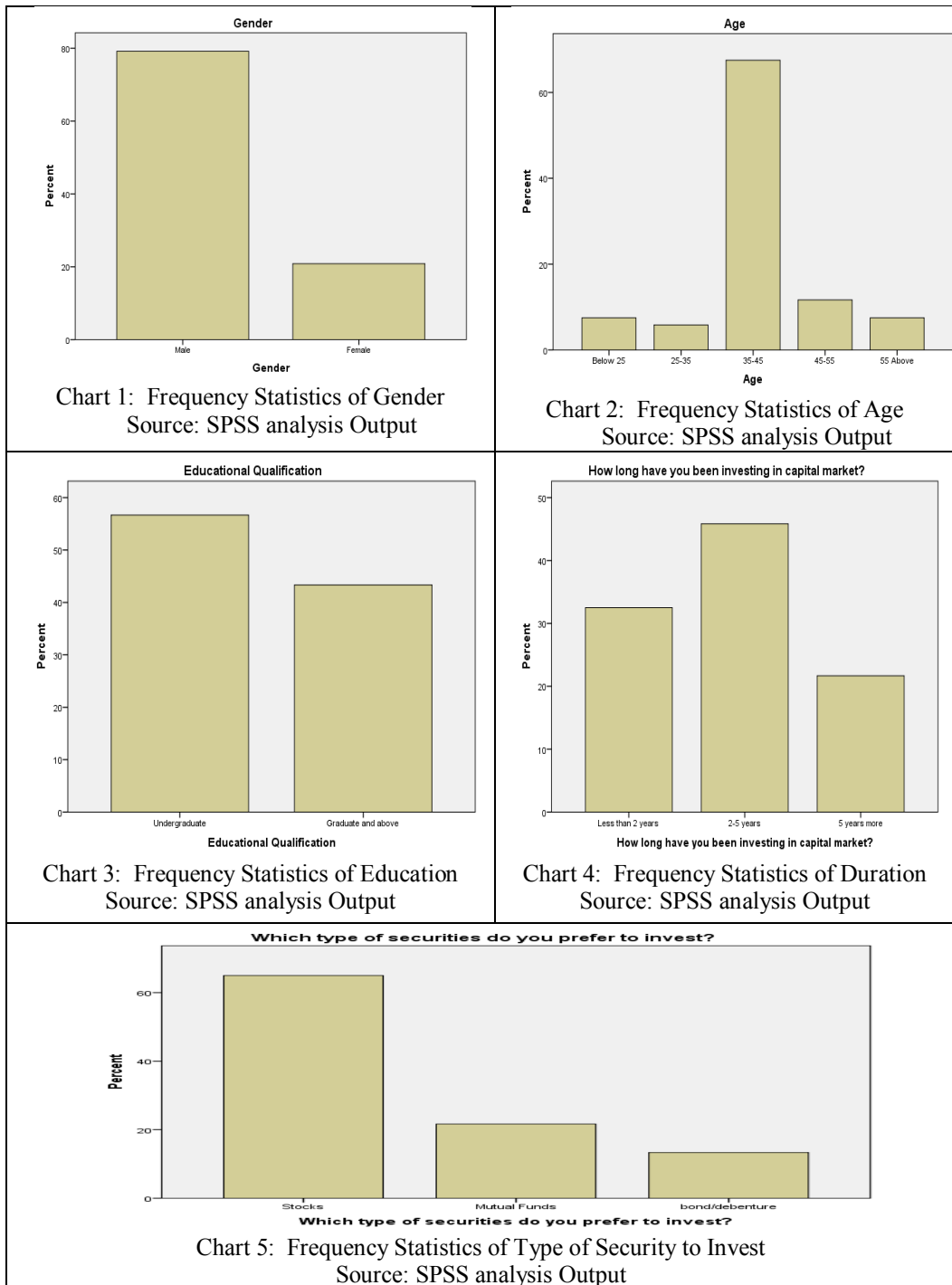
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Appendix

Part A: Descriptive Statistics:



Part B: Logistic Regression**Block 0: Beginning Block****Iteration History^{a,b,c}**

Iteration		-2 Log likelihood	Coefficients
			Constant
Step 0	1	130.717	1.067
	2	130.386	1.186
	3	130.385	1.190
	4	130.385	1.190

- a. Constant is included in the model.
- b. Initial -2 Log Likelihood: 130.385
- c. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Table 11: Iteration History
Source: SPSS Data Analysis Output

Classification Table^{a,b}

	Observed		Predicted		
			I somehow rely on traditional tools and techniques measuring and predicting securities value, returns, risks etc. while making investment decision.		Percentage Correct
			No	Yes	
Step 0	I somehow rely on traditional tools and techniques measuring and predicting securities value, returns, risks etc. while making investment decision.	No	0	28	.0
		Yes	0	92	100.0
	Overall Percentage				

- a. Constant is included in the model.
- b. The cut value is .500

Table 12: Classification Table
Source: SPSS Data Analysis Output
Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	1.190	.216	30.378	1	.000	3.286

Table 13: Variables in the Equation
Source: SPSS Data Analysis Output

Variables not in the Equation					
			Score	df	Sig.
Step 0	Variables	Gender	.384	1	.535
		Age	3.377	1	.066
		Duration	.881	1	.348
		Security_Type	.239	1	.625
		Anchoring	48.936	1	.000
		Conservatism	43.508	1	.000
		Endowment	42.749	1	.000
		Optimism	41.174	1	.000
		Hindsight	43.359	1	.000
	Overall Statistics		57.888	15	.000

Table 14: Variables not in the Equation
Source: SPSS Data Analysis Output

Journal of Business Studies

JBS-ISSN 2303-9884

Volume - 11, No. 2, pp.: 116-132

Impact of Mobile Banking on Financial Inclusion in Bangladesh

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Abstract

Despite rapid progress of the financial sector in Bangladesh, there are concerns that banks have not been able to include a vast segment of the population, especially the underprivileged section and rural people into the field of basic banking services. The main objective of this study is to evaluate the effectiveness of Mobile Banking (M-banking) initiatives taken by Bangladesh Bank on financial inclusion. Researchers analyzed the data for conducting this study collected from the secondary sources like related reports, journals, publications etc. In 2011 Bangladesh Bank introduced M-banking with the name of Mobile Financial Services (MFS) for inclusion of the unbanked people in the financial network. The present paper examines whether the introduction of mobile financial services have promoted financial inclusion in Bangladesh with necessary policy options. However, no attempt has been found yet to evaluate the effectiveness of such initiatives, mainly M-banking at before. Therefore, it is necessary to examine the degree of effectiveness of M-banking on financial inclusion. In the study, financial inclusion has been measured objectively using model containing measurement index.

Keywords: Financial Inclusion, Mobile Banking, Financial System, Index of Financial Inclusion (IFI)

1. Introduction

Financial Inclusion (FI) has been broadly accepted in reducing poverty and reaching inclusive economic growth. If people are financially included, they are able to setup and enlarge businesses, participate in education, handle risk, and face financial shocks.

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Access to financial system increases savings, empowers women, and increases fruitful investment and consumption. Credit access also has great impact on consumption, employment and income that also impacts on mental health and attitude. The benefits go beyond individuals. Better access to financial services may help reduce income disparity and quicken economic growth for both individuals and firms. Knowledge and experience of policy makers and regulators are helping to expand financial inclusion a priority in financial sector growth (World Bank, 2014).

With 145.114 million subscribers (Bangladesh Telecommunication Regulatory Commission, 2017), the current mobile phone density in Bangladesh helps to meet the objectives and challenges of financial inclusion. To use this opportunity, Bangladesh Bank (BB) issued the “Guidelines on Mobile Financial Services for Banks” on 22 September 2011 as the legal framework for a mobile technology-based payment system. This event served as a milestone in financial inclusion activities in the country (Bangladesh Bank, 2011).

Bangladesh has a rapidly growing mobile financial services industry, with at least 17 providers already offering services on the market. At the end of September 2017, the number of total agents was 710,026 and the number of registered customers was almost 58.8 million, of which active accounts were almost 21.0 million under Mobile Banking. The number of total transactions was 187.56 crore in 2017 while the amount of total transactions was BDT 3146.62 billion at the end of same year (Bangladesh Bank, 2017a).

The financial system of Bangladesh is consisted of formal, semi-formal and informal sector. The formal sector is regulated either by the Bangladesh Bank or Insurance Development & Regulatory Authority or Bangladesh Securities and Exchange Commission or another endorsed financial regulator. This part includes Non-bank Financial Institutions, Banking Companies, Capital Market, Insurance Companies and Micro Finance Institutions.

Some Financial Institutions, for example, Palli Karma Sahayak Foundation (PKSF), House Building Finance Corporation (HBFC), Samabay Bank, and so forth are not directed generally but rather don't fall under the purview of Bangladesh Bank, Insurance Authority, Securities and Exchange Commission or some other instituted financial controller. Non-Governmental Organizations (NGOs) and other government programs involve the semi-formal area. Financial institutions of these divisions are otherwise regulated. The financial system of Bangladesh is dominated by the banking sector and Bangladesh Banks, as a regulator, has dominant role in the financial system of Bangladesh (Parvez et al, 2015).

In addition to 697 licensed Microfinance Institutions (MFIs), Bangladesh's financial sector consists of 6 State-Owned Commercial Banks (SOCBs), 39 Private Commercial Banks, 9 Foreign Commercial Banks (FCB), 2 Specialized Banks (SB) and 5 Non-Scheduled Banks. The financial sector of Bangladesh is lead by commercial banks in terms of assets and liabilities. But, in terms of spread, microfinance institutions have larger coverage, with about 15,609 branches, 26 million microfinance clients and 1,10,781 employees as of June 2017. It is also seen that savings per member is Tk. 4,489

whereas outstanding loan per borrower is Tk. 13,913 as of June 30, 2017. At present Grameen Bank (GB) is regulated under Grameen Bank Act 2013. For this reason this institution is not considered as a NGO-MFI. Therefore, GB is also working for financial inclusion separately. It has 2,568 branches with 8.81 million members covering 96.2% women in the year 2016-2017. In this period, total loan outstanding and total savings are Tk. 96,422 million and Tk. 189,804 million, respectively. NBFIs (Non Bank Financial Institute) are also playing a significant role for financial inclusion. At the end of June, 2017, there were 198 branches of 32 NBFIs. Total amount of deposit was Tk. 324.8 billion and loans-leases Tk. 382 billion. The non-scheduled banks in Bangladesh include Ansar VDP Unnayan Bank, Karmashangosthan Bank, Probashi Kollyan Bank, Samabay Bank and Jubilee Bank. They have more than 400 branches and mobilized more than Tk. 3,500 million as deposit. They made loans and advances about Tk. 10,000 million in the year 2017. Moreover, there are a total number of 77 insurance companies in Bangladesh at the end of June, 2017. They have 8064 branches to provide insurance services all over the country (Ministry of Finance, 2018).

Commercial banks have a very low coverage in rural areas. There are 80,750,837 accounts in banks out of which 20.04% Savings Account, 7.58% Current Account, 48.84% Fixed Deposit Accounts and 7.85% Deposit Pension Schemes. At the end of 2017 total balance of these banks accounts was 8,61,745 crore BDT. At the end of 2017, nationwide only 54.57% of adults had an account at a formal financial institution, and less than 20% had saved money in those accounts. Currently, the country has 9,753 branches and approximately 9,810 ATMs whereas Micro Finance Institutes have coverage of more than 15,609 branches. To encourage rural banking Bangladesh Bank mandated opening branches in rural areas while bank open branches in urban areas has resulted in 56.74% of bank branches in rural areas by December, 2017 (Bangladesh Bank, 2018).

Past research on financial inclusion, in Bangladesh, is so limited and along these lines this paper is an undertaking to alleviate the examination hole in such manner. The discoveries of this investigation can help the academicians, analysts, concerned specialist co-ops and arrangement.

2. Literature Review

M-banking is a new technology-based banking concept in Bangladesh. Individuals of this nation get acclimated with customary branch based managing an account framework and fear utilizing versatile saving money since they can't feel it trust commendable (Ahmed et al., 2011). There have been a number of studies led by scientists worldwide on factors that forestall and additionally impact clients to receive the innovation interfaced managing an account (Ram, 1987). It has been watched by the specialists that individuals are less disposed to receive another innovation based keeping money framework. Even though countless keeping money has been actualized over the world, their reception rate has been found as genuinely low (Suoranta & Mattila, 2004). Followings we discuss a broad literature on impact of M-banking on financial inclusion and then propose a research framework in the context of Bangladesh.

Rahman (2009) defines financial inclusion in Bangladesh as access to financial services from officially regulated and supervised entities in which banks and financial institutions are licensed by the Bangladesh Bank, MFIs by the Microcredit Regulatory Authority (MRA), registered cooperatives by the Department of Cooperatives; and official entities themselves including post offices and National Savings Directorate. Microfinance activities in Bangladesh, pioneered by Nobel laureate Dr. Yunus and replicated extensively worldwide, have been expanding the access of financial inclusion (Islam & Mamun, 2011).

By and large, the arrangement of financial services from banks is now and again alluded to as financial inclusion; yet monetary incorporation really alludes to a more extensive idea. United Nations (2006), in its blue book titled "Building Inclusive Financial Sectors for Development", characterizes financial inclusion as the "entrance to the scope of financial services at a sensible cost for the bankable individuals and homesteads". Fundamental financial services incorporate reserve funds, short and long-haul credit, leasing and factoring, local and international remittances, insurance, pension, payments, and mortgage. Studies recommend that entrance to financial services enables the poor to spare cash securely outside their homes, keeps the concentration of financial power with a couple of people and mitigates the dangers that the poor face because of financial stuns or regular disasters (Mehrotra et al., 2009).

Financial inclusion has risen as an instrument to accomplish comprehensive development for destitution decrease since 2005, a year that the UN has announced International Microcredit Year. Studies (King et al., 1993; Beck et al., 2004, 2007, 2008; Levine, 2005 & Demirgüç-Kunt et al., 2008) demonstrate that a positive connection exists between money related advancement and monetary development. Current advancement hypotheses propose that more noteworthy financial inclusion can positively affect the lives of poor people. Money related rejection alludes to the absence of access to financial services. Beck et al. (2008) finds that budgetary avoidance is a boundary to financial advancement. Fiscally avoided populaces incorporate minimal ranchers, landless works, unorganized enterprise, urban slum tenants, migrants, senior citizens and ladies. Monetary consideration is along these lines a high need arrangement objective for creating and created nations keeping in mind the end goal to guarantee steady and fair financial development.

Thus, the definitions of financial inclusion indicate that appropriate financial inclusion is multidimensional in nature offering quality financial services in a convenient way, extending access to all segments of the population and providing equal opportunities and reducing inequalities in an economy.

Estimation is vital to understanding financial inclusion and distinguishing chances to expel the obstructions that might keep individuals from utilizing financial services. A measure of financial inclusion depends correctly on the way it is characterized. A few examinations have endeavored to gauge money related incorporation by basically estimating the extent of the grown-up populace or extent of family units (of an economy) approaching formal financial services (i.e., having a financial balance). Since such a measure can be gotten just through nationwide essential reviews, it is hard to get such a

measure of financial inclusion for nations where such studies are not directed in a normal premise as they included significant cost also being tedious (Sarma, 2012).

Further, a measure of financial inclusion that depends on the extent of grown-ups/families with a bank account disregards some other critical parts of a comprehensive financial system. These relate to quality and use of the financial services. Writing has brought up that simply having a bank account may not suggest that the account is used enough (Kempson et al., 2004). In numerous nations, individuals having a financial account don't utilize them enough because of the remoteness of bank branches, or other physical or mental obstructions (Diniz et al., 2011). A measure of financial inclusion that exclusive tallies number of individuals having a bank account won't mirror the absence of sufficient financial services. Further, sufficient use of money related services is likewise a critical part of the financial inclusion. Kempson et al. (2004) characterized the idea of "under-banked" or "marginally-banked" individuals as the individuals who don't make sufficient utilization of their accounts, regardless of having bank accounts.

A measure of financial inclusion in view of the extent of "managed an account" grown-ups, in this way measures just a single part of the monetary consideration, viz., access to the financial system, and disregards other critical angles, for example, accessibility and use of the financial system. While access to money related establishments is the essential measurement of financial inclusion, a comprehensive financial system is likewise the one in which financial services are sufficiently accessible and are enough used. A substitute approach, as utilized by arrangement producers of various nations, is to utilize an assortment of pointers of money related part effort to consider the condition of financial inclusion. The most usually utilized markers are a number of financial accounts (per 1000 grown-up people), a number of bank branches (per million individuals), and number of ATMs (per million individuals), a measure of bank credit and measure of bank accounts. Beck et al. (2007), stated that different pointers of keeping money segment outreach have been utilized geographic branch entrance, credit and savings accounts per capita, loan-income and deposit-income proportions et cetera.

Demirguc-Kunt & Klapper, (2012) have given fascinating pointers of financial inclusion from miniaturized scale (grown-up people) viewpoints, in light of essential overviews of 150,000 grown-ups in 148 nations amid 2011. These pointers incorporate offer of grown-ups having a record with a formal monetary establishment, of grown-ups who spared and acquired utilizing a formal record, of grown-ups who utilized casual technique to spare and casual sources to get and offers of grown-ups with credit/platinum cards, with contract and with a medical coverage. These pointers are additionally given by salary gathering, sexual orientation and training levels of the respondents.

The Reserve Bank of India reports populace per bank branch, populace per ATM, level of populace having bank deposit accounts, credit to GDP proportion and so on to investigate the advance of financial inclusion in India. In 2010, the Superintendence of Banking, Insurance Companies and Private Pension Funds of Peru started to build up an arrangement of financial inclusion markers, with a goal of giving data on access and utilization of financial products and services. These markers incorporate the number of

branches, ATMs and agents per 100,000 grown-ups and per 1000 sq. km., the number of investors and borrowers per 100000 grown-ups, average size of deposit and credit as a proportion of GDP for every capita and so forth. Studies (Mehrotra et al., 2009 and United Nation, 2006) utilize different criteria to quantify the status of financial inclusion in an economy, for example, (i) outreach measurement and (ii) genuine use measurement. Regarding effort measurement, there are two kinds of markers: geographic penetration (number of bank branches or ATMs per 1000 square kilometers) and demographic penetration (number of bank branches or ATMs per 100000 individuals). More bank branches and ATMs per 1,000 square kilometers demonstrate smaller distance to closest physical bank outlets and less demanding geological access. Demographic penetration measures the normal number of individuals served by each bank branch or ATM. Higher numbers infer that there are fewer customers per branch or ATM and furthermore demonstrate less demanding access to bank's services.

As far as genuine use measurement the markers are (i) number of credit accounts per 1000 individuals (ii) number of deposit accounts per 1000 individuals. These pointers measure the utilization of banking services or access to financial services. Another as often as possible utilized marker of utilization is the proportion of deposit/GDP or credit/GDP or (deposit + credit)/GDP.

While the significance of M-banking is generally perceived, the writing on financial inclusion still does not have a far-reaching measure that can be utilized to gauge the degree of financial inclusion in an economy. Even though there are numerous markers to quantify the degree of financial inclusion any one single pointer neglects to enough catch the degree of financial inclusion. Consequently, a far-reaching measure is required. A far-reaching measure of financial inclusion ought to have the capacity to include information on a few viewpoints (measurements) of financial inclusion ideally in one single number. Such a measure can be utilized to analyze the levels of financial inclusion crosswise over economies and crosswise over states/regions inside nations at a specific time point. It can be utilized to screen the advance of strategy activities for financial inclusion in an economy over some undefined time frame.

Sarma & Pais (2011) built up an index by following a multidimensional approach that utilized by United Nations Development Program (UNDP) for calculation of the notable Human Development Index (HDI) to gauge FI. Be that as it may, certain methodological upgrades influence IFI (Index of Financial Inclusion) free from a portion of the broadly condemned inadequacies of the HDI. Since it catches data on different parts of financial inclusion in a solitary number, the IFI gives a more thorough measure of financial inclusiveness than singular markers, for example, those utilized as a part of (Beck et al., 2007) and the measure evaluated by Honohan, 2008.

In a current investigation of Bangladesh Institute of Bank Management (BIBM), titled "Financial Inclusion Initiatives of Bangladesh Bank: Evaluation and Challenges" by Hossain et al. (2015) additionally utilized this IFI index to quantify the financial inclusion status of Bangladesh.

By computing a dimension index for each dimension of financial inclusion the IFI index is computed. The dimension index d_i , as calculated by the formula (1), measures the nation's success in the i th dimension FI. A weight w_i where $0 \leq w_i \leq 1$ is involved to the dimension i , showing the relative significance of the dimension i in enumerating the inclusiveness of a financial system.

$$d_i = w_i \frac{A_i - m_i}{M_i - m_i} \quad \dots\dots\dots (1)$$

Where,

d_i = dimension index for the i th dimension, $0 \leq d_i \leq 1$

w_i = weightages attached to the dimension i

A_i = actual value of the dimension i

m_i = lower limit on the value of i , fixed by some pre – specified rule

M_i = Upper limit on the value of dimension i , fixed by some pre-specified rule

Equation (1) ensures that $0 \leq d_i \leq w_i$. The higher the estimation of d_i , the higher the nation's accomplishment in measurement in i th dimension. In the event that n measurements of financial inclusion are viewed as, at that point, a nation's accomplishments in these measurements will be spoken to by a point $X = (d_1, d_2, d_3, \dots, d_n)$ on the n -dimensional space. In the n -dimensional space, the point $O = (0, 0, 0 \dots 0)$ speaks to the point showing the most noticeably bad circumstance while the point $W = (w_1, w_2 \dots w_n)$ speaks to a perfect circumstance demonstrating the most noteworthy accomplishment in all measurements. The area of the accomplishment point X versus the most noticeably bad point O and the perfect point W is the critical factor in estimating a nation's level of financial inclusion. Bigger separation amongst X and O would demonstrate higher financial inclusion. What's more, littler separation amongst X and W would demonstrate higher financial inclusion.

IFI is a number that lies in the vicinity of 0 and 1 (i.e., the index has very much characterized limits) and is monotonically expanding, i.e., a larger amount of financial inclusion shows a higher estimation of the index. In the wake of ascertaining d_i 's and settling w_i 's IFI can be computed by following equation (2).

$$IFI = \frac{1}{2} \left[\frac{\sqrt{d_1^2 + d_2^2 + \dots + d_n^2}}{\sqrt{w_1^2 + w_2^2 + \dots + w_n^2}} + \left(1 - \frac{\sqrt{(w_1 - d_1)^2 + (w_2 - d_2)^2 + \dots + (w_n - d_n)^2}}{\sqrt{w_1^2 + w_2^2 + \dots + w_n^2}} \right) \right] \quad \dots\dots\dots (2)$$

3. Objectives of the Study

The commercial banks have an enormous undiscovered market and should be caught through which financial incorporation is thought to be quickened. Be that as it may, individuals are more moderate when they are presented to a proposition of receiving

another saving money innovation. In this way, there is a need to ponder and comprehend people groups' expectation to embrace and utilization of versatile managing account administrations, particularly which factors influencing their aim to receive and utilization of portable keeping money. The main objective of this study is to understand the impact of M-banking on financial inclusion in Bangladesh. The objective of the proposed study is two-fold: first, to see the current status of financial inclusion considering geographic and demographic penetration; second, to measure the Financial Inclusion by IFI Index and third, to put forward policy options for expanding mobile financial services for inclusion unbanked low-income people in financial network. It is normal that the discoveries of the examination will be useful for the partners in taking proper measures for additionally broadening of Mobile keeping money for the advancement of the economy.

4. Methodology

In the study, secondary data have been used. Technological advances have led to vast amounts of data that has been collected, compiled, and archived, and that is now easily accessible for research. As a result, utilizing existing data for research is becoming more prevalent and therefore secondary data analysis. While secondary analysis is flexible and can be utilized in several ways, it is also an empirical exercise and a systematic method with procedural and evaluative steps, just as in collecting and evaluating primary data. As regard to the secondary data, different publications of Bangladesh Bank (BB), Bangladesh Institute of Bank Management (BIBM), Bank and Financial Institutions, Division of Ministry of Finance, Bangladesh Bureau of Statistics, Microcredit Regulatory Authority (MRA), Insurance Development and Regulatory Authority (IDRA), annual reports of different banks, financial institutions, Grameen Bank and relevant research papers published in local and international journals. A good body of literatures has been reviewed to sharpen the thought on M-banking in the context of Bangladesh.

5. Data Analysis and Findings

5.1 Financial Inclusion Measurement: Geographic and Demographic Penetration

Considering geographical penetration, it is seen that the quantity of bank branches per 1000 square kilometer in 2017 expanded to 66.07 compared to 44.24 in 2005. The quantity of ATMs per 1000 square kilometer has expanded immensely from 0.82 in 2005 to 66.47 in 2017 (Figure 1). Access to bank by NGO-MFIs is vital in Bangladesh. The most recent information demonstrate that 697 NGO-MFIs established 15,609 branches all through the nation (for the most part in provincial regions) in June 2017. The aggregate number of customers of NGO-MFIs was 26.17 million toward the finish of June 2017. As number of branches of MFIs is bigger than bank offices their entrance is higher than banks however it is diminishing over the timeframe. In case of MFS/M-banking agent per square kilometer, the development is gigantic. Within six years, beginning from 2011, it crossed the geographical penetration of banks, MFIs and ATMs.

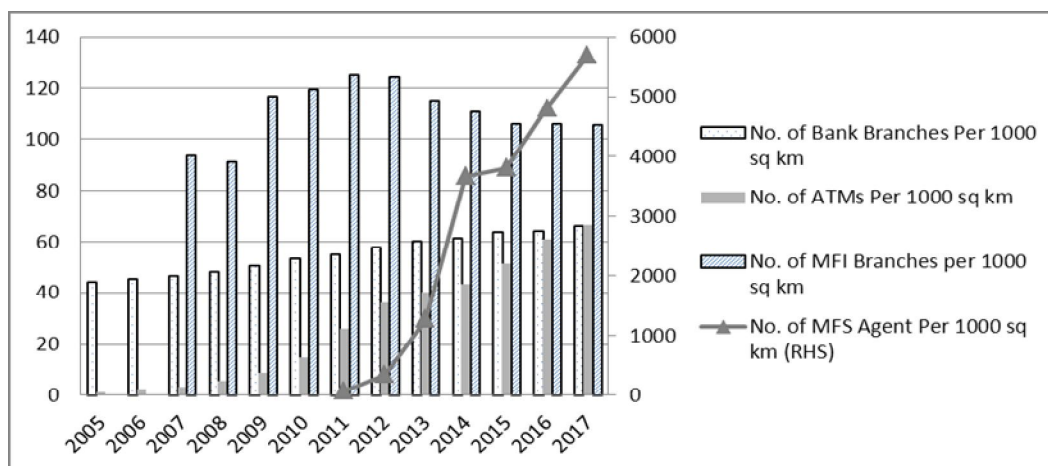


Figure-1: Geographic Penetration of Financial Services (Per 1000 Square Kilometer)

Source: Bangladesh Bank, Research Department (2017b)

In view of demographic penetration, the quantity of branches per 100,000, populace expanded from 4.67 in 2005 to 9.36 in 2017. The quantity of ATMs per 100,000 populaces expanded from 0.13 in 2005 to 9.41 in 2017 (Figure 2). Developments in geographical and demographic penetration demonstrate that entrance to finance is relentlessly expanding over time in Bangladesh. Population penetration by NGO-MFIs shows that 9.61 branches existed per 100,000, populace toward the finish of June 2007, diminishing imperceptibly to 9.38 branches toward the finish of June 2017. In case of MFS/M-banking agent per 100000 grown-up populace, the development is high. Beginning from 2011, within six years, it crossed the demographic penetration of banks, MFIs and ATMs (806.78 for every 100000 grown-up populace).

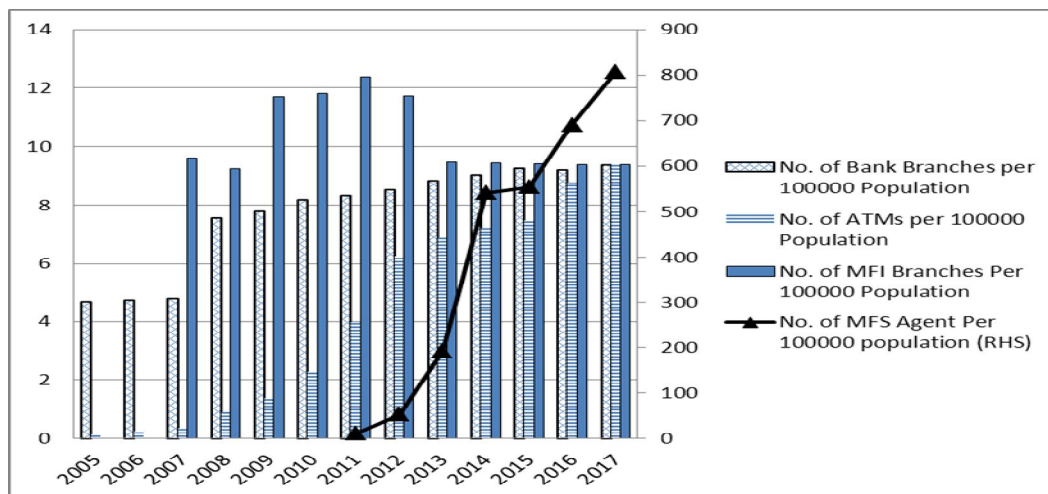


Figure-2: Demographic Penetration of Financial Services (Per 100000 Populations)

Source: BB, Research Department (2017b)

The general financial inclusion, estimated by several deposit accounts as a level of the aggregate grown-up populace, has expanded at an unobtrusive pace in Bangladesh amid the most recent five years. Patterns in general monetary consideration are given in Figure 3. It is watched that financial inclusion by banks, estimated by the number of accounts as a percent of the aggregate grown-up populace, expanded from 42.2 percent in 2009 to 84.63 percent in 2017 because of the opening of countless accounts, including the farmers' BDT 10 account over the most recent quite a long while. Then again, money related incorporation by NGO-MFIs diminished from 35.6 percent in 2009 to 32.8 percent in 2017, which is a conceivable territory of worry for NGO-MFIs. Although the expanding rate of entrance of MFS/M-banking account as % grown-up populace is high for most recent six years still, it is underneath the banks and MFIs infiltration rate.

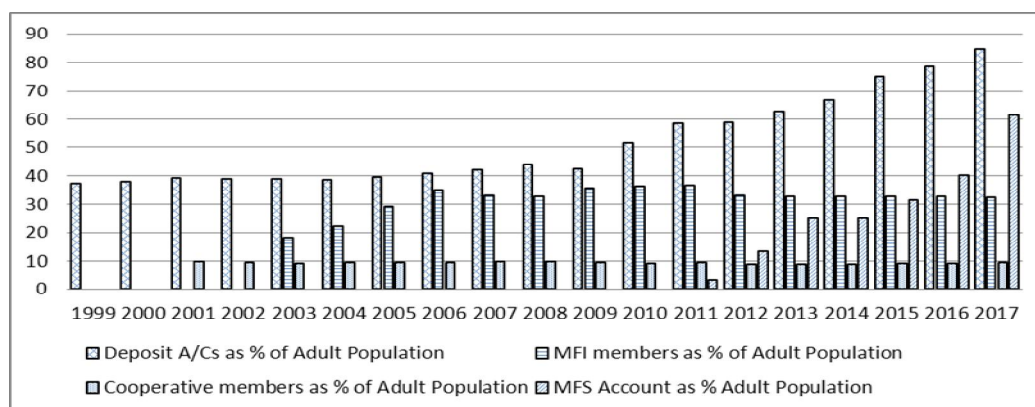


Figure-3: Status of Financial Inclusion in Bangladesh by Banks, MFIs, MFSs and Cooperatives

Source: BB, Research Department (2017b)

5.2 Financial Inclusion Measurement by IFI Index

As indicated by Sarma (2012) the comprehensiveness of a financial inclusion framework ought to be assessed along a few measurements. We have considered three measurements in this model: (i) dimension 1 as a measure of banking penetration, (ii) dimension 2 as a measure of availability of banking services, and (iii) dimension 3 as a measure of usage of banking services.

Banking penetration (measurement 1) has been estimated by the quantity of deposit accounts per 1000 adults as a proxy for the number of banked adults. Availability of banking services has been measured in light of the quantity of bank-branches, ATM, MFS/M-banking agent-point, and so forth. In the present index, the investigation utilizes information on the quantity of bank-branches and the quantity of ATMs/agent-point indicates per 100,000 grown-ups measure the availability measurement. Two separate indices are measured for bank-branches and ATMs/agent-point. At that point, a weighted average of these two indices, doling out 0.67 weights for the bank-branches and 0.33 weights for ATM/agent-point index is considered as the index for the availability

(measurement 2). Including the usage dimension in the present investigation, two essential services of the banking system- credit and deposit have been considered. Subsequently, the present index utilizes the information on the volume of credit to the private segment and deposit activated from the private sector as a percentage of the GDP to gauge measurement 3. Each measurement (d_1 , d_2 and d_3) is ascertained by utilizing the accompanying formula:

$$d_i = w_i \frac{A_i - m_i}{M_i - m_i}$$

Where,

d_i 's, dimension 1, 2 and 3; $0 \leq d_i \leq 1$

w_i 's, weightages of the dimension 1, 2 and 3

A_i 's, actual value of dimension 1, 2 and 3

m_i 's, lower limit on the value of dimension 1, 2 and 3

M_i 's, upper limit on the value of dimension 1, 2 and 3

In the model of Sarma (2012) all the three have been weighted. The weights for d_1 , d_2 and d_3 are 1, 0.5 and 0.5, respectively. Lower limit for all dimensions have been considered as 0 (zero). However, upper limits for d_1 and d_3 are considered as 2500 and 300, respectively. For d_2 , upper limit on the number of bank-branches and the number of ATMs/agent-points per 100,000 adults are taken as 60 and 120, respectively. Therefore, the index of financial inclusion (IFI) will be as follow:

$$IFI = \frac{1}{2} \left[\frac{\sqrt{d_1^2 + d_2^2 + d_3^2}}{\sqrt{(w_1^2 + w_2^2 + w_3^2)}} + \left(1 - \frac{\sqrt{(w_1 - d_1)^2 + (w_2 - d_2)^2 + (w_3 - d_3)^2}}{\sqrt{(w_1^2 + w_2^2 + w_3^2)}} \right) \right]$$

Where,

IFI = Index of financial inclusion

d_1 = dimension 1 meaning penetration in the financial system

d_2 = dimension 2 meaning availability of financial services for the people

d_3 = dimension 3 meaning usages of financial services by the people

w_1 = weightages of dimension 1

w_2 = weightages of dimension 2

w_3 = weightages of dimension 3

Table-1: Descriptive Statistics of the Variables (Only Banks Contribution)

Year	Deposit A/c (No.)	Bank Branch (No.)	ATM (No.)	Credit to Private Sector (Tk. Lac)	Deposit from Private Sector (Tk. Lac)	GDP (Tk. Lac)	Adult Population
2010	48678937	7658	2121	28387162	30423368	69432400	93504000
2011	55175110	7961	3797	33818891	33818891	79670400	95808000
2012	58762151	8322	6117	39874799	44987511	91814100	97536000
2013	63394872	8685	6775	43534625	50658075	119892300	98498749
2014	69371538	9040	7233	49598041	57117772	135092000	100064885
2015	76223464	9397	7591	56998069	65845368	153761714	101365729
2016	80750837	9464	9019	65502181	75906540	175011583	102683483
2017	88139539	9753	9810	75275106	87505059	199198184	104141637
CAGR	9.15	3.96	43.70	14.92	15.28	13.82	1.34

Source: BB, Statistics Department (2017)

Table-2 depicts the status of IFI₁ considering the contribution of banking sector alone. It shows that annual compound growth of bank accounts per 1000 adult population is 7.71% whereas the total number of branches per 100,000 adult populations is about 9.4 at the end of 2017. It is evident that the number of ATMs is increasing very rapidly (CAGR 41.80%). Therefore, CAGR of penetration (d_1) and availability (d_2) arrive at 7.714% and 5.897%, respectively. However, credit and deposit to GDP ratios, which represent usage (d_3), are not growing at a satisfactory level. At the end of 2017, IFI₁ is 36.22% which was 27.53% at the end of 2010, 4.7% growth in 8 years.

Table-2: Status of Index of Financial Inclusion (Only by Banks)

Year	Deposit A/C per 1000 Adult	Branches per 100,000 adults	ATMs per 100,000 adults	Credit and Deposit to GDP	d_1 (Penetration)	d_2 (Availability)	d_3 (Usage)	IFI ₁ (%)
2010	520.61	8.190	2.268	84.70	0.208	0.097	0.282	27.53
2011	575.89	8.309	3.963	84.90	0.230	0.103	0.283	29.04
2012	602.47	8.532	6.272	92.43	0.241	0.112	0.308	30.95
2013	643.61	8.817	6.878	78.56	0.257	0.117	0.262	30.27
2014	693.27	9.034	7.228	78.99	0.277	0.129	0.263	31.93
2015	751.67	9.267	7.486	79.89	0.301	0.124	0.266	33.36
2016	785.78	9.209	8.776	80.80	0.314	0.127	0.269	34.44
2017	846.34	9.365	9.420	81.72	0.339	0.130	0.272	36.22
CAGR (%)	7.71	2.59	41.80	1.13	7.714	5.897	1.134	4.77

Source: Authors' calculation through IFI index method

Comparative indexes of financial inclusion for last 8 years have been summarized in Table-3. First index (IFI₁) is calculated by considering the contribution of banks' traditional activities. In the second index (IFI₂), contributions of M-banking activities have also been incorporated in the model along with first index. Finally, a comprehensive index (IFI₃) has been calculated incorporating the contributions of microfinance institutions (MFIs) and Grameen Bank. Results show that financial inclusion has been completed 36.22% by banks' contribution at the end of 2017. If the contribution of M-banking activities is added with core banking activities, IFI is increased to 96.65%. Therefore, it can easily be said that mobile technology driven banking initiatives are playing a vital role to achieve FI objective. MFIs and GB are playing a significant role accommodating rural and poor people in the financial system as evidenced by IFI (74.01%) after adding their contribution.

Table-3: Comparative Index of Financial Inclusion: 2010-2017 (%)

Year	Only by Banks' Contribution (%)				By Adding M-banking (%)				By Adding MFIs and GB's Contribution (%)			
	d ₁	d ₂	d ₃	IFI ₁	d ₁	d ₂	d ₃	IFI ₂	d ₁	d ₂	d ₃	IFI ₃
2010	0.208	0.097	0.282	27.53	20.80	9.70	28.20	27.53	35.20	33.30	30.00	44.75
2011	0.230	0.103	0.283	29.04	23.00	10.30	28.30	29.04	37.40	34.30	30.10	46.51
2012	0.241	0.112	0.308	30.95	25.30	25.80	30.80	36.40	38.90	49.20	32.60	52.90
2013	0.257	0.117	0.262	30.27	31.10	64.90	26.20	50.84	44.60	84.40	27.80	62.44
2014	0.277	0.129	0.263	31.93	37.80	163.1	26.30	65.51	51.30	84.80	27.90	69.93
2015	0.301	0.124	0.266	33.36	42.60	286.8	25.94	77.91	52.10	84.86	27.50	71.36
2016	0.314	0.127	0.269	34.44	48.00	504.3	25.58	92.66	53.16	84.94	27.10	72.44
2017	0.339	0.130	0.272	36.22	54.09	702.2	25.56	96.65	54.04	85.01	27.09	74.01

Source: Authors' calculation through IFI index method

Figure-4 envisions the similar pictures of financial inclusion considering three models. From the examination, it is clear that FI process will be speed up by the effective development of M-banking in Bangladesh. It has been discovered that these are less expensive yet more successful apparatuses of FI. Thus, MFIs and GB are likewise assuming urgent part in this procedure. Be that as it may, there are different MFIs in Bangladesh which did not get authorized from MRA and their exercises are excluded in this investigation.

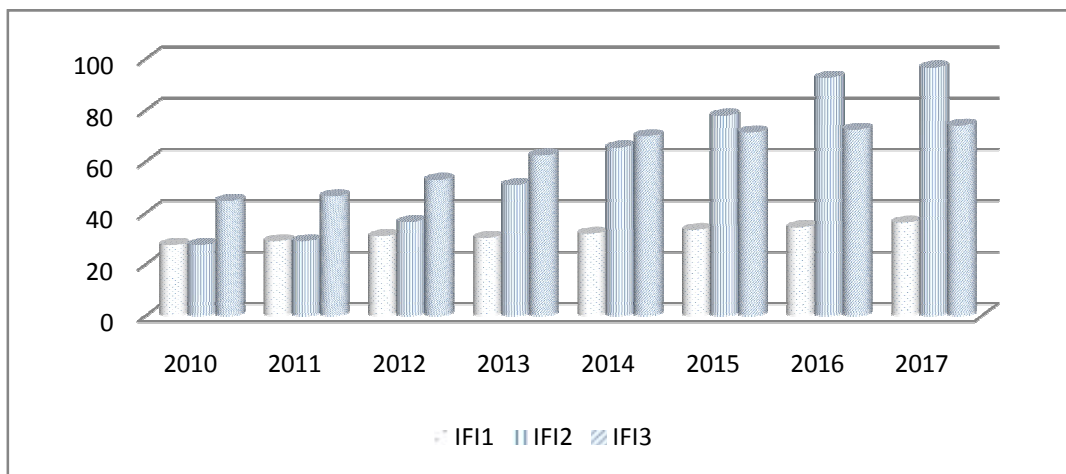


Figure-4: Comparative Value of Indexes: 2010-2017

Source: Authors' calculation from the Table-3

6. Recommendations

Although much advance has been accomplished in financial inclusion because of the M-banking in Bangladesh, a vast section of needy individuals both in provincial and urban zones, including ladies, are still barred from financial inclusion, which is an incredible test for strategy makers and financial service providers, like banks. M-banking opened another window to us and by presenting creative new products and services particularly focusing to this group may bring them under the financial framework. Bangladesh needs some policies in addressing challenges faced by MFS industry. These includes necessary steps to encourage users to use personal account in transactions, concerted efforts for removing insecurity problems of agents in handling big amount, coordinated steps to lower transaction cost, monitoring MFS closely. In Bangladesh, M-banking regulations are still in the underlying phases of improvement. It's an ideal opportunity to develop an M-banking framework for better financial consideration.

7. Conclusion

The fundamental target of the paper was to evaluate the effect of M-banking on Financial Inclusion contrasted with general status of Financial Inclusion in Bangladesh. Considering geographical penetration, it is seen that the quantity of bank branches per 1000 square kilometer in 2017 expanded to 66.07 compared to 44.24 in 2005. Moreover, the quantity of ATMs per 1000 square kilometer also has expanded immensely from 0.82 in 2005 to 66.47 in 2017. But in case of MFS/M-banking agent per square kilometer crossed the geological penetration of banks, MFIs and ATMs within six years, beginning from 2011. In view of demographic penetration, the number of branches per 100,000

population expanded from 4.67 in 2005 to 9.36 in 2017 and the quantity of ATMs per 100,000 populaces expanded from 0.13 in 2005 to 9.41 in 2017. Population penetration by NGO-MFIs shows that 9.61 branches existed per 100,000 population at the end of June 2007, diminishing to 9.38 branches at the end of June 2017. Beginning from 2011, within six years, MFS/M-banking agent per 100000 adult population crossed the demographic penetration of banks, MFIs and ATMs.

The examination of geographical and demographic penetration demonstrates that entrance to banking is developing quickly because of the introduction of M-banking in Bangladesh. The overall financial inclusion, estimated by the quantity of accounts as a proportion of the aggregate adult population, has expanded at an unassuming pace in Bangladesh amid the most recent years. The paper demonstrates that IFI index augmented from 27.53 percent in 2010 to 92.66 percent in 2017, because of opening a huge number of M-banking accounts over the most recent five years.

The investigation demonstrates that financial inclusion has been scaled essentially after the presentation of M-banking since 2011. If the growth prevails, in near future, M-banking will be the only retail banking delivery channel in Bangladesh. This will expand the likelihoods of moving out of poverty from Bangladesh. In this regard, the government's technique should expect to gain by quick advances in mobile technologies and mobile payment system to associate poor families to inexpensive and trustworthy financial system. Particularly at critical time, embracing a powerful methodology like M-banking may help poor family units to expand their entrance to compelling advanced financial services for savings, payments, credit, and insurance.

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Journal of Business Studies

JBS-ISSN 2303-9884

Volume - 11, No. 2, pp.: 133-152

Strategic Human Resource Management Practices in Readymade Garment Industries: Health and Safety Perspective

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Abstract

This paper investigates the strategic human resource management practices particularly; health and safety perspective for understanding the betterment of Readymade Garment Industries (RMG). The nature of the study is exploratory where only qualitative data are used. A sample of 39 respondents (43% management level employees and 57% workers) are surveyed through personal observation and interview technique. It has been revealed that the sampled organizations follow all the provisions regarding health, hygiene and safety of workers as per the Bangladesh Labor Code, 2006 (amended in 2013, 2015, and 2017). But based on observation, it can be asserted that the poisonous external environment of the factories can easily break into the health and safety structure and spread epidemic. In reference to the observation, it can be concluded that still majority of the factories, particularly small size, do not follow the existing health and safety provisions. Therefore, strict continuous inspection system along with reward and fund-on-easy-terms might bring the problem under control.

Keywords: Strategic human resource management, Readymade garment Industry, Health and safety, Bangladesh labour code 2006.

1.0 Introduction

The Textile and Clothing Industries provide the single source of growth in Bangladesh's rapidly developing economy. As of 2016 Bangladesh held the 2nd place in producing garments just after China. Bangladesh is the world's second-largest apparel exporter of western fashion brands. Sixty percent of the export contracts of western brands are with European buyers and about forty percent with American buyers. Only 5% of textile factories are owned by foreign investors, with most of the production

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being controlled by local investors. In the financial year 2016-2017 the RMG industry generated US\$28.14 billion, which was 80.7% of the total export earnings in exports and 12.36% of the GDP; the industry was also taking on green manufacturing practices (Wikipedia, 2017).

The business environment is changing rapidly and this change is characterized by such phenomena as the globalization, changing customer and investor demands, ever-increasing product-market competition. To compete successfully in this environment, organizations continually need to improve their performance by reducing costs, innovating products and processes and improving quality, productivity and speed to market.

Traditional sources of success such as product and process technology, protected markets, economies of scale, etc. can still provide competitive leverage but an organization's human resources are more vital for its sustainability. Parallel to the understanding those human resources are vital for an organization; human resource management function is also going up in organizational hierarchy.

Human resource management aims to ensure that the organization obtains and retains the skilled, committed and well-motivated workforce it needs. This means taking steps to assess and satisfy future people needs and to enhance and develop the inherent capacities of people – their contributions, potential and employability – by providing learning and continuous development opportunities. It involves the operation of recruitment and selection procedures, management development and training activities linked to the needs of the business.

Strategic human resource management (SHRM) represents a relatively new transformation in the field of human resource management. SHRM is concerned with the role human resource management systems play in firm performance, particularly focusing on the alignment of human resources as a means of gaining competitive advantage. Organizations are becoming aware that successful human resource policies and practices may increase performance in different areas such as productivity, quality and financial performance.

Employee health and safety programs should be a major priority for management because the safe lives increase productivity and reduce costs. Thus health and safety programs should stress employee involvement, continued monitoring, and an overall wellness component. Work safety requires that the working conditions should not create significant risk of people being rendered unfit to perform their work. Health and safety at work is therefore aimed at creating conditions, capabilities, and habits that enable the worker and his/her organization to carry out their work efficiently and in a way that avoids events which could cause them harm (Esra, 2010).

Since the 1980's, the Ready-Made Garment (RMG) industry in Bangladesh has experienced rapid growth and is at present ranked the second highest exporter in the world after China. The RMG industry has made a substantial contribution to the economy and society by primarily providing a source of employment for approximately above 4.4

million workers, of whom 80 percent are women (The Daily Star 2016). This result suggests that the sector is one of the major labour intensive industries in the country. Here, accident like, *Rana Plaza Collapse*, incurred irretrievable cost both in terms of money and humanity. These accidents shocked the country and the international community. In response to these accidents, the Government of Bangladesh and the development partners have mobilized unprecedented support and made commitments to improve working conditions and workers' safety in the RMG industry in Bangladesh.

2.0 STATEMENT OF PROBLEMS

The number of industrial accident and death is yet to reach a tolerable limit, although there are bunches of laws and regulations for the health and safety of workers working in factories, including:

- a. The Constitution of the People's Republic of Bangladesh,
- b. National Occupational Health and Safety Policy,
- c. Bangladesh Labour Act 2006 (Amendment 2013),
- d. The Bangladesh National Building Code, etc.

Table1: Major industrial accidents in recent years

Year	Month	Location	Incident	Death	Injured
2017	JAN to DEC	Bangladesh	Boiler Blast at Garments Factory	90	N/A
2016	September	Dhaka	Fire at 3 Factories	34	N/A
2016	August	Chittagong	Inhaling Gas	100	N/A
2013	April	Dhaka	Rana Plaza Collapse	1,136	N/A
2012	November	Dhaka	Fire at Tazreen Fashion	112	150
2010	February	Dhaka	Fire at a Garments Factory	21	50
2006	February	Chittagong	Fire at Textiles factory	65	N/A
2006	February	Dhaka	Garments Factory Collapse	21	N/A
2005	April	Dhaka	Garments Factory Collapse	64	100
2005	January	Dhaka	Fire at a Garments Factory	22	50

(Reuters, 2017)

3.0 THEORETICAL FRAMEWORK

3.1 Strategic Human Resource Management (SHRM)

SHRM includes typical human resource components such as hiring, discipline, and payroll, and also involves working with employees in a collaborative manner to boost retention, improve the quality of the work experience, and maximize the mutual benefit of employment for both the employee and the employer. Strategic HRM utilizes the talent and opportunity within the human resources department to make other departments stronger and more effective to achieve strategic goals.

3.2 Strategic HRM Functions

The role of HRM in companies expanded significantly, and has no longer a simplistic clerical function. HR Department continued to support recruitment and training, payroll, and compensation and benefits, but for the first time HRM roles expanded to include health and safety program administration, strategic planning, and change management. Through these new roles, the traditional HRM has transformed into Strategic Human Resource Management. The major functions of Strategic HRM are as follows:

1. Human resource planning
2. Recruitment & selection
3. Placement & orientation
4. Training & development
5. Performance appraisal
6. Compensation
7. Employee relation
8. Employee health and safety
9. Labour laws

3.3 Employee Health and Safety& SHRM

Health and Safety initiatives are part of a strategic approach to HRM. No longer just a “thing” that companies have to comply with, health and safety is being used as part of a company’s overall strategy for talent retention, overall objectives, and loss-time prevention.

Healthy employees are productive employees, and productive employees have very positive effects on the company’s bottom line. When employees start to feel that their work is unsafe or that their employers do not care about their health or well-being, productivity may start to slip. Witnessing injuries or having to cover jobs while other workers are out injured can also impact productivity; as well as morale and retention (Jennifer, 2017).

Investment in health and safety programs, including disability management, proactive health and wellness programs, preventative measures, and a sound on-boarding and training program, produces quantifiable bottom-line returns. By using health and safety to prevent loss-times injuries and keep productivity at a premium, companies are using health and safety programs to help achieve overall goals and objectives (Jennifer, 2017).

Not only can health and safety be a part of a company's overall success strategy, but it can also be used as a tool for talent retention. Employee health, safety, and wellness management are important determinants of employee perceptions regarding fair treatment by the organization. In fact, a bountiful and comprehensive wellness program can be a powerful incentive for new talent to strive to work for your company, as well as a strong retention tool (**Jennifer, 2017**). This means that health and safety is in a shifting paradigm too. No longer just something companies do to remain compliant and avoid tickets or fines, health and safety is impacting the role of HRM in a company's overall strategy in a major way.

3.3.1 Existing Provisions

There are bunches of laws and regulations for the health and safety of workers working in factories. These begin from the national constitution to many specialized provisions.

3.3.1.1 The Constitution of the People's Republic of Bangladesh

The Constitution recognizes productivity as a basic need for economic development and covers the right to work and reasonable wages, medicare and, disease and disablement. And thus it is assumed the health and safety of industrial workers has been taken care of.

Emancipation of peasants and workers: It shall be a fundamental responsibility of the State to emancipate the toiling masses the peasants and workers and backward sections of the people from all forms and exploitation (Articles 14), (The Constitution of the People's Republic of Bangladesh, 1971).

Work as a right and duty: (1) Work is a right, a duty and a matter of honour for every citizen who is capable of working and everyone shall be paid for his work on the basis of the principle "from each according to his abilities to each according to his work". (2) The State shall endeavor to create conditions in which, as a general principle, persons shall not be able to enjoy unearned incomes, and in which human labour in every form, intellectual and physical, shall become a fuller expression of creative endeavor and of the human personality (Articles 20), (The Constitution of the People's Republic of Bangladesh, 1971).

3.3.1.2 Existing provisions for the health and safety of industrial workers

In terms of the legal framework, the Bangladesh Labour Act 2006 has extensively described the measures to prevent occupational accidents in the workplaces. BLA on OSH encompasses three areas of protection: (i) occupational accidents, hazards and diseases; (ii) safety equipment and facilities; and (iii) workplace environment.

3.3.1.2.1 Occupational Accidents, Hazards and Diseases

The Bangladesh Labour Act 2006 states that every establishment shall be provided with firefighting apparatus and one alternative fire exit. In absence of such fire exit, the inspector may give a written order to the employer of the establishment. The doors

affording exit shall not be locked or fastened and all such doors will open outwards unless they are of sliding types. Every window, door or other exit affording means of the establishment shall be distinctively marked in Bangla in red letters of adequate size or by some other effective and clearly understood signs. Clear and audible means of warning together with a free passageway giving access to each means of escape in case of fire shall be maintained (Sec. 62, BLA).

The Bangladesh Labour Law has declared a number of provisions for preventing the workers from workplace hazards, which includes;

- I. Every establishment is kept clean and free from effluvia arising out of any drain, privy or other nuisance (section 51, BLA),
- II. The temperature of the work room is of comfort and prevent injury to health,
- III. Every employer is required to make effective and suitable measures for securing and maintaining adequate ventilation, sufficient and suitable lighting (section 52),
- IV. To prevent gathering dust or fume in the workroom and its inhalation by the workers (section 53),
- V. The work room of an establishment should not be such overcrowded that is injurious to the health of workers and for that nine and a half cubic meter of space should be provided for every single worker in a factory (section 56), and
- VI. Every establishment should arrange sufficient number of separate toilets with sufficient light, air and water for its male and female workers (section 59).

According to Factory Rules 1979, In case of fatal or serious injury factory manager is obliged to give notice to the Chief Inspector, Deputy Commissioner, Inspector, Commissioner, and especially in case of fatal accident to the officer in charge of the local police station (Rule-84).

The Bangladesh Penal Code 1860 indicates that an employer will be criminally liable for making atmosphere noxious to health (section 278, Penal Code) and for being negligent with respect to poisonous substance/ fire or combustible matter/ explosive substance/ machinery/pulling down or repairing buildings (sections 284 – 288, Penal Code).

3.3.1.2.2 Safety equipment and facilities

The National Occupational Safety and Health Policy has made some mandatory obligation which include to a) identify the risk of health and safety (clause.a.3), b) give orientation to the persons engaged with formal and informal workplace on the risk of possible accident, health risk and safety issues (Clause 3.a.4), and c) make specialist who can identify the occupational diseases and to ensure health service in the factory and establishment (Clause 3.a.10)

The Bangladesh National Building Code obligates the installation of automatic fire and smoke detection system when the size, arrangements and the occupancy of a building become such that a fire itself cannot provide adequate warning to its occupants for their safeguard. The automatic fire and smoke detection system shall include spot or line type heat sensitive detectors and optical, ionized or chemical sensitive type of smoke detectors (Section 4.4)

3.3.1.2.3 Work place environment

The National Health Policy urges for awareness building on capacity development and behavioral change, aware the people about their rights, opportunities, responsibilities, duties and prohibitions regarding health services. The awareness building program on "Health for All" is focused on prevention of diseases and to control non-infectious diseases.

Section 62 of BLA (Amended 2013) has described some precaution in case of fire. These are:

- a. In every establishment during work the doors affording exit from any room shall not be locked or fastened and the exit way cannot be obstructed or blocked.
- b. All doors shall be made in such a way that they can easily and immediately be opened from inside.
- c. Where the door is between two rooms, the doors shall be made in such a way so that they can be opened in the direction of the nearest exit of the building and no such door shall be locked or obstructed while work is being carried on in the room.

The BLA 2006 states that suitable goggles should be provided for the workers where eyes are at risk by reasons of exposure to excessive light or heat (section 75). Inspector may prohibit the use of any building, machinery or plant of any establishment if it appears to him dangerous to human life or safety (section 61(2)). The management shall provide proper protective clothing etc. to employees, who work on machines, handle toxic chemicals or perform specialized jobs (section. 39).

4.0 RESEARCH QUESTIONS

The study is designed to provide answers to the following research questions:

- a. Do garments factories practice existing provisions for the health and safety of workers?
- b. What are the causes of the recurrence of industrial accidents?
- c. What are the most vulnerable areas in the health and safety structure of the factories?
- d. What action steps should the authorities adopt to ensure the health and safety of industrial workers and thrive on it?

5.0 OBJECTIVES OF THE STUDY

The main objective of this study is to conduct a comprehensive study to observe and compare the present condition of the health and safety of garments workers of the sample organization with the existing laws.

5.1 Specific Objectives

Followings are the specific objectives of the present study:

- a. To identify the present condition of the employees' health and safety environment.
- b. To compare the present condition of the employees' health and safety with the relevant laws;
- c. To explore the types of health hazards faced by the workers.
- d. To identify some deviations regarding employees' health and safety with the laws and provide some recommendations to improve employees' health and safety environment.

6.0 METHODOLOGY OF THE STUDY

The credibility of a scientific research depends to a great extent on the appropriate methodology used in the research. Otherwise it will lead to an erroneous result. The nature of the study is exploratory, where only qualitative data were used to get in-depth knowledge of the present situation. Primary and secondary data were collected to meet the objectives of this study. For primary data, a sample 39 respondents (43% management level employees and 57% workers) were surveyed through personal observation and interview schedule. Primary data collected personally through one to one interview with the selected sample, experts, and faculties. On the other hand, secondary data obtained from the secondary sources like Bangladesh Labour Act 2006 (Amendment 2013), National Occupational Safety and Health Policy, National Building Code, other existing provisions for the health and safety of industrial workers, and various published and unpublished reports and books.

6.1 Selection of the Study Area:

Selection of the study area is an important step in a research and it largely depends on the objectives of the study. Therefore, careful thought was given to select an area where a particular set of objectives can be fulfilled. Keeping in mind the objectives, Dhaka and Gazipur District was selected purposively, where garments factories were available. Among all garments factories in these district three garments were selected purposively.

The main criteria behind the selection of these Garments were:

1. To ensure diversity of the sample in terms of geographical location and size of workforce;
2. Due to the availability of a large number of respondents in the study area;
3. To meet the objectives of the study.

6.2 Sampling Technique

For the present study due to budget and time constraint, a sample of 39 respondents, 25 from two garments factory and 14 from garments washing factory, was chosen randomly in order to meet the objectives of the study. So, random sampling technique was used in selecting sample.

6.3 Collection of Data

The study was based on a set of field level primary data collected from the selected respondents by one to one interview with the help of interview schedule designed for this study. The data were collected during the period from May to July, 2018. A brief introduction regarding the nature and objectives of the study was given to each respondent before final interview. The respondents were given assurance that all information would be kept confidential, be used exclusively for research purpose and the study will not affect their interest in any adverse way, rather it might produce some benefits to garment workers in course of time.

6.4 Processing of Data

The collected data were manually edited and coded. Then all the collected data were summarized and scrutinized carefully. Data were processed and transferred to workbook sheets to facilitating tabulation in order to meet the objectives of the study. Moreover, data entry was made in computer and analyses were done using the Microsoft Excel.

6.5 Analytical Technique

To meet particular thesis objectives, several analytical methods were undertaken in the present study using the Microsoft Excel, including: a) Mean Value, b) Maximum Value, c) Minimum Value, d) Percent etc.

7.0 LITERATURE REVIEW

In the age of knowledge economy and changing business environment, achieving competitive advantages and superior employee performance require proper Human Resource Management (HRM). Careful attention to the HR practices is a prerequisite to have motivated and committed employees (Becker & Huselid 1998).

Human capital in the form of a highly trained workforce can be the source of competitive advantage, particularly if employees do not take their skills to competitors. Firm-specific capital is not valuable when transferred to a new firm, and so it in particular is a good source of competitive advantage. However, if a firm is able to retain employees then the skills of interest to competitors can be a source of competitive advantage (Partners Creating Growth, 2013).

Strategic Human Resource Management (SHRM) can be defined as —the pattern of planned human resource deployments and activities intended to enable the firm to achieve its goals. A feature of SHRM is an aim to produce an integrated set of policies and processes that improve organizational performance. HRM, in the context of this thesis, is the totality of strategies, policies and practices enacted by organizations as part of an employment relationship. An explicit pluralist approach is taken as distinct from a normative HRM approach. Part of this approach is that employees should be treated fairly and with respect (Simon Fishwick, 2011).

Safety is a very important and mandatory production function. Safety lapses are serious matters and the authorities concerned are harshly punished by the safety regulatory authorities for any acts of omission and commission. Unfortunately, in Bangladesh, state safety regulation and intervention are extremely poor. Like everything else, it is also relegated more to a routine than any prevention or inspection function - based only on the whims and desires of the factory owner. Over decades, no worthwhile safety audit has been seen, not even any kind of investigation or positive measures from the RMG factory owners or inspection authorities who are primarily responsible for safety in the work place (Ahmed & Hossain 2009).

Safe work is one of the fundamental rights of the workers. Occupational safety and health is an important component of decent work agenda. It means the condition of workplace where workers work is free from all kinds of hazards and risks. Safe work environment ensures safety and health for everyone at work preventing hazards and risks. Risk comes in many forms—repetitive tasks, long hours of work, exposure to harmful substances like gas and fumes, noise, insufficient lighting, damage to equipment, and psychological and physical oppression. It is estimated that globally around 160 million people are affected by avoidable occupational diseases and more than two million workers die from work related accidents each year. The suffering caused by such accidents and illnesses to workers and their families is incalculable. In economic terms, the ILO has estimated that 4 percent of the world's annual GDP is lost as a consequence of occupational diseases and accidents. Besides, employers face costly early retirements, loss of skilled staff, absenteeism, and high insurance premiums due to work-related accidents and diseases (Kwame, Kusi and Lawer 2014).

The physical and mental health status of garment workers affects labour productivity, competitiveness of the garment industry in the world market and the working life of the workers, particularly of female workers. It showed that various illnesses and diseases were widespread among the garment workers. A large number of workers were found to continue their work even they were suffering from various diseases and illness. Though the garment workers were very young, they suffered anemia, female diseases, dysentery, etc. Most of the health problems that the garment workers suffered from arose from the occupational hazards including long working hours, absence of leave facilities, congested and over-crowded working conditions, absence of health facilities and safety measures, absence of staff amenities, lack of safe drinking water etc (Majumder 2003).

ILO's has worked with the Government of Bangladesh to produce the country's first ever OSH Policy which clearly defines roles and responsibilities relating to OSH. The OSH profile is to present a complete picture of OSH in Bangladesh. The ILO/IFC *Better Work* programme is also operational in Bangladesh, and is currently helping improve working conditions and productivity in over 100 factories. As part of their tasks, Better Work advisors work with factories to help enhance awareness of safety among the management and workforce. The Accord and Alliance have both carried out major efforts to enhance worker awareness in areas such as fire safety. The amendment of the

Bangladesh Labour Act in 2013 introduced the need for Safety Committees to be established in any factory with over 50 workers. The main role of the Committees is to bring together management and workers to help create and maintain a safe workplace (ILO, 2016).

8.0 ANALYSIS AND INTERPRETATIONS

In the financial year 2016-2017 the RMG industry generated US\$28.14 billion, which was 80.7% of the total export earnings in exports and 12.36% of the GDP; the industry was also taking on green manufacturing practices (Wikipedia, 2017). The Daily Star (2016) reported that Country's garment sector employed 4.4 million workers, of whom 80 percent are women. This result suggests that the sector is one of the major labour intensive industries in the country. Here, accident like, Rana Plaza Collapse, Fire at Tazreen Fashion, Boiler Blast at Garments Factory etc., has incurred irretrievable cost both in terms of money and humanity. These accidents shocked the country and the international community. ILO has worked with the Government of Bangladesh to produce the country's first ever Occupational Health and Safety Policy (OSH) Policy. The IFC Better Workprogramme is also operational in Bangladesh, and is currently helping improve working conditions and productivity in over 100 factories. The Accord and Alliance have both carried out major efforts to enhance worker awareness in areas such as fire safety. The amendment of the Bangladesh Labour Act in 2013 has introduced a new chapter in the health and safety structure in the country. In this chapter the present status of the implication and operation will be presented.

8.1 Age Distribution of the Respondents

In the present study, the age of the Respondents was classified into four categories such as 20 years or less, 21-25 years, 26-30 years, and 30 years and above. The average age of the respondents is 26 years which ranging from a minimum 18 years to a maximum 54 age. The Table 5.1 present that age 8% of the sample is 20 years or less, about 28% of the sample is between 21-25 years' age group, 31% and 33% of the respondents possess 26-30 years and 31 years or above age group. The Figure 5.1 present the Age Distribution of the Respondents with a pie chart using the information of the Table.

Table 2: Age Distribution of the respondents

Age Group	No of Respondent	Percent
Below 20	3	8
21 – 25	11	28
26 – 30	12	31
31 & Above	13	33
Total	39	100

Mean Age (in years) = 26.64

Maximum Age (in years) = 54

Minimum Age (in years) = 18

Field Server, 2018

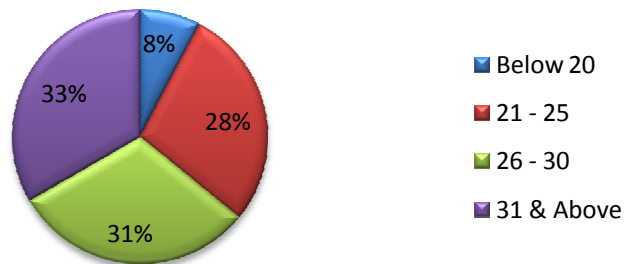


Figure 1 Age Distribution of the Respondents

8.2 Male - Female Ratio among the Respondents

Table 5.2 shows that out of 39 respondents 59% are female and rest of the 41% are male with a number of 23 and 16 respectively. Base on the information of the Table, Figure 5.2 presents the ratio.

Table 3: Male - Female ratio among the respondents

Categories	No of Respondent	Percent	Male - Female Ratio
Male	16	41	0.694915254
Female	23	59	
Total	39	100	

Field Survey, 2018

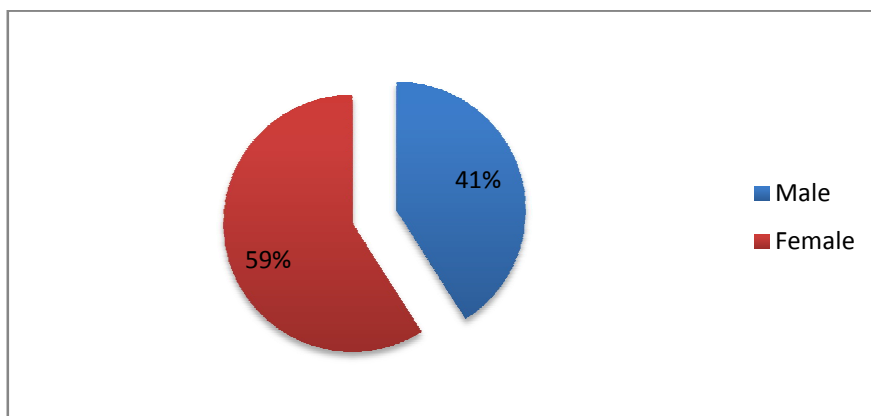
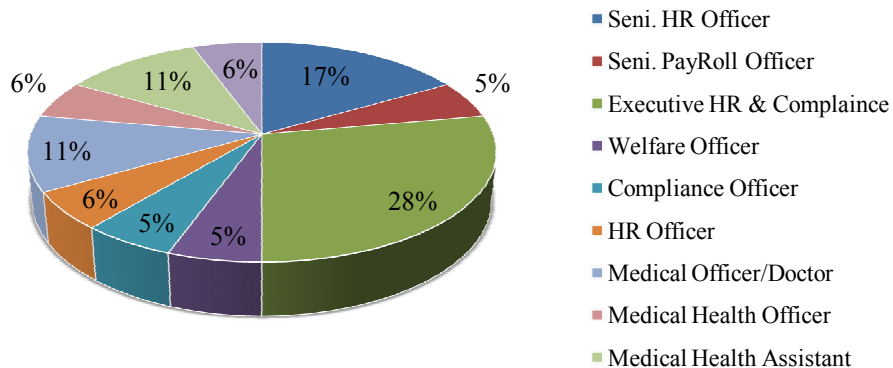


Figure 2: Male - Female Ratio among the Respondents



8.3 Management - Worker Ratio among the Respondents

The study being related to the domestic and international laws and regulations and the company's policy, the composition of the sample consists of both management level employees and factory workers.

Table 4: Management - worker ratio among the respondents

Respondent	No of Respondents	Percent
Management	17	43
Worker	22	57

Field Survey, 2018

Figure-3 Shares of management level respondent

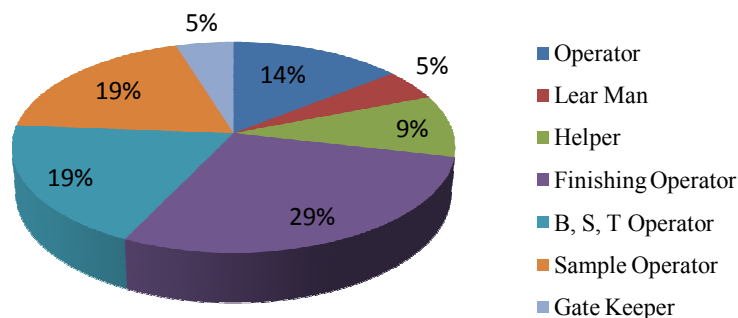


Figure 4: Shares of worker respondents

Among the 39 respondents, 57% was randomly picked from the workers of the factories and the rest of the respondents were employed at different managerial position from HR manager to nurse. The management team was asked particularly their company policies regarding the health and safety where the workers were asked to share their views regarding the health and safety environment of the factory.

8.4 Response regarding the Factory's Safety

It's evident from the Table 5.4 that majority of the respondent thought that factory's safety structure is safe. To note that 100% of the respondents shared that the build structure, dangerous machineries, electricity, access and exit, floors and stairs, necessary signs in Bengali, and lighting system were safe and adequate.

Table 5: Factory's safety perception

Area of Concern	Safe	Not Applicable	Vulnerable	Safety (%)
Building	39	0	0	100
Dangerous Machinery	39	0	0	100
Electricity	39	0	0	100
Hoist and Lifts	19	20	0	49
Access and Exit	39	0	0	100
Floors and Stairs	39	0	0	100
Entry and Exit in Red Bengali Sign	39	0	0	100
Fencing of Machinery	39	0	0	100
Sufficient Lightning	39	0	0	100
Other	27	12	0	69

Field Survey, 2018

8.5 Causes of Unhygienic Environment

From Table 5.5, it can be note that the one of the major cause of unhygienic environment at the factories is overcrowding. About 43% of the respondents shared that the felt uncomfortable due to overcrowded workplace, although they acknowledged that the authority has been trying to lead the workplace comfortable by proper management of dust and fume, pure drinking water, and disposal of waste.

Table 6: Causes of unhygienic environment

Area of Concern	Unhygienic	Not Applicable	Unhygienic (%)
Dust and Fume	0	39	0
Overcrowding	17	22	43
Lack of Drinking Water	0	39	0
Lack of Cleanliness	5	34	12
Lack of Latrines & Washrooms	0	39	0
Lack of Dustbin and Spittoon	13	26	33
Disposal of Waste and Effluents	7	32	17
Others	0	39	0

Field Survey, 2018

About 33% respondents also noted that sufficient amount of dustbin and spittoon and cleanliness of the factory will lead to a hygienic and safe workplace.

8.6 Major Diseases

The study exposes that among the major diseases headache, asthma, and fungal infection has 84%, 56%, 46% respectively. The other diseases are not found in general. Some minor injury including finger punch, needles are not common also.

Table 7: Major diseases at the workplace

Name of Diseases	Response	Percent
Needles	15	38
Finger Punch	13	33
Minor Injury	10	25
Headache	33	84
Fainting	19	48
Asthma	22	56
Diarrhea	14	35
Fungal Infection	18	46
Hepatitis	9	23
Others	5	12

Field Survey, 2018

8.7 Personal Safety Kits

The study shows that 100% of the respondent uses goggles, protective clothes, and mask where about 53% respondents use protective glasses, 89% gloves, and other protective kits are used by 30%.

Table 8: Personal safety kits used at factories

Personal Safety Kits	No of respondent using	Percent
Goggles	39	100
Glasses	21	53
Gloves	35	89
Earplugs	27	69
Boot	39	100
Protective Cloth	39	100
Mask	39	100
Others	12	30

Field Survey, 2018

8.8 Training Programs

It's also visible from the Table 5.6 that factory authority is now much more concern than ever before. The respondents noted that at least 20% of the workforce has got firefighting training. Among our respondent, 71% has got the training on first aid, 51% on managing dangerous machineries, 58% on health and hygiene, 62% on awareness of disease and accident, and 53% on others training.

Table 9: Training program available

Key Training Programs	Training Received	Percent
Fire	39	100
First Aid	28	71
Managing Dangerous Machineries	20	51
Health and Hygiene	23	58
Awareness of Disease and Accident	24	62
Others	21	53
Yet to Get	0	0

Field Survey, 2018

Surprisingly among our survey respondents, there is not a single respondent who didn't get at least a training program. The time gap between two training program usually range from two weeks to four weeks. The authority arranges a fire fighting demonstration at least once a month.

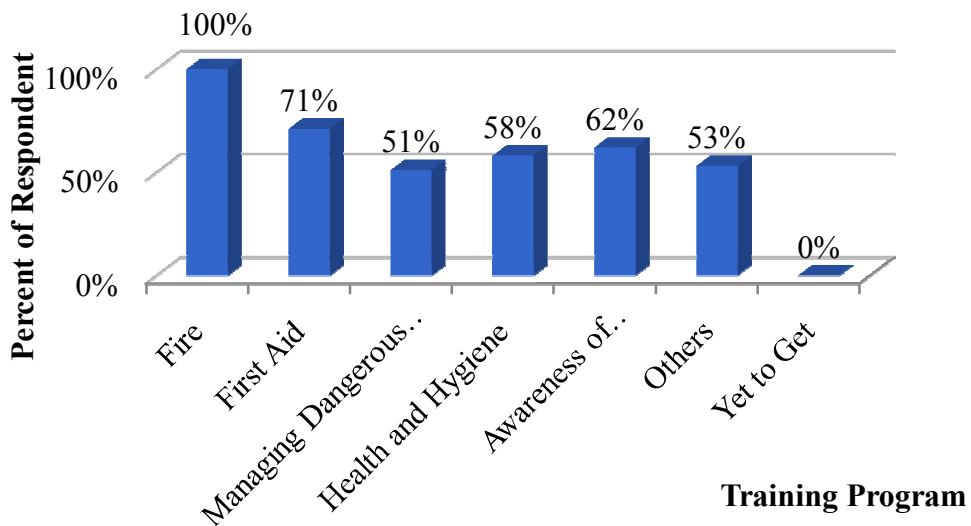


Figure 5: Training program available

9.0 FINDINGS

From the above analysis, it can be concluded that the health and safety structure of the sample organizations is quite good. The study was conducted at the participation of both male and female respondents whose responses indicate that they feel the factory building, dangerous machineries, assess and emergency exit are safe. Pure drinking water, separate latrines for male and female, free doctor facilities are also available. For the welfare of the workers the authority has appointed medical officers, safety officers, compliance officers. Sufficient numbers of personal safety kits are available in the factory. In all the sample organization the firefighting materials are 1.5 times than the standards. At least once a month, and usually twice a month they arrange firefighting demonstration. Among the diseases fungal infection, headache, asthma, fainting is common. The authority provides free doctor and medicine facilities for all. To sum up, overall health and safety condition is in very good condition at the sample factories.

9.0 LIMITATIONS

- I. Due to the limitation of time and fund for this study a sample of 39 respondents were surveyed which is insufficient for performing analysis and reaching a concrete conclusion.
- II. It's a general tendency of the management that factory visit, discussion with workers, and explore the internal health and safety structure, particularly academic one, are extra burden. Thus they try to avoid these. In case of factory visit request, it takes at least 2 to 3 weeks to receive a final confirmation from management, doesn't matter the response is positive or else. It lets the grass grow under the researcher's feet.
- III. Based on observation, it can be said that most of the group of company which has more than one garments factory or other accessory factory has some model factories which the parents company or sister concerns use as a model piece for satisfying the requirements of government, buyers, and domestic and international pressure groups. These model factories can trap the researcher toward erroneous conclusion
- IV. Multiple roles, private tutor, job applicant, family problems, can easily disturb the researcher. Disturbance can cross the tolerance when the researcher is a long distance commuter, don't have a personal computer, and don't have authority in 21st century skills. These disturbances may lead the researcher to miss the deadlines.

10.0 RECOMMENDATIONS

10.1 Recommendations for Policy Makers (Government, NGOs, Management, and other stakeholders)

Strategy 1 Focus on Each Factories Instead of Just Model Factories: The policy makers, if got the opportunity to investigate in each and every factory rather the chosen few by the management the actual picture will be reviled. Thereby subsequent measures and policies will be effective

Strategy 2 Strict Continuous Inspection: Government, in cooperation with domestic and international NGOs) has formed a bunch of laws and regulations. Right now, the policy makers should focus on execution on these at big, medium, and small factories. Regular inspection of the health and safety status will promote the structure. If any discrepancy is found, punishment system should be enforced.

Strategy 3 Reward System: People do tough works either due to afraid of punishment or to get rewards. Along with the punishment, the existing reward system should be executed in a much bigger scale. The reward system should be fair and justified irrespective of the size and location of the factories.

Strategy 4 Fund-on-easy-terms: The policy makers should make available source of funds on easy terms for at least medium time rang. This strategy will help the small and medium size factories to work on workers' safety and health.

Whatever strategy the Policy makers adopt, they should ensure continuous inspection, and keep looking for better ways to thrive in the changing ecosystem.

10.2 Recommendations for Further Research

Tactic 1 Top-Down Path for data collection: use the Top-Down Path which means from highest authority to factory level visit i.e. visit BGMEA, seek their support for factory visit then look for survey schedule at different garments factories.

Tactic 2 Consider Buffering hours: Things don't often go as per plan. When grasses will start to grow under your feet, keep doing the alternative works. Usually it takes 2 – 3 weeks for getting a confirmation message from the factories.

Tactic 3 Follow Reference: For further research follow the reference part. It will lead you to a barrage of information.

Tactic 4 Practice Work-Family Balance: Saying no is difficult. But for the sake of greater achievement, particularly during research period, Work Family Balance is very crucial.

11.0 CONCLUSIONS

In our economy, RMG industry is generating a smart amount of foreign exchanges through exporting garments, and other accessories and thus contributing to GDP. The people behind the success if remained unrecognized then time will come when this ever growing industry will fall against the competitive battle field. The company can only survive when it can meet the goals, the goals can only be achieved when the HR will perform. The HR will perform better when they are in sound health and feel that they belong to the organization. And they are safe in terms of factory, uncertain accidents, financially, and socially, so the authority should give utmost priority at workers' health and safety. There is no alternative of "Safety First".

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Journal of Business Studies

JBS-ISSN 2303-9884

Volume - 11, No. 2, pp.: 153-184

Wetland-based Tourism Development in Rural Bangladesh: Rhetoric or Reality?

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Abstract

Nature-based tourism destinations such as forests, sea beaches, hills, wetlands have become popular tourist places. Consequently, interest on nature-based tourism has grown substantially among the tourism researchers over the last three decades. However, research, particularly, on wetland tourism is surprisingly limited in developing country context. Thus, the aim of this is to investigate the prospects of wetland-based tourism in rural Bangladesh. Simultaneously, this study will attempt to find out the barriers that restrict the wetland tourism development along with possible remedies in rural Bangladesh. Based on case-study of the north-eastern region of Bangladesh in-depth interviews were conducted of different tourism related stakeholders along with tourists. Thematic analysis reveals that there is immense potential of nature-based tourism in the north-eastern region of Bangladesh. However, insufficient infrastructure, limited knowledge on wetland tourism of both visitors and tourism organizations, lack of support from government, illegal activities such as hunting and fishing have made wetland tourism development vulnerable. An integrated approach including government organizations, non government organizations (NGOs), tourism organizations, local communities should be undertaken in order to make wetland tourism popular in rural Bangladesh.

Key Words: *Wetland, Tourism, Rural, Bangladesh*

1.1 Introduction

Wetland tourism has generated a large amount of interest among the tourism academics and many international organizations (Sava 2010; Asciuto et al. 2012; Plummer and Fennell 2009; Higham and Vistad 2011; Goodwin and Roe 2011; Zeng et al. 2005; Gurung and Seeland 2009; Ezebilo and Mattsson 2009). As the main objective in this study is to exploring the prospects of wetland tourism development in rural areas of Bangladesh, it is necessary to define the meaning of ‘wetland tourism’. Wetland is a special ecosystem, which has great ecological, economic and social value. At the same

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time, wetland is also appropriate for ecotourism of its unique natural and cultural landscape (Hailun and Dong 2011). Under the International Convention on Wetlands (ICW) which is known as the Ramsar convention, wetlands are defined under articles 1.1 and 2.1 as:

...wetlands are areas of marsh, fen, peat land or water, where natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters. (Ramsar 2011: 3)

The Ramsar Convention on Wetlands divides wetlands into three main habitat categories: (1) marine/coastal wetlands such as beaches, estuaries, lagoons, mangroves and coral reefs; (2) inland wetlands such as lakes, rivers, peat land, marshes, streams, creeks and waterfalls; and (3) man-made wetlands such as rice fields, canals and ponds. Wetlands that have acquired special characteristics from being wet on a permanent or temporary basis and these include a large variety of highly productive habitat types including rivers, lakes, floodplains, shallow pans and marshes (Namibia's draft 2004). Kotios et al. (2009) argued that these are valuable ecosystems that occupy about 6% of the world's surface as well as provide numerous goods and services, not only to the local people living around them but also to communities living outside wetland areas. Moreover, wetlands can be the most productive of the world's ecosystems, providing services such as water, food, construction materials, transport, and coastline protection, as well as important opportunities for tourism and recreation, which are also defined as 'ecosystem services' (Ramsar 2011). Wetlands can be a significant part of the global tourism experience and are also likely to be a key part of the expansion in demand for tourism locations. People can naturally be attracted to water, to coastal wetlands such as coral reefs and beaches, and to inland wetlands such as lakes and rivers, reflecting the strong bond between people and nature as well as the unique aesthetic appeal of wetlands (Ramsar 2011).

1.2 Objectives of the Study

This study will attempt to explore the prospects of wetland-based tourism development in rural areas of Bangladesh. So, the main objective of this research is as follows:

The prospects and barriers of wetland tourism development in rural areas of Bangladesh

In order to explore the prospects of wetland tourism development in rural areas of Bangladesh, the research has the following specific objectives:

1. *To explore the prospects of wetland tourism development in rural areas of Bangladesh,*
2. *To investigate the barriers that restrict the wetland tourism development, and*

1.3 Research Questions

By considering the research problem and the objective of the research, the main question of this study is as follows:

What are the prospects and barriers of wetland tourism development in rural areas of Bangladesh?

To address the main research question, the study will focus on the prospects and barriers of wetland tourism development of the country. In this regard, the study will address the following research sub-questions in order to get the answer of the main research question:

1. *What are the prospects of wetland tourism development in rural areas of Bangladesh?*
2. *What are the barriers that restrict the wetland tourism development?*

1.4 Significance of the Research

The purpose of this study is to explore the prospects and barriers of wetland-based tourism development in rural areas of Bangladesh. This study will be an attempt to contribute to the existing literature through exploring the investigated phenomenon. In addition, the selected study site is located in rural areas, where traditional agriculture as well as fishing is the means of their livelihood; and most of them live under extreme poverty. However, the areas have tourism prospect for migratory birds, boating and a wide range of plants and trees. Thus, the research will be of substantial contribution from methodological view point.

However, the wetland-based tourism has potential as a means of generating revenue, creating employment and bringing economic development opportunities to peripheral communities (Hall and Boyd 2005). On the other hand, few factors can prevent localities of the wetland area for getting benefits from wetland tourism (Goodwin and Roe 2011). In this context, wetland development and management systems can systemically be developed to support and sustain wetland tourism and conservation interests (Higham and Vistad 2011). From that point of view, this study will contribute to the prospects of wetland-based tourism development in rural areas of Bangladesh. Moreover, findings of the study will be of immense importance to the planners, government, NGOs and international aid agencies in order to implement the plan regarding tourism development.

2.1 Literature Review

Wafa (2012) argued that wetlands are important these are rich in biodiversity along with helping to attain the millennium goals, and preserving diversity, abundance of species, and water birds. These have some direct impacts. These include providing agricultural products, energy and shelter, supply of firewood, transport, fishing and aquaculture, sources of pharmaceutical products, water supply, and recreational facilities (Wafa 2012). Wafa (2012) also stated that simultaneously these have some indirect values including benefits to local communities, scope for income generation, sources of wide range of touristic products, helps to develop a local independent economy, creating employment opportunity, helps to preserving social tradition, and the opportunity of ecotourism and cultural tourism. However, the wetland ecosystem is still instable, vulnerable and sensitive to some degree; so, in order to achieve sustainable development of wetland ecotourism, establishing its proper management system is relatively very important (Higham and Vistad 2011; Hailun and Dong 2011).

According to the Ramsar Convention on Wetlands (Ramsar 2011) tourism in wetlands offers many positive opportunities (opportunities can be economic benefits to national and local economies, support for local livelihoods and local cultures, and, importantly, support for wetland conservation, too) at the national, regional and local levels but also many challenges (such as the impacts on wetlands from the development and operation of tourism facilities include degradation of wetland areas for extraction of building materials, infrastructures over-abstraction of water, inappropriate waste disposal, and so on, as well as the direct impact of tourists on wetland ecosystems through noise pollution, excessive trampling, disturbance of wild species, among) as well. However, the above mentioned issues can be verified in the context of Bangladesh.

Majule and Karonga (2009) viewed that lands can become scarce for increasing the agricultural production as well as the existence of various affluent people in rural wetland areas can lead communities to own land in different terms of sizes. As a consequence, the natural wetland can become small. Moreover, various benefits accumulating from forests including fire wood, timber, building materials, conventional medicine and collection of honey, food products and hunting animals (Majule and Karonga 2009). However, there is an enormous effect of practices and innovations in the conservation of wetland forest biodiversity may vary country to country.

Sava (2010) argued that all wetland areas can be outstanding tourist resources these add value at the national as well as international level and he also viewed that, commonly tourism activities depend on environment; and the protected wetlands can make a contribution to sustainable wetland tourism development. Without damaging the environment, the sustainable development of tourism in the wetland areas can meet the needs of tourists and increase the quality of life of encircled people. However, over the time, environment is polluted severely and human activities are solely responsible for pollution such as physical, chemical, cultural, moral and so on.

Ping and Bao-zhong (2003) stated that wetlands are a fragile ecosystem with low resistance to the impact of the misuse. Expansion of the farming land, wetland can get smaller. Dams and living place can absorb much area of wetlands, which can destroy, disturb, and change the nature of wetlands. They pointed that it is necessary to return the occupied land to the water base. At this point, water base landscape restoration engineering program can be established. They also viewed that, in order to maintain, restore and increase the diversity of the wetland landscape, a series of combined activities such as construction inside and outside of the wetland, the rebuilding and utilization, the engineering and administration, the science techniques and ecological engineering can be done.

However, Okello and Kiringe (2004) pointed that these are closely connected to the overall problem of human population increase and associated activities. The poor rural communities, lead to expansion of agriculture, even in marginal areas, to meet basic needs. Migration corridors and dispersal areas continue to diminish. In the process, wildlife habitats and biodiversity in general are also damaged. They argued that this partly impulsive more human–wildlife clash reinforces negative attitudes to wildlife and

conservation of natural resources among local communities. It is provoking to local communities wildlife induced losses can never be compensated. To deal with wildlife-related problems, they may harass wildlife through displacement and illegal killing (Okello and Kiringe 2004).

Hjalager and Johansen (2012) stated that the international research literature recommends that protected wetland administrations can incline to neglect the role of food and food-based experiences in wetlands although wetland's visitors preferring more attractive eating facilities, purchasing opportunities and food-related understanding. It was viewed that to measure the attitude of farmer, three factors can be considered such as a need for increasing diversity in agricultural production, land cultivation and nature conservation, which can be better coordinated and more cultivating areas ought to decline to nature (Hjalager and Johansen 2012). However, shortage of water in dry season, lack of education, managerial efficiency and controlling system, and free access in wetlands for livelihood etc. are creating challenges for the development of wetland tourism.

Conversely, there is an immense value of wetland to the tourism industry, conservation agencies as well as other stakeholders (Wegner et al. 2010). Wegner et al. (2010) viewed that the stakeholders can be encouraged to enter into partnerships to meet the challenge the limited resources and the complexity and uncertainty of the wetland especially tourism planning context. It was also observed that their capability to work together effectively can influence the quality of the tourist experience, the level of satisfaction of visitors, and the protection of the natural resource base on which the industry depends (Wegner et al. 2010).

Wetlands can face intractable challenges for sustainable tourism. During the past quarter century multi-stakeholder conflicts, complexity and uncertainty have come into view and persisted as an important issues requiring managerial replies (Plummer and Fennell 2009). Plummer and Fennell (2009) viewed that these matters reveal substantial paradigmatic shifts in pursuing and understanding sustainability. Governance expresses interest to cooperative management approaches that can be participatory, interactive and oriented towards 'sharing power' (Plummer and Fennell 2009).

2.2 Theoretical Framework

Researchers have acknowledged the role of stakeholders for wetland tourism development in many ways (see Sava 2010; Asciuto et al. 2012; Jamal and Stronza 2009; Goodwin and Roe 2011; Zeng et al. 2005; Ezebilo and Mattsson 2009). On the other hand, the role of government organizations and international aid agencies are particularly important for the rural poor people to be treated as stakeholders in tourism development programs (Sirakaya, Teye, and Sönmez 2002). However, rural poor people are not benefited from tourism development programs undertaken by the government and international aid agencies (Sirakaya, Teye, and Sönmez 2002).

However, many stakeholders are involved in the wetland tourism development process. Their concern is a vital issue to making the wetland-based tourism development. So, this study has used the Mitchell's (1997) Stakeholder Identification Theory to exploring the prospects of wetland tourism development in rural areas of Bangladesh.

3.1 Research Methodology

There are various theoretical paradigms including positivism, an interpretive social science approach, a critical theory orientation, feminist perspectives, a postmodern approach, and chaos theory orientation (Jennings 2001). Jennings (2001) viewed that each of the paradigms has its own implications in tourism research; and being a tourism researcher, it is required to understand the basic tenets of these paradigms. From this point of view, the subjective case study has been used in this study.

3.1.1 Sample Unit, technique and Size and Sources of Data

Literature of the research indicates that various stakeholders of wetland tourism such as the governments, NGOs, tourism related small and micro enterprises as well as the local people (fishermen, farmers) whose livelihood depends on wetland are crucial. It is assumed that the aforesaid stakeholders are capable enough of better addressing the possible drawbacks for the poor to involve in wetland tourism related enterprises along with the necessary remedies.

In this study, snowball sampling technique has been used in order to reach the informative respondents. A specific question was asked to the interviewees: *'Would you please mention name of any person or organization who can provide information on this research?'* This helped the researcher to find clue of other participants for in-depth interview.

Several techniques were used in collecting empirical data by conducting case study research (Denzin and Lincoln 2003b; Silverman 2004). These include (a) interviews (b) questionnaires (c) archival records (d) direct observation (e) participant observation (f) documentation (g) physical artifacts, and (h) focus groups (Patton 2002; Yin 1994). However, no single source has an absolute superiority over others (Denzin and Lincoln 2003a). Rather, they are complementary to each other (Denzin and Lincoln 2003a). In this research, the **in-depth interview** techniques data have been used.

3.1.2 Conducting the Pre-test

At the very beginning of the interview, five in-depth interviews were conducted for the pre-test. The demographics of interview participant's are shown in Table: 2.1.

Stakeholders	Respondents	Number
FRUG	Project's official	1
Organizing Secretary of the RMO	Fisherman	1
Member of the RMO and Ex President	Farmer	1
Member of FRUG	Business man	1
Member of the RMO	Groceries	1
Total		5

Table2.1: Demographics Information of Pre-test Respondents

4.1 Qualitative Data Analysis

Data analysis is considered as a careful course of action of organizing, categorizing and interpreting the collected data meaningfully (Creswell 2003). Every investigation should

have a general analytical strategy to guide the decision regarding what will be analyzed and for what reason (Yin 1994). Thematic analysis was conducted for theme development from the in-depth interview.

Two methods can be used for preparing and instructing the data such as manual methods and computer-based methods. However, Ibrahim (2012) argued that NVivo software can be useful tool to analyze qualitative data. As a consequence of this research design, descriptive or within-case analysis technique was used for data analysis. Due to the non-availability of NVivo software, manual method has been used for catering data analysis from the in-depth interviews.

The thematic analysis has been used for interpreting the data. Ibrahim (2012) stated that the thematic analysis can be appropriate for the data interpretation, deductive and inductive approaches, analysis two different phased of data, and coding and categorizing. The digital voice recorder was used for in-depth interview and the researcher was very mush cautious of translating interviewing data from Bengali to English in terms of validity and reliability.

4.2 Main Themes and Sub-themes

Themes and sub-themes were developed from the coded data in correspondence with research questions.

Table1.1: Codes Applied to Extract Responses from Interviews

Data originated	Code
<i>While talking with the visitors, people will come to know about natural resources of Baikka Beel. They will become amazed at seeing the natural resources such as migratory birds, fishes and swamp forest.</i> (Interview no. 1, field data, 10.02.2014)	Prospects for wetland-based tourism development
<i>Various charitable organizations work and they want to work with here, but there is a question of materialization of their support in field level. The govt. also has some desire to do developmental work here. But for some upper and lower level officers (bureaucracy) the files don't move rightly. Files are stopped in different offices.</i> (Interview no. 9, field data, 10.02.2014)	Barriers to Wetland-Based Tourism Development.

4.2.1 Prospects for Wetland-Based Tourism Development:

Table1.2: Main Theme and Sub-themes of the Prospects for Wetland-Based Tourism Development

Main theme	Sub-themes of in-depth interview and FGD.
Prospects for wetland-based tourism development	<ul style="list-style-type: none"> • Growing attraction of tourists • Memorable experience • Available natural resources • Boating facility • Demand on local products. • Variation in natural beauty of wetland. • Conservation of natural resources: <ul style="list-style-type: none"> - Safe zone for fish. - Safe zone for migratory birds - Biodiversity and eco-system

4.2.2 Barriers to Wetland-Based Tourism Development:

Table1.3: Main Theme and Sub-themes of the Barriers to Wetland-Based Tourism Development

Main theme	Sub-themes of in-depth interview and FGD.
Barriers to Wetland-Based Tourism Development.	<ul style="list-style-type: none"> • Limited instrument for watching birds and natural beauty • Decreasing open water areas and reducing of water in dry season • Insufficient infrastructural support: Road communication, Washroom and Rest house, Lack of Resort, Hospital or health care center, Non-availability of electricity, cyclone center, watch tower, information center, Lack of Eco-cottage, Limited refreshment facilities for the tourists • Absence of educational institutions • Unplanned tourism development • Lack of coordination and integration among various stakeholders • Irresponsible behavior of tourists: Sound pollution, Air pollution, Soil pollution • Destroying wetland resources: Illegal catching fish, Illegal hunting birds, Illegal tree felling • Exposure of wetland • Information for the tourists • Deforestation • Insufficient financial support for alternative income generation (AIG)

5. Research Findings and discussion

5.1 Prospects for Wetland-Based Tourism Development

There is immense prospect for wetland-based tourism development in the study site. From the information collected through in-depth interviews it is documented that a wide range of favorable factors (See Table 1.2) presented there can help to develop wetland-based tourism. These include growing attraction of tourists, memorable experience, availability of natural resources, variation in natural beauty, scope of stopping indiscriminate catching fish and hunting birds by imposing more sanctuary on wetlands, and possibility for developing a safe zone for fish, birds and biodiversity etc.

5.1.1 Growing Attraction of Tourists

Green wetland is a unique tourism spot that keeps interests and inspires tourists such as green lovers, eco-explorers and wild-life watchers. Every year, increasing number of tourists come to visit wetlands from various corners of the world. They become amazed to see the natural resources such as fish, migratory birds, trees, water plants etc.; and they share their views with others like family members, relatives, friends, coworkers and peer groups after returning home. According to one of the respondents:

Every year lots of people from abroad and different parts of the country come to visit the wetland. I have been watching to come so many people this since the time I could think.

Interview No. 4, Personal Communication, 29.01.2014

The wetlands include a wide variety of changing ecosystems such as mangrove forest, natural lakes, freshwater marshes, reservoirs, oxbow lakes, haors and beels, fish ponds and tanks estuarine waters, and extensive seasonally swamped floodplains in Bangladesh which have made the country one of the world's most significant wetlands and habitats to hundreds of species of fish, plants, birds and other wildlife (Thompson 2008). These wetlands hold over 260 fish species (Rahman 2005) and hundreds of thousands of migratory birds (BirdLife International 2004). The wetland-based tourism destination can become an original product due to its natural environment and the original cultural life (Silva and Elena 2008). A wetland can be an attractive tourist destination with a varied potential, favorable climate to tourism practice, fauna and flora potential, natural beauty treatment factors, rich cultural, historical and architectural heritage (Burca et al. 2012). Wetlands, sea beaches, parks, hills, streams and indigenous people can be the substantial tourists' destinations in rural Bangladesh (Islam and Carlsen 2012).

5.1.2 Memorable Experience

Wetland-based tourism has vast potentiality for providing good memory in the visitor's mind. This area is enriched with various species of water plants including aquatic flora and fauna, fish, migratory birds, and other wild-life. In this regard, tourists are interested to buy some products such as t-shirt, souvenir with the picture of the wetlands and birds etc. which will keep a symbol of their memory regarding their visit to an important place like wetlands. According to one of the respondents:

The visitors feel interested to buy t-shirts and souvenirs with the picture of the wetland and birds. The visitors want to take them as a symbol of their memory. The wetland will get publicity in this way. After going back home, they will show these things to their family members and after that they also want to visit here.

Interview No. 1, Personal Communication, 28.01.2014.

All wetlands can be outstanding tourist resources because they are valuable at the national as well as international level (Sava 2010). Moreover, wetlands and other protected areas of the world are becoming favourite destinations for the tourists who seek contact with nature as well as these areas are providing satisfaction to the visitors through its natural landscapes and objectives, cultural and wildlife (Merce et al. 2012).

5.1.3 Available Natural Resources

According to the research participants, various natural resources are available in the study site like migratory birds, water vegetation, fish, fish-eater tiger and lot of water-bodies which draw the attraction of tourists. People come to visit wetlands to watch these natural resources. Many more tourists come to visit the study site to watch migratory birds and fish during dry season. However, the research participants viewed that, tourists not only come to the wetlands in dry season to enjoy its natural beauty like fish and migratory birds but also they visit wetlands in rainy season to see its water plants, trees etc. One of the participants added that huge amount of migratory birds come to this wetland and visitors enjoy them when they are in the water as well as fly in the sky. Especially it looks very stunning when a flock of birds are seen flying in the sky.

...during the time of winter, near about 1500 people come to see fish, birds and fish eater tigers...

Interview No. 11, Personal Communication, 05.03.2014

Indigenous species of fish such as *Ompok bimaculatus*, *Puntius sarana*, *Nandus nandus*, *Labeo gonius* and *Chitala chitala*, which were verse of extinction before the sanctuary, are now common in few wetlands (Haque 2013). However, wetlands of Bangladesh hold over 260 fish species (Rahman 2005) and more than 40% are now threatened with natural extinction (IUCN Bangladesh 2000). The species in wetlands can attract more tourists towards tourism sites (Uddahammar and Ghosh 2009). However, endangered indigenous fish is one of the important resources of the wetlands as well as attractive phenomenon to the tourists.

5.1.4 Boating Facility

To ensure boating facilities is one of the important aspects of wetland-based tourism development in rural areas. Visitors have an interest to enjoy boating while visiting wetlands. They come to visit wetlands for enjoying natural resources and to take opportunity of boating if possible. Visitors want to go nearer of the birds with boats to see in necked eye. Boating is not allowed for the tourists inside the study site round the year. It is open for the tourists when water is sufficient in the wetland especially rainy season. According to one of the respondents:

The visitors eagerly want to visit by boat. But all time it is not permitted. Generally from October to mid of January, it is permitted to have a boat journey. The visitors want to go very near to the birds and want to feel the happiness.

Interview No. 1, Personal Communication, 28.01.2014.

In wetlands, the arrangement can be made for guided boat trips for the visitors along with information boards and video can be shown on TV (Thompson 2008).

5.1.5 Demand on Local Products

Tourists come from different corners of Bangladesh as well as from abroad. They have a desire for purchasing local products. The local products such as bottle gourd, chilly, vegetables, poultry etc. are fresh, original and hygienic. These products have huge demand for the tourists; and they are ready to pay higher price for them. According to one of the participants:

They want to buy vegetables from us. For example, bottle gourd, chilly etc. even they buy things by giving more money than the expected one. The local cock/hen has more demand. Many tourists buy them.

Interview No. 2, Personal Communication, 29.01.2014

Markwick (2001) viewed that locally produced handicrafts are important for specialist markets such as the tourists. The tourists become happy to purchase local crafts as souvenirs and at the same time, crafts are considered as an income generation opportunity for the local community (Mustafa 2011).

5.1.6 Variation in Natural Beauty

Though birds always stay in the wetlands but there is a variation of natural beauty of wetlands at different time of the day. These have a daylong variation which has an especial attraction to the true nature lover. The beauty of nature of wetlands takes different shapes in the morning as well as in the evening. According to one of the interviewees:

The birds are always there in the wetland at day time. But they look more beautiful in the morning. Again they look beautiful in the evening in a different way.

Interview No.5, Personal Communication, 01.02.2014

Marques et al. (2010) pointed that the tourists have a domestic demand to have contact with nature with specific interests and motivations

5.1.7 Preserving Natural Resources

Wetlands are full with natural resources such as water plants including flora and fauna, fish, migratory birds and other wildlife. However, these are threatened with conversion, intensification and over exploitation. From that viewpoint, one of the significant

prospects of wetland-based tourism development is to preserve its natural resources. Human development and biodiversity are the two key concerns as well as conflicting objectives for the development of the wetland-based tourism in developing countries (Uddahammar and Ghosh 2009). Moreover, biodiversity conservation and protecting endangered species are included within the ecological dimension of wetlands (Higham and Vistad 2011).

In this regard, development of wetland-based tourism can enhance to impose sanctuary for preserving its valuable resources such as fish, migratory birds and biodiversity.

5.1.8 Safe zone for fish

A safe zone for fish and birds can be created through sanctuary. Natural resources like migratory birds, native fish, and water body can be preserved by imposing sanctuary on wetlands which are the attractive phenomenon to the tourists. Local poor people whose livelihood depends on wetlands will restrain themselves from catching fish and hunting birds at random. Extinct fish may increase and more birds may come due to sanctuary. So the lost natural resources may be regained in the wetlands. One of the interviewee stated that:

Catching fish and hunting birds indiscriminately have been stopped due to sanctuary. As a result, the production of fish has increased than before. Fish were almost getting extinct. Now more birds are here, the number of bigger fish has increased, olden fish has come back. It is amazing to see big fish. The beauty of the wetland has also increased.

Interview No.5, Personal Communication, 01.02.2014

5.1.9 Safe zone for migratory birds

Migratory birds did not come here in a large number in the past. Illegal bird hunter's hunted birds and local people caught fish carelessly. After the declaration of sanctuary, it has been strictly restricted. It is only possible for the formation of an organization with different types of people. The organization has taken various steps for protecting hunting birds. According to one of the interviewee:

...the migratory birds merely stopped to come here. But after the declaration of sanctuary, the hunting of birds is prohibited. An organization was made including local people, local political leaders, TNO and fisheries officer in local Thana. That organization has taken initiatives to protect the birds and native species of fish of this wetland so that the birds and fish cannot be carelessly hunted and caught.

Interview No.4, Personal Communication, 31.01.2014

However, local government has developed watch-tower inside the study site for the visitors who are interested to have a close eye for the migratory birds as well as natural beauty. Now more number of tourists visits this wetland than the past. Free access of local people to these areas is also being restricted. This wetland has become a safe place for migratory birds. According to one of the interviewees:

We thank the local govt. for building a watch tower and sanctuary for the fish in this wetland. For this a good number of visitors visit this place. Because of being sanctuary for the fish, automatically it has turned into a sanctuary for the birds too. Peoples' access has been restricted in this specific area and as a result, in this wetland the birds can live safely.

Interview No.6, Personal Communication, 03.03.2014

5.1.10 Biodiversity and eco-system

Preserving biodiversity and eco-system through tourism development is one of the significant prospects of wetland-based tourism development. According to one of the in-depth interview, sanctuary is essential not only from the natural view point but also required for preserving the biodiversity of the wetland. Rural people are involved in various destructive activities inside the wetland, which hamper not only fish production and birds' movement but also the population of others aquatic plants like flora and fauna along with the disappearance of water fowl due to habitat degradation. Eco-system and biodiversity is severely affected and the beauty of the wetland is distorted. In this regard, wetland-based tourism development can expedite imposing sanctuaries on wetlands for preserving its valuable natural resources.

Not only from the natural view point but also from biological view point, this wetland should be preserved. Not only birds but also mother-fish should be saved in order to increase the supply of fish.

Interview No.5, Personal Communication, 01.02.2014

However, preserving biodiversity and eco-system through tourism development is another significant prospect of the wetland-based tourism development. Sanctuary is essential not only from the natural view point but also it is required for preserving the biodiversity of the wetland since the livelihood of the poor people of the surrounded areas depends on wetland resources (Uddahammar and Ghosh 2009).

6. Barriers for Wetland-Based Tourism Development

There is lot of barriers to the development of wetland-based tourism in the study site. From the information collected through in-depth interviews it is documented that there are a wide range of barriers to the wetland-based tourism development (See Table 1.3). These barriers have been discussed below along with the themes and sub-themes that have emerged from the in-depth interviews:

6.1 Limited instruments for watching birds and natural beauty

Limited instrument for watching birds natural beauty is one of the significant barriers to the wetland-based tourism development. According to one of the interviewees, a large number of visitors come to visit wetland. They want to get pleasure from natural beauty of the wetlands especially from migratory birds and large fish. They have a desire to see all these for a long while in close settings. There are shortcomings of instruments to watch birds and fish. Visitors have to wait for getting space to watch; and limited time is allocated for them to see natural beauty.

The number of the visitors is huge but there is only one binocular. The visitors can watch birds for long time if there are some more binoculars. To see the birds in a very short time, it cannot satisfy the mind.

Interview No.1, Personal Communication, 28.01.2014

Insufficient infrastructure is the reason of economic and social exclusion that pressurize the rural people to remain under extreme poverty (Barnes 2005).

One of the respondents added that there is deficient of powerful telescope. Sometimes birds stay at a long distance from the watch-tower. It is not possible to see them close. If powerful telescope is available, it will be easier for the tourists to see long distanced birds and mother fish along with its species with the help of powerful telescope.

If there will be any powerful telescope, they watch long distained birds to their nearby. Even there is a chance to see the mother fish with its species in the water.

Interview No.4, Personal Communication, 31.01.2014

Without damaging the environment, the sustainable development of tourism in the wetland areas can meet the needs of the tourists and increase the quality of life of encircled people (Sava 2010).

6.2 Decreasing open water areas and reducing of water in dry season

Enough open water area is essential for wetland-based tourism development. Open water areas of the wetlands are gradually reduced. The people acquire land from the government in an illegal way. They perform unplanned developmental activities inside the wetland areas. More open water areas are required for free movement of mother fish as well as breeding. However, fish and birds do not get enough space to move around. Plenty of mother fish die in every year. The abundance of fish reduces. The number of visitors and the popularity of the wetlands are on the wane. According to one of the interviewees:

...because of acquiring the lands, the open watery area reduces. So the amount of fish is decreased, the same thing happens to the birds too. As a result, the numbers of the visitors are reduced. It is a great loss for these areas.

Interview No. 21, Personal Communication, 07.03.2014

Sufficient water is required for developing wetland-based tourism. Wetlands are becoming filled. There is a shortage of water in all the seasons especially in dry season. Water in even the deeper parts of the wetlands becomes shallow. Visitors do not have enough opportunity to enjoy boating facility inside the wetland. According to one of the interviewees:

This wetland is gradually filled. In dry season, more than two or three people cannot ride on boat. Due to the shortage of water, the boat cannot be driven.... In the mid of February the depth of water is very low and it is not more than 1.5 feet to 2.5 feet all around the wetland.

Interview No.1, Personal Communication, 28.01.2014.

In addition, one of the research participants viewed that certain level of water height is necessary in the wetland for large parent fish for their movement as well as breeding. In the dry season, there is a scarcity of water inside the wetland. Mother fish die in the dry season due to insufficient water flow. As a consequence, fish production in rainy season becomes shorten fall is result.

Due to insufficient water, large amounts of fish are decayed. The big fish will never spread in all over the wetland areas in the dry season...

Interview No.7, Personal Communication, 03.03.2014

Future threats of water supply of wetland can affect biodiversity influencing the value of wetlands (Mladenov et. al. 2007).

6.3 Insufficient Infrastructural Support

Infrastructural support is necessary for developing wetland-based tourism. Insufficient infrastructure is one of the important barriers to wetland-based tourism development in rural areas. There is deficiency of infrastructure in the study site. The infrastructure includes road communication, washroom, rest house or resort, hospital or health care center, electricity, cyclone center, watch tower, information center, eco-cottage etc.

6.3.1 Road communication

Insufficient road communication is one of the significant barriers to wetland-based tourism development in rural areas of Bangladesh. In Bangladesh, rail communication has become one of the most common modes of transportation. However, rail network has not been connected to all the districts and upozilas of the country. Road communication has been developed in the major divisions of the country under the projects of World Bank. Many roads in the district and upozila level are impoverished and narrow. According to research participants, all roads are underdeveloped inside the study site. Tourists come from a long distance to visit wetlands. Visitors come with their vehicle to enjoy the natural beauty like migratory birds and fish. To come here visitors become tired but by watching birds and fish they become satisfied. They also want to take breath of fresh air from the wetlands. One of the research participants viewed that people come to visit wetlands for keeping their mind happy by watching migratory birds. Though they face obstacles to come here due to the rough condition of the road, they become satisfied when they see the natural beauty. Other participants added that road communication system of this area is developing gradually. Few new roads are under construction. Generally, wetland areas are low lying regions. Most of the time of the year roads remains under water. So the communication system in

these areas is very bad. Some roads have been developed in recent year for the tourists. Now a days, a large number of tourists come here to visit this wetland to enjoy the natural beauty. The local people those who live around this wetland also face big problem to move from one place to another in rainy season. One of the research participants viewed that the condition of these roads is such terrible that the vehicles that tourists use to come here get damaged. When the tourists come to know about the bad condition of the roads, they do not feel interested to come here again to pay a visit of wetlands.

...Tourists say, "They feel very pleasant when they see birds and fish. They like open air, they come here with their vehicles." Tourists also say, "The roads are bad. If they are good, it will be better..."

Interview No.2, Personal Communication, 29.01.2014

Some roads are improvised and some new roads are being built. So the communication system is gradually developing. Because, we are the low lying region people, and our communication system is very poor.

Interview No. 4, Personal Communication, 31.01.2014

....the roads are under developed; A few years ago, there was no road inside the wetland...A large number of tourists are coming..... But the condition of those roads is not good.....It is hard for us to move around the wetland areas in the rainy season....

Interview No. 6, Personal Communication, 03.03.2014

In this regard, Goodwin and Roe (2011) opined that improved infrastructure can induce tourism development in rural areas that in turn can create opportunities for the rural people.

6.3.2 Washroom and Rest house

Tourists come from a long distance. Most of them come from outside adjacent town of the study site. It is necessary for them to get energy after a long journey. So washroom facilities are to be required for them. They want to have rest for a while before starting to watch natural scenarios in the wetlands. It is to be noted that there are a few hotels, restaurants, guest houses and resorts in Bangladesh; and most of these are city based. In this regard, the rest houses adjacent to the wetlands can serve the purpose of tourists. However, more rest houses may affect the natural beauty of this wetland. According to one of the interviewees:

There is no sufficient toilet/washroom facility. The visitors also talk about the rest house, but it can harm the natural beauty of here.

Interview No. 1, Personal Communication, 28.01.2014

One of the participants added that large numbers of domestic as well as foreign tourists come to visit the study site. More wash room facilities are to be required for them. Tourists expect to have more rest houses for getting refreshed. They want to stay over there at night. The

beauty of nature can be enjoyed differently at night. The tourists have a desire to enjoy it. However, wetlands may lose its natural flavor due to the establishment of more rest houses.

There is no rest house for the tourists. There must be a better rest house for the foreigner, so that they can stay. It is better to build the rest house beside the watch tower. People will stay and watch birds from there.

Interview No. 4, Personal Communication, 31.01.2014

According to McCool (2009) Operators, lodging, restaurants, services, guides, destination marketing organizations, communities, local residents and stewardship agencies can be “Players” in the wetland tourism industry; all of them often facilitate, and in some cases provide opportunities for visitors to experience the heritage values. The tourists anticipate having more rest houses for getting refreshed as well as want to stay over there at night. Improved infrastructure can induce the tourism development in the rural areas (Ashley, Roe and Goodwin 2001).

6.3.3 Lack of Resort

Lack of resort adjacent to the wetlands is one of the important barriers to wetland-based tourism development. One of the research participants viewed that sometimes group of visitors come to visit study site. They want to enjoy natural beauty together. However, there is no resort over here at study site. Tourists stay far away from wetland at night. Every day, they have to travel 50 kms, which is woeful for them. As a result, they do not get enough time in their hand to stay more inside the wetland, which makes them unhappy. On the other hand, as the condition of roads is not so good, they have an extra pressure to return town within evening. In this regard, a resort is inevitable which will provide benefit both the visitors and the local poor people because local poor people will get access to various jobs in the resort. Once a resort is built, other investors will be interested for the development of this area.

A resort is necessary. The visitors stay in Srimongal town which is 25 km away from Baikka beel. They have to travel 50 kms in a day. As a result, they do not get ample time to move inside the beel. So they remain unsatisfied. Because before evening they have to return to Srimongal. Moreover, they don't want to start their journey in the early dawn as the roads are not too good. So if some resorts are be built here, the visitors will be benefited as well the local people will get employment opportunity. If a resort center is built over here, other organizations will start to come here to be the development partner.

Interview No. 6, Personal Communication, 03.03.2014

Ashley, Roe and Goodwin (2001) argued that the tourists anticipate having more resorts for getting refreshed as well as want to stay over there at night. Improved infrastructure can induce the tourism development in the rural areas

6.3.4 Hospital or health care center

Lack of medical services is one of the barriers to wetland-based tourism development. Medical services are not always available for the citizen of Bangladesh especially rural

people. Most of the wetland-based tourist sites are situated in rural and remote areas of Bangladesh. There are no hospital and clinic inside the study site. In Bangladesh, the government has been trying to extend health service in the rural areas through the concerned departments. NGOs and other development partners have undertaken few projects on health in the rural areas, which are not sufficient. These organizations do not have enough manpower as well as funds to extend their services to the remote areas of Bangladesh. So health services are out of reach of the rural people of the wetlands. They are poor, illiterate as well as are deprived of various facilities including health service. For getting medical treatment, they need to move to another place. Medical services are also required for the visitors. They may suffer a lot in case of any emergency treatment. According to one of the participants of in-depth interview:

In this area there is no opportunity of medical service. For treatment they have to go to another place.

Interview No. 22, Personal Communication, 07.03.2014

6.3.5 Non-availability of electricity, cyclone center, watch tower, information center

Lacks of electricity, cyclone center, watch tower, information center are the significant obstacles to the development of wetland-based tourism. Electricity is not available in the rural and remote areas of Bangladesh. Rural people of the study site do not have supply of electricity, so the tourism development activities are being hindered. One of the research participants viewed that local people do their households and other activities by insufficient solar energy instead of electricity. Electricity is more convenient than solar panel. Solar panel is also costly. However, it is possible to manage solar energy by installments. Most of the local people use solar panel instead of kerosene*. Still there is a huge demand of solar panel. It is also a troublesome matter for the people of the wetland areas to perform household activities without electricity.

There is no supply of electricity in wetland..... If we got direct electricity, it would be more convenient.....It saves more than kerosene. Now almost every house has a solar panel. It still has much demand....sometimes we can watch news in a black and white television. We charge our mobile phones....But charging those phones is troublesome.

Interview No. 5, Personal Communication, 01.02.2014

Moreover, the study site is low land as well as natural disaster affected area. Storms and rain affect local poor people severely in the rainy season. They do not have options to get information earlier regarding natural disaster. There is also no shelter center in these

* A petroleum based thin and colorless fuel.

areas, so they do not get shelter when they are affected. People live their life under uncertainty and risk. One of the participants pointed that:

There is no scope for getting information about natural disaster. Even there is no center for shelter if there happens any natural disaster.

Interview No. 5, Personal Communication, 01.02.2014

In addition, the degree and frequency of natural disaster in low land area is very high. People of these areas live under threat of natural calamities. They get in panic and become frustrated when storms and rain come down. In this regard, cyclone center or any other shelter center can help local people at the time of natural disaster. One of the interviewees viewed that:

...school or cyclone center or some shelter centers are very necessary to be set up. At the time of storm and rain, fear and frustration cloud the mind of the local people. The severity of rain and storm is very high.

Interview No. 6, Personal Communication, 03.03.2014

However, a few projects of medical services are being run in the Haor areas. The local poor people will be benefited if it is possible to keep one of the sub-stations of medical services over here at the study site. People may get first aid at the time of disasters like storm or cyclone. According to one of the interviewees:

.. there is no opportunity of medical service..they have to go to another place. .. if one sub-station of medical services is made available in this area, the people will be facilitated.

Interview No. 6, Personal Communication, 03.03.2014

6.3.6 Lack of Eco-cottage

Tourists have a great demand of eco-cottage in the wetlands especially foreign tourists. Rural people of the study site do not have knowledge about eco-cottage business. These people may build a relation with tourism related organization and may get assistance from them to establish eco-cottage in the wetlands. Natural beauty of wetland is different at night. Tourists come here to enjoy natural beauty from many perspectives. However, they do not have option to stay over here at night. Eco-cottage may help tourists to fulfill their desire and expectation especially to enjoy beauty at night. But there is no existence of eco-cottage in the study site. One of the respondents viewed that:

There is no eco-cottage here. Tourists come from They want to stay over here at wetland areas for enjoying natural beauty at night.

Interview No. 22, Personal Communication, 07.03.2014

Snyman (2012) argued that the receiving benefits of ecotourism can be claimed to promote an appreciation of biodiversity and conservation in surrounded communities.

6.3.7 Limited refreshment facilities for the tourists

Tourists come to visit wetlands to enjoy everything without pains. They want to get refreshed after traveling. Visitors expect a better accommodations facilities, hotels, and

small shops adjacent to the wetlands. They come from the town early in the morning without having breakfast as they need to journey long distance to the study sites which are far from the towns. Opportunity for having breakfast adjacent to the study site can help them. Availability of necessity goods like mineral water, biscuit or dry food has a demand for the tourists. According to one of the interviewees:

If any accommodations, hotels, or small stalls were here, it would be better. As the visitors often come here late, they need to have their breakfast here. They buy many things from my shop but sometimes they don't find the necessary things of their choice. For example- mineral water, high quality biscuits or dry food etc.

Interview No. 5, Personal Communication, 01.02.2014

After a long journey, tourists expect some refreshment at the study site. A cup of tea or coffee along with dry food may help them to regain energy before starting to visit inside the wetland. However, arrangement of light refreshment is not sufficient for the tourists. More facilities can be provided for them. One of the interviewees viewed that:

There is a lacking of light refreshment facility....can be managed by which tea and biscuit can be sold.

Interview No. 1, Personal Communication, 28.01.2014

6.4 Absence of educational institutions

Lack of educational institution is one of the important barriers to the wetland-based tourism development. Local poor people have a vision to get their children educated. Scarcity of educational institutions diminishes their dreams. Most of the educational institutions are situated very far from the study site. Every day, their children have to make journey at least 10 kms for going to school. Children become tired for having journey. Moreover, majority of the people of the wetlands are extreme poor. Gradually they lose their interest to go to school as well as they drop out. According to one of the interviewees:

There is no school or educational institution over here. Of course I have a feeling to make my children educated. But the educational institution is very far from here. They can't stay at school by going. The educational institution is situated five kms away from here. If children go there one day, they don't want to go there for the next time.

Interview No. 2, Personal Communication, 29.01.2014

In this connection, Zhao and Ritchie (2007) opined that lack of human capital, mainly in terms of formal education and training, is found to be a major barrier to the rural poor; and these can seriously restrict them from becoming involved in tourism. It is not

possible to implement the changes that are required for the wetland-based tourism development without providing education to the local poor people. As, knowledge and awareness of tourism are important factors for the rural people (Cole 2006) as well as absence of understanding of tourism is linked to the unfulfilled potential of tourism development and hence the rural people are unable to realize its values (Cole 2006).

6.5 Unplanned Tourism Development

Wetland-based tourism development is not proceeding in a planned way in Bangladesh. Developers are constructing luxuries hotels, motels, rest houses, and even restaurants adjacent to the wetlands which are the causes of destruction of natural heritage of the wetlands. One of the research participants viewed that limited but scattered development has been initiated inside the study site. Planned development is essential to attract more tourists towards wetlands as well as it enhances the beauty of nature. The more tourists will come to visit wetlands, the local people will earn more money, and more employment opportunity will be created for the local poor people. As a result, the entire community will be benefited if there is planned development of wetland-based tourism in rural areas of Bangladesh.

The authority does not have proper plan for the development of the wetland.....more tourists will come here and it will benefit the local people.

Interview No. 5, Personal Communication, 01.02.2014

However, insufficient water of the wetlands in dry season is one of the significant barriers to the wetland-based tourism development. In dry season, more water is needed for the easy movement of mother fish. Mother fish die in every season due to inadequate water. More pocket canals can be excavated inside the wetlands for preserving more water. Mother fish can have a safe shelter in the canals. Visitors can see them. Migratory birds can come nearer to the observation tower. The tourists will be able to enjoy seeing the different colors of birds and fish in clean water. One of the participants viewed that:

Due to insufficient water,..... in the dry season unless some pocket canals are dug. If it is done so, the fish will not die. The fish can have a safe shelter near the watchtower if there is a pocket canal.

Interview No. 8, Personal Communication, 04.03.2014

Development and conservation need a governance system that regulates appropriate ways of land-use in a particular site ((Uddahammar and Ghosh 2009). Careful planning, management and regulatory policies and active local community participation can have positive results on biodiversity (Haque 2013). It is a great challenge for site management agencies to communicate to the public regarding the model of nature and the reliance of wetlands' ecological integrity on the surrounding landscapes (Shultis 2006).

6.6 Lack of Coordination and Integration among Various Stakeholders

Wetland-based tourism development is hindered due to lack of coordination and integration among various stakeholders. It has become a common phenomenon in

wetland-based tourism development which is created due to absence of network among stakeholders. One of the research participants stretched that there are various stakeholders of wetland-based tourism development. The problems of wetland-based tourism development cannot be handled by a single hand. All public, private and individual stakeholders should come forward to take part in the development programs of the wetlands. There is a lack of coordination and integration among the development activities of various tourism development stakeholders.

It is not possible for the government to help the poor people of this area or to solve the problem of this area by alone. Nobody can to do the entire works single handedly. Both the govt. and non-govt. organizations should come forward.

Interview No. 6, Personal Communication, 03.03.2014

Neither the wetland-based tourism agencies nor the tourism industry can any longer go it alone (McCool 2009). Thompson (2013) argued that most of policies and strategies for wetland resource management are paradoxical and not implemented properly in the context of Bangladesh. Thompson (2013) stated that the MOFL looks after for technical aspects of fisheries, but the ownership and administration of water bodies lies on Ministry of Land. Water Development Board (WDB) and Local Government Engineering Department (LGED) are responsible for building water management infrastructure for agricultural development in floodplains, whereas technical support to farmers comes from the Department of Agricultural Extension (DAE) in Bangladesh (Thompson 2013). Funding agencies and national NGOs promote community management of fisheries projects in Bangladesh (Thompson 2013).

6.7 Irresponsible Activities of Tourists

Behavior of the tourists has an effect for developing wetland-based tourism development in rural areas. Wetland tourists have responsibility towards wetlands. Wastage disposition in wetlands is more problematic; and there are serious impacts which affect visual attraction and conservation status and it may have harmful consequences to biodiversity and humans (Rodriguez 2012). All types of non-organic wastages are in most of the areas of wetlands especially picnic areas and paths, and most of the wastages are paper and cardboard, plastic (Rodriguez 2012). However, behavior of the tourists has an effect for developing the wetland-based tourism development in the rural areas. The wetland tourists have responsibility towards wetlands but they do not do so. Issues of environmental impacts of wetland tourism are as air, water, geology and soil, landscape, habitat, and wildlife (Spenceley 2005). However, tourists' activities may create various pollutions for the wetlands such as sound pollution, air pollution, and soil pollution. Increasing use-levels have a negative impact on the quality of recreational experience as well as natural resources (Candrea and Ispas 2009). However, they do not do so. Their activities may create various pollutions for wetlands such as sound pollution, air pollution, and soil pollution:

6.7.1 Sound pollution

Tourists come to visit wetlands by using vehicles. Vehicles that horn heavily create sound pollution. Moreover, tourists are engaged in various activities inside the wetlands. They talk with each other in loud voice and make hue and cry that creates sound pollution. Sometimes tourists want to enjoy natural beauty of the wetlands by boating. They wear different colorful dresses and want to reach very close to the birds inside the wetlands. Different colors have negative impact on birds. Birds receive color shock. They feel insecure and start to fly in the sky. Enough silence is essential for the migratory birds. These birds come from various parts of the world. They want to stay for a while in the wetlands. If birds do not feel secure, they will start to leave earlier. According to one of the participants of in-depth interview:

---loud voice, hard noise and hue and cry of the visitors create sound pollution. In effects, the birds become afraid and don't feel secure. We should remember that these birds migrate from different countries. So, very soon they will start to leave the country due to sound pollution.....

Interview No. 9, Personal Communication, 04.03.2014

6.7.2 Air pollution

Air pollution is harmful to the natural resources in wetlands. It is a drawback of the development of the wetland-based tourism. Very often larger numbers of tourists come to visit the wetlands in small as well as big vehicles. Releasing black smoke from the vehicles creates air pollution which is harmful to the natural resources of the wetlands. Nature loses its beauty. One of the interviewers pointed that:

If the road is developed more, big bus or truck will start to move and will enter inside this wetland. Big picnic bus will come from different corners of the country and will enter into this wetland instead of other tourist spots, which will affect the silence of wetland. It is to be noted that enough silence is required for migratory birds. Air will be also polluted by the black smoke released from the vehicles.

Interview No. 6, Personal Communication, 03.03.2014

6.7.3 Soil pollution

According to the research participants, various types of visitors come to visit the study site such as green lovers, eco-explorers and wild-life watchers. These visitors have responsibility towards wetlands. Tourists should do nature-based work inside the wetlands. They carry various personal necessary goods with them. They drop polythene or other used materials all over the places inside the wetlands. They always do so. Soil of wetlands becomes infertile due to the dropping of wastage by the irresponsible tourists. Gradually wetlands lose fertility. The growth of natural resources like trees and water bodies are affected. One of the research participants pointed that responsible behavior is expected from the green lovers. They perform various activities inside the study site such as using mike in a loud voice, vehicles horning, clapping hands for seeing birds and

dropping using wastages randomly; and these are not friendly for environment. Pressure is mounted on nature especially migratory birds. One of the participants of in-depth interview stated that

There are also some responsibilities of the tourists. They use mike in a loud voice, honking of car, clapping while seeing birds, dropping wastage like polythene here and there etc. It is not be wise to do so. It may create the harm to the environment, especially for the birds.

Interview No. 9, Personal Communication, 04.03.2014

6.8 Destroying Wetland Resources

According to research participants, wetlands are very valuable because there native fish, aquatic plants, crops, grazing opportunities, wildlife etc. The study site has variety of species of water plants including aquatic flora and fauna, fish, migratory birds, and other water animals. Moreover, wetlands provide opportunities of income and nutrition for rural households in the wetlands. In addition, wetlands not only support direct uses but also provide eco-system services and biodiversity. Ecological balance is lost due to over exploitation of these resources. One of the research interviewees viewed that the gradual destruction of wetland resources hampers the development of wetland-based tourism. The local people catch fish by bailing out water though it is restricted as per the manuals of the government. Especially for the lease-land, fish can be caught at least under 3 feet water. People catch all fish along with mother fish from the mud. Hidden eggs of fish in mud as well as various water bodies are damaged. As a result, water bodies reduce and nature lose its resources. Simultaneously, growth of fish in rainy season is severely affected due to catching mother fish and damaging eggs of fish. As a result, ecological balance is hampered. Due to this reason it is difficult for fish to survive.

In the manual of govt. it is written that the fish can be caught when the wetland has 3 feet water. But some local people bail out water completely to catch fish. Even they catch fish from the mud. The eggs of some fish are hidden in the mud. After getting the water properly, the eggs are raised. Because of that work, those eggs become damaged. A mother fish has thousands of eggs in it; when those eggs are raised, there will be huge species. Simultaneously by bailing out water, other water bodies are also damaged. In fact, they destroy resources of the wetland.

Interview No. 18, Personal Communication, 06.03.2014

Disturbance is a major component in order to continue to maximize the benefits of tourism and ecological integrity within the wetland areas (Shultis 2006). Human activities are solely responsible for pollution such as physical, chemical, cultural and moral, and its effects are immediately evident, long-term, indirect and irradiation (Sava 2010).

The natural environment is severely affected due to the activities of one class of miscreants adjacent to the wetlands. However, human demands are competing upon protected natural wetlands (Higham and Vistad 2011). In this regard, wetlands can be designated primarily for conservation and the protection of unique natural systems (Higham and Maher 2006).

6.8.1 Illegal catching fish

According to the research participants, livelihood of local poor people especially fishermen depends on this wetland. In all seasons, the people caught fish from this wetland in a care-free-manner. Due to this reason, native species of fish were in a verge of extinction. However, sanctuary on indiscriminate catching fish has been imposed. Right at this moment, people are not allowed to catch fish in all the seasons. They can catch fish in only rainy season. Still the local people try to catch fish in illegal ways. The native species of fish are struggling to survive. One of the interviewees added that not only local poor people catch fish for their livelihood but also few local influential people insist the poor people to catch fish by act of stealing. As a result, the parent fish is not available to breed in the next monsoon. Ultimately the fish stocks are declined and they are on the verge of extinction.

In the past, the local people of these areas were dependent on this wetland and the fish were caught indiscriminately; and fish of the native species were on the verge of extinction.

Interview No. 6, Personal Communication, 03.03.2014

...There are several powerful people who influence the local poor to catch fish by stealing.

Interview No. 3, Personal Communication, 30.01.2014

6.8.2 Illegal hunting birds

Migratory birds are the attractive phenomenon for the tourists. They come here to watch them. These birds are under threat. Local prominent persons insist the local poor people to hunt birds. Sometimes they do it openly and sometimes they do it by act of stealing. One of the participants confirmed that:

....several powerful people who influence the local poor to hunt birds by stealing.

Interview No. 3, Personal Communication, 30.01.2014

6.8.3 Illegal felling trees

Green trees surrounding the wetlands are the significant elements of developing wetland-based tourism. These trees draw the attraction of green tourist. The local poor people collect firewood from the surrounding forest of the wetlands. However, few powerful people insist the local poor to fell trees by act of stealing. The wetland is becoming deforested for constant cutting of trees. One of the respondents viewed that:

...several powerful people who influence the local poor....to cut trees by act of stealing in the wetland.

Interview No. 3, Personal Communication, 30.01.2014

6.9 Exposure of Wetland

According to the research participants, lack of exposure of wetlands and its resources among stakeholders is one of the barriers to the wetland-based tourism development. There is a deficiency of promotional activities to draw the attraction of tourists as well as stakeholders towards wetlands. Enough information regarding the wetland's resources can be spread among the stakeholders through promotional activities; and it may create awareness among them. Though there are available resources in the wetlands like migratory birds, native fish and rich water bodies. However the wetlands have not got much exposure among stakeholders. As a result, they have not shown their interest for the development of these areas as a wetland-based tourism.

There is no exposure of this wetland. The visitors do not have sufficient information regarding this wetland.

Interview No. 22, Personal Communication, 07.03.2014

The wetland-based tourism can be developed so that the tourism destination and the visitors can be interested towards the destination due to the role of the information sources; and it can be explored the form of tourism for the visitors, whether it is ecotourism or simply a nature-based one (Stamou and Paraskevopoulos 2006). In this regard, media can play a role to build the wetland-based tourism destination, and create expectations for readers and potential visitors to such areas (Stamou and Paraskevopoulos 2006).

6.10 Deforestation

There is no worth meaning initiative taken by the management regarding tree plantation surrounding the wetlands. Besides, existing trees are felt by the local people. Number of trees of the wetlands reduces. As a result, the wetlands become deforested; ecological balance is hampered; rain is halted and the severity of storms is intensified. The people of these localities live under fear at the time of rainy season. According to one of the interviewees:

There is no forestation in this area. Moreover, the local influential people insist on the local poor to cut down trees beside wetland. So forestation should be cultured here. If there is forestation, the people will be saved from the severity of storm rain; and the ecological balance will be maintained.

Interview No. 6, Personal Communication, 03.03.2014

The natural environment is severely affected due to the activities of one class of miscreants adjacent to the wetlands. However, human demands are competing upon protected natural wetlands (Higham and Vistad 2011). In this regard, wetlands can be designated primarily for conservation and the protection of unique natural systems (Higham and Maher 2006).

6.11 Insufficient Financial Support for Alternative Income Generation

Insufficient financial support to the NGOs for alternative income generation is one of the barriers to the wetland-based tourism development. The livelihood of the local poor people is dependent on fishing, bird hunting and firewood collection from the wetlands and encircled areas. The study site has been declared as a protected area and some restrictions have been imposed on fishing, bird hunting and firewood collection. Before imposing sanctuary, a few NGOs have undertaken programs for poverty alleviation in this study site. They have conducted training programs for creating AIG for the rural poor people in the wetland area. These training have been given on grocery shops, tailoring and sewing for the women, small scale poultry, goat rearing, cow and buffalo fattening, nursery, and prawn culture to the rural poor people around the wetlands. After completing training, it is required to involve these people into AIG. One of the research participants pointed that enough money is necessary to provide them so that they can get themselves involved in AIG. Despite the fact that the micro and small businessmen can get financial support from NGOs in Bangladesh, a limited number of specialized banks provide credit facilities to the rural poor people. The small and micro handicrafts businessmen get benefits from such micro credit facilities made available by the NGOs and specialized banks. However, NGOs and specialized banks face problems to extend their credit facilities to the rural areas for tailoring and sewing, poultry, goat rearing, cow fattening and nursery because there is lack of fund. However, such AIG funds are very limited than the requirements. Field level officers of NGOs ask more funds but they do not get response from the head office. Another member of the FG pointed that the rural handloom weavers and craft persons are extreme poor. They do not have enough money to purchase their required raw-materials. They take support in advance from the small and micro handicrafts businessmen to purchase raw materials in order to continue production. However, NGOs and specialized banks do not properly extend their credit facilities to support the poor people of the wetlands to establish shops.

We have limitation of fund. Only 2000000 taka is distributed among 400-500 people. In that case, it is not possible to give more than 4000 taka. But they want more. Because they can't buy one pair of cow or buffalo in 4000-5000 taka or to take part in any project. Or they can't take part in the improvisation of cows.

Interview No. 9, Personal Communication, 04.03.2014

In this regard, financial support is a necessary option and needs to be ensured in order to open opportunities for alternative income generation activities for the rural people and indigenous communities living under extreme poverty (Scheyvens 2007). Relevant skills and training are important factors that restrict the local people to get involved in tourism (Mvula 2001).

7. Conclusion

Based on findings in this study, it can be concluded that there are immense prospects of the wetland-based tourism development in the rural and remote areas of Bangladesh including migratory birds, endangered fish-species, boating facilities, available natural resources, variation in natural beauty, biodiversity and ecosystem, the local products appealing the tourists towards the wetlands. The wetlands in rural areas of Bangladesh are enriched with various species of water plants including aquatic flora and fauna, endangered fish-species, migratory birds, and other wild-life. In addition, available natural resources, variation in natural beauty, biodiversity and ecosystem, local handicrafts are the main attractions of the tourists. Natural resources are available in the wetlands of Bangladesh including various water bodies like mascaras, water lily, lotus, and swamp forest trees—mostly Koroch and Hijal etc. that can attract the true natural lovers. The locally produced handicrafts are important for specialist market such as for the tourists (Markwick 2001); these products especially handicrafts have huge demand for the tourists that are generally made by local bamboo, cane, wood, dried leaves and fiber. Moreover, bottle gourd, chilly, vegetables, poultry, dried fish, and handmade garments can attract the tourists which are fresh, original and hygienic. Moreover, the wetlands and other protected areas of the world are becoming favorite destinations for the tourists who seek contact with nature as well as these areas are providing satisfaction to the visitors through its natural landscapes and objectives, cultural and wildlife (Merce et al. 2012).

However, the lack of coordination and integration among the stakeholders is a major drawback in order to develop the wetland tourism. It is a common phenomenon in the wetland-based tourism development in the rural areas of developing countries which is created due to absence of network among stakeholders. The NTO works for the tourism development in Bangladesh although the contribution of this organization in sustainable wetland tourism development in rural Bangladesh is inadequate. Public, private and individual stakeholders of the wetland tourism also do not act properly to take part into the development programs of the wetlands. In addition, the current roles of stakeholders and their networks in sustainable wetland-based tourism development in rural and remote areas of Bangladesh are limited. The development of wetland-based tourism in rural Bangladesh depends on the availability of some basic requirements such as sufficient infrastructural and logistics support, educational and training institutions, managerial efficiency, cooperation, coordination and integration among the stakeholders, responsible behavior, planned development, sharing knowledge regarding deforestation, proper lease out policy, and honest officials. Infrastructure projects can improve potential tourism destinations and open up prospects for investment and economic growth. The people of the rural areas can be physically excluded from accessing to the urban areas where economic opportunities in terms of business, trade and employment exist due to scarcity of infrastructure.

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Journal of Business Studies

JBS-ISSN 2303-9884

Volume - 11, No. 2, pp.: 185-196

Corporate Social Activities of Banking Sector in Bangladesh: A Comparative Study on State-owned and Private Commercial Banks

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Abstract

This study compares the contribution of state-owned commercial banks (SOCBs) and private commercial banks (PCBs) in corporate social responsibility (CSR) activities in Bangladesh. This study also investigates the average contribution of banks to CSR as a percentage of their operating expenses. Finally, this study examines the relationship between CSR expenditure and bank's profitability. We use secondary data. We use ordinary least square (OLS) regression in our analysis. Results suggest that the average contribution on CSR by SOCBs is lower than that by PCBs. CSR as a percentage of operating expences in PCBs are higher than that in SOCBs. Results also find that 6% of the variance in the profitability (profit after tax) is explained by the CSR expenditure. However, this study finds no significant relationship between CSR activities and bank's profitability.

Keyword: Corporate Social Responsibility, Bank's Profitability, Operating Expenses. Banking Sector in Bangladesh

I. Introduction

Social responsibility is an imperative corporate duty (Quinn, Mintzberg & James, 1987). In recent years, corporate social responsibility (CSR) has been a trendy topic for academicians. Corporate social responsibility (CSR) is more than just being concerned about the environmental effects of organizations. In the late 1880s, a period of primary industrial development, CSR came to the people's mind that firms should think about the idea of social responsibility. Stakeholders consider CSR as a measure of management skills (Bowman and Haire, 1975). Recent management literatures emphasize on the benefits of corporate social activities because it works as an important corporate governance device (Jo and Harjoto, 2012). The main purpose of CSR is to create passable growth of a business in a conscientious approach (Moir, 2001).

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Firms which are considering social responsibility issues are concerned about the principled ground of achieving social obligation. Successful firms give priority to ethical issues in compare to the structured law. It is believed that responsibility towards society can depreciate the values of economic growth. CSR concept is getting more attention to businesspeople, companies, customers and academicians. Numbers of national and international firms are giving importance to the society which brings a good reputation and instant business benefit since the customers become loyal to CSR activities. That is why, companies are taking CSR activities to get some additional benefit in the present competitive world. This study aims to compare the CSR practices of state-owned commercial banks (SOCBs) and private commercial banks (PCBs) in Bangladesh, and to identify the relationship between CSR expenditure and banks profitability for both SOCBs and PCBs.

The remainder of the paper is organized as follows: Section 2 presents the objectives of this study. Section 3 presents the literature review. Section 4 and 5 cover the methodology, and results and discussions respectively. Conclusion of this study is presented in Section 6.

II. LITERATURE REVIEW

Pattnaik and Nayak (2017) conducted a conceptual study based on previous literature on CSR and concluded that there are three aspects of responsibility: economic, social and environmental. They added that, stakeholders play a vital role in preparing CSR policy. The equation between society and corporations has changed due to growing awareness of the stakeholder groups. Nnenna and Carol (2016) examined the effect of CSR activities on firm's profitability in Nigeria. They found that the CSR activities have a positive impact on firm's profitability. They suggest that the manufacturing firm should set their CSR policy carefully because it returns to the firm in the form of profit.

Kiran, Kakakhel and Shaheen (2015) state that there is a positive relation between CSR and profitability (net profit). However, they find that there is a negative relation between CSR and total assets of firm. According to them, firm's CSR (a share of profit) is a responsibility to the society because firms will not survive for a long time without CSR activities. According to Odetayo, Adeyemi and Sajuyigbe (2014), there is a positive relationship between CSR expenditure and profitability of Nigerian Banks. It implies that if CSR activity increases then the profitability also increases.

Hermawan and Mulyawan (2014) find that firm's profitability is not related to CSR activities in Indonesia. They indicate that the firms are spending surplus money in CSR activities to maintain a good reputation. Abdul Rahman (2014) studies the relationship between CSR activities and profitability and found a positive relationship. Thereby, he recommends the firms to carry more CSR activities. Mahbuba and Farzana (2013) conducted a study on the relationship between CSR and profitability of a private commercial bank, DBBL, which is known as CSR introducer in Bangladesh. They also found a strong positive relationship between CSR activities and profitability. Khan and Hassan (2013) conducted a study on the relationship between CSR activity and financial performance. They found no significant relationship between CSR activities and

performance. They argue that firms involve in the CSR activities for improving their public image and maintaining a good relationship with government and other external stakeholders. Some studies conducted a comparative study on CSR between SOCBs and PCBs in Bangladesh and they investigated the major areas of CSR activities (Arif, 2013; Roy et al. 2017; Saha et al. 2013). However, they did not investigate the relationship between CSR expenditure and firm performance

Vintila and Duca (2013) found that CSR activity has a positive impact on the firm's profitability of Romanian companies. Rahman, Rashid and Haque (2014)¹ found that there is no significant impact of CSR on banks' profitability (profit after tax). They suggest reviewing banks CSR policy so that banks can gain some benefit from it.

Ahmed (2016) investigated whether CSR has any impact on a firm's profitability and share price. They found that CSR has no impact on firm's profitability and share price. According to Selcuk and Kiymaz (2017), there is a negative relationship between CSR and financial performance of Turkish firms. It implies that firms having more CSR activities have a lower performance. Ahmed, Islam and Hasan (2012) examined the relationship between CSR and financial performance. The result shows that a firm having high CSR the firm also has high financial performance; on the other hand, low CSR activities lead to low financial performance. According to Feng, Wang and Kreuze (2017), the impacts of CSR on financial performance are heterogeneous across industries. It implies that the impact of CSR varies among industries. They also identify that CSR has an impact on most of the industries but not for all. According to McWilliams and Siegel (2000), CSR has a neutral impact on the firm's financial performance. Bolanle, Olanrewaju, and Muyideen (2012) found that every unit change in CSR will lead a 95% change in PAT, which means that CSR has a significant relationship with the firm's profitability.

III. STATEMENT OF THE PROBLEM

CSR disclosure and firm performance is a well-established research area in both Bangladesh and abroad. A good number of studies have been conducted on CSR in Bangladesh. All of them dealt with the issue of 'disclosure' (Imam S. 2000; Azim et al. 2011; Masud & Hossain, 2012; Azim et al. 2009). There are other studies on CSR expenditure as a percentage of the firm's profit (Arif, 2013; Saha et al. 2013). There is no study, to best of our knowledge, considered CSR as a percentage of operating expense in Bangladesh. However, this study fills this gap.

Moreover, there are studies on Bangladeshi have worked on the relationship between CSR expenditure and firm performance, but the variables that indicated firm performance were different across these papers. Tuhin, M. H. (2014) studied the relationship between CSR expenditure and profitability of 10 listed banks in Bangladesh for the time period 2007 to 2011, and he used ROE as the performance variable. Another study examined the same thing but used profit after tax as the performance indicator and they found a

¹ CSR is taken as independent variable and profit after tax is taken as the dependent variable. They used ordinary least squares (OLS) method in the analysis.

significant positive relationship (Mahbuba & Farzana, 2013). They considered only one bank as a sample, which may not expose the real conclusion. No study is found in the Bangladesh context where both PCBs and SOCBs are taken as a sample to find out the relationship between CSR expenditure and profit after tax. This paper is trying to address this area.

IV. RESEARCH OBJECTIVES

The objectives of this study are as follows:

- i. To compare the CSR contribution of SOCBs and PCBs.
- ii. To find out the average contribution of banks to CSR as a percentage of their operating expenses.
- iii. To investigate the relationship between CSR expenditure and banks profitability.

V. RATIONALE OF THE STUDY

The issue of corporate social responsibility has gained importance across the world. Social activities facilitate corporations to be accountable towards social and environmental problems (Carroll, 2008). Expenditure on CSR activities is delivering a message to the society regarding the commitment of a firm.

By realizing the influence of corporate social responsibility activities on financial performance, a firm can decide how to distribute their fund to maximize returns. Furthermore, this study can add information to previous studies on company social responsibility by adding the constituent of its result on the firm's long run monetary performance. Finally, by considering the relationship of CSR expenditure and firm performance, findings of this study will give an insight on CSR.

Hypotheses: Following hypotheses have been developed to measure the relationship between corporate social responsibility expenditure and banks profitability:

H_0 : there is no relationship between corporate social responsibility (CSR) expenditure and banks profitability

H_1 : there is a relationship between corporate social responsibility expenditure and banks profitability

VI. RESEARCH METHODOLOGY

We collect data from secondary sources, such as annual reports of selected banks, relevant books and journals for the period of 2012-2016. This study considers three (03) state-owned commercial banks (SOCBs) (Janata Bank Limited (JBL), Rupali Bank Limited (RBL), Agrani Bank Limited (ABL)); and five (05) private commercial banks (PCBs) (Dutch-Bangla Bank Limited (DBBL), Islami Bank Bangladesh Limited (IBBL), Mercantile Bank Limited (MBL), Bank Asia Limited (BAL), Uttara Bank Limited (UBL)).

Model Development: We run ordinary least square (OLS) regression to investigate the relationship between CSR expenditure and profitability. We use statistical software SPSS 23 for our analysis. We measure CSR activities by CSR expenditure (independent variable) and bank's profitability by profit after tax (PAT) (dependent variable).

VII. RESULTS AND DISCUSSION

In this section, we firstly look at the average figures and the trend of the CSR expenditure for SOCBs and PCBs. Since the number of SOCBs and the number of PCBs are not the same (3 versus 5), we use the average CSR expenditures to compare CSR activities between SOCBs and PCBs. For curiosity, we also look at the sectors that banks are spending their CSR funds and for this purpose we use only the latest year data.

Comparison Regarding CSR Contribution of State-Owned Commercial Banks and Private Commercial Banks:

Table I
Year wise average CSR contribution of SOCBs

(BDT in Million)					
SOBs	2012	2013	2014	2015	2016
JBL	113.37	291.50	138.42	22.40	9.13
RBL	15.29	32.18	30.78	8.74	11.68
ABL	53.30	83.72	64.71	31.65	24.51
Total	181.96	407.40	233.91	62.79	45.32
Average Contribution	60.65	135.80	77.97	20.93	15.11

Source: Annual Report of respective banks

Table – I shows the average CSR expenditure by SOCBs from 2012 to 2016. It shows that the highest average contribution of SOCBs in CSR was in 2013. The CSR contributions follow a decreasing afterwards.

Table II
Year wise average CSR contribution of PCBs

(BDT in Million)					
PCBs	2012	2013	2014	2015	2016
DBBL	523.53	787.50	1115.60	901.70	838.20
IBBL	309.19	476.42	524.52	800.43	670.77
MBL	85.90	83.10	53.00	93.30	66.90
BAL	69.45	132.97	239.84	65.92	109.06
UBL	15.60	36.90	23.37	33.74	28.40
PCBs	2012	2013	2014	2015	2016
Total	1003.67	1516.89	1956.33	1895.09	1713.33
Average Contribution	200.73	303.38	391.27	379.02	342.67

Source: Annual Report of Selected PCBs

Table – II shows the average CSR expenditure of PCBs from 2012 to 2016. It shows that in 2016 PCBs contribute around BDT 342.67 million in CSR which is less than the previous year.

Table III

Comparison between Average CSR Contribution of SOCBs and PCBs

(BDT in Million)		
Year	Average Contribution by SOCBs	Average Contribution by PCBs
2012	60.65	200.73
2013	135.80	303.38
2014	77.97	391.27
2015	20.93	379.02
2016	15.11	342.67

Table – III shows the comparative CSR expenditure of SOCBs with PCBs from 2012 to 2016. The table shows that all the year CSR expenditure of PCBs is greater than that of SOCBs and the differences are very wide. In the year 2016, the average contribution of SOCBs was BDT 15.11 million and the average contribution of PCBs was BDT 342.67 million. In 2015 SOCBs contribution was BDT 20.93 million compared to BDT 379.02 million of PCBs.

Comparative Analysis of CSR Expenditure in Proportion to Banks Operating Expenses

Table IV

Contribution to CSR in Proportion to Banks Operating Expenses

Banks	2015			2016		
	CSR (BDT in million)	OE (BDT in million)	% of OE	CSR (BDT in million)	OE (BDT in million)	% of OE
JBL	22.40	10,975.62	0.20%	9.13	13,158.51	0.07%
RBL	8.74	4,746.07	0.18%	11.68	7,226.12	0.16%
ABL	31.65	11,140.87	0.28%	24.51	15,245.62	0.16%
Average	20.93	8,954.19	0.22%	15.11	11,876.75	0.13%
DBBL	901.70	9,174.85	9.83%	838.20	10,409.20	8.05%
IBBL	800.43	13,466.17	5.94%	670.77	17,687.22	3.79%
MBL	93.30	4,008.26	2.33%	66.90	5,652.54	1.18%
BAL	65.92	4,321.26	1.53%	109.06	4,719.26	2.31%
UBL	33.74	4,862.59	0.69%	28.40	6,371.87	0.45%
Average	379.02	7,166.63	4.06%	342.67	8,968.02	3.16%

Source: Annual Reports of Selected Banks

Table IV shows the average contribution to CSR as a percentage of total operating expenses. SOCBs contribute average 0.22% of total operating expenses to CSR expenditure in the year 2015 and 0.13% of total operating expenses in the year 2016. On the other hand, PCBs contribute about 4.06% of total operating expenses to CSR amount in the year 2015 and 3.16% of total operating expenses in the year 2016.

Sector-wise CSR Expenditure of Selected Banks

Table V

Sector wise CSR expenditure of SOCBs in 2016

(BDT in Million)					
Sector	JBL	RBL	ABL	Total	% of Total
Education	-	0.03	0.10	0.13	0.29%
Health	-	0.03	-	0.03	0.07%
Disaster Management	7.90	5.00	-	12.90	28.46%
Poverty reduction and Rehabilitation	-	0.23	-	0.23	0.51%
Arts and Culture	-	-	0.25	0.25	0.55%
Disaster Relief	-	5.09	22.56	27.65	61.01%
Day Care Development	-	1.26	-	1.26	2.78%
Social Welfare	-	-	0.25	0.25	0.55%
Institutions	-	0.04	-	0.04	0.09%
Others	1.23	-	1.35	2.58	5.69%
Total	9.13	11.68	24.51	45.32	100%

Source: Annual Reports of selected SOCBs

Table V shows the sector-wise CSR expenditure of SOCBs in the year 2016. The table shows that the first-priority sector of SOCBs is disaster relief, in this sector SOCBs contributed around 61.01% of total CSR expenditures. The second priority sector is disaster management; it consumed 28.46% of total CSR expenditure.

Table VI

Sector-wise CSR Expenditure of PCBs in 2016

(BDT in Million)							
Sector	DBBL	IBBL	MBL	BAL	UBL	Total	% of Total
Education	603.50	161.00	17.60	61.28	0.03	843.41	49.23%
Health	58.67	16.84	10.90	3.88	-	90.29	5.27%
Disaster Management	92.20	-	33.70	19.34	23.83	169.07	9.87%
Environment	-	26.39	-	0.06	-	26.45	1.54%
Disaster Relief	-	425.95	-	-	-	425.95	24.86%
Arts and Culture	-	0.12	1.35	1.96	3.73	7.16	0.42%
Treatment	-	-	-	-	0.35	0.35	0.02%
Social Development	67.06	-	-	-	-	67.06	3.91%
Sports	-	-	1.35	6.84	0.01	8.20	0.48%
Social Awareness	8.38	-	-	-	-	8.38	0.49%
Others	8.39	40.47	2.00	15.70	0.45	67.01	3.91%
Total	838.20	670.77	66.90	109.06	28.40	1713.33	100%

Source: Annual Reports of selected PCBs

The above table shows the sector-wise CSR contribution of selected PCBs in the year 2016. This shows that the first-priority sector is education, 49.23% of total CSR amount is spent on education. The second major sector is disaster relief, 24.86% of total CSR amount is spent on this sector. The third sector is disaster management, 9.87% of total CSR amount is spent for this sector.

Table VII

Sector wise CSR Expenditure of Selected Commercial Banks (SOCBs and PCB) in 2016

(BDT in Million)

Sector	Total CSR Contribution of SOCBs	Total CSR Contribution of PCBs	Total Contribution	% on Total Contribution
Education	0.13	843.41	843.54	47.96%
Health	0.03	90.29	90.32	5.14%
Disaster Management	12.90	169.07	181.97	10.35%
Poverty reduction and Rehabilitation	0.23	-	0.23	0.01%
Environment	-	26.45	26.45	1.50%
Disaster Relief	27.65	425.95	453.60	25.79%
Day Care Development	1.26	-	1.26	0.07%
Arts and Culture	0.25	7.16	7.41	0.42%
Treatment	-	0.35	0.35	0.02%
Social Development	0.25	67.06	67.31	3.83%
Sports	-	8.20	8.20	0.47%
Social Awareness	-	8.38	8.38	0.47%
Institutions	0.04	-	0.04	0.01%
Others	2.58	67.01	69.59	3.96%
Total	45.32	1713.33	1758.65	100%

Table VII shows the sector wise CSR expenditure of both SOCBs and PCBs in 2016. It shows that the most priority sector by the commercial banks is education, 47.96% of total CSR amount of the commercial banks is spent on the education. Second priority sector is disaster relief, 25.79% of total CSR amount is spent on this sector. Disaster Management is the third priority sector which consumed 10.35% of the total amount.

Relationship between CSR Expenditure and Banks Profitability

CSR expenditure amount and PAT of selected banks is used to find out the relationship between CSR expenditure and banks profitability. The CSR data and PAT data are logged to reduce the magnitude of the data. The log data is run by the SPSS 23 to find out the relationship between CSR expenditure and banks profitability.

Table VIII
Correlations between CSR and Profit After Tax

		Log CSR	Log PAT
Log CSR	Pearson Correlation	1	.244
	Sig. (1-tailed)		.064
	N	40	40
Log PAT	Pearson Correlation	.244**	1
	Sig. (1-tailed)	.064	
	N	40	40

** Correlation is significant at the 0.05 level (1-tailed)

Table IX
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.244 ^a	.060	.035	13.177297518263224	.060	2.411	1	38	.129	1.999
a. Predictors: (Constant), Log CSR										
b. Dependent Variable: Log PAT										

The model summary table (Table IX) shows that the value of R is 0.244 which indicates a lower degree of correlation among the variables considered in this study. The R^2 value 0.060 indicates that only 6% of the total variation in the profit after tax can be explained by the CSR activities of the banks.

Table X
Regression Co-efficient Analysis and Hypothesis Testing

Model		Un standardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Results of Hypothesis
		B	Std. Error	Beta			Lower Bound	Upper Bound	
1	(Constant)	-25.706	27.557		-.933	.357	-81.492	30.081	
	Log CSR	2.328	1.499	.244	1.553	.129	-.707	5.364	H ₁ : Rejected.
a. Dependent Variable: Log PAT									

From the coefficient table (Table X) the results cannot accept the alternative hypotheses H_1 , as the level of significance of this variable is greater than 0.05 at 95% Confidence level. Hence, CSR has no significant impact on PAT of banks.

Thus, the researchers accept the null hypothesis (H_0). That means there is no relationship between corporate social responsibility expenditure and banks profitability.

VIII. CONCLUSION

CSR contributions of SOCBs are decreasing in the most recent years. State-Owned Commercial Banks spent their CSR amount in only 5 or 6 sectors. SOCBs also spent a small amount of money for CSR expenditure in comparison to PCBs. Some PCBs are granting less money on CSR activities compared to the previous year, however, other PCBs are granting more money on CSR activities compared to the previous year. PCBs also spent their CSR amount in 5 or 6 sectors out of total 22 sectors for CSR expenditure. Average contribution on CSR by SOCBs is very low compared to PCBs in this study period.

SOCBs average contribution in CSR activities is about 0.13% of total operating expenditure in 2016 and 0.22% in 2015 which is very low compared to PCBs average contribution in CSR activities. SOCBs spent more than half of their CSR amount in disaster relief. PCBs spent about half of their CSR amount in the education sector. The education sector is the most priority sector for CSR expenditure by commercial banks in Bangladesh. Poverty reduction, health, art and culture, social awareness are also CSR contribution sectors but those are not getting priority by Bangladeshi commercial banks.

The results of the Pearson correlation analysis and ordinary least square regression analysis indicate a lower degree of correlation between CSR expenditure and profitability (PAT). The R^2 value 0.060 indicates that only 6% of the total variation in the profit after tax (PAT) can be explained by the CSR activities of banks. This study finds that there is no significant relationship between CSR expenditure and banks profitability. This result supports the findings of Khan and Hassan (2013), Rahman, Rashid and Haque (2014) and Ahmed (2016).

This study is conducted upon 8 commercial banks in Bangladesh, including 3 state-owned commercial banks and 5 private commercial banks. Future research may include more banks or a longer study period and can include more variables for profitability.

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Journal of Business Studies

JBS-ISSN 2303-9884

Volume - 11, No. 2, pp.: 197-210

Destination Branding in Bangladesh: A Conceptual Framework

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Abstract

The tourism industry is considered as one of the largest and most diverse industries in the world. It has been drawing attention as a modern service industry and the device to create connectivity among nations and various people across the world. Bangladesh is also included in this arena. It is expected that by 2030, million jobs will create in Bangladesh in this field. If we look into main tourism importing countries in the world, it is found that the country has its own image. Some countries are famous for destinations which are already been branded considering rational factors. Unfortunately, due to lack of strategic attention, tourism industry has not a considerable industry in Bangladesh. Whereas, if any destination wants to take better position in the race of present competitive market, it is essential to identify the different responsible factors and ensure the incorporation of those factors into strategic planning for creating destination as a brand. To address this deficiency, the current study has proposed a conceptual framework for destination branding in Bangladesh. At this stage, it is expected that the current study will contribute theoretically proving the rational relationship among the factors for destination branding and it will also be helpful for policy makers and practitioners.

Key-words: Destination Branding, Tourism Destination, Significant factors for branding.

Introduction

At the age of Globalization, the destination branding has been growing utmost interest to both visistors and incetsors. Tourism industry is growing very fast as well as the competition between destinations (Komppula, 2013). It is seen that tha individual destination compete with one another to attract more and more investment and visitors (Fernando & Long, 2012). If any destination wants to take better position in the race of competition, it is essential to have some factors that nake sure tje service which providing in the destination is importanat for the visistors. (Komppula, 2013;

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Crouch, and Ritchie, 1999). If we look into the present scenario it is observed that the growing number of new tourism destinations and the changing preferences of visitors are forcing tourism destinations to be branded. The concept of 'Destination Branding' offers a strong belief that that destination is certainly has distinct factors which can differentiate themselves from one to another. In fact, destination branding, especially its tourism literature is widely accepted as a common approach to tourist destination promotion. (Verissim, Tiago, Tiago, & Jardim, 2017)

Bangladesh is a place of history and natural beauties. Bangladesh's tourist attractions include, historical and monuments, resorts, beaches, picnic spots, forests and tribal people, wildlife of various species. The World Travel and Tourism Council (WTTC) reported in 2013 where Bangladesh was ranked 157 out of 178 countries worldwide. To compete with other destination of several countries, Bangladesh's several destinations should be branded. Mainly, Cox's Bazar can be the most attractive part to be branded. Cox's Bazar is said to be the tourist capital of Bangladesh. It has the world's largest 120 kilometers sandy beach. Here, branding should be in a way that Cox's Bazar become a place of desire for the both local and international tourists. Recognizing the images that tourists have for a particular tourist destination is necessary to identify its strengths and weaknesses (Chen & Uysal, 2002), to promote it efficiently in the marketplace (Leisen, 2001), and to guarantee its competitive success (Telisman & Kosuta, 1994).

That's the reason, it is important to analyze which are the most critical success factors in destination branding, and how these factors could be utilized in destination brand development (Baker & Cameron, 2008).

Rationality of the Present Study

Branding destination has become an effective tool to make a destination successful (Morgan et al, 2002; Baker & Cameron, 2008; Garcia, Gomez, & Molina, 2011). Successful branding can make tourist attract towards a particular destination. Though there is significant importance in branding destination, several issues have not been investigated to identify the factors of successful destination branding, especially in the context of Cox's Bazar, Bangladesh. Firstly, significant factors for Cox's Bazar branding are still to find out. Tourism is one that type of sector where service is a vital attraction and customer satisfaction plays a crucial role. (Pawaskar & Goal, 2014). A relationship between destinations and tourist can be flourished by fulfilling tourists emotional (relaxing, pretty) and basic needs (eating). So, it is important to find out what factors tourists are expecting to have in a beach destination like Cox's Bazar.

Again, trust of visitors towards a particular destination is always play an important (Hsu & Cai, 2009) because if there is confusion regarding products and services on a particular, tourists would not like to visit. In advance country as the tourism destination is safe for the visitors, it not big question on trust. However for developing countries like Bangladesh trust has played important role. It has high impact on destination branding. In case of different destinations of our country it is seen that visitors do have much trust on

destination because there lack of factors that can play the role on destination branding, such as hygenic product, affordable service, security etc. As, most satisfied customers at the end behave loyal and loyal customers word of mouth influence the potential customers upto 60% (Chi &Qu, 2008), it is needed to identify what rae the factors can play the role on destination branding in Bangladesh. In the literature it jas found that multiple works have in the mean time on destination barnding in the advanc ecluture. It is absent in case of developing country like Bangladesh. Therefore the authors have got the interest to do this reseacrh works. This work onlt can help to find outh theb success factors of destination branding.

Research Questions and Objectives of the Study

In general, tourist feelsconfident on destination that has brand imageimage. They search such as destination that has reputation and branding imgae value. Therefore, in view of the previous discussion, the fundamental research question of this study is, “What are the major success factors those flourish destinations branding?Howare the success factors are applied for destination branding?”

The overall objectives of the study us to find out the success factor of destinatiin brnading. However the current study has also following two fold objectives; 1. To find out responsible factors those have impact on destination branding in Bangladesh. 2. To find the success factors which can be implied for branding the destination Cox’s Bazar in Bangladesh?

Concept of Destination Branding and Success Factors

Kotler (1997) quoted from American Marketing association, “Brand is a name, term, sign, symbol or design, or a combination of these, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors’ Keller (2003) defines a brand as “a product, but one that adds other dimensions that differentiate it in some way from other products designed to satisfy the same need.” Morgan (2002) described brand as the unique combination and added value of product characteristics which is directly linked to the brand and it makes people conscious or intuitive. So, brand can be defined as a differential feature of product or service by which it can have positive or negative impact in the consumer mind in comparison with the complementary product or service.

Destination Branding is a relatively new concept in tourism. Branding is applied in product industry for quite a long period but its application to destinations is a recent development. As there are so many similar types of destinations around the world, to compete with others branding of destinations is a vital concern now-a-days. (Morrison & Anderson, 2002) thought that destination branding is a communication way to differentiate a destination through unique features. Keller (2008) states that, understanding the competitive brand associations (i.e., points of difference) over competitors are really difficult. So, to identify the successful brand association for the particular destination is the most essential part for destination branding.

Rainisto (2003) explained success factor as the reason for which place marketing practices are successful or unsuccessful. Different researchers find several factors as success factors. Buhalis (2000) notes prosperity of local people, optimize tourism impact, entertainment of customers as the success factors. Hankinson (2003) added other success factors like, sufficient infrastructure and investments in buildings. Other factors also can be success factors like, affection, amenity and hygiene, diverse attractions, easy accessibility, emotions, uniqueness, nature and culture, sun and sand, Hospitality, attraction, transport, affection, amenity and hygiene, diverse attractions, easy accessibility, emotions, uniqueness, entertainment, nature and culture, sun and sand, Hospitality, attraction, transport etc. Therefore, identifying the success factors is an emerging part for a successful destination branding and to make Bangladesh as a prosperous country in tourism.

Literature Review

Lee, Lee and Lee (2013) conducted an empirical research by using Gunn's model to examine the dynamic nature of destination image and the influence of tourists' overall satisfaction on modification. Here the specific destination was Seoul, one of the major destinations in South Korea. In this research it is found that tourist's satisfaction depends on their need fulfillment and based on their satisfaction level destination's image change between pre trip and post trip. Affection, Amenity and hygiene, diverse attractions, easy accessibility were the main component to find out the difference between pre-trip and post-trip image.

Although there is many positive outcomes of the research, some limitations of this research are like; the influence of contextual and personal characteristic on destination image modification. It didn't measure the impact of post trip image on satisfaction-loyalty relationship. Besides those, it emphasized on the overall satisfaction level but didn't differentiate between domestic tourists' and international tourist satisfaction level. Moreover, whether there is any difference in satisfaction among the tourists from various cultures or not is not measured here.

Mohamadkhani and Barezani (2013) have conducted a research of implication and find out impact of tourism infrastructure and tourism service on tourism brand. A theoretical model showed three dependent variables includes personality, position, and promise. And as the independent variable there are two factors; tourism infrastructure and tourism service. The research was conducted on Iran only. The finding showed neither tourism infrastructure nor the service has impact on Iran tourism as still there are many lacking of proper action. Successful branding needs time and finance as well.

Some limitations of this research are like, to find out the strategic steps which could provide vital facilities toward a destination brand. Though infrastructure and service are two vital issues for tourism development but other factors like political stability, environment, culture and religion also have major impact and they are interrelated for tourism brand developments which were not considered here.

Komppula (2013) focused on understanding the role of entrepreneurs in enhancing the competitiveness of a rural tourism destination. Seminal model of TDC (tourism destination competitiveness) was used to identify the role. Here it is found that entrepreneurs, DMO, municipalities have role in enhancing destination competitiveness. Moreover, innovative, committed, risk-taking entrepreneurs are needed to flourish any destination.

Limitation can be mentioned here of this research are like, local level cross-border policy collaboration is needed to facilitate entrepreneurship effort. Whether any impact of economic or political factors is not identified. Again, whether local or foreign entrepreneurs have the better contribution is not measured separately.

Prayag, Hosnany, and Odeh (2013) conducted an empirical study with the help of a conceptual model. Here, a UNESCO world heritage site Petra is the considered destination. In the model they showed a relationship among tourists' emotion, satisfaction, and behavioral intention. As emotional factors joy, love, positive surprise, and unpleasantness are focused. Researcher suggested that management should focus on holistic experience, service design to enhance consumer experience which leads to meet. The study shows there is no mediating effect of satisfaction on the relationship between emotions and behavioral intention. Rather there is a direct link between these two.

The research still has many limitations. There need to have more sample to make the findings accurate. Only one place is considered here where more places can be taken under consideration. Other factors like service quality, destination image, trust, commitment, personality, motivation were not considered on the behavioral intention of tourists. Beside those, influence of factors like tourist attraction, infrastructure, environment, culture was out of consideration.

Qu, Kim, and Im (2011) measured tourist behavior by an empirical study. With the help of a conceptual model researcher indicates overall satisfaction as a mediating factor for tourist behavior. Here he indicated unique image as a new and second largest component that impact on overall image for destination. The other factors like cognitive image and affective image also have the impact on overall image. And overall image act as a mediating factor for tourist behavior and image component. The researcher suggested more focused and clear strategy with defined purpose and personality. Again different attribute, nature based tourism, friendly environment should be introduced to attract more tourist by both government and industry.

Besides the outcome some limitation are like; data collected on summer only. Again, data collected from limited number of respondent who visited Oklahoma. There may be more factors which were not considered like, socio psychological travel motivation. Besides these, the study did not focus on destination trust, destination loyalty which can also be very influential for overall image.

Chen and Tsai (2007) in their empirical research find out effect of image on behavioral intention. Here the relationship among trip quality, perceived value, behavioral intention and satisfaction are measured. In this study, destination brand, entertainment, nature and culture, sun and sand are indicated as destination image measure factors. Again,

hospitality, attraction, transport, amenity are indicated as factors of measure trip quality. The findings showed that destination image has most important effect on behavioral intension. Image directly and indirectly. Moreover the path destination image-trip quality-perceived value-satisfaction-behavioral intension was proved evident in this study.

As limitation it several points can be said here like, it is important to understand customer's value perception. The role of perceived value in the retaliation between quality & satisfaction should also be identified. Although in this research many factors are measured but behavior of local community, types of branding could be included in measuring destination image.

Crouch and Ritchie (1999) identified some factors which has impact on the destination competitiveness. With a detailed conceptual model they conducted a qualitative research. Here they identified economic, physical, social, psychological, cultural, and political factors as the success factors of tourism development. Again they pointed out structure, territory, stakes, and tools as the elements of competition. This study reveals that destination management can improve competitiveness and enhanced competition directly improves sustainable quality of life.

Some limitations were identified here like, some destination don't have database could not which was required. Major variables and categories of variables have not been established. The relationship was examined only in qualitative terms. Besides those, religious could be a vital success factor. Again, natural traits could be a factor of competitive element.

After reviewing the above literatures, it is found that successful destination branding influences tourists' positive behavioral intension. Destination loyalty depends on the level of satisfaction which comes from destination image. Here, it is found that, tourists' satisfaction level is influenced several factors like, affection, amenity and hygiene, diverse attractions, easy accessibility, emotions, uniqueness, entertainment, nature and culture, sun and sand, hospitality, attraction, transportation, tourism service etc. Again, there may have some other influential factors like, culture, infrastructure, environment, destination trust, destination loyalty, natural traits, political stability, and behavior of local community for satisfaction which not yet considered in these literatures. Infrastructure and destination trust can be the vital issues among all these factors for developing country like Bangladesh. Though Bangladesh's infrastructure is not up to the mark but still tourists like to travel to different destinations. Several variables of destination trust like, reliability, belief, confidence, knowledge, honesty etc could be used as major parameter of the destination trust. These variables we will consider in the current research to find out whether destination trust have any impact on destination branding.

Conceptual Framework

To identify tourist satisfaction as a part of destination branding, theory of reasoned action (TRA) and theory of planned behavior (TPB) had been considered as the two base theories. From the elaboration of Theory of Planned Behavior (Ajzen 1991), it can be

found that tourists' behavioral intention depends upon attitude toward behavior and their subjective norms. But as human behavior is not fully pre-determined it can be controlled to some extent. So what factors of destination can influence human perceived behavior is needed to identify. TRA finds out individuals intention to perform a specific behavior at a specific time and place. (Ajzen & Fishben, 1980) Individuals' 'attitude toward behavior' and 'subjective norms' are considered in TRA as two independent constructs. TRA focus on mainly psychological will but there are other subjective issues to perform the actual behavior. (Ajzen, 1991) Therefore, TRA is actually not enough to identify tourist's satisfaction and actual behavior. For that, TPB, the extension of TRA is used as a base theory in this research. Because in TPB 'perceived behavioral control' is considered as a vital indicator. This perceived behavioral control changes individual intension to conduct the actual behavior because of considering both subjective and objective reasons though the actual behavior was supposed to be acted if only objective reason would considered. (Ajzen, 1991)

Chen & Phou (2013) thought that tourist createe emotional relationship more easily with destination if they found trust there. Again, in case of Bangladesh there are so many natural, historical, religious destinations. But for several reasons like political instability, natural calamity, increased crime record decreasing the trust level of our destinations both for domestic and international tourists. In this study will find out the impact of destination trust on behavioral intention. So destination trust is added as an independent construct which can influence both individual's satisfaction and loyalty. (Cai& Hsu, 2009)

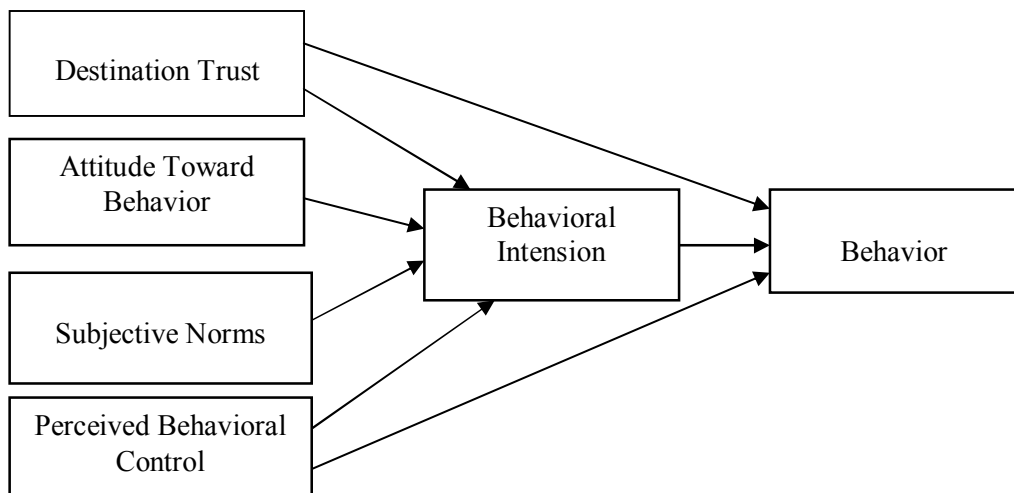


Figure 1: The proposed conceptual framework of Destination Branding

Attitude toward Behavior: Attitude measures the extent which an individual has a favorable or unfavorable evaluation of the behavior. This in turn is predicted by the sum of the products of beliefs about the outcome of the behavior and evaluations of those outcomes (Towler & Shepherd, 1992). A person's attitude towards a behavior is determined by her salient beliefs and their evaluations. Attitude is a multidimensional concept with cognitive, affective and behavioral components (Fishbein & Ajzen, 1980).

The cognitive part refers to knowledge about an object, e.g. knowing that Cox's Bazar is a convenient choice for traveling and having a good time. The affective component refers to amount of likes or dislikes of an object.

Behavioral Intension: It refers to whether someone who is in the mean time either visited or did visit to a particular destination wish to visit or not. It is closely related to the satisfaction. A visitor could be satisfied without visiting the destination if it has the brand image. Majority visitors have taken the decision just hearing the name of destination like Cox's Bazar in Bangladesh and Sentosa Island in Singapore. It does mean satisfaction brings bilateral effect on tourism product and/or service. It is stated that satisfaction works as an influential tool to create repurchase intentions inside the consumer's mind (Petrick, 2004). Because consumers who get satisfied feelings from a tourism destination will generate repeat visits as well as share good words regarding the destination to friends or relatives.

Subjective Norms: Subjective norms means giving up something for getting desired something. Generally, visitors sacrifice time, effort, (non-monetary issues) and money (monetary issue) when they purchase any tourism products (Hossain, Quaddus & Shanka, 2003). The financial situation of an individual illustrates his or her subjective norms level. The use of price information helps the visitors to measure both product or service quality and the level of subjective norms. It's true that service quality defines customer satisfaction. Customer satisfaction is also dependent on total subjective norms (Snoj, Korda, & Mumel, 2004).

Perceived Behavioral Control: A buying decision whose consequences and outcomes are uncertain generally it is known as perceived behavioral control (Boshoff, 2002). Every product (Dunn, Patrick, & Gerald 1986) and service (Zeithaml, Parasuraman, & Berry 1985) has perceived behavioral control. Similarly, in the context of Cox's Bazar it is quite relevant. The definition of perceived risk and the action toward the risk varies person to person. Perceived risk can be different types: likely physical risk, functional risk, social risk, psychological risk, source risk, and equipment risk (Boshoff, 2002). Perceived behavioral control can be minimized and satisfaction can be increased through giving warranty facilities, providing information, money-back offers, endorsements, branding, and price image.

Actual behavior: Actual behavior can be measured via revisit, recommendation, and providing information to the interested or probable visitors (Lobato, Radilla, Tena, and Garci, 2006). Satisfaction influences actual behavior a lot. Loyal visitors are those who make repeat visit to a destination (Yoon & Uysal, 2005). Loyalty is the continuous practice of commitment of an individual's behavior (Lobato, Radilla, Tena, and Garci, 2006). Consumers' positive attitude toward any brand defines the term "Loyalty" (Oliver, 1997). Loyalty is a composite matter (Amine, 1998) which includes not only behavioral dimension but also attitudinal dimension (Campo & Yague, 2008).

Destination Trust: Trust is an expected behavior from others. Lewicki and Bunker (1995) treated it as a confident and positive expectation. Rotter considered it as "a generalized expectancy held by an individual or group that the word, promise, verbal, or

written statement of another individual or group can be relied on” (1971). Chaudhuri and Holbrook (2001) defined brand trust as consumers’ willingness to rely on the capability of a brand to deliver its declared function. Brand trust is marked as tourist’s willingness to depend on his or her perceived ability of the destination brand. A branded destination keeps its promises by meeting the tourist’s expectations. Through the study of brand knowledge, generally expectations of a tourist over a destination brand get generated. A trusted destination rather than alternative destinations influences tourists greatly in decision making process.

Contribution:

This study on destination branding on Cox’s Bazar has both theoretical and practical contribution. This particular research is designed to find success factors of destination branding. Theory of Planned Behavior (Ajzen, 1991) was used as a base of the study. The proposed conceptual framework (Fig:1) is an extension of this model. In the proposed framework an added factor, destination trust, will be examined whether it has any impact on destination branding for the countries like Bangladesh. Branding is a common process but all the time this process is not successful for countries like Bangladesh. Because the factors we consider in tourism branding may not be the success factors for Cox’s Bazar. From literature, it is clear that tourists behave positively if they are satisfied. Again, people are satisfied if the destination image is positive to them. But in countries like Bangladesh, destination trust may be a vital factor for branding destination. So considering brand trust as an influential factor for behavioral intention and behavior, we will conduct the research and will observe whether it has any impact or not. If there is found positive relationship with along other variables, it will be most important theoretical contribution of the study. In addition, application of TPB will be strengthened.

In case of practical implication, we can find that Bangladesh is full of beautiful and historical destinations. Cox’s Bazar is one of the most attractive destination of our country. According to Industry Insider, Cox’s Bazar has now a combined capacity to accommodate over 80,000 tourists at around 400 hotels, motels and guest houses (Unb, 2016). Around 25 hotels claimed to be of 5-Star and 3-star standard. The number of domestic tourist has reached around 65 to 70 lakhs by the end of 2017. (Moretaza, T, 2018). Bangladesh’s visitor arrivals recorded 830,068 persons by 2016 in the month of December (Ceiedata, n.d.). Among them, 6,20,000 tourists visited Bangladesh in 2016. Bangladesh tourist revenue reached 344 million USD in December, 2017 (Ceiedata, n.d.). Direct Contribution Travel and Tourism to GDP in 2017 was BDT 427.5 billion (Hasan, 2018). According to world Travel and Tourism, around 1.5 million people directly and overall 2.3 million people are involved in Bangladesh Tourism Industry.

So, branding this destination is an emerging factor in competition with other countries and to attract tourist. A successful branding can motivate domestic and foreign tourists to visit several places of Bangladesh. Through the survey success factors of a destination branding can be found out which can be helpful to create our destination image. Government, public sectors, and stakeholders can use the finding to bring the destinations in front of the world with some positive image. Academicians and researchers can also be benefited with the help of the findings.

Limitation and Future Research Direction

This study tried to cover the research gaps through the construction of a conceptual framework on tourism destination branding based on three prominent theories IPT, TRA and TPB. Only theory is not enough to draw the actual destination brand model. It is seen from the literature that maximum output had achieved based on the quantitative researches regarding destination loyalty. However, destination trust needs to be taken into account for the purpose of conducting a quantitative study using the framework. Moreover, the framework is needed to be contextualized before starting a complete quantitative study. For the sake of contextualizing the factors and their relationship for a specific application, a field study might be required in this perspective.

In future the researcher is going to draw the hypothesis (positive or negative relationship) on the basis of literature and field study. After that, the researcher will examine the proposed loyalty framework through quantitative research in Cox's Bazar, Bangladesh. To make tourism destination model useable, these constructs are needed to be measured in a certain situation and data must be collected for statistical analysis. The researchers of this study have the measurement items range with their sources to measure the constructs.

Conclusion

Destination branding has become a successful instrument in conveying brand messages to the visitors. It is found that successful destination branding influences tourists' positive behavioral intention. Actual behaviour depends on behavioural intention. It is seen that destination branding depends on several success factors which are led by some quality attributes like, affection, amenity and hygiene, diverse attractions, easy accessibility, emotions, uniqueness, entertainment, nature and culture, sun and sand, hospitality, attraction, transportation, tourism service etc. Again, there may have some other influential factors like, culture, infrastructure, environment, destination trust, destination loyalty, natural traits, political stability, and behavior of local community for satisfaction which not yet considered in these literatures. Infrastructure and destination trust can be the vital issues among all these factors for developing country like Bangladesh. Though Bangladesh's infrastructure is not up to the mark but still tourists like to travel to different destinations. Several variables of destination trust like, reliability, belief, confidence, knowledge, honesty etc. could be used as major parameter of the destination trust. These variables can be considered to find out whether these are work as success factor of destination branding

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Journal of Business Studies

JBS-ISSN 2303-9884

Volume - 11, No. 2, pp.: 211-225

Entrepreneurship and Community Development with Special References to Ektee Bari Ektee Khamar (EBEK) Project in Bangladesh

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Abstract

The purpose of this study is to aim at scrutinizing such government institutional validity and illustrating the strategy and activities employed by an entrepreneurial actor in rural Bangladesh in addressing Ektee Bari Ektee Khamar (EBEK) namely, one house one firm (OHOF) by developing a conceptual model for encompassing. The theoretical importance of developing and applying social entrepreneurship to sustain social and community development (CD) and enhance human wellbeing. This study adopts a theoretical aspect to analytically assessment the literature on EBEK through the community participation, and relates it to research and project explanation. The authors conceptualize this process as the crafting to new institutional arrangements and as EBEK projects resource and institutional theory occurring in parallel. The discussion concludes that developing community entrepreneurship requires a supportive infrastructure and a long term commitment of people and resources to facilitate the process of releasing the entrepreneurial spirit of each individual community. The study offers insights for development agencies, policy makers and local governments on how to combat poverty, fight corruption, and stimulate community and financial development. The paper enriches current thinking on institutions and entrepreneurship as well as strategies for CD in Bangladesh. The limitation of this study is that EBEK has not yet emerged as an exclusive discipline. Thus, there is limited research on EBEK projects in the context of Bangladesh.

Keywords- *Entrepreneurship, Community Development, Local Government, EBEK Project*

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Introduction

The present world is significantly supports the relationship between project and entrepreneurship for community. The notion of Ektee Bari Ektee Khamar (EBEK) i.e. one house one firm (OHOF) is different in conditions of its dynamics, ins and outs, and definitions (Kumar, 2011). Different indicators are essential to deal successfully with different dimensions of EBK and well-being comes to the vanguard as one of the ordinary factors (Roy, 2012). EBK (developing project) is poverty alleviation activities of the government of Bangladesh through family farming. Development projects play significant role in pouring this development as focused community structures and significant trade of methods, they necessitate particular the local government rural development and cooperatives division (LGRD) and regulations come into continuation and to function suitably (Gross, LeRoy, & Janis-aporicio, 2002). One of the main stupendous factors preventing rising state from up wording with the way to a project financial system is the blurred character of their organizational structure. The facts that we examine in rising economy is that organizational preparations that hold up projects are either missing or frail, and, over and over again the frequencies of hindering simple institutions encumbers complete project involvement (Fraser, 2005; Scott, 2005). The result of the LGRD on economic action and prosperity formation has been conducted by economists, financial sociologists and organization theorists. Even though these experts have focused their analyses on various magnitude and meanings of institutions, the most vital point is the same: institutions restrain and settle on act and activities (Dimaggio & Powell, 1983). The LGRD or institutional points of view have mostly focused the mighty and steadiness of the LGRD and cooperatives. A noteworthy review to institutional theory is that comparatively slight concentration has been paid to the enabling role of institutions and to institutional modification (Neubaum & Zahra, 2006; Svejvig, 2009; Tsai, Lai, & Hsu, 2013).

The emphasize on rising countries allow to study the processes of entrepreneur in a situation where funds and support by the LGRD and cooperatives are limited. This categorization is essential as it allow to generate the idea of the processes of entrepreneur in the region of a idea first introduced by anthropologist (Marquis, Glynn, & Davis, 2007; Hossain & Yahya, 2017) that of bricolage. Within this background we study Bangladesh and demonstrate the government institutional processes of entrepreneurship with data resulting from a qualitative case examination of the actions of EBK projects, one of the chief CD projects in Bangladesh. Then, how is entrepreneurial institution feasible in such a context? Are motivated actors being inadequately resourced LGRD able to construct and cooperatives or initiate the process of varying existing institutions? An amalgamation of concepts from various areas allows concentrating on these questions.

Objectives of the Study

Our main objectives are to know some of the institutional obstacles to CD and how this new sort of entrepreneurs manages or deal with those obstacles. More specifically, the study explores the following objectives:

- i) To examine the institutional (LGRD) effects of CD through the EBK development projects in Bangladesh.
- ii) To examine the notion of the LGRD and cooperatives suitable to portray circumstances where present and/or strong institutional preparations thwart those barred by poverty from taking part in project activities.

Literature Review

A good number of works to date has paying concentration on the growing world. Therefore, we at a standstill be familiar with comparatively modest literature about how the actors entrepreneurial endeavor to convert institutions and to alternate them with innovative ones in rising countries where organizational preparations are a smaller amount grown-up (Hayton, 2005; Jun, 2016). EBK is a pinnacle focused on family farming and poverty diminution plan financed by LGRD in Bangladesh (Kumar, 2011; Richardson, Ramirez, & Haq, 2000). The aim of the project is poverty mitigation through fund rolling followed by family farming living and income creation of under advantaged and diminutive stakeholders of the country (Kumar, 2011).

The failure to achieve a negligible standard of living means to forms of financial, communal and psychological dispossession taking place among people missing adequate ownership, control over or access to resources to keep up or present individual or collective smallest levels of living (Wodon, 1997). The positive relation movement of entrepreneurial with economic growth, privileged circumstances and possessions creation has extensive been well-known (Marti & Mair, 2007). Over the last decade development works have progressively more paying attention on developing and transforming the LGRD and cooperatives required for attractive the estimable in project actions. The guesses underlying such works are that projects are an successful instrument to achieve persistent raising in living values in the region of the nation; and institutions comprise the “rules of the game” (Moudud-Ul-Huq, 2015). Defined this way, the LGRD and cooperatives are ubiquitous and institutional validity in all-purpose existence.

A holistic way to growth, creation, conversion and de-institutionalization policy and norms is initiated by anti-poverty programmes (Ahmad & Townsend, 1998) and thus permits the broke in rising countries to come into the righteous ring of economic and CD. This fact has in recent times been stated as CD entrepreneurship. For this article, we apply the terms community and the LGRD and cooperatives entrepreneurial actor interchangeably. Why many developing countries have in common although institutions exist and they do not allow for discourage of economy and CD (Banks 2013; Hossain & Yahya 2017)? In rising countries, community and economic possessions are classically intense in a small amount of who have partial attention in shifting the institutional status quo. Particularly in Bangladesh EBK and economic realism is formed by the LGRD and cooperatives yet we examine that particular institutions, those that would hold up a latest economy focused on project doctrine, are gasp. Academic argument on entrepreneurial institution has paying attention on the actions of influential works with wealthy resources (Dimaggio & Powell, 1983).

Methodology

The methodology of this work is done using the objectives. Other studies used decisive assess approach to review extensive literature on the outcome of support in budding project in relation to entrepreneurship and community development (Seferiadis et al., 2017).

Particularly, this work is conducted by using the related studies and peer-reviewed articles were searched from the SCOPUS, Google Scholar, EMERALD, ERIC (EBSCO or CSA), Tylor and Francis, Elsevier and Social Sciences Full Text (SSFT) of a variety of years. In addition, with a sight to finding studies those are connected to the theme and keywords. The study is mainly composed using varied secondary sources. Due to its increasing reputation, secondary data analysis has been used by many studies to scan EBEK issues and other variables in community and institutions. Mainly, the span and quality of the studies surveyed settle on accomplish of a case study. The search conducted on anthropological analysis (bricoleur) shown relevant literature (Phillimore et al., 2016). A 'bricoleur' means a jack-of-all-trades, and 'bricolage' has been focused within scholastic qualitative research to explain a realistic and diverse approach to qualitative research - one in fact alike to that adopted in a good number social science research (Bygballe, & Swärd, 2019).

Rational of this study

Ektee Bari Ektee Khamar project is a 'Small Savings Model'. The key purpose of this project is to create the top use of natural and human resources for ensuring the sustentation of meager community organizing their own little saved funds for the reason of their scarcity alleviation and sustainable expansion. This theoretical article spotlight on EBEK projects and their communities' view give good reason for through institutional theoretical viewpoint. Developing project linked other research highlights the project subject where communities' view where not point to precisely. In this paper, the researchers highlight on this matters and main concern to the communities' opinion. Therefore, in this study used new methodological feature that is bricolage or anthropological case study.

Projects and Institutes

Scholars from diverse disciplines have focused on how to generate projects and how to make them further resourceful by intensification institutions such as property rights, structures of governance and exchange rules of preconditions for projects to be present (Datta, 2007; Gidron, 2010). Who is accountable for the formation and development of such CD projects? It is extensively recognized that this role is first for the state. However, what happens if the structures of the government are fragile or fraudulent or both, which is the cases seen in the developing countries and the circumstances, under which economic actors systematize, contend or cooperate, tend to support some actors over others? A emergent number of research personnel on developing countries propose that when the government normal curriculum non-sufficient to guess this function government budding projects step in (Kumar, 2011). Thus, government developing projects are designed as intra-firm mechanisms for trade off with project deficiencies.

- What has been focused on the actions of project directors are forced by their key objective: generating CD value? Consequently, they are inclined to plug the suitable by the exiting institutions only as extended as it is lucrative.
- If, nevertheless, no instantaneous or direct economic returns are concerned, who steps in?
- Who builds exiting the LGRD and cooperatives or corrects for the rising institutional arrangement if the government and project directors be unsuccessful or are too fragile to proceed?

In many developing countries, it is observed that the new kind of actors like, an amalgam kind of entrepreneurial actor is used for the economic development of the said countries by focusing on the CD and economic development as a sustainable development. In this respect, social value generation for business entrepreneurs is the by-product of the economic value. The primary purpose of taking of these actors are to generate social entrepreneurs, while generating economic worth is a essential situation to make sure economic feasibility (Marti & Mair, 2007). For these, entrepreneurs' projects are not an end in itself or a means to suitable worth; they sight at projects as a significant CD construction and a instrument to promote social and economic growth. Thus, promoting project contribution by construction, transform and putrid the LGRD and cooperatives becomes a significant purpose.

Institutional Entrepreneurship in Emerging Countries

Researchers have mentioned that actors lacking of resources can utilize the obtainable the LGRD and cooperatives in unintentional behavior to generate latest ones by using a broad arrangement of actors (Campbell, 2007) while the scholars of entrepreneurship have stated that the entrepreneurs themselves involve the "creation" of new ways through the recombination and conversion of obtainable resources (Fassin, 2005). Both schools of attention have in recent times has taken the term "bricolage" to explain the development of "making do" by recombining rudiments at hand. Aiming at bridging these urging we openly submit to bricolage as creation do with resources the LGRD and cooperatives. The lack of resource and nebulous institutional material that describe rising countries make it hard to visage the huge level and unified nature of the communal troubles that subsist. Researchers have strained the need for inter organizational collaboration. However, this type of cooperation needs a stage for disseminated agencies and least developed countries.

These characterize significance of the LGRD and cooperatives to encourage expansion which are lost. But these comprise of institutional legality which is defined in this article. Therefore, it is vital to look at how entrepreneurial actors or project directors build cooperation sufficient in the first place. We will squabble that, whether the nonattendance or feeble institutional preparations hinder people's successful contribution in projects and community, entrepreneurial actors step in and plug these voids by construction platforms for contribution. Once built, such platforms become arenas where new entrepreneurial opportunities can be enacted and where organizations may cooperate. We will exercise the idea of bricolage to point up this process.

Research Context: Bangladesh and EBEK Projects

The choice of background and the definite case were guided by the phenomenon, themes, and issues we attend to in this paper. We select Bangladesh as our research perspective for two reasons: first, indicators on poverty and development in Bangladesh recommend that the LGRD and cooperatives which facilitate the poor to take part in the project economy are exiting (Gross et al., 2002; Werner, 2009) and therefore, an institutional validity is defined in this paper exists. Secondly, unreliable substantiation recommends that a number of entrepreneurial actors who are local have been taken on the undertaking of satisfying the untoward void. Although Bangladesh has experienced important development in plummeting poverty, nearly half of its people of 140 million still live under the poverty line (as measured by earnings, expenditure and capability to meet up fundamental human needs) which leads Bangladesh to one of the poorest countries in the world. The remedies place onward by international policy makers and international organizations are hollow one theme: Bangladesh wants to initiate better efforts to facilitate the poor to contribute in the economy (Sharmin, Khan, & Belal, 2014). Bangladesh is an rising country, average gross domestic product (GDP) with 6.7% (Sheila Reed & Nasreen, 2016). After independence in 1971, Bangladesh became changed her governance structure, economic structure and social structure. Our Great leader Bangabandhu Sheikh Mujibur Rahman, dreamt the freedom of the poor as a key to development. He dreamt for a state where deficiency, injustice, and human rights violation would not be happened (Kumar, 2011).

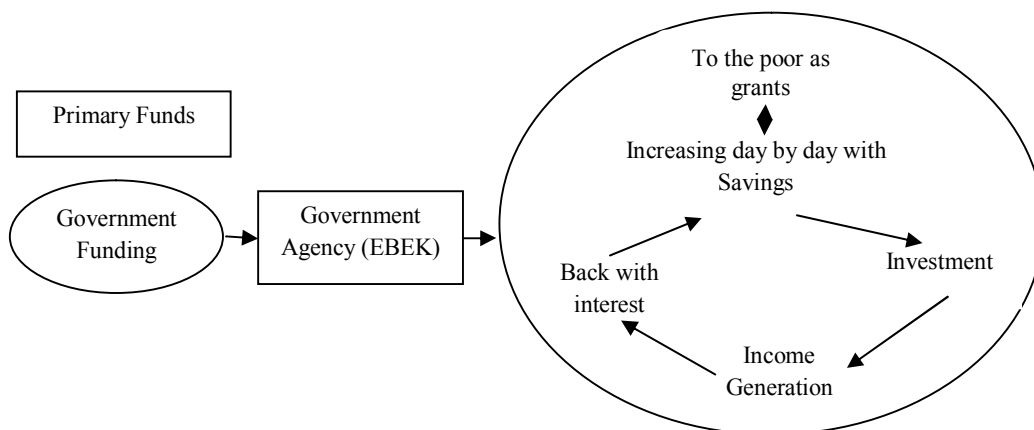


Figure 1: EBEK (one house on firm) model: Capital lies with the poor and increasing day by day effects on community. The existing government has announced various safety-net projects along with definite programs for progress by employing human and financial likely of the community. EBEK is one of the vital rustic development agendas for poverty reduction by confirming capital creation and skill development of the poor shadowed by maintenance (agro farming) which are entirely their need founded on economic activities.

Table-1: The EBK projects plan on the year 2010-2020

Phase	Budget	No. of Village	Beneficiary community	Period				Period			Period		Period
				2010-	2011-	2012-	2013-	2014-	2015-	2016-	2017-	2019-	
				11	12	13	14	15	16	17	18	Con.	
1 st Phase	1492 (BD Tk.)	core 17300	10.38 Lac										
2 nd Phase	1670 (BD Tk.)	core 23227	13.88 Lac										
3 rd Phase	Proposed 100041000 core (BD Tk.)	100041000	25 Lac										
4 th Phase	Proposed 100041000 core (BD Tk.)	100041000	25 Lac										
5 th Phase	Banks fund	120000	Above 25 Lac										
Total	5162 core	120000	Above core	1									

Source: <https://www.povertyactionlab.org/.../ministry-local-government-rural-development-and-...>

In the above table 1 shows the EBK projects plan on the year 2010-2020. Here proposed budget which help to reduce poverty. The existing government started the project EBK in financial year 2010-11. The numbers of villages 9640, economic values US \$ 149.625 million. After that it was extended 17300 villages and economic values US \$ 216.25 million and end of the July 2013 beneficiaries' villages 40425 and financial expenses US \$ 395.375. EBK is as a slight gage aid and recovery project designed at revitalizing some of the ruin initiated by Bangladesh's war of liberation (Roy, 2012).

In particularly explained by 2011, however, the multitude of social problems on a national scale and the government's failure to provide sufficient aid, led EBK to adopt a new strategy of integrated development based on the twin objectives of poverty alleviation and empowerment of the poor, and focusing on institution construction to carry the rural poor into the majority of development. EBK's outreach enclosed 78% of the nation's villages. In 2016, EBK engaged more than 93,000 individuals' assembly it the nation's second-largest proprietor after the regime. EBK has formed over 6 million businesses in several economic upgrading and its main programs length four basic spaces: economic upgrading, education, health and social upgrading, human rights and legal services (Islam & Hasan, 2009; Streeten & Burki, 1978). EBK pecuniary program has so far united more than 5 million poor and dispossessed people of which most are women into 164,107 VDOs (Roy, 2012).

Policy Implications and Findings

It is very sensitive issue all over the world to reduce poverty because nearly 3 billion community people live on less than two dollars per day (Bank, 2002). Negotiations on

overwhelming the deficiency cycle that happens in many emerging countries have typically centered on macro level variables such as economic development, geography, trade and business, and cultural values. Correspondingly, research has focused on the role of powerful actors, governments. This focus on macro solutions might have prohibited the attention to and enhancement of micro solutions. In contrast, entrepreneurs such as EBK can offer teachings for development in an exercise and impending partners for mutually project and non-project systematic areas in talking the lack of market contribution for the realm's poorest. Our investigation of EBK shows how a motivated business performer converted the institutional more effective that encumbers people to contribute in project-based actions by forming a platform for sharing and teamwork, innovatively coalescing the institutions and possessions it has at hand.

Since this, we conclude that actors interested in adopting economic and CD should pay consideration to both the resources at their dumping and the institutional context. Those climax merely on resources may discovery the social structure delaying the board group from profiting, and persons that emphasis solitary on the LGRD and cooperatives project construction may find it challenging to do so if they cannot assemble the suitable assets. Decades of unsuccessful progress determinations have revealed that for-all-contexts explanations simply do not effort (Easterly, 2006). Consequently, we must extend our understanding of how entrepreneurial actors create the LGRD and cooperatives that can gradually enhance processes of transformation of the socio-cultural norms that impede participation in project-based activities. It is our hope that this study will not only stimulate future research, but will also offer insights for development agencies, policy makers and companies on how to counter poverty, reduce corruption and flourish social and economic growth.

Drawbacks for Project Participation in the Community of Bangladesh

As EBK acts predominately in the rural areas of Bangladesh, it is our objective in this section to briefly highlight some of the most important constraints that many people in rural areas confront to participate in the projects and in public life. A defining characteristic of the rural areas in Bangladesh is the asymmetrical relationship that exists between different members of the community, elites at one extreme and the powerless. By using different mechanisms (ranging from outright violence to bribery, manipulation or prestige), the local elites can extend their control over private and public land, local government resources (such as capital, government agricultural land, family farming infrastructure and skill development training); or who is employed jobs.

In this context, survival for the powerless poor lies very much on their ability to ensure support from the community elite. This support typically comes at the price of losing their autonomy and independence. For instance, many sell their land so that they can afford bribes to get jobs. Those who have nothing to offer to the elite are even excluded from these "dependent-security" relations. As development professionals highlight, poverty has multiple dimension. In addition to material poverty, it involves gender inequalities, powerlessness and injustice. The formal legal system of Bangladesh is perceived as highly corrupt and extremely slow (Wickberg, 2012). Most poor people

cannot rely on the formal system because they can neither afford to pay bribes nor wait eternally for dispute settlements. Consequently, the informal legal system is generally favoured for its lower cost, speed, accessibility, and cultural relevance. However, it is dominated by the male elite and presents high levels of corruption; hence both the formal and informal systems are used to perpetuate relationships of dominance.

The power structure interacts with and is reinforced by the ideological system of norms, traditions and values. Particularly, indigent in rural Bangladesh are the women; the most disadvantaged and deprived sector of society. Social and cultural norms associated with purdah, patriarchy and the still very common occurrence of early marriages restrict women's mobility and participation in public life. A strict separation between the public and the private sphere confines women to the latter, thus restricting their involvement in project transactions and income generating activities. An additional issue should do with ownership of resources: socio-cultural norms dictate that men control the resources even if women can own them. For this reason, many mainstream development programs targeted at women (including micro-finance) bypass the intended recipients (women and girls) in favour of more culturally acceptable ones (men and boys): therefore, access to resources does not necessarily equate with their utilization. In sum, the complex power structure of rural Bangladesh, based on relationships of dependence and perpetuated through existing socio-cultural norms, along with the weakness and corruption of the legal and political systems, restricts the involvement of the poor and powerless in project based activities. In the next section we shall describe EBK's strategy to cope with such deep-seated impediments.

Linkage Between Participation and Collaboration: The Village Organization

More than one decades of development practice has showed EBK that the community arrangement in rural spaces of Bangladesh makes it practically difficult to scope the poorest of rural societies. Programs considered for the whole communal tended to convey most of their reimbursements to the exclusive by avoiding the poor. EBK, thus, makes hard work to give a public opinion to those who have been excepted because of their addiction on the richest villagers. Its clarification was to shape arenas in which the poor could contribute all over the nation. EBK calls these arenas "Village Development Organizations" (VDOs) and they offer both the initial point and the foundation of the EBK development model. The VDOs is a link of poor people (mostly women) that becomes the arena in which the conventionally feeble can clarify their problems, share in the community and obtain services. As such, it shows a crucial role in promotion the emergence of new solutions, practices and rules. VDOs are formed with 20 to 55 members and from the beginning attention is paid to discipline (e.g. regular attendance at weekly meetings and monthly issue-based discussions). Among many changes that occur after joining VDOs, women highlight increases in: self-confidence, credit-worthiness, mobility, personal savings, and a sense of economic security.

Table 2 Collaboration between EBK (OHOF) projects and other organization in CD Bangladesh

Collaboration	EBK (OHOF) program	Rationale and objectives
VDOs	Micro savings and incentives from govt.	Assistance to capital formation of the poor farm families
VDOs	Revolving fund as grant from the government	VDOs as revolving capital
VDOs	Long training on five farming livelihood activities	Skill development
VDOs	Livelihood agro-farm selection at evening meeting	Identification of beneficiaries Needs
Fund mobilization authority	Fund raise and sustainability of fund mobilization	Refunded to the common fund

Source: Complained by the authors

Expansion professionals put forward that a feeble social system may be a influential hindrance to seepage poverty (Burns, Krott, Sayadyan, & Giessen, 2017). In this logic, VDOs ripen the social principal of EBK members and permit them to generate their own systems, thus flouting the cycle of prohibiting and/or necessity previously skilled in every day. At the same time, the VDOs are the transport idea for EBK's key strategies to realize social upgrading and economic upgrading. When a VDOs has been designed, EBK begins to advance and implement programs such as micro credit, income generation, family farming. Given the multidimensional fauna of poverty, the development and implementation of such programs often requires alliance with other actors (e.g. the government, other NGOs or development organizations, firms, etc.). Table 2 shows some of the collaborations EBK is currently engaged in, along with a short description of their rationale and objectives.

These alliances are frequently built upon the social grids previously formed by EBK. For example, the countrywide allowance of some of the CD programs trusts on the vital role played by EBK. EBK are the ministry of local government, rural development and cooperatives community wellbeing volunteers and play a key role in CD, poverty reduction and family farming and health service (El Arifeen et al., 2013). They contributed greatly to the advancement of the lives and freedoms of all indigenous men, women. The unlocking of the power of women's active role in the community and in the economy has been an tremendously productive move for Bangladesh (Sen, 2013). EBK are members of VDOs, and thus have direct knowledge of the most rampant family farming issues and their impact. While collaborations with the government and

other development agencies point to the fact that some issues cannot be controlled by a single organization, this example reveals something very important: collaboration builds upon an infrastructure of pre-existing networks, social relations, and organizations. What EBK aimed to do with the VDOs was to build such infrastructure.

Recombining Resources and Institutions

One important part of those corporeal in poverty the humblest of the poor has been avoided by most development agendas and by typical development research (Ullah & Routray, 2007). Part of the problematic should do using a failure to identify that the poor are not a same group. For example, while conceding the prospective of micro-finance, many grant that while customary micro-credit based involvements have a verified effect on the judicious poor, they may not be sound for the “ultra” poor and may uniform be counter-productive for those confined in lingering food uncertainty who have no resources base to protect themselves (Dowla, 2006; Emejulu, 2015). Assessments show that over the 25% of Bangladeshi people live in extreme poverty and cannot even satisfy their most basic needs. For this group, EBK has been investigating with more general tactics. Stimulating feature of this program is the use and mixture of different elements (e.g. physical assets, training and institutions) to scope the ultra-poor and subsidize to building a more permitting atmosphere for them. The project has two core sub-objectives: pushing down and pushing out the borders of poverty reduction. By “pushing down” the poverty frontier EBK means the advance of new instruments appropriate for the ultra-poor.

To do this it recombines some of the elements used in other agendas and devises new tools. In difference to its other systems, EBK primarily transfers some straightforward assets to begin an income making activity such as poultry or livestock rearing, agriculture, and other, non-farm activities. It also provides an existence stipend, as well as enterprise development exercise. At the same time, identifying the solid correlation between ill-health and poverty, the project offers specific health care services for the ultra-poor. Nevertheless, EBK’s practice has shown that even the combination of these several elements is not enough; one must also challenge the socio-cultural norms that constrain the ultra-poor from benefiting from these basic assets. Hence, the second element of the EBK program strives to “push out” poverty by offering an alternative to the existing networks that promote exploitative yet secure forms of dependency as outlined above.

The socio-structural setting in rustic Bangladesh brands EBK project a difficult one. To this conclusion, EBK has mutually created fresh institutions and an engage in recreation with old ones. The interaction between each of motioned types of institutions novel and prevailing becomes fundamental. For example, EBK boosts members of the VDOs to competition for local government polls so that their opinions and views can be perceived. Therefore, community people have a say in shalish (arbitration) procedures and can well support their own benefits and those of the additional VDOs members. Of specific attention is an institution called the “Gram Shahayak Committee” (GSC). By construction GSCs, EBK objectives to assemble the local leading to create an allowing

situation for the ultra-poor. The notion of engaging the local elite materialized after EBK workforce found out that various very poor women in the EBK program were at menace from theft or injury of the resources they customary. Their lack of contacts with more prevailing actors and an absence of backing from their rural peoples meant that these women were powerless to shield their newly owned assets.

To create a nexus between two extravagances of the power variety in rural communities and consequently shelter assets that it has relocated to the ultra-poor, EBK has haggard on customs concerning the customary responsibilities of village leaders with veneration to the poor.

Conclusions

The most significance of maximizing entrepreneur attitude in developing project done by institutions (LGRD) has been widely acknowledged by this study. In this regard, the approaches of how to upsurge CD as a meaningful strategy to reduce real entrepreneur dissatisfaction has been effective to attain researchers' consideration because community development is measured to be the pioneer of tangible project progression. Previous studies in relation to this have extensively credited as the fame of CD practices in decreasing community dissatisfaction. By doing so, the study assimilates anthropological investigation (bricoleur) perspective. To conclude, this research serves as an impermeable of the belief that institutional tactic are major constituents that can intensification CD through boosted developing project (EBK) practices from the organisation and increased community stakeholder satisfaction which will eventually define the attractiveness, success, and position of the EBK projects in Bangladesh. Further, while the platform addresses great shortage and the community causes that inspire such shortage, EBK also shapes associations that are comprehensive of, and standard to, the wider context of the socio-cultural setting of rural Bangladesh. A project that openly confronted imposts and civilizations would have botched and maybe rejected from the inauguration level. The EBK project offers an excellent design of how progress enterprises can report the inhibitions that some affiliates of rural community's aspect when wearisome to encompass in project-based actions. Asset allocation is an essential but not enough. Building a more enabling atmosphere is essential as well, but again, not sufficient. What is very often needed is an endless effort to association the government and community.

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Journal of Business Studies

JBS-ISSN 2303-9884

Volume - 11, No. 2, pp.: 226-240

Factors Affecting of Expatriate Leadership Effectiveness in a Multinational Organization: A Case Study in Bangladesh

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Abstract

The reason for this examination is to investigate and clarify the impacts of enthusiastic knowledge social insight and furthermore otherworldliness insight on viable administration. Social knowledge job for the most part influenced on the successful initiative of global association particularly in Bangladesh. Populace in these investigations that the whole staff working in various vast urban areas in Bangladesh. Testing was finished by helpful method with the details in this way got an example of 200 director level representatives, consequences of information investigation auxiliary condition displaying utilizing AMOS (Analysis of Moment Structures) programming gives proof that the social insight, passionate knowledge and job otherworldly insight impact on viable authority of worldwide association in Bangladesh, profound knowledge and initiative viability, enthusiastic insight have the positive effect on the administration successful on the global association in Bangladesh. At that point the last causality gives proof that the social knowledge greatly affect administration adequacy of the global association in Bangladesh.

Kew-words: spiritual intelligence, emotional intelligence, cultural intelligence, effective leadership, multinational organization.

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1.1 Introduction

Over the past decades, the world economy has experienced massive shifts as a result of globalization (Irving, 2010). An escalation in international travel, advancements in communication and technology and the emergence of a highly interdependent global economy have immensely changed the way businesses are conducted in recent time. As a result of the interconnectedness among cultures, societies and businesses, the effects of globalization can be felt like never before. The concept of globalization has indeed rewritten social expectations, expanded the scope of multicultural interactions and opened the door for new opportunities, challenges as well as responsibilities (Lozano and Boni, 2002).

Economic globalization is the driving factor that has influenced MNCs effort toward ameliorating their international activity as well as existence (Maertz, Hassan & Magnusson, 2009). With the drastic expansion of the global market, the number for multinational corporations (MNC) has also ameliorated at a radical pace. As the number of MNCs is increasing globally, securing long term success as well as improving organisational performance has emerged as a necessity in order to survive in this competitive global market. Under such circumstances, potential success of MNCs is greatly dependent on their organizational performance, or in other words their ability to meaningfully formulate strategies in order to attain institutional objectives (Randeree and Al Youha, 2009). This effort in turn requires globally competent workers as well as intensive use of the skills of expatriate leaders. Expatriates are referred to as sojourner who leaves their respective countries in order to business assignments with the intention of an eventual return (Aycan & Kanungo, 1997; Ramalu et al, 2010). In today's global market the competence as well as leadership effectiveness of expatriates working in the top managerial positions play a vital role in coming up with effective and sustainable strategies. The global corporate environment of the current period calls for a leadership style that is flexible and future oriented (Chuang, 2013). Businesses with global presence require certain approaches that will enhance the leadership development of expatriate managers and ultimately result in higher organizational performance (Amagoh, 2009).

Global leaders must continuously develop their skills in order to face the existing as well as upcoming challenges in today's increasingly changing environment (Chuang, 2013). A true global leader is not only well aware of the differences that take place in a cross cultural environment, but more importantly appreciates and adjusts to those differences (Chuang, 2013). An expatriate leader's ability to effectively manage the culturally distinct settings is the key to organizational success (Rockstuhl et al., 2011; Okoro, 2012). The emergence of such phenomenon has called for greater leadership skills among expatriate leaders in order to secure long term performance of the multinational companies in today's intensely competitive globalised business environment. Global leadership effectiveness has turned into a critical aspect in the arena of cross-border business and human resource development (Harteis, 2012). The need for effective leadership in the area of cross-cultural management has gained much attention in literature (Nguyen & Umemoto, 2009) for the reason that organizations across the world

are in need of leaders who are competent regarding the intercultural aspects and can visualize the business environment from a global perspective. In order to survive in the intensely competitive business landscape of this globalized era, it has become a necessity for organizations to have leaders who possess the skills as well as abilities required to manage the diverse culture and develop complex strategies (Chuang, 2013). Effective global leaders are key concerns for global businesses as they open the door for organizational success and growth in a globalized market (Irving, 2010). Taking these issues into account, it has become ardently necessary to gain further understanding regarding the aspects that affect leadership effectiveness of expatriates for enhancing organisational performance in a Multinational organization.

2.1 Literature Review of the Study

2.1.1 Leadership Effectiveness and Organisational Performance

Leadership is indeed one of the most important factors that pave the way to organizational success. Leadership is a way of social interaction that provides individuals with the ability to influence the behaviours and actions of their followers and eventually their ultimate performance (Humphrey, 2002; Pirola-Merlo et al., 2002). The primary objective of leadership development programs is to enhance leadership effectiveness for accordingly guiding organisations during the time of uncertainty as well as change (Amagoh, 2009). Leadership effectiveness denotes a leader's ability to influence his or her followers in attaining organisational objectives (Vardiman et al., 2006; Bodinson, 2005). Effective leadership is envisaged as the basis for organisational performance as well as growth (Kim, 2007).

The relationship between leadership skills and organisational performance has been a global phenomenon (Almatrooshi, 2016). In the words of McNair et al. (2011) leadership is considered to be the art through which the followers are motivated in order to attain a shared goal. Moreover, the effective leaders possess the skills that are needed in order to influence their followers, on the organisation's behalf, to fulfil the due tasks for the attainment of organisational objective as well as communicating organisational vision. It has been argued by Pradhan and Pradhan (2015) that organizational performance is the result of leadership capability. In today's globalized business environment, organisational performance to a great extent depends on the effectiveness along with the flexibility of the leaders (Soebbing et al., 2015). In regards to the above discussion, the hypothesis below has been derived:

2.1.2 Spiritual Intelligence and Leadership Effectiveness

The realization of how we perceive the environment that surrounds us, an understanding of the background as well as meaning of events and the ability to come up with innovative ways are of much importance for organizations of the current era (Maja, 2016). According to Musek & Maravič (2004) intelligence is said to be the greatest predictor of cognitive accomplishments and also performance. The theory of multiple intelligence was first brought to existence by Gardner (1999), in which he claimed that

the aspect of intelligence is not restricted to a single or one property of human mind (Maja, 2016). There exists a part in each and every individual which is not physical, and this part is called our spirit. According to Fairholm (1996) it is the key, energizing force and more importantly the principle that guides an individual. He has further explained that the aspect of spirituality that lies within a person creates their identity, shapes their values and harmonizes the values of wholeness, relationships as well as inner wisdom.

Emmons (2000) took the concept of intelligence a step further and proved that spirituality comprises of all the criteria that are required for intelligence. According to him, the aspect of spiritual intelligence comprises of five respective components which are the aptitude for transcendence, an individual's capacity to go into the highest spiritual states of consciousness, the capability to carry out events, tasks as well as relationships in a sacred manner, a person's ability to make use of spiritual resources in order to solve problems, and to engage in righteous behaviours which includes the ability to forgive, showing gratitude and humbleness and being compassionate to others. He further mentioned that the aspect of spirituality can be perceived as a form of intelligence for the reason that it has the ability to predict functioning and adaptation as well as provides individuals with the abilities required for solving problems and eventually attaining goals (Amram, 2009). By perceiving the concept of spirituality through the lens of intelligence, it has been noted by Zohar and Marshall (2001) the aspect of spiritual intelligence is rooted in a person's capacity of dealing with issues that involves meaning and purpose and affecting their ultimate behaviours and actions. Spiritual intelligence allows individuals to bring about a deeper meaning, importance and enrich their lives (Maja, 2016). This in turn allows individuals to attain a higher level of personal integrity, comprehend the true purpose of life and live life on the right path (Zohar & Marshall, 2000).

The concept of spiritual intelligence consists of the intangible internal aspects and a deep awareness of oneself (Saad et al., 2015). In the words of Marques (2005) spiritual intelligence has been defined as a person's deepest inner resources to care for others in the workplace as well as the ability to tolerate and adapt. It has been mentioned by Maja (2016) that the main difference between emotional and spiritual intelligence can be seen in the fact that the former helps us to evaluate the situation that we are in and enables us to understand how we can properly find ourselves in that situation. On the contrary, they have added that the latter gives individuals the option to ask themselves if they are willing to stay in this situation or they want to establish a more proper situation by changing the current one. Henceforth, the element of spiritual intelligence connects all the different types of intelligences so that individuals can understand which one is the most important (Schwartz, 1995; Vaughan, 2002).

Research has indicated workplace spirituality is one of the leading factors that ameliorates organisational competitiveness (Ayranci, 2011), enhances organisational performance (Brown and Ryan, 2003; Fry, 2003) as well as increases profitability (Milliman et al., 2003). Marques et al., (2000) claimed that there is a direct association between the aspect of spirituality and organisational activities and eventually to results. Literature has also indicated the presence of a favourable relationship between spiritual

intelligence and performance through leadership (Ayranci, 2011). Studies have demonstrated that certain components of spiritual intelligence enable leaders enhance financial performance (Tischler et al., 2002; Ayranci, 2011) whereby others shown that they make positive contributions to leadership effectiveness (Amram, 2009; Sternberg, 2007). Based on the relationship that can be seen between spiritual intelligences and leadership in regards to prior literature, the following hypothesis has been established.

Hypothesis H1: Spiritual intelligence has a significant effect on leadership effectiveness.

2.1.3 Cultural Intelligence and Leadership Effectiveness

Cultural intelligence refers to the ability of a person to work effectively in a culturally diverse setting (Rockstuhl et al., 2011). Initially, the construct of cultural intelligence was developed for attaining a clear idea about the factors that impact an individual's ability to adjust into a new culture (Earley and Ang, 2003). Today, as more and more organizations are competing beyond national boundaries they have come to recognize the importance of having leaders with a global mind-set (Crowne, 2008). Organizations are in need of personals that are capable of skilfully working across distinct cultures in order to attain organizational objectives (Lovvorn& Chen; 2011).

According to Barakat et al., (2015) the aspect of cultural intelligence comprises of four components. First and foremost, is the ability to process information and an individual's awareness capabilities, which is known as meta cognitive cultural intelligence, secondly having a clear understanding of cultural dissimilarities or in other words cognitive cultural intelligence, thirdly an individual's efforts to integrate the differences, which is called motivational cultural intelligence, and lastly his or her capacity to interact appropriately with people from a different culture known as behavioural cultural intelligence (Barakat et al., 2015). The combination of these four respective elements helps global leaders to communicate, develop relationships and successfully undertake business activities in a Multinational organization (Li, 2009).

Cultural intelligence has been perceived as the learning capability of managers who work in culturally unfamiliar situations (Dunning and Lundan, 2009). Crowne (2013) has claimed that an individual's cultural intelligence develops as he or she gets exposed to different cultures and carries out more international assignments. Since cultural intelligence has a positive association with cultural adaptation and it has been accepted as one of the major aspects that lead to effective managerial interactions in the arena of international business (Alon and Higgins, 2005). The demand for leaders who are capable of effectively working with peers belonging to different cultural groups is increasing day by day as they integrate today's intensely globalized business environment (Zoogah and Abbey, 2010; Lenartowicz and Johnson, 2007). According to Cappellen and Janssens (2005) global managers have the ability to comprehend and balance the differences that take place in a cross cultural environment, appreciate the cultural dissimilarities and act correctly in the unknown settings.

In order to lead in a globalized environment, a culturally competent leader must be well versed about the effects of his or her own cultural background, should be thoughtful about the differences that take place in a cross cultural setting and lastly, must be willing to adapt and accept the values and principles of the new culture (Lee et al., 2013). This in turn enables leaders to successfully perform their assignments in a cross cultural environment (Wu and Ang, 2011). Thus, it has been asserted by Ang et al.(2007) that cultural intelligence is a key predictor of an individual's ability to adapt to a new culture and his or her performance in that particular culture. Deng and Gibson (2009) noted that an individual who ranks high on cultural intelligence has the interest of working in unfamiliar situations and is able to adapt to a new culture more easily.

Cultural intelligence has been characterised as a driving factor for cultural adjustment as well as effectiveness (Kim et al., 2008) as it enables leaders to navigate and comprehend new cultures (Ang et al., 2007). Due to its ability to help individuals to get a better understating of cultural diversity and how to work effectively in a culturally sensitive way, cultural intelligence has evolved as a pivotal element that leads organizations toward effective leadership in a cross cultural business setting (Alon and Higgins, 2005; Ang and Inkpen, 2008; Kueng&Rockinson-Szapkiw, 2013). Moreover, a line of researchers have demonstrated that cultural intelligence allows leaders to work appropriately in different cultures at a global level (Deng and Gibson, 2009). Cultural intelligence is critical to an expatriate's performance, since it facilitates them to adjust and adapt to a new culture and perform effectively in the host culture (Lee and Sukoco, 2008). When it comes to cross border leadership effectiveness, the findings of prior research has indicated that the aspect of cultural intelligences shares a positive relation with leadership effectiveness (Rockstuhl et al., 2011, Ersoy, 2014).

Hypothesis H2: Cultural intelligence has a significant positive effect on leadership effectiveness.

2.1.4 Emotional Intelligence and Leadership Effectiveness

The concept of emotional intelligence (EI) was coined by Salovey and Mayer (1990). Since then, the aspect of emotional intelligence received much attention from researchers and academicians (Lui& Liu, 2013). According to Salovey and Mayer (1990, 1994), emotional intelligence is the ability of an individual to be conscious about his or her own feelings, and also the feelings of others and create a distinction between the two groups of feelings and finally make use of the information in order to guide one's thinking as well as action. A similar definition has also been given by Chernis and Adlet (2000) whereby they stated that emotional intelligence is a person's ability to properly comprehend his or her own emotional reactions as well as others in order to make sound decisions and take effective actions.

Leadership is perceived to be an intrinsically emotional process in which leaders strive to gain an understanding about the various stages of emotions that their followers encounter, tries to arouse certain emotional feelings within them as well as attempts to appropriately manage the different emotional states the subordinates' to through (Humphrey, 2002). It has been asserted by Pescosolido (2002) that leaders enhance group solidarity as well as

morale through the formulation of shared emotional experiences., Leaders' capability of influencing the emotional climate carries positive impacts on performance (Humphrey, 2002).

Henceforth, in the area of leadership literature emotional intelligence is seen as vital antecedent of effective leadership (Ashkanasy and Tse, 2000; Boal and Hooijberg, 2000; George, 2000). Researchers have argued that leaders who are emotionally intelligent have the capability of promoting effectiveness in all the various levels of a particular organisation (George, 2000). In a study undertaken by Rosete and Ciarrochi (2005) on a total of 41 managers working in Australian public organisations, higher emotional intelligence scores were found to be associated to higher leadership effectiveness. Research has also indicated that leaders with higher degree of emotional intelligence have the capability of leading more effectively and vice versa (Watkin, 2000). Emotional intelligence has also been suggested as a key component of effective leadership (Palmer et al., 2001).

Hypothesis H3: Emotional intelligence has a significant positive effect on leadership effectiveness.

1.3 Conceptual Framework of the Study

A framework has been developed for this research paper is based on the review of prior literature. The framework has been created with the primary objective of investigating the factors that may affect organisational performance which is the dependent variable, in relation to three independent variables which are spiritual, cultural and emotional intelligence and one mediating variable, leadership effectiveness. The current framework connects all the variables into one structure and illustrates their relationship to each other. Figure 2.1 provides an illustration of the model that has been proposed in this particular study:

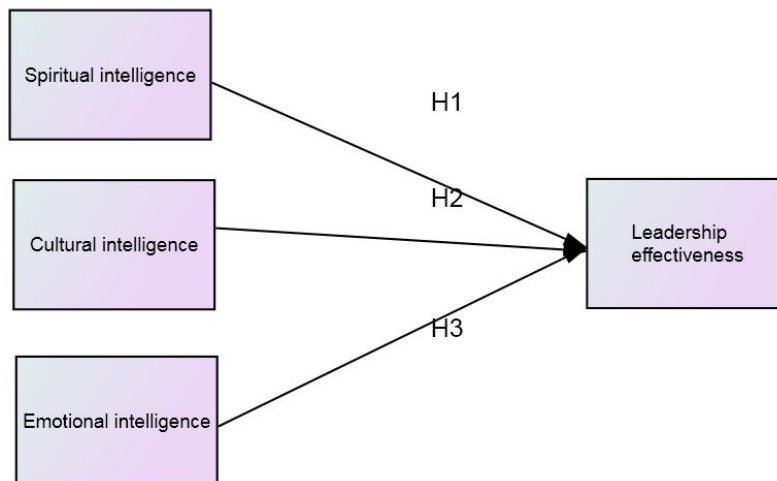


Figure 2.1: Conceptual Framework of the Study

3.1 Methodology of the Study

As this was an experimental study, only one focus group has been studied in this research that is the all level of multinational company's managers, Bangladesh. Managers are those who are already travel in different country. The study used modified SERVQUAL framework (Parasuraman, Zeithaml & Berry, 1985; 1988; 1991) with 24 items, about the price, quality of the service, safety, reputation and last one available of the route etc as SERVQUAL is a valid predictor of overall service quality (Carrillat, Jaramillo & Mulki, 2007). All variables included in the questionnaire were set on a five-point scale (5=Strongly Agree and 1 is strongly disagree) and these scales were used to conduct factor analysis. First, data were analyzed with the Statistical Package of Social Sciences (SPSS) version 16 using Factor Analysis (FA). After the factor analysis, a Confirmatory Factor Analysis (CFA) was done using Amos 16 followed by Structural Equation Modeling (SEM) to achieve impending the interactions and associations among the various intention and attitude factors of the conceptual model. For assessing and identification of main factors regarding effective managers of multinational organizations the study used only purchase intention and attitude. Thus, this research looked for the important factors further and provides suggestions.

Questionnaire Survey and Data Collection: The population of the study focused on the different multinational organizations managers which are situated in the different part of the countries like Dhaka, Rajshahi, Sylhet, Chittagong coxs Bazar and Khulna in Bangladesh. In this research, only one focus group has been studied, that is the in-passenger of the different airlines. A convenient random sampling method was adopted so that all samples of the same size have an equal chance of being selected from the entire population. Determining adequate sample size in qualitative research is ultimately a matter of judgment and depends on the particular research method (1995). For this small scale study a total of 220-sample sizes found to be valid and eventually distributed among the potential respondents for this study, of which 200 questionnaires were received. Each of the response received systematically screened for errors, incomplete and missing responses. However, those responses that still contained questions in the survey questionnaire that had been remained unanswered or left incorrectly answered finally discarded from data analysis in order to establish a rationality of analysis through proper representation. After having the screening process completed, 200 responses found valid for data analysis. This represents a rate of 80%, which is considered extremely well in view of time, cost, certainty and geographical constraints (Sandelowski, 1995). Next, we analyzed the received responses using SPSS (version 22) to compute their mean scores, standard deviation, skewness and kurtosis, hence ensuring a better understanding of the distribution of each item used in measuring service quality. Factor analysis is used in the study to identify the salient attributes that have impact on consumers' perception to evaluate the healthcare service providers. Since, Factor analysis represents an analytical process of transforming statistical data (as measurements) into linear combinations of variables, it is a meaningful statistical method used for combining a large number of data into a

considerably smaller number of factors with a minimum loss of information (Hair, et al., 2010). In addition, SEM (structural Educational Modeling) has been carried out to investigate the relationship among the variables that influence the consumers' perception choice in selecting the healthcare service providers.

Results and Discussion

Exploratory factor analysis (EFA): J. Hair et al. (2009) have quantified that it is indispensable to lead calculated examination, as it helps researchers in condensing the data assembled from a specific arrangement of information. Before continuing with EFA, two tests, to be specific, Kaiser–Meyer–Olkin (KMO) and Bartlett's test of sphericity, ought to be confirmed through checking the factorability of information (Pallant, 2007). B. Tabachnick, L. Fidell, & S. Osterlind (2001) have demonstrated that estimation of the primary test (KMO) ranges from 0 to 1, and for proper examination it is vital to have no less than estimation of 0.6. And for Bartlett's Test of Sphericity it is essential to achieve critical p esteem ($p < .05$). Running both of these particular tests through SPSS, we observed that the consequences of both fell inside the worthy range. The results are shown in Table 3. From EFA, 26 items have been determined and every one of them is thought to be significant (more than 0.50), (Hair et al., 2009). It demonstrates that four segments represent approximately 22% of the variance and the total variance accounted for approximately 73.72% which is highly adequate. A higher change is clarified when four parts are held. Cronbach's alpha has additionally been ascertained for every of the four factors. It can be seen that all items under all factors are solid as they all have outperformed the base estimation of .60 proposed by J.F. Hair, W.C. Black, W.J. Babin, and R.E. Anderson (2010).

Table 1. Kaiser-Meyer-Olkin (KMO) & Bartlett's test, authors'

Kaiser-Meyer-Olkin Measure of sampling Adequacy.		.824
Bartlett's Test of Sphericity	Approx. Chi-Square	4437.148
	Df	250
	Sig.	.000

Table 2. Exploratory Factor Analysis (EFA)

FACTORS	SI	CI	EI	
SI1	.855			
SI2	.910			
SI3	.720			
SI4	.626			
SI5	.655			
CI1		.912		
CI2		.858		
CI3		.823		
CI4		.981		
CI5		.740		

FACTORS	SI	CI	EI	
EI1			.839	
EI2			.705	
EI3			.602	
EI4			.796	
EI5			.935	
LE1				.735
LE 2				.601
LE 3				.903
LE 4				.893
LE 5				.739

Evaluation of the Structural Equation Model. The aftereffect of the model revealed that the model is sufficient as it has the required qualities for each of the records: root mean square error approximation (RMSEA) = .074, comparative fit list (CFI) = .904. Normed X² = 2.274 (Figure 2).

Results of Hypothesis Testing. As appeared in Table 5, all five theorized ways showed p value < .05. Spiritual intelligence have huge impact on effective leadership in the multinational organization Bangladesh, demonstrating that the H1 standardized regression weight = .369, standard error = .107, critical ratio = 2.497, level of significance for regression weight = significant at .013. H2 has likewise been acknowledged, showing that emotional intelligence have huge impact on effective leadership in the multinational organization Bangladesh, as the standardized regression weight = .475, standard error = .087, critical ratio = 4.234, and the level of significance for regression weight = .008. H3 was likewise also supported as the standardized regression weight = .347, standard error = .147, critical ratio = 2.414, and the level of significance for regression weight = .000. Thus, Cultural intelligence have huge impact on effective leadership in the multinational organization Bangladesh.

Table 3. Fitness Assessment of the Structural Model

Name of Category	Required Value	Obtained Value	Comments
Absolute fit	RMSEA < 0 .08	0.074	The required value is attained
Incremental fit	CFI > 0.90	0.904	The required value is attained
Parsimonious fit	CMINDF < 3-5	2.274	The required value is attained

Source: Byrne (2010); Hair, Black, Babin, and Anderson (2010); Kline (2011); Haque, et, al. (2013);

Zainudin (2012).

Note: RMSEA = root mean square error approximation; GFI = goodness-of-fit index; CFI = comparative fit index.

Validity testing. Alongside the baseline model, the review needs to consider the general estimation model to test the validity. To affirm the validity requires evaluating convergent, discriminant, and facing validity. The majority of element loadings for each factors (more than .70), normal chi-square value (more than .50), and construct validity (also more than .50) demonstrate the convergent validity, while discriminant validity is affirmed with the positive contrast amongst AVE and squared correlation (r^2) of the constructs. Here, in all the cases AVE is bigger than the squared multiple correlation value and this gives the evidence of uniqueness for each construct. In addition, theoretical support from literature proves the face validity of the constructs

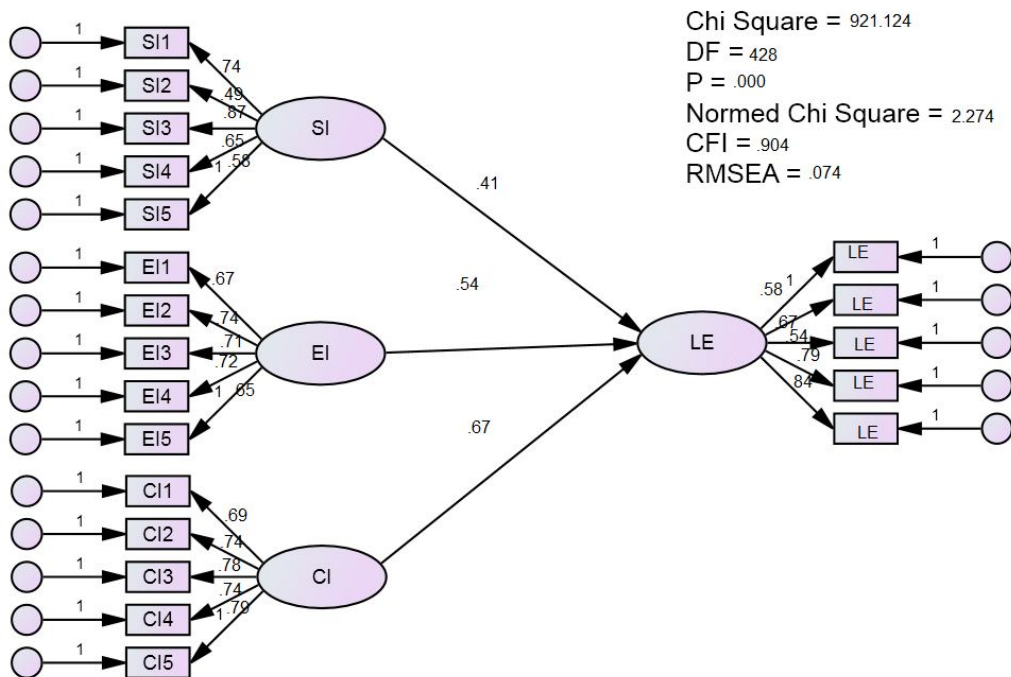


Figure 02. Full-fledged model of measuring low price flight in Bangladesh

Table 4. Validity Testing, authors'

Construct	Cronbach's Alpha	CR	AVE
Spiritual Intelligence	0.814	5.247	.444
Emotional Intelligence	0.742	4.348	.435
Cultural Intelligence	0.857	5.457	.447
Leadership Effectiveness	0.865	4.224	.578

Table 5. Results of hypotheses testing, authors'

			Estimate	S.E.	C.R.	P
Leadership Effectiveness	<---	Spiritual Intelligence (SI)	0.369	.107	2.457	.013
Leadership Effectiveness	<---	Emotional Intelligence (EI)	0.475	.087	2.234	.008
Leadership Effectiveness	<---	Cultural Intelligence (CI)	0.347	.147	2.414	.000

5.0 Conclusion

Many aspects related to those mentioned in this study have been raised as there are many factors affecting expatriates' leadership in different cultural contexts. Culture is ambiguous and vague; often it does not as it seems. Instead it is deeper than what we see; it depends on how we interpret through it. We do not say that there is no adaptation into the Multinational organization context or no understanding of different culture of those expatriates we interviewed, since several of them have been working in different countries for several years. Some have even lived in Bangladesh for more than ten years and married local people, but instead of aligning themselves into the local context, they are pushing their culture to influence people around them, to exercise their values and beliefs with their subordinates. Since Bangladeshi people are generally very flexible and with their cultural values, particularly the relationship between leader-follower as well as the high degree of acceptability of power distribution (power distance) and high degree of uncertainty avoidance

(Hofstede, 1980), Bangladeshi subordinates accept rather than resist the push or influence of Western culture in the organization. Hence, there seem to be no severe cultural conflicts between the Western managers and the Bangladeshi employees. Expatriate leaders have roles to play in culture and must therefore be aware of cultural differences and respect local or national culture in order to understand, communicate, and interact with local employees. In practice, expatriate leaders should synergize and reconcile cultural differences between their own culture and leadership style to fit with the Multinational organizational context.

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Journal of Business Studies

JBS-ISSN 2303-9884

Volume - 11, No. 2, pp.: 241-256

Effects of Firm Size, Firm Age and Independent Director on Corporate Social Responsibility Disclosure in Bangladesh: A Study on Banking Sector

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Abstract

The purpose of this paper is to examine the potential effects of firm size and firm characteristics such as firm age and independent director on CSR disclosure of listed banking companies in Bangladesh. In this study, fifty (50) annual reports of ten (10) banking companies which were active in Dhaka Stock Exchange (DSE) between the years 2011-2015 are investigated. As indicators of firm size, total assets, number of employees and number of branches have been used whereas CSR disclosure is measured from content analysis. Multiple regression analysis was developed to show the effect of firm size, firm age and independent director on CSR disclosure of banking companies in Bangladesh. The results of empirical analyses showed that firm size (total assets, number of employees and number of branches) and independent directors positively affect CSR disclosure. Besides firm size and independent director, firm age is not significantly influencing CSR disclosure of the banks operating in Bangladesh banking industry. The results should not be generalized for all financial industry and all economy of the globe as the sample was based on only banking companies listed on DSE in Bangladesh.

Key word: Firm Size, Firm Age, Independent director, CSR disclosure, Banking Companies

1.1 Introduction

Business organizations rely on the required inputs such as raw materials, labors, capital, skill etc. for survival which are provided by the society. If society ceases, there is no cause for business to live (Swapna, 2011). So, business concerns have responsibilities and duties to the society. There are different types of business institutions in our society. Among them financial companies specially banking companies are noteworthy. In any country, a well-functioning banking sector can assist to ensure a

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developed economy. Each company has a responsibility to their owner(s) or shareholders as well as the societies because it confirms their right to continue operation. Corporation can satisfy all the responsibilities profitably. The responsibilities performed by the companies for the well-being of the society are known as “corporate social responsibility”.

Disclosure is the output of accounting information system. It ensures accountability and transparency of corporate sectors in one hand and increases the confidence of investors and hence increases the efficiency of capital market on the other hand. It is seen that a diversified interest group has been using corporate disclosure for proper decisions. But Social responsibility disclosure varies from country to country and even among developed least developed and developing countries in the world. Moreover, the status and patterns of CSR activities differ between industries to industry. Furthermore, the massive parts of disclosures of CSR information of corporation are qualitative in nature.

Under current Bangladesh Accounting Standard (BAS), there is no mandatory prerequisite to report societal, ecological or environmental information. Statements of Accounting Concepts SAC2 on *Objective of General Purpose Financial Reporting* indicates that general purpose financial reports should provide useful information to stakeholders for making and evaluating prudent decisions about the allotment of limited funds to profitable sectors. The conventional form of corporate exposure or reporting takes a contracted and narrow view of evaluating an organization’s financial performance and position. It excludes different types of information about future overall impact of a business concern’s activities, such as, rise of sea level, destruction of the ozone layer, increase of drought, flood, diseases, social cost of involuntary unemployment, etc. Economists consider these impacts as externalities – the penalty of economic activities which are not reflected in the costs borne by the business organization enjoying the profit of the action (Gray *et al.*, 1996). Luqman, (2017) has written an article on “The effect of firm size on performance of firms in Nigeria”. The purpose of the study is to investigate the effect of firm size on the performance of firms in Nigeria. The focus is on firm size as the modern-day phenomenon of economies of scale means this is a crucial factor in firm performance. Return on equity is used as a proxy for performance, which serves as the dependent variable. Total assets and total sales are the proxies for firm size, and the control variables are leverage and working capital. The results of the study reveal that firm size in terms of total assets has a negative effect on performance, while in terms of total sales; firm size has a positive effect on the performance of Nigerian non-financial companies. The study suggests that firm’s focus should be on increasing their size by boosting turnover and opening up new markets for existing and new product. Based on the background issue, the problems of this study can be formulated into a question as follows: Do firm age, firm size or independent director on the board affect corporate social responsibility disclosure of banking companies in Bangladesh?

1.2 Review of literature

Recently, in financial arena it is seen that the trend of reporting of CSR information is increasing. In 2005, an international survey conducted by KPMG reveal that approximately 52% of world's largest firms issued separate CSR reports whereas in 2008 the rate of disclosure is 70%. The rapid increase in CSR reporting by business institutions worldwide signals the importance of CSR activities for sustainable development (KPMG, 2008). Moreover, KPMG (2011) also suggest that corporations that have involved in CSR activities will get a chance to achieve competitive benefits, drive motivation, develop financial performance and build real bottom line outcomes. A recent study reveals that on an average disclosure of CSR information in annual report of Islamic banks is 25.89% with a standard deviation of 5.49%. Empirical evidence provides that there is statistically significant difference of CSR disclosure among Islamic Sharia-based banking companies in Bangladesh. But there is no significant difference of CSR disclosure of Islamic banking industry in Bangladesh year to year (Hossain & Neogy, 2019). But, a limited number of corporations engage in social and environmental reporting in South East Asian countries like India, China, Pakistan, and Bangladesh. Consequently, the extent of disclosure of CSR is less and the quality of disclosure is very poor (Belal, 2001).

“...although a number of companies are making social disclosures, the quality of information disclosed is very low. The nature of disclosure is mainly descriptive.” (Azim, Ahmed & D’ Netto, 2011)

Bangladesh Bank (BB) motivates listed commercial banks to participate in social activities (CSR) willingly, which might pave the banking sectors to become more prepared on the thoughts of CSR issues (Bangladesh Bank 2008). BB also advised banking and other financial institutions to move towards implementation of CSR program (Bangladesh Bank 2009, 2010a), set up a separate CSR desk (Bangladesh Bank 2010b) and ensuring gender equality in the office in order to confirming basic human rights and socio economic growth (Bangladesh Bank 2011b). According to Bangladesh Bank (2010a), now CSR initiatives start in a modest way as supplements to usual annual financial reports, eventually it will grow as a comprehensive reports format like Global Reporting Initiative (GRI). In one hand, CSR disclosure is positively associated with firm size, board size, ownership structure and independent non-executive director in the board; On the other hand, it is negatively related with firm's financial performance and the listing age of the firms (Das, Dixon & Michael, 2015).

Hossain, (2019) has written an article on “The Nexus between CSR disclosure and Financial Performance: A Study on Islamic Sharia-based Banking Companies in Bangladesh”. The objective of the study is to examine the relationship between CSR disclosure and financial performance of Islamic banking companies in Bangladesh. It is found that there is a positive and statistically significant relationship between CSR disclosure and financial performance proxied by return on equity (ROE) and earnings per share (EPS). It is also seen that the association between CSR disclosure and return on assets (ROA) is statistically insignificant. Mahbuba & Farzana (2013) have written an article on “Corporate Social Responsibility and profitability: A case Study on Dutch

Bangla Bank Ltd". The objectives of the study are: (1) to examine the relationship between financial performance and CSR programs of Dutch Bangla Bank Ltd (DBBL), (2) To assess the relationship between CSR expenditure and profit after tax. The findings of the study are: The study indicated that for every unit increase in the CSR expenditure will lead to .953 or 95.3% rise in the profit after tax (PAT) of the firm. The result of hypotheses testing represents that there is significant relationship between corporate social responsibility and financial performance. The limitations of the study are: First, the study is conducted considering only one financial performance indicator i.e.; net profit after tax. Second, this study is done on one bank only that does not provide overall picture of banking industry.

It is widely recognized that CSR activities increase as firm become older because it leads to improvements in a firm's reputation on the market, increasing sale, profitability and financial performance of the firm. A critical opinion is given by Withisuphakorn & Jiraporn, (2015) relying on two hypotheses. Firstly, the 'outcome hypothesis' claims that the increased economic performance and predictability of cash flow allow mature firms to invest in CSR; on the other hand, younger firms, with less predictable cash flow, that are focused on survival or accelerated growth, lack the funds to invest in CSR. The opposing hypothesis, i.e. 'substitution hypothesis', claims that older firms, regardless of performance and stable cash flow, have a reputation that does not need to raise social goodwill through CSR campaigns and are, subsequently, less involved in CSR programs. Again, young firms need to build their reputation possibly through CSR involvement and consequently emphasizes on more investment on CSR activities. Santos (2011), examining a consistent sample of Portuguese SMEs stated that, the involvement of SMEs in external community is directly related with the size of the company and its operational age. Trencasky & Tsaparlidis (2014) found that firm's age is positively and significantly associated with certain CSR activities (such as voluntary and philanthropy activities), it is statistically no significant with sustainable issues. On the other hand, another study showed that the age of company has virtually no influence on the type and level of involvement in CSR actions (Wiklund, 1999).

Garcia-Shanchez & Martinez- Ferrero, (2018) have written an article on "Independent Director and CSR Disclosure: Moderating Effects of Proprietary Costs". The purpose of this study is two-fold: (i) to evidence if the role of independent directors regarding the disclosure of corporate social responsibility (CSR) information is determined by the aim of protecting shareholders' value; and (ii) to highlight whether non-executive directors only have incentives to disclose this information when it does not damage ownerships' interest, being a trade-off between the benefits of reducing the information asymmetry in capital markets and the cost of aiding competitors by revealing proprietary information. From an international sample from 2004 to 2010, researchers proposed several Tobit regressions for panel data. This research evidences that independent directors show an initial opposition to CSR disclosure practices except in firms with a higher yearly cost of equity capital and lower proprietary costs. Moreover, this opposition is avoiding if there is an assurance statement that reduces their reputation risks associated with potential misleading CSR information.

From the above comprehensive review of related literature, it could be summarized that firm size, firm age and independent director are key focusing variables of measurement of corporate social responsibility disclosure. Few empirical studies are conducted to verify whether there is any influence of firm size, firm age and independent director on CSR disclosure. Most of the studies of this field have been done covering various aspects of CSR in developed world but no comprehensive study has yet been conducted on banking companies in a developing country like Bangladesh.

1.3 Objectives of the study

The overall objective of this study is to find out the potential effects of firm characteristics on CSR disclosure of banking companies in Bangladesh. The specific objectives of the study are:

- (i) To investigate the effect of firm size on CSR disclosure of banking companies in Bangladesh.
- (ii) To examine the impact of firm age on CSR disclosure of banking companies in Bangladesh.
- (iii) To find out the empirical relationship between the independent director on board and CSR disclosure of banking sector in Bangladesh.

1.4 Methodology

1.4.1 Conceptual framework

Figure 1: Research Framework of this Study

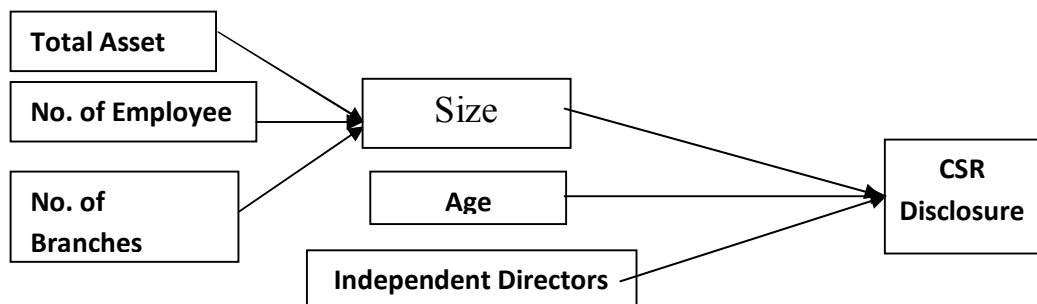


Figure: Conceptualization model (Author's Preparation)

1.4.2 Sample selection

In quantitative research methodology, a data sample is a set of data collected from a statistical population by defined procedure. Typically, the population is very large, making census of all the values in the population are either impractical or impossible. Sample needs to be complete and representative as researcher has to depend on sample to inference the population. A complete sample is a set of objects from a parent population that includes all such objects that satisfy a set of well-defined selection criteria (Pratt,

Raiffa&Schaifer,. 1995). An unbiased (representative) sample is a set of objects chosen from a complete sample using a selection process that does not depend on the properties of the objects. The best way to avoid a biased or unrepresentative sample is to select a random sample, also known as a probability sample. A random sample is defined as a sample where each individual member of the population has a known, non-zero chance of being selected as part of the sample (Cochran, 1977). Several types of random samples are simple random samples, systematic samples, stratified random samples and cluster samples. In this study simple random sample technique is used to select the sample unit of the research work

In Bangladesh, there are two Stock Exchanges namely Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE). Chittagong Stock Exchange (CSE) has been excluded from our study. At the end of February 2017, the total number of listed companies on the Dhaka Stock Exchange is 562 and they are categorized into twenty two (22) sectors, i.e., Bank, Cement, Ceramics, Corporate Bond, Debenture, Engineering, Financial institutions, Food and Allied, Fuel and Power, Insurance, IT, Jute, Mutual Funds, Paper and Printing, Pharmaceuticals, Service and Real Estate, Tannery Industries, Telecommunication, Textile, Travel and Leisure, Treasury Bond and Miscellaneous. As the study is limited to only banking companies listed under DSE, so all non-banking companies are excluded from the study initially and the population size is reduced to 30. So, finally the population frame stands to 30 (Appendix A). One-third (33.33%) of population has been taken as sample in our study. So, the sample size of our study is 10 listed banks. These ten banks have been selected by employing simple random sampling technique. The name of sample companies and their symbolic codes are provided in **Table 1**.

Table 1: List of Sample Companies of the Study

S.N.	Acronym	Full Name
1.	DBBL	Dutch-Bangla Bank Limited
2.	PBL	Pubali Bank Limited
3.	IFIC	International Finance Investment and Commerce Bank Limited
4.	EBL	Eastern Bank Limited
5.	BAL	Bank Asia Limited
6.	CBL	City Bank Limited
7.	IBBL	Islami Bank Bangladesh Limited
8.	SJIBL	ShajalalIslami Bank Limited
9.	FSIBL	First Security Islami Bank Limited
10.	ICBIBL	ICB Islami Bank Limited

Source: Prepared by the researcher

However, it can be concluded that the sample size and study period in prior studies in Bangladeshi context are either small or partial. For example, Mahbuba&Farzana(2013) studied only one bank; Hasan(2013) studied only two years and six banks; Haq& Salam studied only four companies. So, it can be concluded that the sample unit of this study is complete and representative.

1.4.3 Firm Size

Main independent variables of this study are the size indicators. The size of a firm of a firm is a primary factor in determining the profitability of a firm due to the concept known as economies of scale which can found in the traditional neo classical view of the firm (Niresh&Velnampy, 2014). It indicates that items or products can be produced on much lower cost by bigger firms. Big firm have more competitive power when compared to small firms in fields requiring competition (Dogan, 2013). In this study, total assets, number of employees and number of Branches have been used as firm size indicators. There are a number of writers such as Friend and Lang (1988), Gönenç&Arslan (2003), Deesomsak, (2004), Padron (2005), Khatapet *al.*, (2011), Saliha&Abdessatar (2011) have used “Total Assets” as firm size indicator. Writers such as Rajan&Zingales (1995), Çağlayan (2006), Huang & Song (2006), Serrasqueiro&Nunes (2008), Akbaş&Karaduman (2012), Shubita&Alsawalhah (2012) have used “Total Sales” as firm size indicator. Bilkey&Tesar (1977), Cavusgil&Naor (1992), Holzmuller& Kasper (1991), Bonaccorsi (1992), Archarungroj&Hoshino (1998), Jonsson (2007), Serrasqueiro&Nunes (2008), Becker *et al.*, (2010), Banchuenvijit (2012) measured firm size using number of employees (Dogan, 2013).

1.4.4 Firm Age

Age of a business organization is also another vital factor that may influence the volume of corporate social responsibility disclosure. The relation between CSR and financial performance could be affected by firm age (Schreck, 2011, Peloza, 2006, Suttipan, 2012). Some studies advocate that younger businesses do not have much concentration on CSR activities; rather, emphasize on maintaining profitability. After achieving healthy financial performance, businesses may invest in protecting their reputation by increasing CSR programs. Roberts (1992) has found positive relationship between firm age and CSR disclosure.

1.4.5 Independent Director

Corporate governance is must for successful operation of a business. An independent director is a part of corporate governance. Independent directors are non-executive of a company who assist a company in improving corporate credibility and governance standards. Our companies Act 1994 does not provide any provision on Independent directors. Following persons are competent for appointment of Independent director as per corporate governance guidelines issued by the Bangladesh Securities and Exchange Commission notification:

- Business or corporate leader
- Bureaucrats with long exposures in management
- University Teacher with Economics or Business Studies or Law background
- Professional like-Chartered Accountants, Cost and Management Accountant, Chartered Secretaries
- Must have at least 12 (twelve) years of corporate management/ professional experiences

Arshad *et al.*, (2010) and Khan *et al.*, (2013) found that independent directors influence the extent of voluntary disclosure. Wang *et al.*, (2012) claim that increased number of independent directors of a board try to boost managers to disclose more voluntary information. It is also seen that a higher number of independent directors were positively and significantly related with CSR (Chenget *et al.*, 2006). In this research, the independent directors of banking companies are measured as the percentage of independent directors on the board of banking companies in relation to total number of directors in the board.

1.4.6 Construction of CSR disclosure index

Several techniques have been employed to develop CSR index in previous studies. In this study, the un-weighted disclosure index approach (Saleh, 2010; Haniffa&cooke, 2005; Rouf, 2011) is employed to measure the degree of CSR disclosure as a dichotomous variable. If a financial company (bank) disclosed CSR items in its annual report it scored ‘1’ while banks that did not disclose an item scored ‘0’ (Gujarati, 2009). The disclosure model is additive and un-weight index are calculated as follows:

$$CSRI = \frac{\sum_{i=1}^n X_{ij}}{nj} ; \text{Where,}$$

CSRI_{jt} = Corporate Social Responsibility Index of *jth* firm'

nj = Total number of CSR items for *jth* firm, *n*=85

X_{jt}= 1 if *ith* item is disclosed, 0 if *ith* item is not disclosed.

So that $0 \leq CSRI \leq 1$

1.4.7 Regression models

Size indicators have been tested by developing three models instead of being considered in a single model. This is in order to avoid multi collinearity and auto correlation problems in the study. The following regression models can be developed based on the variables used in the study.

$$\text{Model 1: } CSRI_{jt} = \beta_0 + \beta_1 SIZE_TA_{jt} + \beta_2 AGEF_{jt} + \beta_3 PID_{jt} + \varepsilon_{jt}$$

$$\text{Model 2: } CSRI_{jt} = \beta_0 + \beta_1 SIZE_EMPL_{jt} + \beta_2 AGEF_{jt} + \beta_3 PID_{jt} + \varepsilon_{jt}$$

$$\text{Model 3: } CSRI_{jt} = \beta_0 + \beta_1 SIZE_BRNC_{jt} + \beta_2 AGEF_{jt} + \beta_3 PID_{jt} + \varepsilon_{jt}$$

Table 2: The Summary of Description and Measurement of Variables

Variable	Description of Measurement unit
CSRI	A variable of corporate social disclosure index of <i>j</i> firm in the period of <i>t</i> . It is defined as number of CSR items which firm disclosed divided by total CSR disclosure items (85 items).
SIZE_TA _{jt}	: A variable of firm size of firm <i>j</i> in period <i>t</i> . It is defined as the logarithm of Total Assets.
SIZE_EMPL _{jt}	: A variable of firm size of firm <i>j</i> in the period of <i>t</i> . It is defined as the log of Number of Employees.
SIZE_BRNC _{jt}	: A variable of firm size of firm <i>j</i> in the period of <i>t</i> . It is defined as the log of Number of Branches.
AGEF _{jt}	: A variable of firm age of firm <i>j</i> in the period of <i>t</i> . It is defined as number of years since firms was listed on DSE.
PID _{jt}	: A variable of the independent director ratio of firm <i>j</i> in period <i>t</i> . It is defined as the number of independent directors divided by total number of directors in the board of firm
ε _{jt}	: A random error of firm <i>j</i> in period <i>t</i> .

Source: Prepared by the researchers

1.4.8 Multicollinearity statistics

From Appendix A1, A2 and A3, it is seen that the correlations among the study variables are weak because the maximum value is 0.652. It indicates that there is no strong correlation among the variables. Moreover, the variance inflation factor (VIF) values also indicate no multicollinearity among the independent variables. So, multicollinearity is not a problem in this study.

1.4.9 Tools of analysis

To achieve the objectives of the present study and to ensure goodness of data, different statistical tools such as average, standard deviation, Minimum, Maximum, R-squared, correlation matrix, regression, variance inflation factor (VIF) etc. have been used for analyzing the data and testing the hypotheses.

1.5 Data analysis and empirical results

1.5.1 Sample description

Table 3 provides descriptive statistics for CSR disclosure and firm characteristics. It is seen that average of CSR disclosure is 27.05% with a standard deviation of 10.32. Inspection of firm characteristics reveals that average firm age is about 21 years and average percentage of independent director on board is about 18%. There are three indicators of firm size in this study –number of employees, number of branches and total

assets. There is a huge difference among the sample companies in respect of size. The average number of employees is about 3762 with minimum and maximum numbers of employees are 566 and 13622 respectively. Average number of branches is about 145 with minimum and maximum numbers of branches are 33 and 444 respectively. The average total assets are TK 20074.9 million with minimum and maximum amount of total assets are TK12752.90 million and TK859201.6 million. Due to the violation of assumption of homoscedasticity of size indicators, log transformation form of size indicators is adopted in regression analysis.

Table 3: Table showing the descriptive statistics of CSR disclosure and firm characteristics

Measurements	CSRD (%)	Age (year)	Independent Director (%)	Number of employees	Number of Branches	SIZE (TA)
Mean	27.05	20.20	18.0692	3761.8200	144.4200	20074.9
Median	27.46	24.00	16.0250	2455.5000	99.5000	156746.4
Std. Deviation	10.32	8.53	8.98352	3519.15768	114.90992	176356.7
Minimum	7.06	4.00	6.67	566.00	33.00	12752.90
Maximum	48.24	30.00	42.00	13622.00	444.00	859201.6

Source: Author's calculation using financial data from annual reports of sample banks

1.5.2 Empirical relationship between CSR disclosure and firm characteristics

In this part, the relationship between CSR disclosure and firm specific characteristics has been revealed by applying the OLS regression models. In Table 4, Table 5 and Table 6, the regression results have been shown.

Table 4: Regression results when CSR disclosure used as dependent variable and firm size (log asset), age and independent director used as independent variables in the OLS model

Model 1	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-68.138	14.208		-4.796	.000		
Logasset	18.419	2.871	.710	6.415	.000***	.814	1.228
Age	-.044	.121	-.036	-.362	.719	.994	1.006
IDirector	.059	.127	.051	.464	.645	.810	1.235
Group=10; Observations: 50; R squared: 0.541, F statistics: 18.071, p=.000							

Source: Author's calculation using financial data from annual reports of sample banks.

Note: ***, ** and * indicate 1%, 5% and 10% level of significance respectively

Table 4 reveals that there is a positive and significant association between CSR disclosure and size (log of assets) at 1% level of significance in the OLS model. The coefficient of age is negative and the coefficient of independent director is positive but both are statistically insignificant.

Table 5: Regression results when CSR disclosure used as dependent variable and firm size (log employee), age and independent director used as independent variables in the OLS model

Model 2	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-27.999	11.364		-2.464	.018		
Log of employee	15.768	3.480	.547	4.531	.000***	.898	1.114
Age	-.213	.144	-.176	-1.473	.147	.917	1.091
IDirector	.296	.134	.258	2.211	.032**	.959	1.043
Group=10; Observations: 50; R squared: 0.399, F statistics: 10.169, p=.000							

Source: Author's calculation using financial data from annual reports of sample banks.

Note: ***, ** and * indicate 1%, 5% and 10% level of significance respectively

Table 5 shows the regression results of the relationship between CSR disclosure and firm size (log employee), firm age and independent director of companies. The coefficient of log employee is positively and significantly associated with CSR disclosure of listed banking companies in Bangladesh at 1% level of significance. The coefficient of independent director is positively and significantly associated with CSR disclosure at 5% level of significance in the OLS model. The coefficient of age is negative and insignificantly associated with CSR disclosure in the OLS model.

Table 6: Regression results when CSR disclosure used as dependent variable and firm size (log branch), age and independent director used as independent variables in the OLS model

Model 3	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	3.084	9.502		.325	.747		
Logbranch	9.713	4.716	.284	2.059	.045**	.913	1.095
Age	-.111	.164	-.092	-.675	.503	.937	1.067
IDirector	.348	.155	.303	2.250	.029**	.954	1.048
Group=10; Observations: 50; R squared: 0.204, F statistics: 3.925, p=.014							

Source: Author's calculation using financial data from annual reports of sample banks.

Note: ***, ** and * indicate 1%, 5% and 10% level of significance respectively

Table 6 shows that size (log of branch) is positively and significantly correlated with CSR disclosure at 5% level of significance in the OLS regression model. The coefficient of independent director is also positively and significantly associated with CSR disclosure. But the coefficient of age is negatively and insignificantly related to CSR disclosure.

1.6 Discussion

With regard to the statistical tests, empirical results obtained for models (1-3) show no multicollinearity among independent variables. Regarding the main variable of our interest (Size), it can be perceived that, after controlling for other influences, firm size (log of total assets, log of employees and log of branches) has statistically significant positive influence on CSR disclosure. This finding is supported by the study conducted by Das, Dixon and Michael, (2015). All three models of the study show that there is no association between firm age and CSR disclosure of banking companies in Bangladesh. This finding is opposite to Trencasky&Tsaparlidis (2014) and line with Wiklund, (1999). Moreover, the independent directors of the board of banking companies are positively influence the increase of CSR disclosure of banking companies in Bangladesh. Variance Inflation Factor (VIF) has been used to test multicollinearity and to support regression models results. Other method used to determine multicollinearity problem is tolerance value of the variables. In cases where VIF value is under 10 and tolerance value is not very close to 0, model is considered to be free from multicollinearity problem (Gujarati, 1995). All three models have pretty good VIF and tolerance values. There are no multicollinearity problems and autocorrelation in the model and this shows soundness and reliability of the model. The R Squared (correlation of determination) were 0.541, 0.399 and 0.204 respectively in the three models which indicate that the models explain about 54.10%, 39.90% and 20.40% respectively of the systematic variation of the dependent variable.

1.7 Conclusion

The rationale of this study was to determine nature of relationships (if any) between firm size and CSR disclosure of banking industry in Bangladesh. The analysis is conducted on companies operating in Bangladesh banking industry listed on Dhaka Stock Exchange (DSE) for the period from 2011 to 2015. The results of conducted ordinary least square (OLS) regressions show that firm size is an important explanatory factor in the determination of business success. Precisely, on a sample of the Bangladesh banking industry, firm size turns out to be statistically significant with positive coefficient sign, thus suggesting improvement of firm CSR disclosure with size. Moreover, there is strong positive and significant relationship of independent director on CSR disclosure. Besides, Age is not significantly related to CSR disclosure of banking industry in Bangladesh. This study provides insight into the effects of firm characteristics on CSR disclosure. Profit is must for a firm to operate soundly but along with profit generation, firms need to engage with social activities for the society as well as firms' long-term sustainability. It is necessary to ensure the minimum number of independent director on board (20%) as many of the sample banks lacks the minimum number unfortunately. The regulatory body issued a guideline on CSR programs by banking companies which is still voluntary and it

is now urgent to make a comprehensive reporting framework for CSR disclosure by banking companies in Bangladesh like global reporting initiatives (GRI). Government should provide corporate incentives, rewards for CSR disclosure and penalty for non-disclosure.

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Appendix**Appendix A1: Inter –Item Correlation Matrix (Size_log assets)**

	CSRD	Age	IDirector	SIZE (TA)
CSRD	1			
Age	-.052	1		
IDirector	.360*	-.076	1	
SIZE (log assets)	.651**	.249	.516**	1

Source: Author's calculation using financial data from annual reports of sample banks.

Appendix A2: Inter –Item Correlation Matrix (Size_log employee)

	CSRD	Age	IDirector	SIZE (TA)
CSRD	1			
Age	-.052	1		
IDirector	.360	-.076	1	
SIZE (log employees)	.542	.262	.162	1

Source: Author's calculation using financial data from annual reports of sample banks.

Appendix A3: Inter –Item Correlation Matrix (Size_log branch)

	CSRD	Age	IDirector	SIZE (TA)
CSRD	1			
Age	-.052	1		
IDirector	.360	-.076	1	
SIZE (log branch)	.317	.221	.178	1

Source: Author's calculation using financial data from annual reports of sample banks.