Towards e-Governance: An Exploratory Analysis of e-Tax Filing Adoption in Bangladesh

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Abstract

This study attempts to explore taxpayer behavioral intention to adopt Electronic Tax (e-Tax) filing systems in Bangladesh. Following an interpretive research paradigm this study employs an in-depth interview method for data collection from six individuals selected through a judgment sampling technique. Content analysis is employed through the application of inductive and deductive approach for the data analysis. The study explores a range of factors which may significantly affect adoption of e-Tax filing which includes, performance expectancy, effort expectancy, social influence, trust, security, facilitating condition and country readiness. The study also explores age, gender, and ICT experience as moderating variables. The exploratory analysis not only formulates a theoretical framework to examine individual taxpayer behavioral intention to adopt e-Tax filing but also helps develop government policy priorities to foster the pace of e-Tax filing system adoption in Bangladesh.

Keywords: *E-governance, e-Tax filing, behavioral intention, interpretive research paradigm, UTAUT model.*

1. Introduction

The treasuries of any government are highly reliant on imposing and collecting taxes from the citizen as well as from the business organizations. The successful execution of financial and development plans of a country largely depends on how efficiently and timely the target taxes are collected. In view of enhancing the productivity, efficiency and transparency in tax collection government employs a range of policies and administrative supports, which include rewards, rebates, and various promotional activities. Introduction of electronic tax (e-Tax) filing is now being considered as an important mean for making ease and saving costs in tax collection, which help enhance the efficiency (Chen, 2010) and transparency in government services.

Electronic tax filing refers to an automated taxation system which enables tax payers in preparation and submission of income tax returns and tax-payments online. E-taxation is

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as an effective tool for establishing e-governance (Stafford and Turan, 2011; Asianzu and Maiga, 2012, 2013; Decman, Stare and Klun, 2010; Wu and Chen, 2005; Wang, 2012; Chatfield, 2009; Chen et al., 2015). Use of information systems (IS) like electronic government (e-government) web sites enable governments to provide a wide range of advanced and innovative services to citizens (Hu et al., 2009; Matavire et al., 2010). As a result, governments around the world are emphasizing on the use of ICT in various forms, such as, electronic filing (e-filing) that help promote an automated citizen services throughe-governance (Dorasamy et al., 2010).

E-government is the provision of online public service to citizens and businesses (Teodora, 2008). It is the use of Internet or other digital means such as information and communication technologies (ICTs) in providing government services to the people and various other stakeholders with an anticipation of improved efficiency and transparency in various government services (Gil-Gracia and Pardo, 2005; Wong et al., 2006) that are useful to the respective stakeholders (West, 2004; Hart and Teeter 2000; Koh and Prybutok, 2003; Srivastava and Teo, 2007a; 2007b; ANOA, 2006). Services like registration for healthcare, education, employment benefits or taxation are usually included in e-government service systems (Teodora, 2008). This service can help reduce cost and time for both the parties-the government and the citizenry (Wang, 2012). Among all other e-services, e-tax (filing and payment) has significant roles in the dynamics of government and citizen (Wu and Chen, 2005).

E-taxation enables individuals and corporations to file taxes and the payments online (Hu et al., 2009; Chatfield, 2009). Taxpayers can gain substantial benefits from using e-Tax, including improved accuracy and efficiency over paper-based filing, lower costs, and faster refunds (Pant et al., 2004; Peterson and Washington, 1993).

E-taxation acceptance has become an important index of e-government in many countries across the world (Chen and Huang, 2006). However, the scenario of Bangladesh is different from other countries since the adoption and acceptance of e-Tax filling is in its infancy level. Although Bangladesh has set its vision to establish a digital technology based society, the nation is passing through a transitional period where it is experiencing a significantly large-scale improvement in the process of establishing a digital based operation in various government departments. In the process of development the government has established a wide range of networks, which linked the citizens from different interior locations to the main face of the government's networks, and the development initiative is titled as 'digital Bangladesh' where digital technology would be the key driving force of the nation's economy.

The National Board of Revenue (NBR) plays key role in tax administration in Bangladesh since it is the only authorized organization to implement and execute tax laws, rules, guidelines to collect and mobilize internal revenue for the successful implementation of government development initiatives. More particularly, NBR was established by the President's Order, No. 76 of 1972, to help implement the national budget and also to manage and operate domestic resource collection and mobilization process in Bangladesh.

Thus, to establish dynamic revenue management in the tax department and to comply with government's vision of establishing digital Bangladesh, NBR has initiated to establish many online services like online tax registration, online Tax Payer Identification Number (TIN) registration and online VAT calculation.

Online tax filing system in Bangladesh, although in existent, does not provide convenience to the individual taxpayer. For example, the official website of NBR provides a window to submit income tax return online which requires scanned copy of manually prepared income tax return form. Tax payers must have an user ID and password which is designed to be provided by the local income tax office for online return submission following the above mentioned procedures which projects a slow move in digitalization process in tax collection system. It is interesting to mention that, in the assessment year 2019-2020, 2.2 million of the 4.6 million electronic TIN (e-TIN) holders submitted their return (NBR, 2020) out of which only 4 to 5 percent returns were submitted online and less than one percent of the tax payers followed online payment system in the said assessment year[3].

The comprehensive implementation of online tax filing system in Bangladesh is still underway which posits a question how to implement the system by providing user convenience in the near future. Since the government has an urge to provide various government services to the doorsteps of the people through e-platforms, one important question comes out whether the potential users of e-services are ready to accept the system or not? Therefore, this study aims to assess the taxpayers' intention to use e-tax filing system in Bangladesh.

2. Conceptual framework

E-taxation enables online return preparation, submission, and payment, sitting at home which results in time and cost savings for both the parties, i.e., taxpayer and tax collector. E-tax filing also enhances the effectiveness of the tax authorities in assessing and collecting taxes. It is assumed that use of digital means in tax filing would reduce the corruption and inefficiencies in tax management. Realizing the abundant benefits of e-filing systems, governments around the world either have installed the digital based tax filing systems or about to establish e-tax filing systems. However, there remain big differences between tax payment systems around the world. Taxpayers in manly countries are quite habituated with this system since they have the technology and full-fledged infrastructure to implement e-tax filling systems, while the taxpayers in some countries are thinking to use the system. This global phenomena attracts bulk of researchers attention to analyze tax payers intention of using online tax filing system around the world (Bhuasiri et al., 2016; Chen et al., 2015; Venkatesh et al., 2014; Okoye and Ezejiofor, 2014; Maiga and Asianzu, 2013; Asianzu and Maiga, 2012; Wang, 2012; Stafford and Turan, 2011; Lu et al., 2010; Chen, 2010; Decmanet al., 2010; Dorasamy et al., 2010; Chatfield, 2009;

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[3] Source of information regarding online return submission and online tax payment is the official record of a regional income tax office operated under the National Board of Revenue (NBR), Bangladesh.

Schaupp et al., 2009; Chen and Huang, 2009; Fu et al., 2006; Chen and Huang, 2006; Pant et al., 2004; Wang, 2002; McLure, 2000).

In the past, numerous studies (Hung et al., 2006; Van Dikj et al., 2007) examined the e-government services acceptance phenomena around the world. Since electronic taxation is being considered as an effective tool for a successful e-government initiative, a lot of studies also have been initiated to examine whether e-tax filing adds any value to the e-governance (Stafford and Turan, 2011; Decman et al., 2010) or to examine the success factors of e-governance and that of e-tax filing (Chen et al., 2015; Venkatesh et al., 2012; Srivastava, 2009; Horst, 2007).

Notable theories have been applied to explore and analyze factors affecting organizations as well as individual's technology acceptance behavior. Many researchers have been applied DeLone and McLean's (1992, 2003) Information System (IS) Success model to judge information systems implementation success from the users' viewpoint (Chen, 2010; Chen et al., 2015; Floropoulos et al., 2010; Petter and McLean, 2009). According to DeLone and McLean (2003) success of information system adoption is dependent on users' perception about net benefit where the net benefit comes from the user satisfaction and intention to use the technology or information system. Hence, the intention to use and user satisfaction towards any particular information system is dependent on system quality, information quality and the system's service quality (DeLone and McLean, 2003). If the perception of net benefit is positive then the users will be intended to use the technology based services or information system services.

A countable number of past studies have applied Rogers' (1995) Diffusion of Innovation (DOI) theory (Agarwal and Prasad, 1998; Eastin, 2002; Bharatiand Chaudhury, 2006; Azamand Quaddus, 2009, 2012, 2013) and Tornatzky and Fleischer's (1990) Technology-Organization-Environment (TOE) model (Chau and Tam, 1997; Thong, 1999; Kuan and Chau, 2001; Vega et al., 2008; Zailani, Dahlan and Jallaludin, 2009; Awa et al., 2012) to explore and analyze factors affecting technology adoption behavior of individuals as well as of organizations. In fact these two theories mainly focus on organization's technology acceptance intention behavior.

Technology Acceptance Model (TAM) is one of the commonly used theories to look into the technology usage intention of individuals. It is developed by Davis (1986) which is derived from the Theory of Reasoned Action (TRA) that states technology acceptance intention of individual is influenced by the ease of use and usefulness perceptions regarding a technology (Davis, 1986). On the other hand, Theory of Planned Behavior (TPB), developed by Ajzen (1991) was extended from TRA also by adding a new construct namely perceived behavioral control. TPB implies attitude, subjective norms, and perceived behavioral control to explain individual's intention to accept and use of new technology or technology based services. A number of past studies employed integrated model of TAM and TPB (Fu et al., 2006; Lu et al., 2010; Stafford and Turan, 2011; Wang, 2012) whereas some studies employed an extended version of TAM (Wang, 2002; Hu et al., 2009; Asianzu and Maiga, 2012; Maigaand Asianzu, 2013) to explain the behavioral

intention of individuals towards technology based services acceptance, especially acceptance and use of e-tax filing and any other e-government services. During our study we also notice that some previous research initiatives have integrated TAM with DOI and other theories (Chen and Huang, 2006; Chen and Huang, 2009; Dorasamy et al., 2010) to predict tax payers' willingness of using self-service technology based online government services, more clearly to understand and assess the tax payers' intention of using e-tax filing system services.

Therefore, it is clear that in many cases two or more theories have been synthesized in view of constructing a comprehensive framework to intensively study a diffusion phenomenon. In such an effort Venkatesh et al. (2003) evaluated eight diffusion models and constructed a comprehensive framework to study the adoption-diffusion phenomena of a technological innovation which is Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2003).

The Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) which has been employed in a number research initiatives to examine a range of technological innovations, such as technology, Information technology and mobile services, acceptance behavior in different parts around the world (Venkatesh et al., 2003; Venkatesh and Zhang, 2010; Foon and Fah, 2011; Taiwo and Downe, 2013). The model comprises four core determinants: performance expectancy, effort expectancy, social influence and facilitating conditions alongside it has four moderators as gender, age, experience, and voluntariness of use.

Performance expectancy was measured by the perceptions of using e-government services in terms of benefits, such as time saving, cost saving, effort saving, facilitating communication with government, improving the quality of government services and by providing citizens with an equal basis on which to carry out their citizens with an equal basis on which to carry out their business with government (Awadhi and Morris, 2008).

Effort expectancy is the degree of ease associated with the use of the system. The UTAUT model identifies three constructs from the eight models which make up the concept of effort expectancy: perceived ease of use, complexity, and ease of use (Venkatesh et al., 2003). This construct has been found to be significant in both voluntary and mandatory usage contexts, but only in the initial usage of the technology (Venkatesh et al., 2003).

Social influence is the degree to which an individual perceives that others who are deemed important to them believe that they should use the system (Venkatesh et al., 2003). Social influence is comprised of subjective norms, social factors, and image (Schaupp et al., 2009). None of the social influence constructs were found to be significant in voluntary contexts; however, all of them were found to be significant when usage was mandatory (Venkatesh et al., 2003).

Facilitating conditions was measured by the perception of being able to access required resources, as well as to obtain knowledge and the necessary support needed to use an e-file

system (Schaupp et al., 2009). It is also influenced by the perception of the technology fitting into the lifestyle of the user (Awadhi and Morris, 2008).

The application of UTAUT model is very comprehensive and contemporary; however, it still lacks to describe the roles of some important variables influencing ICT based technological innovation adoption such as *Trust* and *Security* as well as *country e-readiness*. Hence, trust implies peoples' perception toward the reliability of technology. On the other hand security includes the payment security and information security, whereas country e-readiness means the IT infrastructural development of the country. This study thus attempts to extract additional variables and finalize the conceptual framework by applying an interpretive research approach through field study. The analyses of the in-depth interviews in conjunction with an extensive literature review, constructs the conceptual framework of this paper.

3.   Research method

An interpretive research paradigm is employed to attain the objectives of this study where the research method includes literature review and field study. The aim of this study is to explore factors affecting taxpayer's willingness to use online tax filing services.   By design, firstly we went through previous studies to primarily understand about the factors affecting the e-tax filing services usage intention of the taxpayers. Finally, a field study has been conducted to explore and validate the previously identified factors and variables affecting individual taxpayers' intention behavior to use online tax filing systems. The field study conducts six in-depth interviews with six individual taxpayers. A purposive sampling technique has been employed to get an expert and insightful respondent comments on the study matter. The following section addresses a detail of data collection and analyses process.

3.1.   Sample

Since the main objective of this study is to explore and validate factors and variables affecting tax payers willingness of using e-tax filing, we undertook a purposive sampling approach to select six individual tax payer who have experience of using government websites, especially the website of tax authority and also are willing to be included in the field study. It is important to note that, use of a judgmental sampling is a common technique in business research (Zikmund, 2000).

However, there are different propositions and suggestions by the researchers in selecting the sample size. For the purpose of this study, we stopped at sixth interview as information redundancy was experienced which is suggested by Lincoln and Guba (1985) and Denzin and Lincoln (2003). This sample size is also supported by Eisenhardt (1989) and Perry (1998), where they proposed 4-8 cases are appropriate for qualitative research that has been follow edin various prior studies like Quaddus and Xu (2005).The interview respondents are selected based on the persons' involvement in tax filing, availability of the persons and convenience to reach them. Six interviewees were selected on the basis of

personal contact. Importantly, each person uses Internet for various purposes in their daily life. For the purpose of this study, we contacted six persons of different educational background via telephone. The respondents are also well known about interactions over the Internet who has been given clear ideas about the objectives of the study. The participants took part in the interview voluntarily. *Table 1* refers demographic information on the firms and the details of the respondents.

3.2. Data collection

Data were collected through an in-depth interview by employing a semi structured interview technique. The existing literature provides the primary guide for undertaking a semi-structured interview. The interview questions focused on the areas of information needed in this research which include among others: (i) degree of internet usage, (ii) factors that influencing to practice e-tax filing, (iii) barriers that inhibiting to use e-tax filing services, and (iv) things that would encourage people to file tax online.

Table 1: Participants Demographic Profile

	Person A	Person B	Person C	Person D	Person E	Person F
Profession	Teacher	Teacher	Govt. Service Holder	Pvt. Service Holder	Banker	Banker
Age group	45-60	45-60	25-34	25-34	25-34	25-34
Position	Associate Professor	Professor	Assistant Manager	Assistant Manager	Senior Executive Officer	Senior Executive Officer
Education	PhD	PhD	MSc	MBA	MBA	MBA
IT knowledge	Yes	Yes	Yes	Yes	Yes	Yes
First use of computer	1997	2001	2001	2005	2004	2006
Frequency of website visit	Daily	Most often	Daily	Daily	Daily	Daily
Tax Paying Status	Tax Payer	Tax Payer	Tax Payer	Tax Payer	Tax Payer	Tax Payer

We were concerned to ensure a less rush working schedule of the interviewees so that there could have a limited chance of facing disruption and interruption during the interview. Therefore, all the interviews were scheduled as per the convenience of the interviewees. The basic and fundamental information regarding the study issues and the methods employed were conveyed through an introductory session prior to the final interview via telephone which enable each interviewee well aware about the interview

process as well as feel comfortable to participate in the interview. In total we conducted six interviews. Each interview lasted for about 1 (one) hour. In view of explaining the body language and other cues received during the interview which we believe have a great value in interpreting the results, we transcribed all the interviews on the following day of the interview.

3.3. *Data analysis*

Researchers face a challenge in the data analysis as this study stands at interpretive research paradigm. Content analysis has been chosen as the tool for data analysis (to analyzing the interview transcripts) among many other analytical tools used in qualitative research. This study analyzes the in-depth interviews from multiple perspectives by carefully reviewing the interview transcripts. It is noted that content analyses were done manually and a combination of inductive and deductive approaches was used to categorize the factors and variables.

4. Results and implications

4.1.   *Demography*

The demographic information of the interviewees involved in the field study are presented in *Table 1*. It is noted that all the persons involved in the field study are service holder. Three of them are from public service and three are from private sector. All of them are taxpayers. Some of the interviewees are paying taxes for a long time. All the interviewees have prior experience of using or visiting government websites. They also visited the website of tax authority for TIN (Taxpayer Identification Number) registration, to download TIN certificate or to download income tax circulars declared by the government. The interviewees are from different academic backgrounds; however, one of them has had his graduation in computer science and engineering.

4.2.   *Factors and variables influencing e-tax filing system* adoption

The field study explores 11 factors along with 21 distinct variables which are justified by literature review. In our study *performance expectancy* has been found to be the strongest predictor of intention. This finding was expected. All the six interviewees state that an online tax filing system would be time saving, and cost saving to them. The interviewees also say that they can choose any moment of the day to submit their tax return. Four respondents opined that accuracy in performance could be ensured more effectively using technology which leads them to use technological means in the various operations. Therefore, performance expectancy has been identified as a significant predictor of use in the Information Technology (IT) adoption literature (Venkatesh et al., 2003).

Table 2: Factors and Variables

Factors	Variables	Interviewees						Literatures
		A	B	C	D	E	F	
Performance expectancy	Cost saving	√	√	√	√	√	√	Stockdale and Standing, (2004); Bakos, (1998)
	24*7 operation	√	√	√	√	√	√	Hurwitz, (2000)
	Easy execution	√	√	√		√	√	Awadhi and Morris, 2008
	Time saving	√	√	√	√	√	√	Awadhi and Morris, 2008
	Accuracy		√	√	√	√		Floropoulos et al. 2010
	Quality information					√		DeLone and McLean, 2003
	Sufficient information				√			Field study
Effort expectancy	Understandable interaction	√		√		√	√	Venkatesh et al. 2003; Awadhi and Morris, 2008
	Easy to use	√		√		√	√	Venkatesh et al. 2003
Social influence	Coworkers' influence		√			√	√	Venkatesh et al. 2003
	Family members' influence						√	Venkatesh et al. 2003
	Technology usage trend			√		√	√	Field study
Facilitating condition	Available resources					√		Venkatesh et al. 2003
	Knowledge about the system	√	√	√	√	√		Venkatesh et al. 2003
	Available guidance			√	√	√		Venkatesh et al. 2003
	Assistance group				√	√		Venkatesh et al. 2003
	Organizational support					√	√	Venkatesh et al. 2003
Trust and Security	Trust in technology	√	√	√		√	√	Lee et al. 2011
	Trust in authority	√		√		√		Lee et al. 2011
User's Innovativeness	User's Innovativeness			√		√	√	Azam and Quaddus, 2009
Confidentiality	Confidentiality				√	√		Field study
Gender	Gender							Venkatesh et al. 2003
Age	Age							Venkatesh et al. 2003
Experience	Experience					√	√	Venkatesh et al. 2003
Country e-readiness	IT infrastructure			√	√	√	√	Azam and Quaddus, 2012
	Legal framework							Azam and Quaddus, 2012
	Public awareness			√	√	√	√	Azam and Quaddus, 2012

Source: Field study and literature review.

A mixed opinion was derived about *effort expectancy* during our study. Since the idea of e-tax filing system is a new issue in Bangladesh most of the tax payers are not aware of the system. Two of the interviewees have visited the website of NBR only to register and get e-TIN certificate. As a result neither they think using e-tax filing is a complex task nor they think it is an easy one. It is important to note that interviewee D states that *"[…] the website should be designed in such a way so that all the necessary information and guidelines necessary for submitting income tax return as well as direction for online tax payment would be available […]."* However, respondent E has a clear opinion regarding effort expectancy. Respondent E states that, *"[…] most of the tax payers of Bangladesh belong to a developed society and are very much habituated in technology usage. I don't think online tax filing would be a complex task at all."* In addition to this, respondent F mentions that using computer and some specific accounting software is an inevitable part of her professional life. That's why she doesn't feel that online tax filing would be a difficult task.

It is interestingly observed that *social influence* was found less significant in our study. This result is unusual since the past literature supports that *social influence* has a strong effect on individual's IT acceptance intention. It is only the interviewee B who can remember that very few of his colleagues prepare income tax return using computer.

We noticed that all the respondents have faith on the efficiency and accuracy of technology, but few of them have doubt on the authority's honesty and integrity. Respondent A mentions that *"[…] how could I be sure that my online payment was done properly?"* This statement indicates that there is an ambiguity about the payment system. If the taxpayers get assured that their online payment is going to be safe and secured then they would be interested to pay tax online, our analysis explores. Respondent A also mentions that there is still a chance of avoiding tax because people may not show all of their assets and income accordingly in the tax return. In this connection respondent C says *"[…] e-tax filing would only be able to minimize corruption in tax collection and in tax avoidance if all the incomes and expenses of tax payers of a country are recorded digitally and is stored in a central database."* Respondent E opined the same during conversation.

It is interesting to note that *facilitating conditions* have a great impact on peoples' intention of using online tax filing services. In present days, use of digital devices has got a revolution around the world. Internet services are available to the doorsteps of the people. In the context of this study we realize that taxpayers wish to use the online tax filing system. But they want to get sure that there would be a helpline for the assistance of the taxpayers in any disruptions or interruptions during filling and paying taxes online.

From the analyses of these factors and variables and the effects of those, the following model (*Figure 1*) was formulated to validate the factors which influence individual taxpayers' e-tax filing intention.
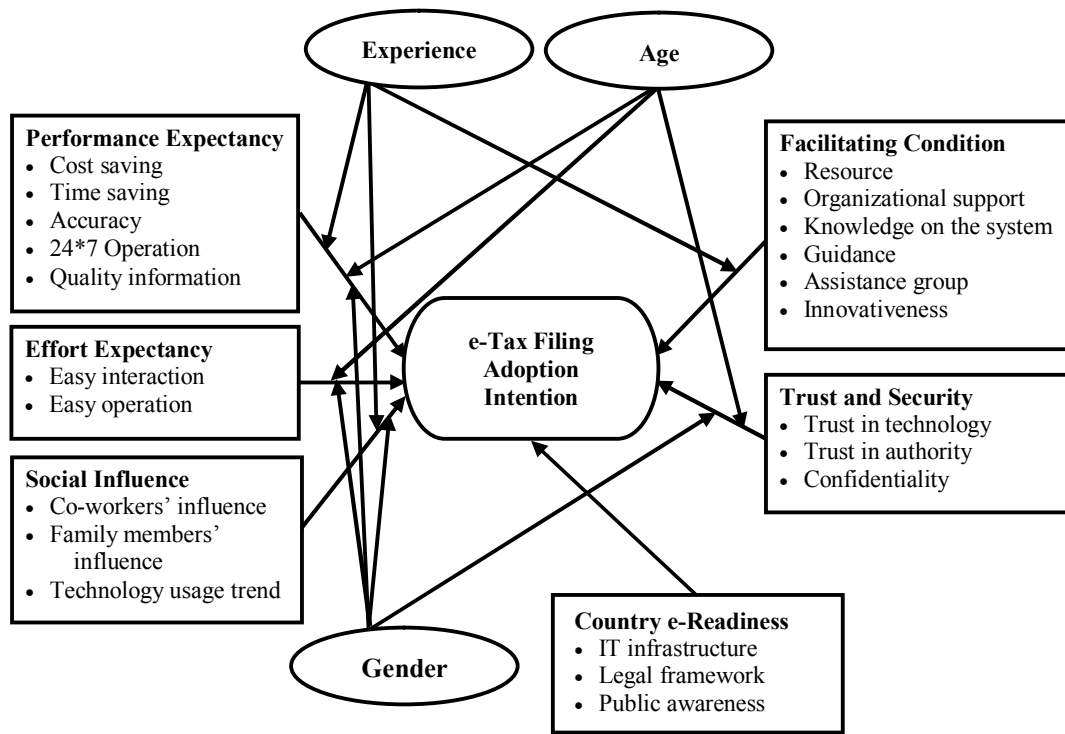
Figure 1: Proposed Research Model

4.3 Research implications

The model shows that the performance expectancy derives taxpayers to use online tax filing system. If the use of tax authority's website requires less technical effort then people would be encouraged using e-tax filing. On the other hand, people will only be interested to accept e-tax filing system trustworthy and provides sound payment system along with protecting information secrecy.

The model may also help in drawing a hypothesis that government's motivational activities like awareness building campaigning, advertisement explaining the benefits of online tax return submission and tax payment over the traditional paper based system would influence people to use the intended system. Another distinct independent variable, namely "country e-readiness" in the model shows that a developed IT infrastructure has positive impact on individual taxpayers' e-tax filing adoption intention.

It should be noted that the projected model in Figure 1 would serve as the basic research model, which would help develop appropriate research hypotheses to initiate a quantitative study to justify them.

Figure 1 presents a practical model explaining individual taxpayers' e-tax filing adoption behavior. All the factors, sub-factors and variables have been obtained from the practical field. The tax authority, policy makers, government, and the taxpayers planning to implement, generalize, and use e-tax filing can consider the factors shown in the model as 'criteria' of successful decision for e-tax filing adoption and implementation.

5. Conclusions and future study

The objective of this study is to explore the factors affecting individuals' e-tax filing adoption decision. Therefore, an interpretive research paradigm has been applied in exploring the factors and variables that influences individual taxpayers' e-filing system adoption decision. The exploratory analysis identifies a range of factors that affect individuals' e-tax filing acceptance behavior. The government, tax authority, policy makers, and potential users may look into these factors for any initiative regarding e-tax filing system development, adoption and implementation.

This study contributes to the e-Tax filing adoption literature by providing a theoretical framework, which can be applied in different countries around the world. This study is exploratory in nature. Since, most of the existing research studies on e-Tax filing adoption follow positivist approach, the projected model can be used in initiating further research studies to develop hypotheses for empirical validation from different country perspectives, especially from a developing country perspective.

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Analysis of Growth Rate of Deposits and Advances: A Study of Selected Banks in Bangladesh

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Abstract

This paper analyzes the growth rate of total deposits and total advances of selected banks in Bangladesh. It examines whether there is significant difference between the growth rate of advance and deposit of those banks. A random sample of 9 banks including 3 from each sectors of state owned commercial bank, private commercial bank and foreign commercial bank are taken for the study. The study has been conducted using secondary data of total deposits and total advances of the banks for five years from 2013 to 2017. The Kruskal-Wallis W test is used for the purpose of testing the hypothesis. The Kruskal- Wallis "W" test result shows the calculated value is less than the critical table value of chi-square test, so the null hypothesis is accepted. There is no significant difference between the growth rate of total deposit and advance of selected banks under the study.

Key Words: Banks, Deposits, Advances, Growth Rate

Introduction

The bank deposits are money placed by customers at banks' different accounts like savings account, checking account, money market account. These deposits are liabilities for bank. Banks pay interest against the deposits to the customers. In exchange bank gets the chance to use the money until any withdrawal arises from the customers. To meet the interest expenses, also to maintain the value of money, bank generally uses the money for investment purpose or providing loans and advances. Advance refers to total amount of combined fund that financial institution provides to an individual or business. Banking industry plays important role in economy to channelize the deposit money for the purpose of the lending activity. Here a question arises, whether there is any relation between the growth rate of deposit and advance between banks. The purpose of this paper

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is to analyze the growth rate of deposit and advances of some selected banks. Balancing of banks borrowing and loans are one of the vital factors that influence the profitability and riskiness of a bank.

Review of Literature

Corradi et al. (1989) in their paper attempted to analyze about the bank deposits and loans of Italian banks (by using the time series method).They presented that free reserves co-integrate with deposits and loans. In the short run the causal nexus runs from deposits to reserves and in the long run from deposits and loans.

A conference paper submitted by **Kilkenny (2006)**, titled **"**The Spatial Extent of Commercial Bank Deposit and Loan Contracts" tested the null hypothesis on deposits and loans level and found that deposits and loans have a positive relation with the size of the deposits market but no relation to distance of the market. Analyzing new primary survey data author found that distance is significant in both deposit and loan markets. Bank lending is almost wholly contained within an hour's drive from the office. Local competition does not matter for deposits, suggesting deposit markets are spatially integrated.

Selvakumar (2010 in his paper "Regional Rural Banks (RRBs): Performance Analysis**",** attempted to analyze growth rate of deposit, advances, income, expenditure and profit of regional rural banks (RRBs) in India. They found no important (or significant) differences about the growth rate of deposits, loans, earnings, expenses and profits in RRBs, Tamil Nadu, India. And also no noticeable differences of growth rate advances, deposits etc. between banks RRBs of Tamil Nadu and RRBs of other states of India were found.

Aboagye (2012) in his article, found, in the Ghanaian banking industry, misallocation of resources and inefficiency in the deposits and loans markets created welfare losses. These estimates suggest that bank concentration and efficiency in loans and deposits markets are positively correlated. The operating costs elasticity with respect to deposits exceeds the elasticity of loans.

To analyze the significant difference in the growth rate of deposits and advances of various banks **Anbalagan et al. (2014)** conducted a research in Tamil Nadu, India. Although the maximum share of Banking Industry possesses by the Public Sector Commercial Banks (PSCBs), the Private Sector Commercial Bank's role is also important in India specially in Tamil Nadu. With a view to figure out the existence of difference in the growth rate of advances and deposits in different banks the authors used Kruskal-Wallis Test and various banks data for the period of 11 years (2002 to 2012). They found no significant difference between different types of deposits, total deposits, total loans, priority and non-priority sector advances of various banks both at 1 percent and 5 percent significance levels.

Mashamba et al. (2014). In this paper authors investigated the connection between the deposit mobilization and the rate of interest on deposit. They used the data of 7 years from

2000 to 2006 of banks in Zimbabwe and exerted an Ordinary Least Square (OLS) method with a purpose of expressing the relationship between explanatory and explained variable. Furthermore, this study used Pearson's correlation coefficient (R) to visualize the relationship between bank's deposits the rates of deposit that bank offers on deposit. Correlation coefficient showed a positive relationship between rates of deposit and banks' deposit. It also showed that regressors were statistically significant with a significantly high coefficient of determination (R2). It evident that the independent variables were able to explain a large scale of the variation of dependent variable that is banks' deposit.

Mukoya et al. (2015) establish the effect of determinants of long term lending in the Kenyan more specifically to determine the effect of volume of deposit on total loan advanced, of selected commercial banks. The Author took a sample size of 52 respondents from 13 commercial banks in Bungoma County in Kenya. This study concluded that for every unit increase in volume of deposits, a 10.9%, unit increase in total loans advanced is predicted.

Mathur (2017) in his article sought to examine whether there were any differences between the growth rate of deposit and advance of the chosen banks. Two banks from each category including public, private and foreign sector are selected for this analysis. Total deposit and total advance data are collected from the annual reports of each banks covering the period of 2011 to 2015.The author employed Kruskal-Wallis W test model for testing hypothesis. W test calculation reveals a value which is greater than table value stating that there is considerable difference between the growth rate of deposit and advance of selected banks under the study.

Nguyen et al. (2018). The study examined the existence of casual relationship between loans and deposits and their efficiency in using loans and deposits in Vietnamese banks. For this study authors took data of 6 years (2008-2025) from the annual report of 44 Vietnamese banks (pooled cross-sectional sample). The result of the analysis stated that in case of underdeveloped banking system (Vietnam), bank deposits have remarkable and positive effect on loans. But the contra relationship is not considerable. In addition, the performance of Vietnamese banks of providing loans and taking deposits had been seen to be improving over time.

Objective of the Study

- To analyze the deposits and advances growth rate of some banks.
- To find out whether there is significant difference between the growth rate of advance and deposit of selected banks

Hypothesis of the Study

Ho: Under the study there is no significant difference between the growth rate of total deposits and total advances of selected banks.

Ha: Under the study there is significant difference between the growth rate of total deposits and total advances of selected banks.

Methodology of this study

This research study is analytical in nature. Total deposit and total advance amount of selected banks are analyzed to test the above mentioned hypothesis. The study has been conducted using secondary data of the banks of five years ranging from 2013 to 2017. Total deposit and total advance data are collected from the annual reports and financial statements of the banks.

For taking samples, for the study, the random sampling method is used. Numerous State owned, private commercial banks and foreign commercial banks are operating in Bangladesh. From those banks, 3 state-owned, 3 private commercial and 3 foreign commercial banks are selected for the convenience of the research. For the purpose of testing the hypothesis, the Kruskal-Wallis W test was used and it is a nonparametric and a rank-based test. Between two or more groups of an independent variable it helps to find whether they are statistically significantly different or not.

The Kruskal –Wallis Test statistics, which is based on the sum of ranks for each of the samples, can be computed as follows:

$$W = \frac{12}{N(N+1)} \sum_{i=1}^{k} \left(\frac{T_i^2}{n_i} \right) - 3(N+1)$$

here
k = Number of population groups
n_i = Number of items in sample
N = Total number of items in all samples
T_i = Sum of the ranks for sample i
The Kruskal–Wallis Test is used when k=9.

In order to compute the 'W' value for this study, ranks are assigned to combined data from low to high. The lowest value receives the rank of 1, whereas the highest value receives the rank of 45. Tied growth rates are assigned average rank values.

Kruskal and Wallis were able to show that under the null hypothesis, there is no significant difference between the growth rate of total deposits and advances of selected banks, the sampling distribution of 'W' can be approximated by a χ^2 (chi-square) distribution with k-1 degrees of freedom. This approximation is generally acceptable if each of the sample sizes is greater or equal to 5.

The calculated value of 'W' is compared with the table value of chi-square (χ^2), at 5 per cent level of significance. If the calculated value of 'W' is less than or equal to table value of chi-square (χ^2), at 5 per cent level of significance there is no significant difference in the deposits and advances of 9 banks.

Sample for the Study

From random sample three state-owned commercial banks, three Private commercial banks and three foreign commercial banks are selected as follows:

Table 1: Selected Banks

| State Owned Commercial bank |
|---|
| 1. Sonali Bank Limited (SBL) |
| 2. Janata Bank Limited (JBL) |
| 3. Agrani Bank Limited (ABL) |
| **Private Commercial bank** |
| 1. Premier Bank Limited (PBL) |
| 2. IFIC Bank Limited (IFIC) |
| 3. Mercantile Bank Limited (MBL) |
| **Foreign Commercial Banks** |
| 1.   The Hongkong and Shanghai Banking Corporation (HSBC) |
| 2.   Bank Alfalah Limited (BAFL) |
| 3.   Commercial Bank of Ceylon (CBC) |

Data Analysis and Interpretation

Table 2: Total Deposits of Various Banks (In Billions)

Year	SBL	JBL	ABL	MBL	IFIC	PBL	HSBC	CBC	BAFL
2012	599.207	409.767	292.42	132.09364	92.481	67.129	86.635	18.245	8.094
2013	685.895	478.535	348.68	124.56697	107.990	73.34872	91.988	19.526	8.414
2014	778.043	516.010	383.92	140.47584	129.863	90.50376	96.845	18.633	9.752
2015	866.012	568.911	439.98	154.86952	146.848	108.70054	97.774	21.937	11.434
2016	1031.608	641.819	494.050	165.25745	160.132	125..9012	90.892	23.129	12.482
2017	1064.311	649.440	530.349	220.51663	200.148	140.69048	97.829	28.815	13.432
Mean	885.1738	570.943	439.3958	161.1373	148.9962	103.3109	95.0656	22.408	11.1028

Sources: Annual Reports of Banks

The table given above showed us that total deposits of all the selected banks are conveying a rising trend from the year 2012 to 2017.

Figure 1 Total Deposits of Banks (Mean Values)
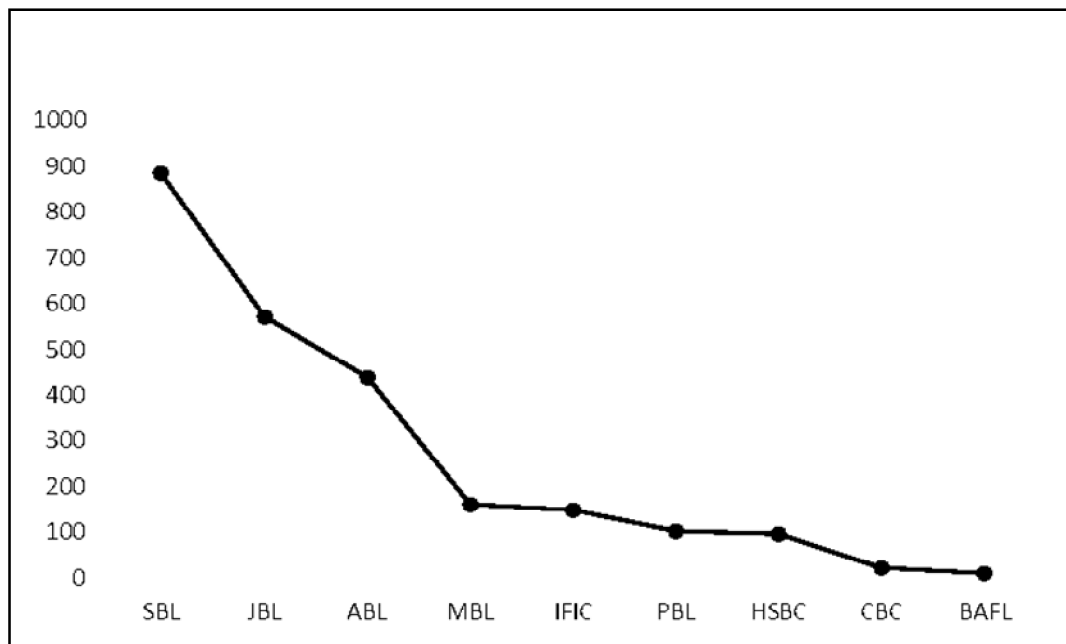
This graphical representation shows position of different banks on the basis of deposit holding. It shows that state owned banks has more deposit compared to private sector banks and the private sector banks possess more deposits than foreign banks but less than state owned banks.

Table 3: Growth Rates of Total Deposits of selected banks under the study corrected for the yearly dynamics (In %)

Year	SBL	JBL	ABL	MBL	IFIC	PBL	HSBC	CBC	BAFL
2013	14.467	16.782	19.239	-5.698	16.770	9.265	6.179	7.021	3.954
2014	13.435	7.831	10.107	12.771	20.255	23.388	5.280	-4.573	15.902
2015	11.306	10.252	14.602	10.246	13.079	20.106	0.959	17.732	17.248
2016	19.122	12.815	12.289	6.708	9.046	15.824	-7.039	5.434	9.166
2017	3.170	1.187	7.347	33.438	24.989	11.747	7.632	24.584	7.611
Mean	12.300	9.774	12.717	11.493	16.828	16.066	2.602	10.039	10.776

Sources: Annual Reports of Banks

The table above here shows the growth rate of total deposits of the 9 selected banks from the year 2013 to 2017.

Table 4: Ranking of Growth Rates of total Deposits of 9 banks and KRUSKAL – WALLIS TEST result

Year	SBL	JBL	ABL	MBL	IFIC	PBL	HSBC	CBC	BAFL	*W*
2013	30	35	39	2	34	19	10	12	7	
2014	29	16	20	26	41	42	8	3	33	
2015	23	22	31	21	28	40	4	37	36	
2016	38	27	25	11	17	32	1	9	18	*12.463*
2017	6	5	13	45	44	24	15	43	14	
Rank Total	126	105	128	105	164	157	38	104	108	

This table shows the rankings of the growth rate of total deposits of various selected banks from the year 2013 to 2017. It also shows the value of Kruskal-Wallis "W" test, which is 12.463, and the critical values of chi-square test with degrees of freedom 8 at different significance levels are as follows:

Table 5: Critical Values of Chi-Square test at degrees of freedom 8

| Level of significance, (α)	Chi-square critical value at df=k-1=9-1=8
α =0.10	13.362
α =0.05	15.507
α =0.01	20.090
α =0.001	26.25

The table shows the chi-square critical values at significance level 10%, 5%, 1% and .1%. The calculated value 12.463 is less than the chi-square critical value at any level of significance. So at all the level of significance the null hypothesis is accepted.

Table 6: Total Advances of Various Banks (In Billions)

Year	SBL	JBL	ABL	MBL	IFIC	PBL	HSBC	CBC	BAFL
2012	380.67	305.34	212.66	93.61087	78.446	52.121	68.564	16.344	5.502
2013	337.554	285.747	202.97	97.6885	86.02	52.80046	64.044	16.858	6.58
2014	346.346	319.773	235.09	117.060.03	104.419	69.81814	67.768	18.487	7.508
2015	384.315	349.861	244.8	126.33883	125.668	91.21745	72.396	22.781	7.758
2016	384.538	403.037	265.871	150.91252	141.258	113.72381	61.53	24.775	9.274
2017	423.218	459.58	319.118	199.66072	183.3	135.89106	68.241	32.568	10.068
Mean	375.1942	363.5996	253.5698	143.6501425	114.34125	98.408195	66.7958	23.0938	8.2376

Sources: Annual Reports of Banks

With reference to the above table, it was found that total advances of all the selected banks are showing an increasing trend from the year 2012 to 2017.

Figure 2 Total Advances of Banks (Mean Values).
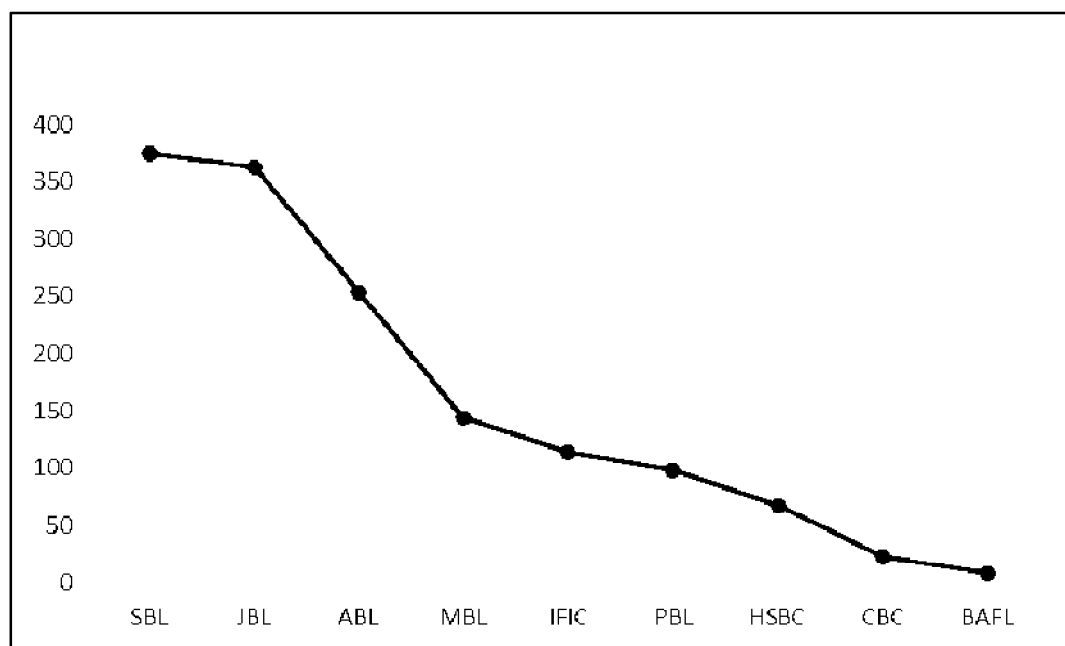
Graph shows that state owned banks has more advances compared to Private commercial banks and the private commercial Banks possess more advance than foreign banks but less than state owned Banks.

Table 7: Yearly Growth Rates of Total Advances of the selected banks under the study (In %).

Year	SBL	JBL	ABL	MBL	IFIC	PBL	HSBC	CBC	BAFL
2013	-11.326	-6.417	-4.557	4.356	9.655	1.304	-6.592	3.145	19.593
2014	2.605	11.908	15.825	19.830	21.389	32.230	5.815	9.663	14.103
2015	10.963	9.409	4.130	7.927	20.350	30.650	6.829	23.227	3.330
2016	0.058	15.199	8.607	19.451	12.406	24.673	15.009	8.753	19.541
2017	10.059	14.029	20.027	32.302	29.763	19.492	10.907	31.455	8.562
Mean	2.472	8.826	8.807	16.773	18.712	21.670	0.390	15.249	13.026

Sources: Annual Reports of Banks

The above table shows the growth rate of total advances of 9 selected banks from the year 2013 to 2017.

Table 8: Ranking of Growth Rates of Advances of 9 banks and KRUSKAL – WALLIS TEST result.

Year	SBL	JBL	ABL	MBL	IFIC	PBL	HSBC	CBC	BAFL	*W*
2013	2	4	5	12	20	7	3	9	34	
2014	8	25	30	35	38	44	13	21	28	
2015	24	19	11	15	37	42	14	39	10	*14.384*
2016	6	29	17	31	26	40	1	18	33	
2017	22	27	36	45	41	32	23	43	16	
Total	62	104	99	138	162	165	54	130	121	

The above table shows the rankings of growth rates of total advances of various selected banks from the year 2013 to 2017. It also shows the value of Kruskal-Wallis "W" test, which is 14.384 and the critical values of chi-Square test with degrees of freedom 8 at different significance levels.

From table 5, it shows the chi-square critical values at significance level 10%, 5%, 1% and .1%. The calculated vale of Kruskal-Wallis "W" test is 14.384, which is less than the chi-square critical value at level of significance 5%, 1% and .1% but it is higher than the chi-square critical value at level of significance 10%. So at all the level of significance the null hypothesis is accepted except at 10%.

Findings and Conclusion

This paper investigated whether there is significant difference between the growth rate of total deposits and advances of selected banks under the study using Kruskal-Wallis "W" test. Kruskal-Wallis test shows that the calculated value of "W" for deposit and advance are respectively 12.463 and 14.384, both of which are less than table value of chi-square (χ^2) at 5 percent level of significance. As the critical value 15.507 exceeds the calculated "W" value at 5 per cent level of significance, we cannot reject the null hypothesis. The null hypothesis is accepted. There is no significant difference between the growth rate of total deposits and advance of selected banks under the study.

The growth rate of total deposits and total advances of selected banks are also analyzed. Total deposit and Total advances of selected banks show that state owned commercial banks in Bangladesh have captured the largest portion of deposits and advances of banking industry. The second largest portion is captured by private commercial banks and then comes the foreign commercial Banks.

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Role of ICB in the Development of Capital Market of Bangladesh

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Abstract

Investment Corporation of Bangladesh (ICB) plays a vital and leading role in developing the capital market. It has taken a number of initiatives for the development of the capital market since its inception. So, it is a crying need to evaluate the role of ICB in developing the capital market of Bangladesh. Therefore, the main objective of this study is to examine the role of ICB in the capital market development of Bangladesh. However, the specific objectives are to see the overview of the capital market of Bangladesh, to identify the initiatives of ICB for the capital market development, to evaluate the relationship between different ICB functions and the capital market development, and to analyze the impact of ICB functions on the capital market development. The study covers the policies and operations of ICB towards the development of capital market of Bangladesh. Different ICB activities are discussed in this study to develop the capital market of Bangladesh. However, the study focuses only few areas like issue management activity, underwriting performance, mutual funds operation, and stock market transaction of ICB where it performs better since inception. The study used mainly the secondary data. The data has been collected from annual reports of ICB and Dhaka Stock Exchange (DSE). The study covers a16 years of time series data from 2000-01 to 2014-15. Four influential functions of ICB are considered as independent variables. On the other hand, market capitalization of DSE is regarded as dependent variable as the indicator of capital market development of Bangladesh. Collected data were processed and analyzed by applying correlation and regression analysis. The study has established four hypotheses depend upon to the nature of the problems. The study has found a very strong and positive correlation between issue management and stock market transaction with the capital market development. On the other hand, the mutual fund operation is found a moderate and underwriting activity is shown a weak relationship with the capital market development. Regression analysis has also found significant impact of issue management activities, mutual fund operation and stock market transaction of ICB on market capitalization i.e., capital market development. The study, therefore, recommends ICB to arrange its activities in such a way so that it can achieve the goal of capital market development.

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Introduction

The capital market plays a significant role in the financial system. Savings and investments are vital for economic development of an economy. Generally, units which save and invest are different; capital market provides a bridge by which savings of surplus units are transmitted into long-term investments of deficit units. Capital market, therefore, enhances efficient financial intermediation. It increases mobilization of savings and therefore improves efficiency and volume of investments, economic growth and development[3]. Capital market of Bangladesh consists of two exchanges, one central depository, 51 merchant bankers, one portfolio manager, two issue managers, and one underwriter. As a regulator, Bangladesh Securities and Exchange Commission (BSEC) issues licenses and regulate the operations of these market participants.

However, if we want to say anything about the capital market of Bangladesh, the role of Investment Corporation of Bangladesh (ICB) cannot be ignored. Because, ICB was established to develop a well-organized and vibrant capital market particularly securities markets in Bangladesh. ICB caters to the need of institutional support to meet the equity gap of the industrial enterprises. In view of the national policy of accelerating the rate of savings and investment to foster self-reliant economy, ICB assumes an indispensable and pivotal role.

ICB is working to encourage and broaden the base of investments, to develop the capital market and to mobilize savings. And to achieve these objectives, the corporation carries out direct purchase and sales of shares and debentures including placement and equity participation, participating in and financing of joint-ventures companies, providing lease finance singly and through syndication, managing existing investor's accounts, managing existing mutual funds and unit fund, managing portfolios, providing advance against ICB unit and mutual fund certificates, to act as trustee and custodian, providing bank guarantee, providing investment counseling to investors, participating in government divestment program, introducing new business products suiting market demand[4].

Statement of the problem

In spite of having a number of activities, the investment position of ICB in respect of its financial assistance transaction has not been improved significantly over the last fifteen years. Although to solve this crisis, the authorities have taken some important measures and yet, the performance of said operations could not be improved to the expected level. Proper dissemination of research-based information is also absent in the capital market sector. Again, a lack of capital market investment policies in issue management, underwriting activities, mutual fund operation, and on the other hand, fluctuation in net operative accounts, fluctuation of total turnover, and many other issues are hindering the development of capital market. For these reasons, ICB has been facing some challenges in recent years.

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[3] Perkins, D. H. Radelet, S. Lindauer, D. L and Block, S. A. (2012). *Economics of Development.* 7th ed, W. W. Norton & Company, New York.
[4] ICB Annual Report, 2012-13.

Objectives of the study

The principal objective of the study was to examine the role of ICB in the development of capital market of Bangladesh. This study was guided by the following specific objectives:

i) to see the overview of the capital market of Bangladesh;

ii) to identify the initiatives of ICB for the capital market development;

iii) to evaluate the relationship between different ICB functions and the capital market development.

iv) to analyze the impact of ICB functions on the capital market development.

Literature review

Since there were very few research work available on ICB the study, therefore, reviewed various studies in the area of investment banking, merchant banking, underwriting, portfolio management which were conducted in Bangladesh and in abroad. Related literatures regarding capital market development, market capitalization, trading volume etc also have been reviewed for the study.

Hossain (2018)[5] observed in a paper that ICB provides institutional support to meet the equity gap of the companies and in view of the national policy of accelerating the rate of savings and investment to foster self-reliant economy. He further noticed that ICB acts as an investment banker, market maker and portfolio manager which have significant contribution to develop a well-organized, vibrant, balanced, efficient, stable and liquid capital market in Bangladesh. The paper found that the correlation between secondary market transactions, underwriting activities and portfolio management with market capitalization are significant. Finally, the paper recommended that the number of IPOs issued by ICB as well as the performance of ICB mutual funds has been decreasing year to year which are needed to improve.

Prakash (2018)[6] analyzed the various functions performed by investment banks. She noticed that investment banks match those selling securities with those investors. They add liquidity to the market; remove deficiency of capital by stimulating savings and investment; mobilize small and scattered savings of the community and makes them available for investment in productive enterprises. The study concluded that the role of investment banks in the economic development is significant.

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[5] Hossain, M. S. (2018). "The Role of Investment Corporation of Bangladesh in the Development of Capital Market of Bangladesh." *Business Management & Compliance,* Vol. I, No. 2, July-December.

[6] Prakash, P. (2018). "A Study on the Role of Investment Banks in the Economic Development of India", *International Journal of Scientific Progress and Research (IJSPR)*, ISSN: 2349-4689.

Huda and Chowdhury (2017)[7] tried to analyze the performance of Lanka Bangla Investment Ltd., Prime Finance Capital Management Ltd., IDLC Investment Ltd. and Uttara Finance and Investment Ltd. observed that the selected merchant banks were able to achieve a stable growth of investment in securities, margin loan to clients, brokerage commission, capital gain/loss from securities, portfolio management services, issue management fees, corporate advisory fees and underwriting commission during the period of 2011-2015. Among them the trend equation of investment in securities, margin loan to clients, and corporate advisory fees are positive incase of all the selected merchant banks. According to **Lahoti (2016)**[8], merchant banking provides various services like portfolio management, loan syndication, and issue management. Merchant banking is a combination of consultancy services and banking. It also helps to increase the fund and to expand the business. **Rayamajhi (2009)**[9] tried to point about some features and problems of merchant banking in Nepal. He further showed that merchant bankers are also playing a highly significant role towards the development of securities industries as well as capital market in Nepal. **Hyderabad (2002)**[10] attempted to study the overall performance of merchant bankers in the area of public issue management from 1989 to 1998 in India. And **Lakshmanna (2002)**[11] found that most of the merchant bankers concentrated on floating the public issues function while underwriting was secondary. The study did not find a direct correlation between number of issues in each activity to the size and value of the issue. **Aggarwal (1995)**[12] highlighted the important role of merchant bankers in the growth of capital market and mobilization of resources from public through issue management activities.

Periyasamy (2016)[13] attempted to develop an understanding of the dynamics of market participants such as domestic institutions and foreign institutional investors' investment behavior and its impact on retail participation. The study is conducted using NIFTY index movement with the contribution of DII and FII transactions from January 2007 to August 2015. The outcome of the study shows that there is a positive correlation between

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7   Huda, F. and Chowdhury, T. A. (2017). "Merchant Banking Operation: A Case Study of Selected Merchant Bank in Bangladesh", *ISSN: 1946-052X*

8   Lahoti, J. (2016). "Recent development in Merchant Banking and Challenges ahead in India", *E-ISSN:2455-295X*.

9   Rayamajhi, D. (2009). Merchant Banking in Nepal. *An Unpublished Master Degree Thesis.* Kathmandu: Shanker Dev Campus, T.U.

10 Hyderabad, R. L. & Halasagai, S. O. (2002). *Performance of Merchant Bankers in Public Issue Management,* Financial Services, Texts, Cases and Strategies, (ed.), Deep & Deep Publication Pvt. Ltd., New Delhi.

11 Lakshmanna, B. C. & Krishna N. C. N. (2002). *Merchant Banking in India*, Deep & Deep Publication Pvt. Ltd., New Delhi.

12 Aggarwal, M. (1996). *An Appraisal of the Working of Merchant Banking in India,* Ph.D. Thesis, Department of Commerce, Delhi School of Economics, University of Delhi.

13 Periyasamy, S. (2016). "A Study on the Impact of Institutional Investors Contribution on the Indian Stock Market with Reference to NIFTY". *Zenith International Journal of Multidisciplinary Research*, Vol 6.

institutional investments and market movement over the period, which suggests some positive signs for retail investors. On the other hand, the analysis of the dynamics of the value of assets can be found in **Satoła's (2010)**[14] work. It focused on the period from June 2006 to March 2010 analyzing capital flows both at the end of the month and in the quarter. Satoła concluded that the development of the investment funds market is one of the factors of the development of the financial market. The upturn in the stock market attracts capital to investment funds, and this has a positive impact on the development of the entire market. **Mishra et al. (2009)**[15] attempted to examine the role of Indian mutual funds in the capital market of the country. They not only looked at the fundamental growth of the Indian mutual fund industry, but also examined the dynamics of the causal relationship that runs between the growth of mutual funds investment and capital market development. Thus, the policy makers in India should take necessary steps to reduce the volatility of the Indian capital market thereby helping putting the mutual funds industry in a high growth trajectory. Again, **Aras and Müslümov (2005)**[16] examined causality relationships between institutional investors and stock market development based on the panel data compiled from 23 OECD countries for the years 1982 through 2000. They found that there are statistically significant positive relationship between institutional investors and stock market development. Research results support the idea that a country should promote the development of institutional investors for the establishment of well-developed securities market.

Since underwriting activities, mutual fund operation and stock market transaction increase liquidity of the market so the author here took help of such previous studies which are related with capital market development and liquidity. **Mawla (2011)**[17] aimed to test the relationship between stock market liquidity indicators and the economic growth represented by the growth rate of a group of Arab states from 1994 to 2007. **Lischewski and Voronkova (2010)**[18] also found a negative relation between size and illiquidity specifying that size factor is not responsible for the lack of liquidity effect. A weak link between size and liquidity was also observed by them. Their results confirmed that size and book-to-market are significant for Polish stock market and liquidity is not a priced factor for it. **Daouk et al. (2006)**[19] highlighted that increases in market liquidity (trading volume, market depth and US foreign investments) are positively related to an improvement in capital market governance. They focused their research on the link

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[14] Satoła Ł. (2010) "Dynamika wartości aktywów na polskim rynku funduszy inwestycyjnych", *Zeszyty Naukowe Polityki Europejskie*, Finanse i Marketing, Nr 4 (53).

[15] Mishra P. K. Das, K. B. and Prodhan, B. B. (2009). "Role of Mutual Funds in India: An Empirical Analysis", *The Research Network, 4(4)*, ISSN 0975 0517.

[16] Aras, G, & Müslümov, A. (2005). "Institutional Investors and Stock Market Development: A Causality Study", *ISE Review,* Vol. 29, 1-14.

[17] Mawla, E. (2011). "Indicators to Measure Stock Market Liquidity and Its Impact on Economic Growth." *Tikrit Journal for Administrative and Economics Sciences*, Vol.VII.

[18] Lischewski, J. and Voronkova, S. (2010). "Size, Value and Liquidity. Do They Really Matter on an Emerging Stock Market?" *Discussion Paper*, pp. 10-070.

[19] Daouk, H. MCLea, C. and Ng, D. (2006). "Capital Market Governance: How Do Securities Laws Affect Market Performance?" *Journal of Corporate Finance*, no. 12, pp. 560-593.

between CMG index and the key measure of market performance in 22 developed and 10 emerging countries. Here, liquidity was considered as a component of market performance. And **Levine (2003)[20]** suggested that there is a strong positive relationship between long-run economic growth rates and stock market liquidity. On the other hand, **Narta (1996)[21]** found that public financial institutions accounted for a larger proportion in underwriting activities.

Attariet et al. (2012)[22] carried out a study to measure the relationship between trading volume and returns; and change in trading volume and returns of stocks in Pakistan. **Mutalib (2011)[23]** investigated the dynamics of relationship between trading volume and returns of Nigerian capital market. The empirical results indicated, in general, a mild causal relation between stock returns and trading volumes for individual assets but on the overall, a weak evidence of a dynamic (causal) relation running from trading volume to market return was found. **Pathirawasam (2011)[24]** conducted a study to examine the relationship between trading volume and stock returns. The sample of the study consisted of 266 stocks traded at the Colombo Stock Exchange (CSE) from February 2000 to December 2008. The study revealed that stock returns are positively related to the contemporary change in trading volume. **V and Batten (2011)[25]** found that size had no significant pricing role in most of the regression they employed in the attempt to determine the relationship between liquidity (proxied by turnover) and stocks return on Vietnam stock exchange.

Beck, Lundberg and Majnoni (2006)[26] found a positive correlation between capital market development and economic growth. **Bose (2005)[27]** offered a theoretical financial model that explains the positive correlation between stock market development and

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[20]   Levine, R and Sara, Z (1998). "Stock Market, Bank and Economic Growth." *The World Bank Policy Research Working Paper*, No 1690, Washington DC: World Bank.

[21]   Narta S. S., (1996). "Underwriting of Capital Issues in India- Progress and Practices", *Finance India*, Vol. X No.3 September, pp 693-698.

[22]   Attari, M. I. J., Rafiq, S and Awan, H. M. (2012). "The Dynamic Relationship between Stock Volatility and Trading Volume." *Asian Economic and Financial Review* 2(8), pp. 1085–1097.

[23]   Mutalib, A. (2011). "Trading Volume and Stock Return Dynamics: the Nigerian evidence." *Working Paper,* Social Science Research, Network.

[24]   Pathirawasam, C. (2011). "The Relationship between Trading Volume and Stock Returns." *Journal of Competitiveness* 3, pp. 41-49.

[25]   V and Batten, J. (2011). "An Empirical Investigation of Liquidity and Stock Returns Relationship in Vietnam Stock Markets during Financial Crisis" *MPRA Paper* no. 29862. World Databank, 2012.Vol, X.

[26]   Beck, T. Lundberg, M. Majnoni, G. (2006). "Financial Intermediary Development and Growth Volatility: Do Intermediaries Dampen or Magnify Shocks?" *Journal of International Money and Finance,* 25, pp.1146-1167.

[27]   Bose, N. (2005). "Endogenous Growth and the Emergence of Equity Finance"*, Journal of Development Economics*," 77, pp.173-188.

economic growth. **Garretsen, Lensink and Sterken (2004)**[28] revealed that a causal relationship exists between economic growth and financial market's development: a 1 percent improvement of economic growth determines a 0.4 percent rise of market capitalization / GDP ratio.

From the above discussion, it is apparent that the present study does not receive much help because the previous studies did very little in this area. Hence, the research gap is identified and the novelty of this research in filling those vacuums is specified.

Methodology

Research Type

The study was quantitative in nature.

Sources of Data

The study used mainly the secondary data. The data were collected from audited annual reports of ICB, annual reports of DSE and also from the reports published by BSEC. Besides, different necessary documents, ordinances, books and various periodicals were also used for the study.

Period of Study

The present study has covered 16 years as time series data of ICB and DSE from 2000-01 to 2014-15.

Data Processing and Interpretation

Collected data were processed by sorting, editing and tabulation. Processed data then analyzed by applying mean, standard deviation, correlation analysis, regression analysis. Correlation and regression were used in order to evaluate the relationship among the variables. Statistical tool SPSS was used for analyzing multiple regression and correlation, as the study was quantitative in nature.

Research Variables

The study covered important functional areas like 'issue management', 'underwriting', 'mutual fund operation' and 'stock market transaction' of ICB and its subsidiaries. Because, ICB is doing well in these areas since its inception. Therefore, the present study evaluates the impact of these ICB activities on the development of capital market of Bangladesh.

Hence, the study has taken capital market development as dependent variable and four influential functions of ICB issue management, underwriting activities, mutual fund

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[28] Garretsen, H. Lensink, R and Sterken, E. (2004). "Growth, Financial Development, Societal Norms and Legal Institutions"*, Journal of International Financial Markets, Institutions and Money,* 14, pp.165-183.

operation, and stock market transaction as independent variables. And the study has used market capitalization of Dhaka Stock Exchange (DSE) as a proxy of capital market development of Bangladesh.

Capital market development can be measured using the number of listed companies, market capitalization, value traded and turnover. Those indicators were used by Khorshidi. H. *et al* (2010)[29]. However, in this study, capital market development is evaluated using market capitalization since it is a good substitute and it has less arbitrary than any other index. Influential studies were also used market capitalization as an alternative of capital market development (Yartey (2008), Cherif and Gazdar, (2010).

The dependent and independent variables can be explained by the following model.

Figure -1: Dependent and Independent Variable.

Source: Researcher's own developed model

Regression Model

The empirical regression model is

$$MC_i = \alpha_0 + \beta_1(IM_i) + \beta_2(US_i) + \beta_3(MFO_i) + \beta_4(SMT_i) + u_i$$

Where,

MC = Market Capitalization

α_0 = Constant term of the model

IM = Issue Management

US = Underwriting of Securities

MFO = Mutual Fund Operation

SMT = Stock Market Transaction

β_1 = beta coefficient for Issue Management

β_2 = beta coefficient for Underwriting of Securities

β_3 = beta coefficient for Mutual Fund Operation

β_4 = beta coefficient for Stock Market Transaction

u_i = Error term for the each observation

Statement of the Study Hypotheses

The study has used four main independent variables such as issue management, underwriting of securities, mutual fund operation and stock market transaction of ICB

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which have significant impact on capital market development of Bangladesh. As a result, the four main hypotheses are formed.

H_1: There is a significant relationship between issue management activity of ICB and the capital market development of Bangladesh.

H_2: There is a significant relationship between underwriting of security of ICB and the capital market development of Bangladesh.

H_3: There is a significant relationship between mutual fund operation of ICB and the capital market development of Bangladesh.

H_4: There is a significant relationship between stock market transaction of ICB and the capital market development of Bangladesh.

ICB Activities in the Capital Market

ICB carry out the following activities in the capital market:

- Underwriting of initial public offering of shares and debentures.
- Underwriting of right issue of shares.
- Direct purchases of shares and debentures
- Including placement and equity participation
- Providing lease finance singly or by syndicate
- Managing investor's accounts.
- Managing mutual fund and unit fund.
- Operating of the stock exchange.
- Providing investment counsel to investors and issuers.
- Participating in government divestment program.
- Participating in financing of joint venture projects.
- Introducing new business products according to market demand.

However, for evaluating ICB's contribution to the development of capital market the study concentrates in those areas of operations where ICB is found always better.

Table-1: ICB's Position in the Industry

Particulars	Position
Issue Management	Top
Underwriting of Securities	Top
Mutual Fund Management	Top
Stock Market Operation	1st /2nd since inception

Source: (ICB, Partners in dynamic investment, Annual Report 2013-14)

Issue Management Activities of ICB

Management of issue involves marketing of corporate securities viz. equity shares, preference shares and debentures or bonds by offering them to public. The merchant

banker arranges a meeting with company representatives and advertising agents to finalize arrangements relating to date of opening and closing of issue, registration of prospectus, launching publicity campaign and fixing date of board meeting to approve and sign prospectus and pass the necessary resolutions. Pricing of issues is done by the companies in consultant with the merchant bankers.

Table-2: Participation of ICB in Different Activities and Market Capitalization
(Amount in tk crore)

Year	Issue Management	Underwriting of Securities	Mutual Fund Operation	Stock Market Transaction	Market Capitalization
2000-01	3.00	200.00	17.50	366.99	5401.09
2001-02	4.57	16765.00	10.00	225.82	7217.85
2002-03	51.89	5377.00	20.00	722.55	6552.23
2003-04	108.36	49155.53	20.00	631.26	7259.00
2004-05	189.66	42877.68	20.00	796.90	13664.56
2005-06	850.63	46763.41	30.00	426.46	22205.33
2006-07	989.79	49853.30	30.00	1020.75	21542.89
2007-08	1065.78	81164.16	120.00	3973.97	47589.25
2008-09	1553.66	76133.44	245.00	5158.42	93103.54
2009-10	1056.63	87689.39	750.00	12241.30	124132.24
2010-11	1021.23	76898.04	400.00	13202.33	270074.78
2011-12	2534.71	55646.23	545.75	10232.27	285389.47
2012-13	1871.29	8745.29	200.00	8848.13	249161.20
2013-14	2070.44	11518.10	130.00	12723.51	253025.59
2014-15	3953.10	12203.00	150.00	10934.65	294320.33
Total	11657.35(157)	712203.89(109)	2688.25(41)		
Mean	955.12	508.89	179.22	5433.69	288943.87
SD	± 827.63	±344.26	±222.93	±5285.33	± 771893.65
Max	3953.10	87689.39	750.00	13202.33	294320.33
Min	3.00	200.00	10.00	225.82	5401.09

Source: ICB annual reports
Note: Data has been compiled by researcher

Issue management is one of the main activities of ICB. It offers specialized services to state owned enterprises, local statutory bodies and corporate sector. It has been rendering issue management, consultancy and corporate advisory services as a capital market intermediary. From Table-2 it has been observed that ICB and its subsidiary companies

successfully performed the responsibilities of issue manager of 157 companies of TK 11,657.35 crore, as on 30th June 2015. It has also been observed that size of issue management operation was highest in the year of 2014-2015 when 17 companies with an amount of TK. 3953.10 crore took ICB's issue management services. The amount and number of issue were lowest in year 2000-2001.

Underwriting of Securities of ICB

Underwriting is the process by which <u>investment bankers</u> raise investment capital from investors on behalf of corporations and governments that are issuing either <u>equity</u> or <u>debt securities</u>. It is an arrangement whereby the underwriter undertakes to subscribe the unsubscribed portion of shares/debentures offered by any public limited company. This encourages the prospective issuers to offer shares/debentures to the public for subscription and they can raise fund from the public for implementation of their industrial undertakings. Underwriters take on the risk of distributing the securities. If they fail to find enough investors, they will have to hold some securities themselves.

Underwriting performance is also one of the important aspects of ICB's operational and investment activities. It has significant opportunities to develop the capital market. In order to raise long term debt and equity from the primary market, the government bodies, enterprises, corporation or companies seek intermediary assistance from ICB in the form of underwriting[30]. Because of its long and proven experience, reputation, asset back up and established network of regional offices, ICB is in an excellent position to attract the potential investors to the proposed issue of shares, debenture and other securities for successful floatation of IPO & placement. ICB renders underwriting support singly or through consortium to viable and prospective companies seeking long term fund from the capital market.

The Table-2 shows the underwriting contribution of ICB from 2000 to 2015. During the period of study, ICB successfully performed the responsibilities of underwriting of 109 companies. The total amount of underwriting was TK.712203.89 crore, as on 30th June 2015. The amounts of underwriting were bigger during 2007-20011 periods. However, the study experiences a declining trend after that period. The amount of underwriting was only tk8745 crore in 2012-12. It has further been observed that the maximum 23 number of company was underwritten with an amount of TK. 55646.23 crore in 2011-2012. On the other hand, only 1 company with an amount of only tk.200.00 crore was underwritten in 2000-01.

Mutual Fund Operations of ICB

A mutual fund pools the money of people with certain investment goals. The money invested in various securities depending on the objectives of the mutual fund scheme and the profits (or loss) are shared among investors' in proportion to their investment. Investments in securities are spread across a wide cross-section of industries and sectors.

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[30] www.icb.gov.bd/icml.php

Diversification reduces the risk because all stocks may not move in the same direction in the same proportion at the same time. Investors' of mutual funds are known as unit holders. The profits or losses are shared by the investors' in proportion to their investment.

ICB pioneered the mutual fund industry in Bangladesh. The country's first mutual fund, the First ICB Mutual Fund was launched on 25 April 1980. Because of its strong and steady performance in terms of dividend and portfolio management ICB mutual funds are perceived by investors as rewarding and relatively safe investment vehicle. ICB and its subsidiaries are now managing twenty one funds: ten close-end mutual fund and eleven open-end mutual fund known as Unit Fund. Bangladesh Fund is the country's largest open-end mutual fund. New mutual funds are now being floated through "ICB Asset Management Company Ltd." a subsidiary of ICB after corporate restructuring.

ICB floated 8 mutual funds of total capital of Tk. 17.50 crore (at present 17.75 crore) up to 1996. At the end of FY 2014-15, total number of listed mutual funds stood 41 with unit value of Tk. 2688.25 crore and market value of those funds are Tk. 2885 crore. From the Table-2, it is seen that mutual fund operation of ICB has been increasing over the study period. Although amount of mutual funds grew slowly at the initial years of the study period but it grew significantly after 2007-2008. ICB contributed highest amount of investment (tk750.00 crore) in 2009-2010 for 7 mutual funds. But a downtrend in operation was seen again after the financial year of 2011-2012.

Stock Market Transaction of ICB

Stock market transaction means the trading of ICB's and its subsidiaries companies in the DSE. For capital market development, stock market operation has an important role of ICB. ICB is playing an unparalleled role with secondary market in this regard which ultimately makes the capital market vibrant. Merchant banking operation specially the brokerage services are being provided uniquely.

From the Table-2, it is seen that the total transaction of ICB and its subsidiary companies in DSE was Tk10934.65 crore in 2014-15, which was Tk.12723.51 crore in the previous year. The amount of transactions of ICB was lower in the initial years of the study period. However, the transaction amount has been increased significantly since 2006-07. The highest amount of tk13202.33 crore was transacted in 2010-11. However, in percentage, ICB's contribution to total transactions was highest (25.48 percent) in year 2003-04. The average percentage of ICB's transaction for the study period was 9.70.

Market capitalization

Market capitalization means the total number of share outstanding multiplied by the current market price. Generally, the size of market is positively correlated with the ability to mobilize capital in to the capital market. So that market capitalization can be used as an indicator of capital market development. The higher amounts of market capitalization the better is the performance of stock exchanges. Table-2 shows that the market capitalization of DSE has been increased during the period of study. The market capitalization stood at 3159757.75 crore as on 30 June 2015 against only 5401.09 as on 30 June 2000. The

market capitalization has been started escalating since 2007 when it became more than double as compared to the previous year. This increasing trend was continued since then. The market capitalization has been considerably increased in last five years of the study.

Findings

Results from Correlation Analysis

Person correlation test was used to see the degree and direction of linear relationship among variables i.e., market capitalization (dependent variable), issue management, underwriting of securities, mutual fund operation and stock market transaction (independent variables). Table-3 demonstrates the correlation coefficient between them.

From Table-3, it is seen that Person correlation coefficient between market capitalization and issue management, underwriting of securities, mutual fund operation and stock market transactions is 0.853, 0.413, 0.661, and 0.884 respectively. Hence, the result shows that market capitalization is significantly (at 1% level) and positively correlated with issue management and stock market transaction of ICB. Mutual fund operation of ICB also positively and significantly (at 5% level) correlated with market capitalization. But the underwriting of securities shows a weak correlation with the market capitalization.

Table-3: Correlations between the Variables

Variables	1	2	3	4	5
Market capitalization	1				
Issue management	0.853^{**}	1			
Underwriting of securities	0.413	0.525	1		
Mutual fund operation	0.661^{*}	0.552^{*}	0.463	1	
Stock market transaction	0.884^{**}	0.738^{**}	0.625^{*}	0.792^{**}	1
** Correlation is significant at the 0.01 level (2-tailed).					
* Correlation is significant at the 0.05 level (2-tailed).					

8.2 Results from Regression Analysis

Multiple Linear Regression Models were used to express the relationship of the four independent variables that affect the market capitalization. The results of multiple regression analysis are given below:

Table-4: Summary Output of Regression Analysis

Regression Statistics	
Multiple R	0.95868
R Square	0.91907
Adjusted R Square	0.88310
Standard Error	33518.3535
Observations	15

From regression analysis (Table-4), it is seen that in 15 observations, the selected model has a R^2 = 91.91%, which indicates that the model has explained the capital market development indicator of Bangladesh, market capitalization by 91.91%. It proves that a strong model has been fitted. The adjusted R^2 = 88.31%, which is only 3.6% less than the R^2 value. It indicates that the model contains good estimators. The chances of taking insignificant estimator/s is very low or nil. So, the goodness of fit of the estimated model has been tested.

Table-5: ANOVA in Regression

Source of variation	Df	SS	MS	F	Significance F
Regression	4	1.14828E+11	28707058057	25.55191	0.0001
Residual	10	10111320191	1123480021		
Total	15	1.2494E+11			

From Table-5, at 5% level of significance, the independent variables collectively have statistically significant relationship with dependent variable. So, the linear relationship of the model is proved.

Table-6: Regression Coefficients with p-values

Variables	Coefficients	Standard Error	t stat	p-value
Intercept	82.16443	171.910301	0.47795	0.64408
IM	0.55888	0.16823	3.32204	0.00891
US	-0.80401	0.34899	-2.30384	0.04670
MFO	-0.38478	0.66256	-0.58075	0.57566
SMT	0.14636	0.03840	3.81101	0.00415

From Table-6, it is found that at 5% level of significance, three independent variables IM, US and SMT have individual significant relationship with the MC. Having, 50% or more variables with individual significance relationship indicates that the model is highly strong. So, we can consider the model to be a good one and that is proven.

Based on the coefficients the equation can be written as:

MC = 82.16443 + 0.55888 IM - 0.80401 US - 0.38478 MFO + 0.14636 SMT

Test of Hypotheses

The first hypothesis of the study was to see whether issue management activity of ICB has significant impact on capital market development (market capitalization) of Bangladesh. It has been hypothesized that relationship is significant between the variables. Table-6

reveals that issue management activity of ICB has a positive coefficient of 0.55888. Again, the p-value of IM is 0.0089. Therefore, the variable is found statistically significant. Hence, the regression result revealed that issue management has a positive and significant relationship with market capitalization.

The second hypothesis of the study was to see whether underwriting activity of ICB has significant impact on market capitalization of Bangladesh. It has been hypothesized that relationship is significant between the variables. Table-6 reveals that underwriting activity of ICB has a negative coefficient of 0.80401, t-value of it is -2.30384 and the p-value is 0.04670. It means that the variable is statistically significant at 5% level. Hence, it can be said that there is a significant relationship exists between underwriting activity of ICB and market capitalization.

The third hypothesis of the study is to see whether the mutual fund operation of ICB has significant impact on market capitalization of Bangladesh. It was hypothesized that there is a positive relationship between the mutual fund operation of ICB and market capitalization of Bangladesh. Table-6 indicates that the mutual fund operation of ICB has a negative coefficient value of -0.38478; t-stat of it is -0.58075 and the p-value is 0.57566. This variable was tested at 5% level of significance and found statistically insignificant, since its p-value is greater than 5%. This implies that there is no significant relationship between mutual fund operation of ICB and market capitalization.

The forth hypothesis of the study is to see whether stock market transaction of ICB has significant impact on market capitalization of Bangladesh. It was hypothesized that there is a positive relationship between stock market transaction of ICB and market capitalization of Bangladesh. Table-6 indicates that the stock market transaction of ICB variable has a positive coefficient of 0.14636, t-value of it is 3.81101 and p-value is 0.00415. The variable was tested at 5% level of significance and it was found statistically significant in explaining the market capitalization, since its p-value is lower than 0.05. This implies that there is a significant relationship exists between underwriting activity of ICB and market capitalization.

Conclusion

This study has found that issue management activities, mutual fund operation and stock market transaction of ICB significantly affect the market capitalization i.e., capital market development of Bangladesh. The study, therefore, suggest ICB to give more emphasis on those areas where development of capital market can be enhanced. The findings of the study has created scope for the researcher to propose few suggestions for the interest of academic research as well as for the policy makers of ICB to take necessary steps so that it can achieve the optimal fruits of capital market development.

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Analysis of Income Inequality at National and Household Levels in Bangladesh

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Abstract

Although the scenario of income inequality at national level received much attention of the researchers and policy makers, income inequality at household level remained mostly overlooked. Available studies indicate that beyond the national scenario, distribution of income among households differs across locations as well as occupations. This study is an effort to investigate the extent of income inequality in Bangladesh both at national and household levels. The study is mainly based on primary data, which are collected from 200 households of Nilphamari and Rajshahi Districts of Bangladesh. Secondary data are also used in the analyses that are collected from different published sources. In this study, Income Gini Coefficient, under the conceptual framework of the Lorenz Curve, is estimated to measure the extent of income inequality among the households. The analysis of secondary data shows that income inequality in Bangladesh has increased from 36.0% in 1973 to 46.0% in 2010 to 48.0% in 2016 at national level with shares of income of households belonging to first, second and third quintiles declined over the years. From the analysis of primary data, it is found that there is significant inequality in household income in the Northern districts of Bangladesh. The value of Gini index in the whole study area is found as 0.408, which is 0.406 in case of Nilphamari district and 0.353 in case of Rajshahi district. It is also found that the richest 20% households in the study sample are receiving more than half of the total income. Looking across the occupations, it is found that income inequality is higher among the non-farm based and self-employed households compared to other groups of households.

Keywords: Income Inequality, Gini Coefficient, Household Level, Bangladesh.

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1. Introduction

Income inequality is one of the most debated and well discussed economic, social or political issues around the world (Peterson, 2017). It has been a global phenomenon for long period of time and has drawn significant attention of the researchers, civil societies and policy makers (Stiglitz, 2016; Piketty, 2014; Stiglitz, 2013). Inequality in the distribution of income often arises as a result of ongoing changes in the production systems as well as in the distributive activities of the government. It has always been a major reason for the existing economic and political order such as capitalism's income distribution and the redistribution of wealth through political authority (Franzini & Pianta, 2011; Jantti, *et al*., 2008). A study conducted by Oxfam found that income inequality in the world has been worsening over the years (Oxfam, 2018). The study revealed that since the turn of the century, the poorest 50% of the world's population have received only 1% of the total increase in global wealth, while the top 1% has received 50% of the total increase in global wealth. Oxfam also found that only eight richest persons own the same wealth as the 3.6 billion poorest people do, who make up almost half of total humanity.

Income inequality poses severe impacts on human welfare. Due to income inequality, people throughout the world live in different economic and social conditions and status (Todaro & Smith, 2008). Some have more than enough financial securities, who live in luxurious and comfortable homes with many spacious rooms and all types of modern facilities. They have huge food to eat and cloth to wear. On the other hand, others are much less fortunate who have little or no shelter for living, inadequate food for eating and insufficient cloth for dressing (Todaro & Smith, 2008; Bandura, 1999; Berger & Luckmann, 1966). Such inhuman class structure has massive negative impact on the social welfare and economic development of a country (Ravallion, 2016; Wright & Rogers, 20015; Stewart, 2000). No civilized people can feel satisfied with a state of affairs in which their fellow humans exist in conditions of such human grief (Todaro & Smith, 2008).

Income inequality may have positive influence on economic growth in the short term. However, it has obvious negative impact on the long-run economic growth, development and social harmony in a country. A high degree of economic inequality means a higher level of anguish among the poor people which forces them to commit crime that places burdens on the society (Franzini & Raitano, 2010). On the other hand, a more equitable distribution of income among people within a society is of enormous importance as it is one of the supportive factors of positive economic growth and overall development. Some earlier studies have proved that growth has an inconclusive effect on inequality and conversely, income inequality is detrimental to economic growth (Guidetti & Rehbein, 2014; Stewart, 2000). Thus, income distribution as an issue has always been discussed in economic theories, and is still bearing importance to the researchers and policy makers around the world as an ongoing central concern of economic theory.

In the trajectory of economic and social development, Bangladesh has attained spectacular successes in the recent years and the country is in the path of securing the status of developing as well as middle income economy status. However, following the global

trend, the rich-poor disparity in the country has also widened in the same way. During the recent decades, income inequality around the world has increased remarkably. It is observed that since the 1980s, the percent of income going to the richest 10% population in the world has increased by 50%, creating a huge disparity between high earners and low earners. Bangladesh has also been experiencing similar phenomenon with respect to distribution of income among the household groups- both in urban and rural areas. Various reports revealed that income inequality in Bangladesh has increased from 36.0% in 1973 to 46.0% in 2010 to 48.0% in 2016 at national level (HIES, 2016). It is generally observed that income inequality in Bangladesh at national level received much attention of the researchers and policy makers, but income inequality at household level remained mostly overlooked. Available studies indicate that beyond the national scenario, distribution of income among households differs across locations as well as occupations. Therefore, research on the issue of income inequality in the context of rural areas of Bangladesh is the demand of the hour, and this study aims at investigating the extent of income inequality among the rural households in the context of Northern Bangladesh *vis-a-vis* the scenario at the national level.

The paper is structured as follows: introducing the issue in Section 1, the paper presents a brief literature review in Section 2. Section 3 describes the methodology which is followed in the study. Section 4 provides income inequality scenario at national level based on secondary data and Section 5 presents the estimated results of income inequality at household level. Finally, Section 6 concludes the study.

2. Literature Review

Several earlier studies concentrating on the issue of income inequality, are reviewed and synthesized in this section. From the review of earlier studies conducted by Guidetti and Rehbein (2014), Stewart (2000) and Kuznets (1955), it is found that growth has inconclusive effect on income inequality although inequality is detrimental to economic growth. Kuznets (1955) stated that inequality increases in the early stages of economic development as a result of industrialization, and then it declines in the later stages as a result of introducing service sectors in the economy, when capitalism matures. He found that growth and income inequality relationship takes an inverted-U shaped trajectory over time. Some researchers concluded from their empirical studies that growth and inequality are not separable. Income inequality is an inevitable situation in a growing economy (UNDP, 2013; Ferreira *et al.,* 2009; Stewart, 2002).

Empirical studies have referred two types of sources- endogenous and exogenous, that give rise to income inequality. Endogenous sources of income inequality are intelligence, personality, professional ability, cultural attributes, gender, age, education, training, physical strength and skills. On the other hand, the exogenous sources are ownership of land and capital, family size, quality of workers, geographical location, etc. (Charles-Coll, 2011; Yang, 1999; Yang & Zhou, 1999; Aizawa, *et al*., 2017; Blinder, 1973; Mincer, 1958). In his study, Murphy (2002) found that the rural-urban migration is a significant

factor of income inequality. The similar insight is found in the study carried out by Li (2009). He found that rural migration contributes to increase in income of the rural households. The migrant people could increase their income by raising productivity. Thus, the condition of rural-urban income gap might be improved by migrating rural people to urban area. However, this may lead to increase in inequality among migrant and non-migrant households in rural areas.

A good number of studies have tried to empirically investigate the nature and extent of income inequality using different methods and techniques. Yang (1999) analyzed the urban-rural income inequality in China. Using the Gini ratio and generalized entropy index, he found that there is significant inequality in the level of income among rural and urban households. Wu and Perloff (2005) estimated China's income distribution using publicly available interval summary statistics. They examined rural, urban and overall income distributions from 1985 to 2001. They revealed that urban consumption inequality has risen considerably in China. Nebebe *et al.* (2016) analyzed the determinants of income inequality among the urban households living in South Wollo Administrative Zone of Ethiopia. Using household field survey data, they found that income inequality is very high in all urban centers. Tassew *et al.* (2009) investigated the poverty and inequality situations in Ethiopia. The study found that while inequality is constant in the rural areas, there is substantial increase in urban inequality. Oyekale *et al.* (2004) investigated the sources of income inequality in the rural and urban areas of Nigeria and its impact on poverty. The study used descriptive statistical tools such as mean, standard deviation and coefficient of variation to describe the distribution of households' incomes, and Gini coefficient to measure income inequality. They found that in the urban sector, agricultural income was highly unequally distributed with a high Gini coefficient value. Nguyen *et al.* (2006) studied the rural-urban gap in income in Vietnam. The authors tried to find out the causes of income inequality between the two regions and found that both demographic and region specific variables are responsible for income inequality across the regions. Dara *et al.* (2016) investigated the state of income inequality and poverty in rural areas of Andhra Pradesh in India. In the study, income inequality in all districts of Andhra Pradesh is calculated using three alternative measures of inequality such as Gini coefficient, Theil's Entropy Measure, and Multidimensional Poverty Index (MPI). The study revealed that there are high income inequalities among households in the districts of Andhra Pradesh.

The extent of income inequality in Bangladesh has been increasing over time and different studies have been carried out to measure the extent of income inequality in Bangladesh. Matin (2014) analyzed the trend of income inequality in Bangladesh for the period 1973-2010 using HIES data. The study found that there is a persistent tendency of transferring income from the lower four quintiles of the households to the highest quintile. The annual average rate of income loss is 0.71% for the bottom quintile, 0.54% for the 2nd quintile, 0.32% for the 3rd quintile and 0.27% for the 4th quintile while the annual average gain in income share of the highest (top) quintile is 0.46%. The study also found increasing trend of Gini concentration ratio for both income and expenditure at rural, urban and national levels over the period. The annual average rate of increase of income Gini concentration

ratio was 0.77%. Thus, from the findings of earlier studies, it is clear that income inequality and its reasons have been studied in different countries and it has also been studied in the national level of Bangladesh. However, few studies are found that have studied income inequality in the rural areas of Bangladesh.

3. Research Methodology

3.1 Sampling and Data Collection

This study is mainly based on primary data. Nilphamari and Rajshahi districts of Bangladesh are selected purposively for this study as both districts have high rate of poverty and income inequality, and the general people of these areas are engaged mainly in agricultural activities although some people are involved in non-agricultural activities. In the second step, multistage random sampling technique is followed in sample selection. From the two selected districts, two *upazilas*, one from each, are selected randomly. Following similar techniques, four *unions* and then eight villages are selected randomly. Finally, from the selected villages a total of 200 rural households, 100 households from Nilphamari district and 100 households from Rajshahi district, are selected on random basis and interviewed using structured schedule. In addition to primary data, some secondary data are also used to represent the income inequality scenario of Bangladesh. The required secondary data are collected from various issues of Bangladesh Bureau of Statistics (BBS), Statistical Yearbook of Bangladesh and Household Income and Expenditure Survey (HIES) of Bangladesh.

3.2 Measurement of Income Inequality (Gini Index)

The widely used measure of income inequality is the 'Gini Coefficient', which shows the extent to which the Lorenz curve departs from the line of equality. The value of Gini index ranges from zero (0) to one (1). If the calculated value of the index is zero, the group is defined as the complete equality group. On the other hand, if the calculated value of the index is one, the group is defined as the complete inequality group. Following the studies of Yao (1997) and Rahman (2015), the formula for Gini index used in this study is structured as follows:

$$G = 1 - \sum_{i=1}^{n} P_i (2Q_i - w_i)$$

$$\text{Where, } \sum_{i=1}^{n} p_i = 1, \quad \sum_{i=1}^{n} w_i = 1, \quad w_i = \frac{p_i m_i}{m}, \quad Q_i = \sum_{k=1}^{i} w_k$$

n = number of income groups, m_i = mean income of group i (i = 1, 2 …n), m = mean income of the entire population, p_i = population share of group i, w_i = income share of group i in total income, Q_i = cumulative income share from group 1 to group i.

4. Income Inequality in Bangladesh at National Level

The amounts of money which are received as payments, wages, salaries, bonuses, profits on investments, interest on savings, dividends from shares of stock, pensions, rents, etc. are termed as income. However, incomes received by different people and households differ from person to person and from household to household. Various factors including economic system, education, skill, training, experience, ownership of assets, ownership of land, etc. affect the income level of people. As a result of having variation in these factors, income inequality is obvious in every society. However, it becomes a challenge for a country when it crosses the limit of tolerable level. In this section, inequality in the distribution of income among people at national level of Bangladesh is discussed from different viewpoints.

4.1. Income Share of Households of Different Quintiles in Bangladesh

The share of income of households belong to different quintiles in total income is a simple measure of income inequality. In this analysis, at first, all the households are classified into five groups based on their level of income. The lowest income holder 20% households are considered as the 1st quintile and highest income achiever 20% households are classified as the 5th quintile. Thus, based on the level of income, all the households are grouped into 1st, 2nd, 3rd, 4th and 5th quintiles. Then, the income share of each quintile is calculated by dividing the total income of a quintile by total income of the population. The income shares of different quintiles of households in Bangladesh for various earlier years are presented in Table 4.1.

Table 4.1: Share of Income of Households by Different Quintiles (%)					
Year	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
1974	7.00	11.30	15.10	22.80	44.40
1984	7.20	11.75	15.94	21.73	43.38
1989	6.64	10.89	15.05	21.23	46.20
1996	5.71	9.83	13.88	20.50	50.08
2005	5.26	9.10	13.13	19.79	52.71
2010	5.22	9.10	13.33	20.56	51.79
2016	3.84	9.17	13.74	20.25	53.00
Average	5.80	10.20	14.30	21.00	48.80
Source: BBS (Several years), HIES (2010, 2016)					

Table 4.1 shows that the share of income of households belonging to first quintile has decreased over the years. Similarly, the income shares of households belong to second and third quintiles have decreased continuously with slight fluctuations. Again, the share of income of the fourth quintile has not changed much over the time. It has declined but at an insignificant rate. However, the share of income of the 5th (top) quintile has increased substantially over the years. Thus, it is clear that not only the poor, but also the middle

class people have also experienced declining share of income in Bangladesh. Table 4.1 shows that the income share of households in the bottom (1st) quintile decreased from 7.20% in 1973-74 to 3.84% in 2016, and there is an overall loss of 3.16% point over the period under consideration. In 1973-74, the income of households belonged to first four quintiles jointly shared 56.2% of the total income, whereas the top 20% shared 43.8% of the total income. Again, in 2016, the first four quintiles jointly shared 47.0% of the total income, although they comprised 80% of the total population. These findings indicate that the poor households have been becoming poorer and the rich households becoming richer over the time in Bangladesh.

4.2 Income Gini Coefficients in Bangladesh

The most popular measure of income inequality is Gini coefficient. The measure of income inequality by Gini coefficient is developed by Italian statistician and sociologist Corrado Gini in 1912. The zero (0) value of the coefficient indicates perfect equality in the distribution of income and one (1) indicates perfect inequality in the distribution of income. Zero means all people have same level of income and one means only one individual possesses all the incomes of the country. Sometimes it is also referred in percentage term, where the value varies between zero (0) and 100. The situation of Gini income inequality in Bangladesh is shown by Figure 4.1.

Figure 4.1: Income Gini Inequality in Bangladesh

	1973-74	1983-84	1988-89	1995-96	2005	2010	2016
■ National	0.36	0.36	0.38	0.43	0.47	0.46	0.48
■ Rural	0.35	0.35	0.37	0.38	0.43	0.43	0.45
■ Urban	0.38	0.37	0.38	0.44	0.5	0.45	0.5
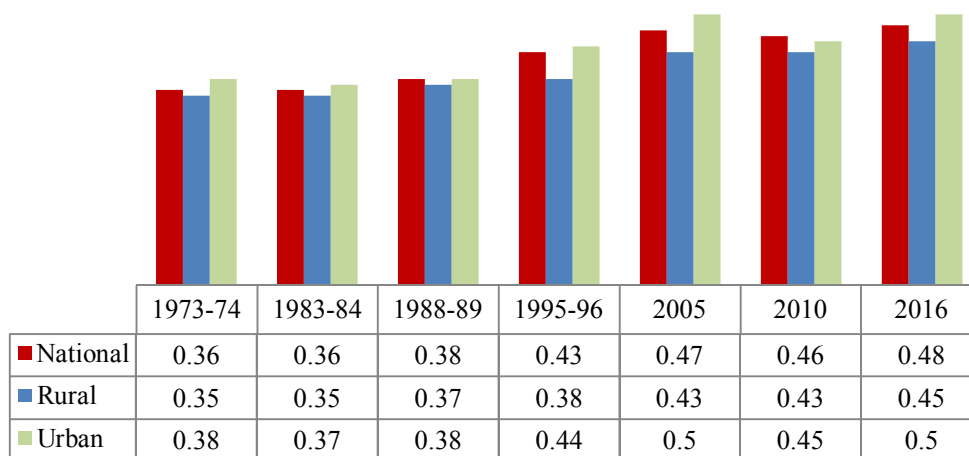
Source: BBS (several years), HIES (2005, 2010, 2016)

From Figure 4.1 it is found that the Gini coefficient has increased from 0.36 in 1973-74 to 0.48 in 2016 in Bangladesh. In the rural areas, the value of Gini coefficient has increased from 0.35 in 1973-74 to 0.45 in 2016, and in the urban areas the coefficient has increased from 0.38 in 1973-74 to 0.50 in 2016. Thus, it is clear from the analyses of Gini

coefficient that income inequality in Bangladesh has picked up over the time and that the income inequality in urban areas is higher compared to rural areas.

4.3 Per Capita Income Gini Coefficients in Bangladesh

Another measure of income inequality is Gini coefficient of per capita income. The scenario of Gini coefficients on per capita income in Bangladesh is shown by Figure 4.2. The values of the Gini coefficients of per capita income are analogous to those obtained for household income.

Figure 4.2: Gini coefficient based on Per Capita Income
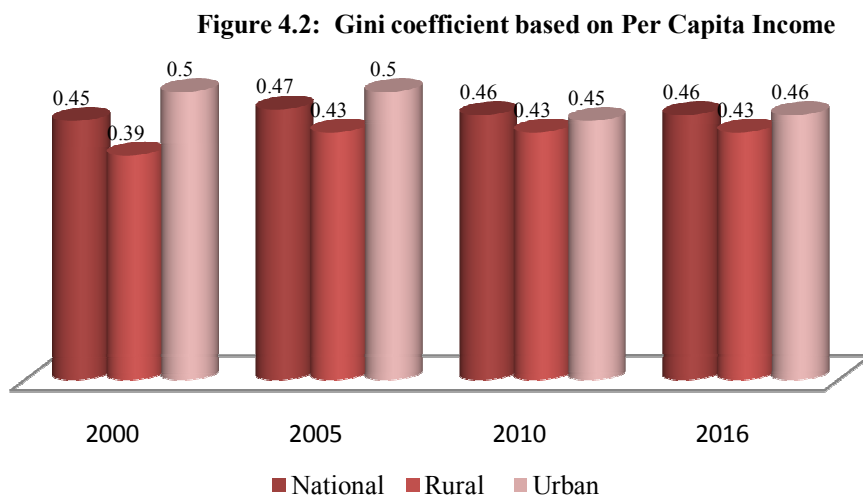
Source: BBS (several years), and HIES, severel years

From Figure 4.2 it is observed that income inequality in rural areas of Bangladesh has increased during the time period under consideration as the per capita income Gini coefficient in rural areas has increased from 0.393 in 2000 to 0.43 in 2016. However, there is slight decline in per capita income Gini coefficient in the urban area from 0.50 in 2000 to 0.46 in 2016.

5. Income Inequality at Household Level in Bangladesh

In this section, income inequality among the households in Rajshahi and Nilphamari districts are analyzed using the collected data from selected households. In doing so, required data are collected directly from 200 rural household heads.

5.1 Socio-economic Features of Sample Households

Inequality in the income of households may occur for several reasons. For example, age, education, experience, assets, family size, ownership type of land, farm size etc. may affect the income level of households if significant variations are found in each of the

factors. Therefore, in this section the summary statistics of the socio-economic, demographic and farm specific features of the respondents are described. The minimum value, maximum value, mean and standard deviation of main socio-economic variables are described here that are important to understand the condition of income of the households. The summary statistics of socio-economic features of the respondents are shown in Table 5.1.

Table 5.1: Summary Statistics of Socioeconomic and Demographic Features of Sample Households

Variables	Minimum	Maximum	Mean	Stdv.
Age of household head (years)	22.00	80.00	42.28	12.2
Education of household head (years of schooling)	0.00	17.00	4.84	4.4
Experience of household head in main occupation (years)	5.00	50.00	21.18	10.5
Family size (person)	2.00	17.00	4.60	1.8
Earner members in family	1.00	5.00	1.35	0.6
Size of homestead land (decimal)	3.50	66.20	10.41	9.3
Farm size (*bigha*)	0.00	27.09	3.15	5.1
Annual crop agricultural income (Tk.)	0.00	324170	79044	1213.3
Annual non-crop agricultural income (Tk.)	0.00	98024	12072	1245.4
Annual non-agricultural income (Tk.)	0.00	142089	37392	19951.9
Monthly food expenditure (Tk.)	2319	29333	5121	4312.1
Monthly non-food expenditure (Tk.)	390	15011	5312	3610.2
Total accumulated saving (Tk.)	0.00	120000	10790	4568.3

Source: Author's calculation based on field survey data, 2018

From Table 5.1, it is observed that the average annual crop agricultural income, non-crop agricultural income, and non-agricultural income of sample households are Tk.79044, Tk.12072 and Tk.37392, respectively. The standard deviation of crop agricultural income, non-crop agricultural income, and non-agricultural income of households are Tk.1213.29, Tk.1245.39 and Tk.19951.97, respectively. Thus, it can be said that there are clear differences among the income of households from sectors- crop agriculture, non-crop agriculture and non-agriculture. From Table 5.1, it is also observed that the average age of the household head is 42.28 years with maximum 80 years, minimum 22 years and standard deviation 12.2 years. The average level of education of household heads in the study area is 4.84 years of schooling with minimum 0.00 years, maximum 17 years, and standard deviation 4.4 years. Again, the mean experience of the household heads in main occupation is 21.18 years with a standard deviation of 10.5 years. It is also observed that there are variations in the age, education and experience of household heads. Therefore, these variables may have affect on the level of income of households.

From Table 5.1, it is revealed that average family size in the study area is 4.6 persons with maximum 17 and minimum 2 persons. Again, the average earner members in sample households are 1.35 persons with maximum 5.00 and minimum 1.00. The standard

deviations of these variables are 1.8 and 0.63 persons, respectively. From these results it can be said that there are variations in family size and number of earner members in the sample households. Farms of different sizes are found in the study area. The average farm size of the respondent households is 3.15 *Bigha* with minimum of 0.00 *Bigha* and maximum of 27.09 *Bigha*. The average monthly food expenditure and non-food expenditure of households are Tk.5121.00 and Tk.5312, respectively, with standard deviation Tk.4312.1 and Tk.3610.2, respectively. These results indicate that there is variation in the expenditures of the households. This variation may occur due to the variations in their income levels. There is also variation in the level of saving of the households as the average annual saving of households is Tk.10790.00 with a standard deviation of Tk.4568.3.

5.2 Income Inequality among Households by Lowest to Highest Quintiles

Much has been reported on income inequality in Bangladesh over the last several decades. In the rural Bangladesh, income inequality exists as some people are deprived, and unable to satisfy their basic needs for their very survival while other section of people consume abundantly and this scenario is reflected in the field survey. The income inequality among the study households is shown in Table 5.2. As for the analysis, income inequality is measured by classifying the sample households with respect to their shares of income in total income.

5.2: Measures of Income Inequality among Different Income Groups

Items	Nilphamari	Rajshahi	All Area
A. Mean income of households (Tk.)			
1st 20%	2820	3280	3022
2nd 20%	5083	4942	4999
3rd 20%	8404	6549	7152
4th 20%	12927	9042	11111
5th 20%	29331	24716	27263
B. Income share of households in total income (w_i) in percentage			
1st 20%	0.048	0.067	0.056
2nd 20%	0.087	0.103	0.094
3rd 20%	0.144	0.135	0.134
4th 20%	0.220	0.186	0.207
5th 20%	0.501	0.509	0.509
C. Cumulative income share of households (Q_i) in cumulative percentage			
1st 20%	0.048	0.067	0.056
2nd 20%	0.135	0.170	0.150
3rd 20%	0.279	0.305	0.284
4th 20%	0.499	0.491	0.491
5th 20%	1.000	1.000	1.000
D. Gini Coefficient (G_i)	0.406	0.353	0.408

Source: Calculation based on field survey data, 2018

From Table 5.2, it is found that the average monthly income of the lowest 20% income earner households, called the first quintile, is only Tk.3022 for the total study area which is Tk.2820 in Nilphamari district and Tk.3280 in Rajshahi district. On the other hand, the mean income of the highest 20% income earner households, the fifth quintile, is Tk.27263 for total study area, when these figures are Tk.29331 in Nilphamari district and Tk.24716 in Rajshahi district. It is also found from the mean income of all groups that there are clear and significant differences among the mean incomes of all the groups. These findings mean that there is an unequal distribution of income among the study households. The difference between mean income of the highest 20% households and the lowest 20% households is Tk.24241 for whole study area, which is Tk.27113 in Nilphamari district and Tk. 21436 in Rajshahi district. This implies that there exists huge income inequality among the households of the study area.

Again, from Table 5.2, it is found that income share of the lowest 20% income earning households in total income is only 5.6% in the study area, which is 4.8% in Nilphamari district, 6.7% in Rajshahi district. This share for the next 20% income earner households, the second quintile, is 9.4% for the whole sample, and 8.7% for Nilphamari and 10.3% for Rajshahi. Similarly, the shares of income for the next two groups of households, the third and forth quintiles, are also lower, but these shares are higher compared to first two groups. It is remarkable that the share of income of the richest 20% households, the fifth quintile, is 50.9% for the whole sample, which is 50.1% for Nilphamari, 50.9% for Rajshahi. The cumulative shares of income of households are also shown in Table 5.2, where it is made vivid that only 20% households received more than 50.0% of total income, and 80% households received less than 50% of total income in the study area.

Income inequality scenario measured by the Gini coefficient is also reported in Table 5.2. The table shows that the Gini coefficient value for the whole sample is 0.408, while they are 0.406 in Nilphamari district, 0.353 in Rajshahi district. This means that there is a 40.8% deviation between the line of equality and the line of income share of households in the whole study area. Similarly, this deviation is 35.3% in Rajshahi district, and 40.6% in Nilphamari district. These results indicate that there is considerable inequality in the distribution of income among the households in rural areas of Bangladesh. However, it is interesting that income inequality is more in Nilphamari district compared to that in Rajshahi district. This can be explained from the fact that income of the lowest income group in Rajshahi district is higher than the lowest income group in Nilphamari. The differences are attributed to more sources of income, developed infrastructure, education facilities etc. in Rajshahi district that are slightly weaker in Nilphamari district.
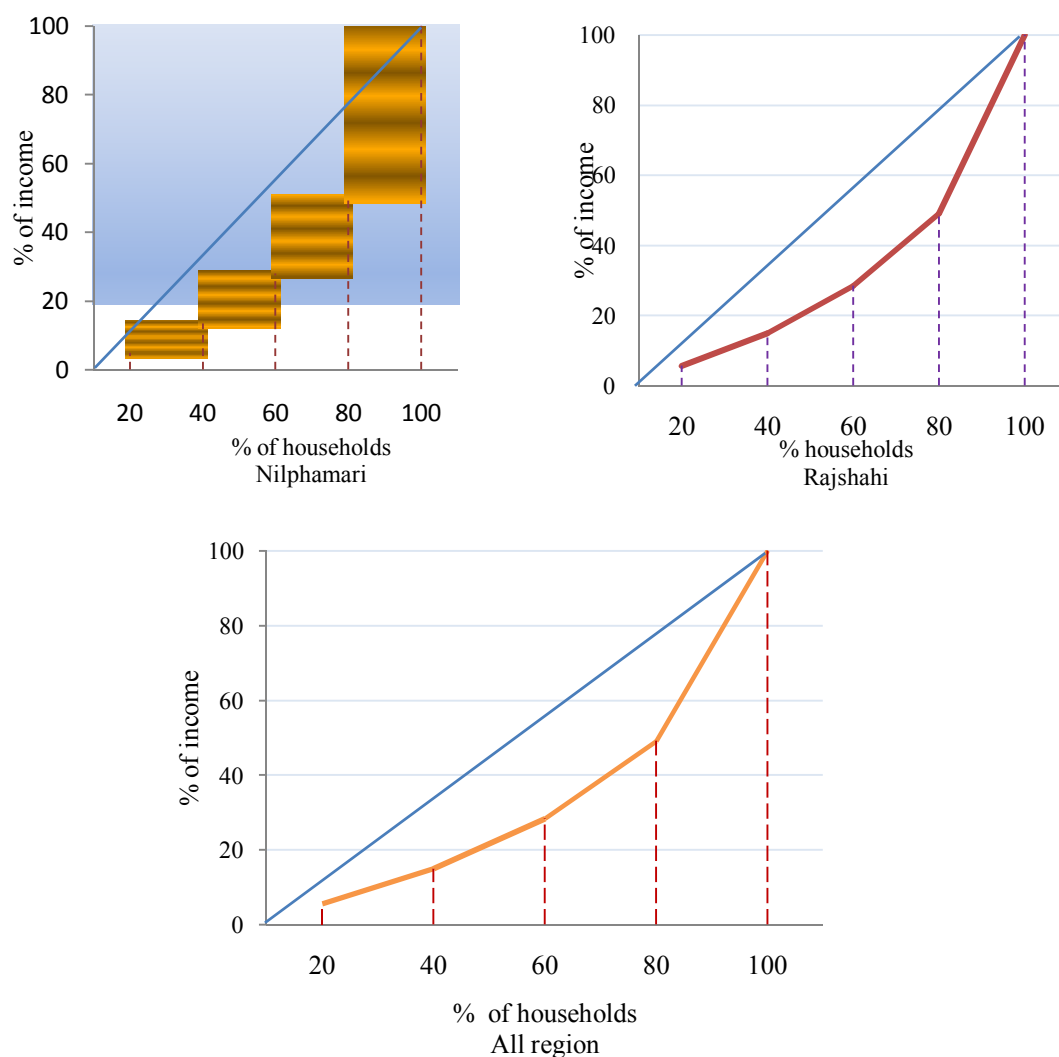
Figure 5.1: Income Inequality by Lorenz Curves

Income inequality patterns in the study area are also shown by Lorenz curve in Figure 5.1. The Lorenz Curve is used for analyzing the size distribution of income and wealth, and portraying the scenario of inequality. It plots the cumulative share of total income against the cumulative proportion of income receiving units. The divergence of a Lorenz curve for a given income distribution from perfect distribution is measured by some indices of inequality. The most widely used index of inequality is the Gini coefficient. From the three Lorenz curves in Figure1 5.1, it is observed that there is a clear dispersion between line of equality and line of income share of households. The gap between the curves is highest in

case of the total study area followed by Nilphamari and Rajshahi districts. The Lorenz curves also clarified that most of the income (all most 50% of total income) is going to the highest 20% income earner households. This means that there is a significant level of inequality exist in the distribution of income in the study area.

5.3 Income Inequality among Households by Income Sources

In general, increasing interests are shown in measuring and understanding the extent and sources of income inequality among the households. The estimation of Gini coefficients in this study showed that the extent of income inequality is higher in Nilphamari district (0.406) than that in Rajshahi district (0.353). Thus, it can be said that there is divergence of income inequality situations in different regions of Bangladesh.

This divergence of income inequality is also found in different groups of households if they are categorized based on their sources of income. There are many income sources in the rural areas. However, income inequality exists among the households even though they have similar income sources or occupations. Some households have similar sources of income, but shares of income from all of them are not similar. In this section, income inequality among the households, by sources of income, is discussed. The empirical results of income inequality by sources of income are given in Table 5.3.

Table 5.3: Income Inequality among Households by Area and Sources of Income

Study area	Source of income	Mean income (Tk.)	Income share (%)	Gini Coefficient
All region	Agriculture (crop)	6587	0.615	0.552
	Agriculture (non crop)	1006	0.094	0.678
	Self employed	1338	0.125	0.597
	Day laboring	1244	0.116	0.182
	Others	534	0.050	0.625
	Total income	10709	1.000	0.408
Nilphamari	Agriculture (crop)	6620	0.597	0.450
	Agriculture (non crop)	1428	0.159	0.750
	Self employed	1422	0.113	0.690
	Day laboring	504	0.067	0.220
	Others	739	0.063	0.650
	Total income	11713	1.000	0.406
Rajshahi	Agriculture (crop)	6246	0.554	0.495
	Agriculture (non crop)	989	0.133	0.604
	Self employed	1228	0.168	0.748
	Day laboring	1029	0.116	0.240
	Others	266	0.029	0.560
	Total income	9706	1.000	0.353

Source: Calculation based on field survey, 2018

From the table, it is found that when all study households are considered, the value of Gini coefficient (0.678) is the highest for the households whose main income source is non-

crop agriculture (livestock, poultry, etc.) followed by self employed (0.597), others (0.625), crop agriculture (0.552) and day laboring (0.182). Thus, it is clear that in the total study area income inequality is less among the households whose main source of income is day laboring. In Nilphamari district, the highest income inequality (0.75) is found among the households who adopt non-crop agriculture as their main earning sources as shown by the Gini coefficient value and the lowest income inequality is found in day laboring households. However, in case of Rajshahi district, the highest Gini coefficient (0.748) is found among the self employed households and lowest Gini coefficient (0.240) is found in day laboring households. From the analysis of income inequality among households by income source, it is clear that the least income inequality exists among households whose main source of income is day laboring.

6. Conclusion

Analyes in this study revealed that like many other developing countries, income inequality has increased in Bangladesh over time although the country has achieved commendable progresses in terms of socioeconomic indicators. The scenario of income inequality, as found from the analysis of national level data, indicates that income distribution has become skewed in favor of the richer section of people over the years violating the norms of distributive justice. In the course of continued achievement of high growth rate in the last two decades, a section of people became wealthier at the cost of impoverishing the other sections. As a result of rising income inequality, the country is facing several problems such as weakening democratic norms, rising corruption in all sectors, increase of widespread stress on the poor people, degrading social unity, discontent among various section of people etc., which ultimately undermine the economic development of our country in the long run. Therefore, among many other problems, income inequality has turned up to be one of the most serious issues to the researchers, policy makers and various agencies of Bangladesh to concentrate. This results indicate that the poorer households in Bangladesh have become poorest and richer have become richest over the time. The insight found from the analysis of Gini income inequality for the period 1974 to 2010 using aggregate data set for national, rural, urban levels, were 0.41, 0.39 and 0.42, respectively. These results mean that there is a large extent of deviation in the distribution of income among people in Bangladesh from perfectly equal distribution. Like wise, similar extent of income inequality is found among the rural households in the study districts. The analysis of survey data also gives a complex scenario of income inequality among the rural households. It is found that the value of Gini index in the whole study area is 0.408, which is 0.406 in Nilphamari district and 0.353 in Rajshahi district. It is also found that the top 20% households in the study area are receiving more than 50% of the total income. Again, looking across occupations, it is found that income inequality is higher among the non-farm households compared to other group of households. These diverse scenarios of income inequality observed from the diaggregated analysis may be attributed to the differences in crop patterns as well as to the differences in employment

opportunities in the two sample regions taken for this study. Therefore, an integrated policy of crop diversification, balanced adoption of modern agricultural technology, mass adult literacy promotion, tenancy reform to enable land rental market to operate effectively, provision of credit services for economic proprietorship, and rural infrastructure development to promote economic diversification and non-agricultural income, is recommended in programs designed to reduce income inequality and increase welfare of rural households in Bangladesh.

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The Effects of Financing Decisions on the Profitability of Commercial Banks: The Case of Bangladesh

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Abstract

Banking sector plays an important role to create the healthy economy and has significant impact on the sustainable economic development of any country. The purpose of the study is to examine the effects of financing decisions on the profitability of commercial banks in Bangladesh. For this consideration researchers have taken five commercial banks from private sector. The present research study is conducted to evaluate the effects of financing decisions on the profitability of commercial banks on the basis of financing decisions measured by debt equity ratio and loan to deposit ratio while the profitability ratios measured by return on equity ratio, return on assets ratio and net profit ratio. The results show that both debt equity ratio and loan deposit ratio as proxies of financing decisions have significant effect on return on equity and net profit ratio but have no effect on the return on assets of the sample banks.

Introduction

In Bangladesh, the banking industry dominates the financial sector and thus macroeconomic development largely depends on the soundness of this industry. Banking system is considered as the heart of an economy because of its contribution toward the mobilization of savings and thus to the utilization of this country's recourses. At present, banking industry is emphasizing to provide efficient banking services and thus focusing on capital adequacy, quality asset growth and strong liquidity to ensure sound operation (Yesmine and Bhuiyah, 2015). The era of globalization modern free market economy introduce a window of banking acidity that has huge impact on any countries trade and overall development. As an institution, bank has been contributing towards the

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development of any economy for a long time and at the moment it is treated as an important banking industry in modern world. Bank mobilizes the savings of community into productive channels. Sound financial health of a bank is the guarantee not only to its depositors but is equally significant for the shareholders, employees and whole economy. Banking sector plays an important role in sustaining financial markets and has a significant impact on the success of the economy. An efficient banking system is recognized as basic requirement for the economic development of any economy (Sirisha and Malyadri, 2018). Banking industry of Bangladesh has developed tremendously. Among contributory financial organizations both conventional and islamic banks of Bangladesh are making significant contribution in economic development of Bangladesh. All sorts of economic and financial activities revolve round the axis of banks. Banks are the only media through which both national and international trade and commerce emanated (Mahal and Rahman, 2013). Commercial banks play a vital role in the economic resource allocation of countries and for sustainable intermediation function, banks need to profitable. Beyond the intermediation function, the financial performance of banks has critical implication for economic growth of countries. Good financial performance rewards the shareholders for their investment (Ongore and Kusa, 2013).

The health of the economy is closely related to the soundness of its banking system. Banking as an activity involves acceptance of deposits and lending or investment of money. It facilitates business activities by providing money and certain services that help in exchange of goods and services. Corporate performance is an important concept that related to the way and manner in which financial resources available to an organization are judiciously used to achieve the overall corporate objective of an organization, it keeps the organization in business and creates a greater prospect for future opportunities (Sunday, 2008 cited in Olaifa, 2018). Financial strategy consists of three interrelated kinds of decision such as investment, funding and working capital decisions. The financing decision is concerned with the raising of funds that finance assets. The major sources of long-term capital are shares and debentures. Funds can also be obtained in the form of term loans and leases, as the latter serves as an alternative to borrowing. If sufficient funds are not raised domestically, they are obtained from sources abroad (Ross et al., 2011 cited in Olaifa, 2018).

The word profitability may be defined as the ability of a given investment to earn a return from its use. The state of profitability is a variable think like temperature and humidity of a day. The definition of profitability by an accountant and or analyst can even be linked to temperature reading and study of humidity by meteorologist. Profitability has been considered, to a great extent, as one of the main criteria to judge the extent to which management has been successful in maximizing its profits or minimizing it loses, if any (Alrabei, 2013). Banking system plays a vital role in the economic life of a nation. The health of the economy is closely related to the soundness of its banking system. And the soundness of banks depends mainly on the constant profitability. And the profitability can be managed with the proper combination of revenue and cost of the banks (Nirjhar, 2010).

Literature review

The objective of the study done by Olaifa, 2018 is to determine the effects of financial decisions on the performance of commercial banks in Nigeria. Findings of the study are (i) net loans to deposit a finance decision had significant impacts on return on asset and return on capital employed, (ii) capital labour ratio and capital earning to labour employed both investment decision were positively significant on return on asset, (iii) earnings per share a dividend decision was only significant on profits and (iv) liquidity decision was not significant to any of the performance indices.

The research study of Yesmine and Bhuiyah, (2015) on determinants of banks' financial performance: A comparative study between nationalized and local private commercial banks of Bangladesh conducted to identify the factors having impact on the financial performance of the commercial banks operating in Bangladesh. The study revealed that asset utilization and operating efficiency have significant positive impact on banks' financial performance (profitability) whereas credit risk has significant negative impact.

Karim and Alam, (2013) conducted a research study on An Evaluation of Financial Performance of Private Commercial Banks in Bangladesh: Ratio Analysis with a view to analyzing the financial performance of the selected private sector banks and this study measured the performance at the three levels, namely internal, market and economic performance. The internal performance was measured by using the ROA, market based was done by means of Tobin's Q and economic performance was measured by means of economic value added. The study revealed that the bank size, credit risk, operational efficiency and asset management have significant impact on financial performance of Bangladesh commercial banks.

A research study conducted by Ongore and Kusa, (2013) on Determinants of Financial Performance of Commercial Banks in Kenya in order to examine the effects of bank specific factors and macroeconomic factors on the performance of commercial banks in Kenya. This research study revealed that the internal factors are individual bank characteristics which affect the bank's performance. These factors are basically influenced by the internal decision of management and board. The external factors are sector wide or country wide factors which are beyond the control of the company and affect the profitability of banks. This study concluded that the financial performance of commercial banks in Kenya is driven mainly by board and management decisions, while macroeconomic factors have insignificant contribution.

Sirisha and Malyadri, (2018) have done a research study on A Study on the Financial Performance of Scheduled Commercial Banks. The objective of the study is to compare the financial performance of banks-group wise. The study stated that the sound performance of a firm depends on the well-planning of capital structure, investment and distribution. Any firm that fails to apply the sound principles of capital structure like cost, control and the firm that fails to adopt scientific tool of investment and distribution in managing funds will not survive in the long run. Further, the firm should apply the wealth

maximization as criteria in taking financial decisions like financing, investment and distribution. Profitability of a bank denotes the efficiency with which a bank deploys its total resources to optimize its net profits and thus serves as an index to the degree of asset utilization and managerial effectiveness. The study found that private sector banks is performing well and they are financially sound than comparing to other bank groups.

Objectives of the Study

The main purpose of the study is to examine the effects of financing decisions on the profitability of the commercial banks in Bangladesh. However the specific objectives of the study are stated below:

1. To analyze the different financing decisions of the sample commercial banks in Bangladesh in the respective years from 2013 to 2017.
2. To analyze the different attributes of profitability of the sample commercial banks in Bangladesh during the study period from 2013 to 2017.
3. To know the impacts of financing decisions on the profitability attributes of the sample commercial banks in Bangladesh.

Hypotheses of the Study

In order to achieve the earlier mentioned research objectives researchers have developed and tested the following null hypotheses:

Ho_1:   There is no significant variation in different indicators of financing decisions among the sample banks over the study period.

Ho_2: There is no significant variation in different attributes of profitability among the sample bank over the study period.

Ho_3: The debt equity ratio and loan deposit ratio both financing decisions do not affect the profitability measured by return on equity, return on assets and net profit ratio of the sample banks over the study period.

Methodology of the Study

The banking sector in Bangladesh is mixed nature and it is comprised by state-owned commercial banks, state-owned specialized banks, conventional private commercial banks, islami shariah based private commercial banks and foreign commercial banks. Researchers have selected five conventional private commercial banks like AB bank limited (here in after Bank_1), Dutch-Bangla bank limited (here in after Bank_2), Estern bank limited (here in after Bank_3), IFIC bank limited (here in after Bank_4) and One bank limited (here in after Bank_5) as sample for the present research study in the respective years from 2013 to 2017. With a view to achieving the research objectives, researchers have used secondary data obtained from the annual reports of the respective commercial banks. In the present research study profitability represented by return on equity, return on assets and net profit ratio has been used as dependent variables. In

addition, debt equity ratio and loan deposit ratio both financing decisions have been used as independent variables. This study has used different descriptive statistics, regression analysis and ANOVA test.

Data Analysis and Interpretation: Descriptive Statistics

Table 1: Results of descriptive statistics about debt equity ratio of the sample banks

Years	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
2013	5	22.68	0.92	23.6	11.314	8.338	69.515
2014	5	31.17	0.93	32.1	13.062	11.667	136.116
2015	5	25.38	0.92	26.3	12.418	9.298	86.459
2016	5	19.97	0.93	20.9	11.804	7.366	54.251
2017	5	38.67	0.93	39.6	15.54	14.433	208.323

(Source: Analysis of Annual Reports)

The above table reveals that the descriptive statistics about the debt equity ratio of the sample banks. It is found from the table that the mean of debt equity ratio is highest in 2017 and lowest in 2013 but the standard deviation is highest in 2017 and lowest in 2016 during the study period.

Referring to the above table it is evident that the mean of debt equity ratio of the sample banks shows increasing and decreasing tendency over the study period. In order to see whether there is any significant variation in debt equity ratio among the sample banks, researchers have developed the null hypothesis and it is Ho1: There is no significant variation in debt equity ratio among the sample banks and conducted the ANOVA test using SPSS and the following Table contains the result of ANOVA test.

Table 2: Results of ANOVA test regarding debt equity ratio of the sample banks

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2024.622	4	506.155	40.716	0.000
Within Groups	248.628	20	12.431		
Total	2273.250	24			

(Source: Analysis of Annual Reports)

From the above table it is known that the F ratio is 40.716 and its significant level is 0.000 which is less than 0.05. In addition, this result shows that the null hypothesis is rejected and it indicates that there is significant difference among the debt equity ratio of the sample banks.

Table 3: Results of descriptive statistics about loan deposit ratio of the sample banks

Years	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
2013	5	15.15	73.3	88.45	82.462	7.187	51.647
2014	5	26.68	74.6	101.28	86.902	10.513	110.516
2015	5	21.17	80.58	101.75	88.926	9.689	93.880
2016	5	4.47	79.4	83.87	81.798	1.962	3.851
2017	5	3.18	83.06	86.24	84.594	1.170	1.368

(Source: Analysis of Annual Reports)

The above table states that the descriptive statistics about the loan deposit ratio of the sample banks. The observation of the table reveals that the mean of loan deposit ratio is highest in 2015 and lowest in 2016 whereas the standard deviation is highest in 2014 and lowest in 2017 during the study period. The table also shows that the standard deviation of 2016 and 2017 is very much poor than that of first three years. From the above table it is clear that the mean of loan deposit ratio of the sample banks shows increasing and decreasing tendency over the study period. In order to see whether there is any significant variation in loan deposit ratio among the sample banks, researchers have developed the null hypothesis and it is Ho_1: There is no significant variation in loan deposit ratio among the sample banks and conducted the ANOVA test using SPSS and the following Table contains the result of ANOVA test.

Table 4: Results of ANOVA test regarding loan deposit ratio of the sample banks

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	520.607	4	130.152	3.699	0.021
Within Groups	703.790	20	35.190		
Total	1224.397	24			

(Source: Analysis of Annual Reports)

The above table reveals that the F ratio is 3.699 and its significant level is 0.021 which is less than 0.05. From the above result it is clear that the null hypothesis is rejected and it indicates that there is significant difference among the loan deposit ratio of the sample banks.

Table 5: Results of descriptive statistics about return on equity ratio of the sample banks

Years	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
2013	5	10.87	6.13	17	13.856	4.414	19.485
2014	5	13.55	6.95	20.5	14.048	5.219	27.240
2015	5	13.27	6.03	19.3	12.168	5.643	31.843
2016	5	10.27	5.68	15.95	10.956	3.816	14.559
2017	5	14.33	0.13	14.46	10.318	5.804	33.686

(Source: Analysis of Annual Reports)

This table shows that the descriptive statistics about the return on equity ratio of the sample banks. From the aforesaid discussion it is clear that the mean of return on equity ratio is highest in 2014 and lowest in 2017 whereas the highest standard deviation shows in 2015 and lowest in 2016 during the study period. In the above table it is apparent that the mean of return on equity ratio of the sample banks shows increasing and decreasing tendency over the study period. In order to see whether there is any significant variation in return on equity ratio among the sample banks, researchers have developed the null hypothesis and it is Ho_1: There is no significant variation in return on equity ratio among the sample banks and conducted the ANOVA test using SPSS and the following Table contains the result of ANOVA test.

Table 6: Results of ANOVA test regarding return on equity ratio of the sample banks

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	404.341	4	101.085	12.713	0.000
Within Groups	159.030	20	7.951		
Total	563.371	24			

(Source: Analysis of Annual Reports)

The above table reveals that the F ratio is 12.713 and its significant level is 0.000 and it is less than 0.05. Referring to this it is visible that the null hypothesis is rejected and it indicates that there is significant difference among the return on equity ratio of the sample banks.

Table 7: Results of descriptive statistics about return on assets ratio of the sample banks

Years	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
2013	5	1.15	0.53	1.68	1.186	0.431	0.186
2014	5	1.33	0.54	1.87	1.172	0.478	0.228
2015	5	0.91	0.48	1.39	0.986	0.443	0.196
2016	5	0.89	0.44	1.33	0.864	0.382	0.146
2017	5	1.04	0.01	1.05	0.784	0.438	0.192

(Source: Analysis of Annual Reports)

The above table states that the descriptive statistics about the return on assets ratio of the sample banks. The observation from the aforesaid that the mean of return on assets ratio is highest in 2013 and lowest in 2017 but the standard deviation is highest in 2014 and lowest in 2016 during the study period. In the above table it is evident that the mean of return on assets ratio of the sample banks shows increasing and decreasing tendency over the study period. In order to see whether there is any significant variation in return on assets ratio among the sample banks, researchers have developed the null hypothesis and it is Ho_1: There is no significant variation in return on assets ratio among the sample banks and conducted the ANOVA test using SPSS and the following Table contains the result of ANOVA test.

Table 8: Results of ANOVA test regarding return on assets ratio of the sample banks

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.157	4	0.789	12.302	0.000
Within Groups	1.283	20	0.064		
Total	4.440	24			

(Source: Analysis of Annual Reports)

The observation from the above table that the F ratio is 12.302 and its significant level is 0.000 which is less than 0.05 and it indicates that the null hypothesis is rejected. So, there is significant difference among the return on assets ratio of the sample banks.

Table 9: Results of descriptive statistics about net profit ratio of the sample banks

Years	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
2013	5	33.29	10.36	43.65	25.346	12.107	146.586
2014	5	31.07	10.37	41.44	24.492	11.596	134.458
2015	5	35.9	11.04	46.94	23.516	14.498	210.203
2016	5	20.31	11.84	32.15	21.300	8.271	68.409
2017	5	42.91	0.29	43.2	21.368	15.222	231.715

(Source: Analysis of Annual Reports)

This table shows that the descriptive statistics about the net profit ratio of the sample banks. From the above discussion it is clear that the mean of net profit ratio is highest in 2013 and lowest in 2016 but the highest standard deviation is in case of 2017 and lowest is in case of 2016 during the study period. This discussion also shows that the mean of net profit ratio of the sample banks shows increasing and decreasing tendency during the study period. In order to see whether there is any significant variation in net profit ratio among the sample banks, researchers have developed the null hypothesis and it is Ho1: There is no significant variation in net profit ratio among the sample banks and conducted the ANOVA test using SPSS and the following Table contains the result of ANOVA test.

Table 10: Results of ANOVA test regarding net profit ratio of the sample banks

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2870.002	4	717.501	39.620	0.000
Within Groups	362.188	20	18.109		
Total	3232.19	24			

(Source: Analysis of Annual Reports)

In the above table it is visible that the F ratio is 39.620 and its significant level is 0.000 which is less than 0.05. In addition, this result shows that the null hypothesis is rejected and it indicates that there is significant difference among the net profit ratio of the sample banks over the study period.

Simple Regression

In order to see whether one variable is affected by other variable researchers conducted simple regression analysis and the results of regression analysis have been tabulated in the following tables.

Ho3: The debt equity ratio and loan deposit ratio both financing decisions do not affect the profitability measured by return on equity, return on assets and net profit percentage of the sample banks over the study period.

Table 11: Results of regression about ROE vs. DER of the sample banks

Samples	R²	F ratio	S	Accepted/Rejected	Decisions
Bank_1	0.132	0.456	0.548	Accepted	Insignificant
Bank_2	0.080	0.260	0.646	Accepted	Insignificant
Bank_3	0.000	0.000	0.990	Accepted	Insignificant
Bank_4	0.446	2.413	0.218	Accepted	Insignificant
Bank_5	0.045	0.142	0.731	Accepted	Insignificant

(Source: Analysis of Annual Reports)

This table shows the results of regression analysis between return on equity and debt equity ratio of the sample banks over the study period. From the aforesaid discussion it is visible that the significant level in case of all cases is higher than 0.05 which mean that there is no significant impact of debt equity ratio on the return on equity of the sample banks over the study period.

Table 12: Results of regression about ROE vs. LDR of the sample banks

Samples	R²	F ratio	SL	Accepted/Rejected	Decisions
Bank_1	0.085	0.280	0.634	Accepted	Insignificant
Bank_2	0.585	4.237	0.132	Accepted	Insignificant
Bank_3	0.067	0.216	0.674	Accepted	Insignificant
Bank_4	0.291	1.228	0.349	Accepted	Insignificant
Bank_5	0.325	1.441	0.316	Accepted	Insignificant

(Source: Analysis of Annual Reports)

This table discloses the results of regression analysis between return on equity and loan deposit ratio of the sample banks over the study period. The results of regression reveal that the significant level in all cases is higher than 0.05 and it is evident that there is no significant impact of loan deposit ratio on return on equity of the sample banks over the study period.

Table 13: Results of regression about ROA vs. DER of the sample banks

Samples	R²	F ratio	SL	Accepted/Rejected	Decisions
Bank_1	0.178	0.690	0.467	Accepted	Insignificant
Bank_2	0.179	0.656	0.477	Accepted	Insignificant
Bank_3	0.000	0.001	0.981	Accepted	Insignificant
Bank_4	0.728	8.032	0.066	Accepted	Insignificant
Bank_5	0.503	3.032	0.180	Accepted	Insignificant

(Source: Analysis of Annual Reports)

This table shows the results of regression analysis between return on assets and debt equity ratio of the sample banks over the study period. From the above discussion it is found that the significant level is higher than 0.05 in all cases which mean that there is no significant impact of debt equity ratio on the return on assets of the sample banks over the study period.

Table 14: Results of regression about ROA vs. LDR of the sample banks

Samples	R²	F ratio	SL	Accepted/Rejected	Decisions
Bank_1	0.79	0.256	0.648	Accepted	Insignificant
Bank_2	0.442	2.372	0.221	Accepted	Insignificant
Bank_3	0.098	0.325	0.608	Accepted	Insignificant
Bank_4	0.403	2.024	0.250	Accepted	Insignificant
Bank_5	0.002	0.005	0.947	Accepted	Insignificant

(Source: Analysis of Annual Reports)

This table exhibits the results of regression analysis between the return on assets and loan deposit ratio of the sample banks over the study period. The results of regression reveals that the significant level in all cases is higher than 0.05 and its means that there is no significant impact of loan deposit ratio on return on assets of the sample banks over the study period.

Table 15: Results of regression about NPR vs. DER of the sample banks

Samples	R²	F ratio	SL	Accepted/Rejected	Decisions
Bank_1	0.168	0.606	0.493	Accepted	Insignificant
Bank_2	0.455	2.505	0.212	Accepted	Insignificant
Bank_3	0.163	0.583	0.501	Accepted	Insignificant
Bank_4	0.506	3.067	0.178	Accepted	Insignificant
Bank_5	0.379	1.829	0.269	Accepted	Insignificant

(Source: Analysis of Annual Reports)

The above table reveals the results of regression analysis between net profit ratio and debt equity ratio of the sample banks over the study period. From the above table it is apparent that the significant level is higher than 0.05 in all cases which mean that there is no significant impact of debt equity ratio on net profit ratio of the sample banks over the study period.

Table 16: Results of regression analysis about NPR vs. LDR of the sample banks

Samples	R²	F ratio	SL	Accepted/Rejected	Decisions
Bank_1	0.090	0.296	0.624	Accepted	Insignificant
Bank_2	0.176	0.640	0.482	Accepted	Insignificant
Bank_3	0.004	0.012	0.919	Accepted	Insignificant
Bank_4	0.315	1.379	0.325	Accepted	Insignificant
Bank_5	0.010	0.031	0.871	Accepted	Insignificant

(Source: Analysis of Annual Reports)

The above table portrays that the results of regression analysis between net profit ratio and loan deposit ratio of the sample banks during the study period. The result of regression reveals that the significant level is higher in all cases and it indicates that there is no significant impact of loan deposit ratio on the net profit ratio of the sample banks.

Multiple Regressions

In order to examine whether all the independent variables like debt equity ratio and loan deposit ratio both financing decisions together affected the dependent variables such as return on equity, return on assets and net profit ratio researchers have been conducted multiple regressions.

Regression Model

Model_1: Return on Equity (ROE) = β_1Debt equity ratio+ B_2Loan Deposit Ratio +ϵ..........(1)

Model_2: Return on Assets (ROA) = β_1Debt equity ratio+ B_2Loan Deposit Ratio +ϵ..........(2)

Model_3: Net Profit (NP) = β_1Debt equity ratio+ B_2Loan Deposit Ratio +ϵ............................ (3)

Table 17: Results of different regression models of the sample banks

Model	R²	F ratio	SL	Accepted/Rejected	Decisions
Model_1	0.327	5.337	0.013	Rejected	Significant
Model_2	0.111	1.377	0.273	Accepted	Insignificant
Model_3	0.726	29.124	0.000	Rejected	Significant

(Source: Analysis of Annual Reports)

This table discloses the results of regression analysis of the sample banks between independent variables and dependent variables over the study period. Referring to this analysis it is revealed that the null hypothesis is rejected in case of model_1 and 3 and accepted in case of model_2 which mean that the debt equity ratio and loan deposit ratio both financing decisions have significant effects on return on equity and net profit ratio but have no significant effects on the return on assets of the sample banks over the study period.

Conclusions

This research study is intended to evaluate the effects of financing decisions on the profitability of the commercial banks in Bangladesh through extensive use of different ratios such as debt equity ratio, loan deposit ratio, return on equity, return on assets and net profit ratio of which first two are the indicators of financing decisions and last three are the indicators of profitability. The results of the study show that the mean of debt equity ratio and loan deposit ratio both financing decisions of the sample banks show increasing and decreasing tendency and there was significant difference regarding the debt equity ratio and loan deposit ratio among the sample banks over the study period. In addition, the mean of different profitability ratios such as return on equity ratio, return on assets ratio and net profit ratio show increasing and decreasing tendency and there was significant difference regarding the return on equity ratio, return on assets ratio and net profit ratio among the sample banks during the study period. On the basis of the results of regression analysis it is found that the regressional study shows insignificant results in case of examining the influence between one dependent variable and one independent variable which means that there is no significant impacts of both financing decisions like debt equity ratio and loan deposit ratio on the different profitability ratios namely return on equity ratio, return on assets and net profit ratio of the sample banks over the study period. Researcher have employed multiple regression analysis and the results indicate that the debt equity ratio and loan deposit ratio both financing decisions have significant effects on return on equity and net profit ratio but have no significant effects on the return on assets of the sample banks over the study period. In the global world, bank is the backbone of the economic development of any country and has effective contribution in case of national and international trade and commerce. Profitability is one of the most important criteria to evaluate the operational efficiency of any bank and for this consideration it is important to ensure the operational efficiency through optimal utilization of resources and reduce the operational expenses by effective cost control.

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Promoting Bangladesh's Tourism through Internet: Empirical Evidence and Suggestions

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Abstract

This research paper explores how the Internet can help promoting tourism of Bangladesh. The applicability of the Internet in the promotional activities of tourism, its (Internet) effectiveness and advantages of using the Internet in promoting tourism over other promotional tools are presented in this paper. This paper utilizes a qualitative research approach in which both primary (in-depth interviews) and secondary data (review of literature) collection techniques are used. The collected data have been analyzed using content analysis. The results indicated that Bangladesh is not very effective in using and utilizing the Internet for tourism promotion. The absence of a central tourism website, poor internet-based promotional contents, cyber and payment security issues, lack of skilled manpower, interrupted Internet speed, no cyber acts and regulations are hindering the Internet tourism marketing in Bangladesh. The paper concluded with some policy guidelines about how to develop an Internet promotion strategy for Bangladesh tourism. The findings and recommendations accommodated in this research are expected to help the key policy-makers and planners of the Bangladesh tourism industry.

Keywords: *Bangladesh, internet, marketing tool, promotion through the Internet, technology, tourism.*

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Introduction

The Internet is a network that links multiple network systems and users worldwide (Nyheim, McFadden & Connolly, 2004). It is a network of all networks (Buhalis & Jun, 2011).Since the introduction and application of Internet technology in product, service and other business fields, a technological revolution worldwide has been seen. The Internet and Information and Communication Technologies (ICTs) revolution has already profound implications for the tourism industry and a whole system of ICTs and the Internet has rapidly spread across the tourism sectors (Buhalis & Jun, 2011; Buhalis & Law, 2008; Buhalis, 2004; Werthner & Klein, 1999; and Poon, 1993). As an information-intensive sector, travel and tourism sector is highly affected by the information technology such as internet, software applications etc. For over 35 years, tourism has been closely linked to the progress of the Internet and ICTs. In the 1970s, the introduction of Computer Reservation Systems (CRSs), Global Distribution Systems (GDSs) in the late 1980s and lastly the Internet in the late 1990s have radically transformed the organizational and operational practices of tourism (Buhalis, 2003; Buhalis & Law, 2008). In 1995, with the availability of the www, SABRE developed Travelocity for individual travel reservations over the web. By 1998, SABRE was handling 4176 messages/second and bringing more than $45 billion/year (Brinson et al., 2001).According to the report of World Tourism Organization (WTO) more than 1.4 billion tourists traveled worldwide in 2018 (UNWTO, 2019) and the online travel booking statistic report (2019) reveals that 70% tourists around the world use the Internet mainly for travel information searching, besides the report also forecasts that 700 million people will be booking their hotel rooms online by 2023(Travel Agency Statistics, 2019). So it is evident that how Internet technology is and will be revolving the whole travel and tourism market. Bangladesh (BD) - a small country endowed with a lot of tourism treasures is not out of this Internet-based technological trend. In mid-2019, worldwide Internet users reached 4.4 billion which represents 57% of the total population and in BD the Internet users number is 94.4 million, 56% of its population (Internet World Statistics, 2019). The statistic also represents an increase of 94,345 % growth compared to the year 2000 in BD. The country hosts the world's longest unbroken sandy sea beach, the largest mangrove forest, diversified cultures, beautiful six seasons, archaeological heritage and so many sites Khondker and Ahsan (2015), Howladar (2015). Despite having a lot of attractions, BD has not been able to draw the desired level of attention from tourists, especially from foreigners. However, the tourism sector, in general, has not been prospered yet (Alam, Furukawa & Akter, 2010; Howladar, 2015), as result, an insignificant contribution from this sector to the country's GDP is noticed. According to the World Travel and Tourism Council (WTTC: 2018), the direct contribution of tourism in the country's GDP was only 4.3% in 2017which indicates poor performance of this sector in comparison to the other neighboring countries. Poor marketing and promotional strategy hold back the tourism sector in Bangladesh (Howladar, 2015; Zaman, 2017). Besides the budget allocated for the tourism sector is insufficient (Howladar, 2015).In such a situation, this paper aims to focus on the application of the Internet as a low-cost high impact generating tool to promote Bangladesh's tourism.

Objectives of the Research Paper

The principal objective of this research paper is to explore how the Internet can help promote Bangladesh's tourism. In addressing the core objective, specifically this paper has considered the following objectives:

I.   To focus on the importance of the Internet as a tool for tourism promotion.

II.   To identify the advantages of using the Internet as a promotional tool as well as limitations which exist in the context of Bangladesh

III. To generate suggestions from the stakeholders regarding how the Internet can be used effectively to promote Bangladesh tourism.

Literature Review

This section clarifies some key concepts including the Internet and the Internet as a marketing tool. Correspondingly, a link between the Internet and tourism promotion has been explored.

Internet and marketing tool

Internet is an assemblage of computer networks worldwide. It is the largest computer system that millions of computer users can use and share all kinds of information: numbers, text, sound, and image. In a research note Lie (2000) defined the Internet as a global 'network of networks' of interlinked computers which is operated on a standard protocol that allows data to be transferred between them. In this advanced world of technology, the Internet is considered as the most modern and multi-layered method used to exchange and spread information, knowledge at the lowest cost. Studies show that the Internet is the most effective when used as an advertising and marketing tool (Al-Kassem & Nassuora, 2012). Lai & Vinh (2013) noted that online promotion is a part of marketing on the Internet, including Internet advertising, Internet branding, and direct marketing.

Internet and tourism promotion

Today, the Internet has become a popular medium for tourism promotion as it connects companies with companies, companies with customers, and people with people regardless of time, space and hardware/software platforms (Mathur, Mathur & Gleason, 1998). Buhalis (1998) claimed that destination management organizations have successfully utilized the Internet and extranet in providing tourists with pre-trip and in-trip information; helping tourism firms to promote their products. The importance is also given on the use of the Internet for tourism promotion by many researchers. Garín-Muñoz & Pérez-Amaral (2010) pointed out that tourism as an information-intensive industry can gain important synergies from the use of the Internet. It is appealed by Liu (2000), Lai & Vinh (2013) that the Internet is an ideal tool for tourism promotion. According to this researcher, the Internet has profoundly changed the way the tourism business is conducted. As such, tourism organizations must use the Internet effectively to create new competitive

advantages. Applicability of Internet technology as an effective promotional tool in the field of the tourism industry and destination marketing is also investigated by Bencken dorff and Black (2000). Their study tells that the Internet has revolutionized the way of communication and its rich proliferation of text and multimedia, provides a range of stimuli encouraging consumers to buy travel products and services. Besides, Govere et al. (2013) focused on how the Internet can be useful in tourism promotion. Al-Kassem and Nassuora (2012) also described the term Internet as an important source of information for tourists' travel-related decision making. According to their research, the Internet serves not only providing information on travel suppliers but also helps to book air tickets, accommodation, meeting venues, resorts, destinations, and other tourism suppliers, and making payments through credit cards. Batinic (2013) analyzed the advantages and disadvantages of Internet technology used in contemporary travel agencies and tour operation businesses; also stated that the Internet helps to provide high-quality and efficient services to the tourists.

Research Method

This research can be called an exploratory work since the extant studies in this context is not in existence in Bangladesh. To analyze how the Internet can help promote tourism in Bangladesh, a qualitative approach was employed in conducting this research. The data collection method comprises both primary and secondary techniques. The collected data have been analyzed using content analysis. Purposive judgment sampling technique is used to sample special populations for this research as Churchil, Iacobucci & Israel (2010) endorsed the use of purposive judgment samples in exploratory design. A semi-structured interview technique is utilized to collect primary data from the participants. Because of the flexible nature, the qualitative interview method is effective to gain an in-depth understanding of the research issue than the conventional survey method (Yin, 2014; Rubin and Rubin, 2011). The participants' category includes tourists, hoteliers, travel agents, and tour operators, and institutional representatives. The coverage of research participants is shown in Table 1.

Participant's Category	Quantity
i. Tourist	15
ii. Hotelier	05
iii. Travel agent and tour operator	08
iv. Institutional representative (IR)	02

Table 1: Profile of the research participants

In total thirty participants were interviewed. On average the duration of each interview was 20-25 minutes. Before interviewing, the researcher shared the research objectives to the participants. The interviewing was stopped when data saturation observed by the researchers. Besides, secondary data sources cover a wide range of published journal articles, research, conference papers, book notes, and newspaper articles which were reviewed for this paper.

Findings and Discussions

The findings from the interviews which include advantages of using the Internet over the traditional promotional tools and the challenges are represented in this section. Some suggestions are also provided here regarding how the Internet can be used effectively to promote Bangladesh's tourism. The following figure1 summarizes the findings of this research.
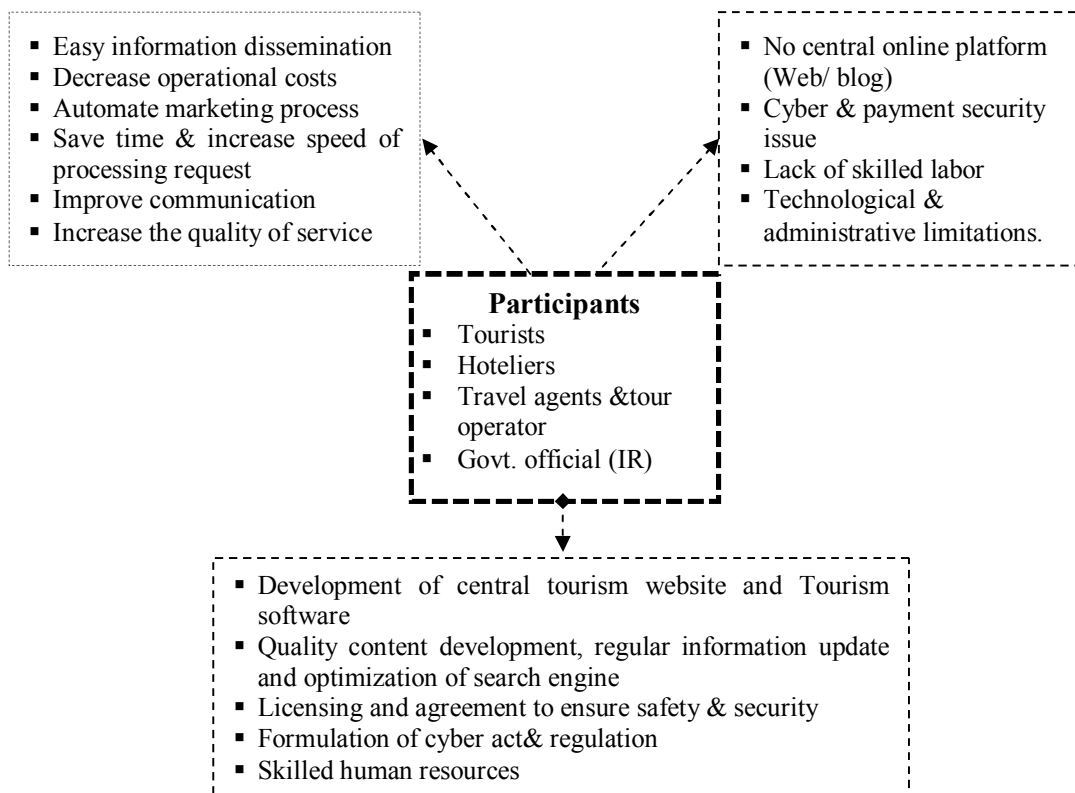
▪ Easy information dissemination ▪ Decrease operational costs ▪ Automate marketing process ▪ Save time & increase speed of processing request ▪ Improve communication ▪ Increase the quality of service	▪ No central online platform (Web/ blog) ▪ Cyber & payment security issue ▪ Lack of skilled labor ▪ Technological & administrative limitations.

Participants
- ▪ Tourists
- ▪ Hoteliers
- ▪ Travel agents &tour operator
- ▪ Govt. official (IR)

- ▪ Development of central tourism website and Tourism software
- ▪ Quality content development, regular information update and optimization of search engine
- ▪ Licensing and agreement to ensure safety & security
- ▪ Formulation of cyber act& regulation
- ▪ Skilled human resources

Figure-1: Participants' identifications of advantages, challenges, and suggestions.

Almost every participant in this research emphasized the use of the Internet in tourism promotion in contrast to other traditional media such as brochures, billboards, advertisements in radio, television, magazines, guidebooks, or personal referrals, etc. For instance, a tour operator (Shohel) stated that-

Promotion through the Internet is more profitable than using other media. The main limitation of traditional promotional media is it requires a huge budget and time to get the desired result. But the Internet reduces promotion costs, operational costs, staff costs; besides it saves huge time. Now by using the Internet, we can boost posts by targeting and customizing our customers/tourists to inform them about our products or services just with one click.

This finding confirms the one generated from Liu (2000) who found that the Internet helps the producer to save huge distribution costs through the disintermediation process by offering direct links between producer and consumer. Buhalis (1998) also stated that the Internet reduces over-dependence on intermediaries and enables firms to reduce their supply costs and thus increase their profit margins. The Internet's emergence and mainstreaming empowered global computer networking, enabling individuals and organizations to frequently access a host of multimedia sources of information and knowledge, regardless of location or ownership with no costs (Buhalis & Jun, 2011).

In terms of using the Internet for tourism promotion, as a special feature 'easy information access and distribution' has been addressed by almost all the research participants. Most of the participants from the tourist category asserted that before traveling to any tourism destination they use the Internet to collect information regarding the destination, accommodation, and transportation, etc. For example, one tourist (Jamiul) commented that '…The Internet makes traveling system very easy as one can buy tickets, book hotel rooms, pay bills from anywhere in the world with the help of the Internet'. In this vein, it is found that the web is becoming a collective travel square as so many travelers are shifting to web-based services to complete their tourism-related (Doolin, Burgess & Cooper, 2002). Liu (2000) also noted that the Internet is special to other marketing media for its high-speed information transmission and retrieval. Originally the Internet was used for email and file transfer but with the addition of www, it provides an excellent vehicle for information dissemination (Brinson et al. 2001).

Almost 90% of participants in this research opined that the Internet improves communication. Al-Kassem and Nassuora (2012) addressed that the Internet can play various roles within the multifaceted tourism industry as a communicative tool, an information source, or a travel facilitator, to name a few. From the business point of view (hotelier and tour operator category participants) it is found that the Internet helps to maintain the relationship with remote partners in different geographical settings, automate the marketing process, supports maintaining post-sales relationships with the customers/tourists, etc. The Internet enables customers to communicate with organizations 24 hours a day and 365 days a year basis (Buhalis and Licata, 2002).

One hotelier (Hyder) mentioned that-

> *The Internet creates a link between service providers and guests/tourists. Nowadays, replying to remote guest's queries, making a reservation, meeting the guest's demand and getting post sell feedbacks, are very easy. Moreover, by using the Internet we can easily inform our customers regarding promotional offers, discounts, and sales.*

Besides the above-mentioned benefits and usages of the Internet, so many issues are identified by the research participants. Having no central web portal for tourism, cyber and payment security issues, shortage of skilled manpower, technological and administrative limitations are the main challenges as addressed by the participants. Those issues are needed to be solved to get the maximum output of using the Internet for tourism

promotion. Most of the tourist participants said that there is no central website or online platform for tourism in Bangladesh. Zaved (a tourist category participant) commented that- '…a central web site containing all travel and tourism-related information (tourist attractions, things to do, how to go, where to stay and dine, contact details, guide services etc.), booking/reservation system (transport tickets, accommodation etc.), route mapping, online payment system, cancelation and refund policy, and other services necessary for tourists, may boost the overall tourism industry in Bangladesh'.

The study conducted by Govere et al. (2013) also suggests a sound web presence in the form of a good and informative website. The services, a tourist may need, are normally provided by different service providers or organizations. A well-designed website facilitates tour planning and ensures that the right choices are made, resulting in an enjoyable experience for the tourist (Rita, 2000).

Online services and payment security issues were also identified by the 78% research participants. A tourist participant (Mosaraf) stated that – 'to avoid the long line at the train station, I bought a train ticket via Internet web portal of Bangladesh railway but I had to go to the station to collect the ticket. Is it called online service'? Added to this, another tourist participant (Jahid) stated that the online bill payment services in Bangladesh are not at the satisfactory level which deters customers form online buying. He shared his experience as follows-

> *'By using the online portal, I bought four train tickets (Saidpur to Khulna route). I paid the bill of BDT 3944 through Standard Chartered Bank visa card but I did not receive any ticket confirmation email/SMS. Then I checked the ticket information page and found no information there. After that, I called the CNS hotline number but the call was not picked up. I asked suggestions by sharing a post regarding this issue on social media and became surprised when another friend commented that he faced a similar problem and did not get the ticket or money back'.*

Buhalis and Law (2008) stated that payment security and privacy concerns are one of the major challenges which dissuade customers from online transactions. In 2008 & 2009, some of Radisson hotels' computer system was hacked, and customer details (name, debit and credit card number, etc.) were stolen (McEntegart, 2009). The world's biggest hotel company Marriott International also failed to protect the private data of its' 500 million guests as Marriott faced hacking in 2018(Cook, 2018). As perceived security of the information and transactions is one of the common concerns in online communication, hence, formulation of cyber transaction act, and agreement with the cyber security enforcing agency, and continuous monitoring may work out in this regard which is also suggested by the participants in this research. Many researchers (Mills et al., 2002; Buhalis & Law, 2008) also suggested that business organization, therefore, must pay more attention to defending itself and its customers from cybercrime losses such as spamming, identity theft and hacking booking data, credit card numbers, card authentication codes, etc.

Most of the participants in this research emphasized the presentation of authentic and complete information with real pictures and contents of the tourism products and services while promoting via the Internet. One of the most technological barriers is a lack of standards for content quality and information dependability(Van et al., 2006; Turban et al., 2008).If the destination image portrayed on the Website is not satisfactory or the Website is not well designed and contains insufficient information, potential tourists may forma poor impression towards a destination which, in turn, negatively influences the decision-making process.

One hotelier category participant (Mamun) mentioned that- 'services provided by hotel staff can't be evaluated based on information and pictures provided on the Internet'. Tourism and travel exist only as information at the point of sale, and cannot be sampled before the purchase decision is made (WTO, 2003).Development and regular updates of quality content with accurate information and image are suggested. Participants in this research also identified a lack of skilled manpower as an impediment to tourism promotion through the Internet. For instance- Rafiqul, an official of Bangladesh Tourism Board (industrial representative category participant) said that-

> *'There is a shortage of manpower excels in IT in our country. There exist a few agencies that provide boosting services in social media, email, SMS marketing, etc. but for the promotion of tourism only social media post boosting, emailing is not enough. Moreover, we need experts for the optimization of the search engine (websites, contents) so that the potential foreign tourist can easily get the promotional notifications'.*

Arrangement of an IT-based training program to create skilled manpower in this regard is suggested. Buhalis & Jun (2011) also suggested that continuous education and training programs for the employees are instrumental for the effectiveness of tourism organizations and using ICTs innovatively.

Lastly, most of the participants said about the interrupted Internet connection of the country which discourages the stakeholders to use Internet-based promotion rather the tour operators prefer to attract domestic tourists through posters, brochures, and billboard advertisements. There are some administrative limitations too. The nature of the Internet enables none to control its structure and content. Regulations and principles need to be adopted to ease and control the commercial use of the Internet. As suggested by the participants, the government should formulate necessary regulations and invest to provide necessary infrastructure and a strong network of the Internet, and thus help tourism organizations to conduct Internet-based promotional activities.

Conclusion

Tourism is an information concentrated industry and the Internet is the world's most efficient means of exchanging information. It is proved that the Internet is an effective medium for tourism promotion. There are enormous opportunities for the stakeholders of the tourism industry in Bangladesh to successfully promote and sell their tourism and hospitality relevant services by using the Internet. But many success factors are lacking. The absence of central tourism website/portal, poor online promotional contents, cyber and payment security issues, lack of skilled manpower, interrupted Internet speed, no cyber acts and regulations are hindering the Internet tourism marketing in Bangladesh. Hence, a sound website or web portal/tourism software, search engine optimization (SEO), continuous update of information and quality contents, regular arrangement of IT-based training program for creating skilled manpower, securing privacy of tourists, formulation of cyber transaction act, regulations by the government of Bangladesh, and continuous monitoring can play the vital role to seize the full potentials of the Internet tourism promotion at relatively lower costs. Besides, it is inadequate to use Internet media/ICTs as a stand-alone initiative and it must be combined with a redesign of processes, structures and control systems of management (Buhalis & Jun, 2011). So the tourism business firm in Bangladesh also should update its strategies, structures, and systems to adapt to the changes in market trends and technologies.

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A Comparative Analysis of the Hygiene and Motivation Factors in the Public and Private Sector Organizations of Bangladesh

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Abstract

This study shows the comparative analysis of the presence of the hygiene and motivation factors as per Herzberg's (Herzberg, Mausner & Snyderman, 1959) two-factor theory in the public and private sector organizations of Bangladesh. For the field survey of this study 250 questionnaires have been distributed among the respondents of different public and private sector organizations of Bangladesh and from those 158 usable responses have been collected. After collecting the data, relevant statistical analyses have been done to reach the research objectives. The findings of this study show that among the two-factors, social recognition is found very high and work environment is found to be very poor in public sector organizations of Bangladesh. On the other hand, the employees of the private sector organizations are extremely empowered with the sense of responsibility but get poor working conditions. Interpersonal relations, personal life and status, opportunity to growth and development, company policy and administration and responsibility are almost same in public and private sector organizations of Bangladesh. The employees of the public organizations of Bangladesh enjoy better opportunity for achievement, advancement; better working conditions and much job security compared to the employees of private sector organizations. On the other hand, the employees of the private organizations get much pay and better work environment compared to the public organizations, and enjoy sound policies and administration and the sense of responsibility.

Keywords: *Hygiene factors, Motivation factors, Two-factors, Public organizations, Private organizations.*

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1.   Introduction

Employees are the most crucial part in any organization and both (employees and organizations) are highly dependent on each other. One's existence is the cause of another's survival. Even though it may not assure that their good relation continues always. Dragged from the earlier literature, obviously it reveals that the level of satisfaction and motivation of employees depends on some contributory factors as: supervisors' good behavior, sufficient pay, or the good-working environment. In the two-factor theory, Fredrick Herzberg suggests that two types of factors: hygiene factors and motivation factors are responsible for achieving the level of job satisfaction among employees and hence motivation. The hygiene factors that Herzberg suggests are: pay and security, supervision, interpersonal relations, working conditions, work environment, personal life and status, company policy and administration (Griffin, 2005; Stoner, 1995). And the motivation factors are: achievement, advancement, social recognition, work itself, responsibility, opportunity to growth and development (Griffin, 2005; Stoner, 1995). According to Herzberg if organization fails to offer the hygiene factors properly the employees of that organization will be dissatisfied. But if the presence of the hygiene factors is ensured, the employees will not be satisfied; rather their dissatisfaction will simply be removed. To make employees satisfied some other factors which Herzberg named motivation factors need to be offered (Griffin, 2005). The two-factor theory (Herzberg, et. al 1959) suggests that the employees in organizations will be motivated for satisfaction through the availing the hygiene and motivation factors in organizations. Employers, industry leaders and the entrepreneurs should have to be concerned about employees, their level of motivation and satisfaction. When an employee is motivated and satisfied with the work and work setting, this situation reveals enormous benefits for the employee and employers as well as for organizations. In fact, the study tries to reveal the scenario that how the public and private organizations separately sincere to provide the two factors for their employees to enrich their level of motivation and satisfaction.

Thus, the above discussion signifies the key research questions; (i) Whether the two-factors as suggested by Frederick Herzberg are practiced by the public and private sector organizations in Bangladesh? and (ii) Whether the two-factors vary in public and private organizations? A few studies have been conducted in Bangladesh relating to the research problem, so it will definitely establish a milestone for the students, academics and researchers by contributing the body of knowlegde.

This study intends to identify whether there is any significant difference between presence of the two-factors in public and private sector organizations in Bangladesh.

2.   Literature Review

Employee's job satisfaction and motivation are not the recent phenomena, rather these are widely researched and an ongoing issue. These are also the highly the debated topics in the field of organizational behavior. A lot of researches are carried on in these fields in order to reveal the causes, factors and the determinants of employees' motivation and job

satisfaction. Herzberg's (1959) two-factor theory is one of the important solution and conclusion which suggests that the motivation and satisfaction of employees depend on the presence and absence of some factors. Research suggests that the presence or absence of the elements of the two-factors not only determine the level of motivation (Herzberg, et. al 1959) and job satisfaction (Alam and Hasan, 2015a; Alam and Hasan, 2015b; Talukder, et. al 2014) of employees rather influence the employees' commitment (Hasan and Alam, 2016), intention to stay (Islam and Alam, 2015) in organizations, productivity (Hasan and Alam, 2016), work-life balance (Hasan and Alam, 2016), quality of work-life (Hasan and Alam, 2016), turnover intention (Alam and Amin, 2018; Islam and Alam, 2015) and turnover (Amin, et. al 2018; Alam and Hasan, 2015a; Alam and Hasan, 2015c;Alam and Bhuiyan, 2015; Talukder, et. al 2014; Alam, et. al 2013).

Alam and Hasan, (2015a) conducted a study among the employees in different private and public sector companies of Bangladesh and found that the most important factors which caused the employee dissatisfaction were work hours & supervisors, security of income (future) and working environment & administration. Another study of Alam and Hasan, (2015b) on the private sector companies of Bangladesh and found that, pay, supervision, job security and challenges are the prominent factors that create job dissatisfaction among the employees (Talukder, et. al 2014). Hasan and Alam, (2016) conducted a study among the employees of different organizations in the Dhaka city of Bangladesh. The findings of the study suggested that recognition, supervision and good interpersonal relation increased employees' productivity, organizational commitment, helped achieve work-life balance and offered a good quality of work life. Islam and Alam, (2015), in their study among the banking sector employees of Bangladesh found that interpersonal relation, administration, pay & job security, supervision, nature of job, personal growth and development are the key factors for employee turnover. These findings are supported by Alam and Amin, (2018). A study of Amin, et. al (2018) among the employees of different public and private sector organizations of Bangladesh showed that excessive work load and supervision, absent of sound retirement benefits, poor administration, poor pay and less job facilities cause employees quit their jobs. These findings are also similar to the findings of Alam and Hasan, (2015a), Alam and Hasan, (2015c), Alam and Bhuiyan, (2015), Talukder et al. (2014) and Alam et al. (2013). Mobley et al. (1979) suggested that employees who are satisfied have higher intentions of stay with their organization, which results in decreased turnover rate. According to George and Jones, (1999), many people are dissatisfied if working conditions are poor and gradually build an intention to leave the organization. The relationship with the supervisor is often a crucial factor in determining whether a person stays or moves (Mendonsa, 1998). According to the Harvard Management Update (June, 1988), nine of ten managers think people stay or go because of money. Beardwell (2007) argues that employees leave managers not companies. That means they want more interaction with management, more self-satisfaction on the job, more responsibility and more control over decisions. Some other experts worked with the two-factors and the employees' intention to stay, retention and motivation and suggested that, the quality of relationship an employee has with his or her immediate managers

elongates employee stay in an organization (Ferreira, 2007; Michael, 2008). Attractive remuneration packages are one of the most important factors of retention because it fulfills the financial and material desires (Shoaib et al. 2009).Kaye (2000) showed that money is necessary, but most of the employees think of challenging and meaningful work, good bosses, and opportunities for learning and development. Some argue that, the supervision style that influences employees' decision to be committed and remain with the organization even when other job opportunities exist outside the organization (Michael, 2008). Dockel (2003) argues that people should not only be rewarded financially but they should also be offered opportunities to grow within the organization. Flexible work schedules and assistance programs need to be considered, however, only a small share of the workforce takes advantage of them (Smith and Blum, 2000). Taylor and Consenza (1997) indicate that a sound job status increases the level of consent, participation, and motivation of employees.

To the best of knowledge of the researchers, and the above literature as far reviewed, no study has been conducted/is found to show the comparison of the presence of the different motivation/satisfaction organizations. So this study is an effort to bridge the gap.

3.   Methodology of the study

The primary data was collected from the respondents through questionnaire survey. The questionnaire included three parts: first - the respondents' demographic information, second - the statements relating to the perception about the presence and absence of the two-factors and third - the statements relating to the perception about how the respondents' degree of emphasis on the two factors. Five-point Likert-type scale was used, where 1= very poor and 5= excellent. To obtain desired level of information from the field a total of 250 questionnaires were distributed among the respondents 158 usable responses were found usable.

The researchers pre-tested the questionnaire to see whether changes are necessary before going for the actual survey. 10 people are selected as initial respondents in the pre-testing session. Respondents identified some important correction areas of the questionnaire such as interpretation of the key and technical concepts, and some possible areas of confusion or ambiguity. The questionnaire was modified based on pre-test suggestions.

The survey of the study was carried out in the different districts of Bangladesh including Dhaka city. A random sampling method had been adopted for choosing the respondents from different institutions. 250 questionnaires were sent to the respondents through postal mail and 158 usable responses were received.

4.   Data analysis and tools applied

All the usable responses were put into SPSS version 17.0 software and several statistical analyses were performed to interpret the results. Descriptive statistics was used to show the perception of the respondent regarding the existence of the two-factors and their perceptions regarding the importance of the factors in the workplace.

4.1 Reliability and validity of data

The initial reliability of the items was assessed by computing the Cronbach's alpha. In this regard, George and Mallery (2003) provided the following rules of thumb: "_ > .9 – Excellent, _ > .8 – Good, _ > .7 – Acceptable, _ > .6 – Questionable, _ > .5 – Poor, and _ < .5 – Unacceptable". Cronbach's alpha value for all of the variables was .701 (Table 1). As the Cronbach's alpha was much higher than .6 the constructs were therefore deemed to have adequate reliability.

Table 1: Reliability Statistics

Cronbach's Alpha	No. of Items
.701	17

A measuring instrument (questionnaire) is considered to be valid when it measures what it is supposed to measure (Kumar, 1999 Sekaran 2003).It involves asking the right questions by following the objectives and getting the intended information which is relevant. This study has been chosen the questionnaire mailing option in order to avoid the respondent biases. The questionnaire was also pre and pilot tested.

5. Ethical Considerations

The researchers strictly follow honesty in the entire study activities ranging from data collection to data presentation. The result is the honest opinion of respondents as same that was drawn from the field survey without fabricating or falsifying. The researchers maintain integrity acting with sincerity and consistency in action. The study was carried out without any negligence; utmost care was taken in setting research objective and executing the objective through research design. The study explored the openness sharing research ideas with concerned parties and welcoming criticism from all. The research study posted the highest value to protect human interest by maximizing benefits and minimizing harm and risk and respecting human dignity as a whole. The study provided absolute autonomy and confidentially to the respondents about their response. By the above methods, the researcher ensured neutrality and objectivity which helped the findings to be representative views of the respondents.

6. Findings and discussion

This part of the study discusses all findings to reach a valid conclusion about the study. The following findings and their corresponding discussions are presented below in different segments and titles.

6.1 Demographic information of the respondents

The table below (Table 2) shows the demographic information of the respondents:

Table 2: Demographic information of the respondents

Particulars	Percentage	Particulars	Percentage
AGE		**JOB NATURE**	
20-30	40.7	Permanent	93.3
30-40	40.0	Contractual	6.7
40-50	13.3	Total	100.0
50-60	6.00	**EXPERIANCE**	
Total	100.0	Below 3 Years	40.0
SALARY		3-6 Years	46.7
Below 50000	77.3	6-9 Years	13.3
50000-60000	15.7	Total	100.0
60000-70000	08.0	**MARITAL STATUS**	
EDUCATION		Unmarried	26.7
Graduate Level	10.0	Married	66.7
Postgraduate Level	90.0	Divorced	6.7
Total	100.0	Total	100.0

Table 2 shows that most of the respondents are in the age of 20-40 (80.7%), majority of them get the salary below 50000 (77.3%) per month, almost all (90%) of them have completed the post-graduation and engaged in the permanent jobs (93.3%). The table also reveals that most of the respondents (86.7%) have the job experience of 1-6 years and the majority of them are married (66.7%).

6.2 Respondents' opinion regarding the existence of the two-factors in their organizations

Table 3 shows the descriptive statistics for each of the factors based on the respondents' opinion in different organizations:

Table 3: Respondents opinion regarding the presence of the two-factors in public and private sector organizations.

Particulars	Public organizations		Private organizations		Difference of mean (Public - Private)
HYGIENE FACTORS	Mean	Std. Deviation	Mean	Std. Deviation	
Pay	1.82	.93220	2.01	.75980	-.19
Security	2.21	.91873	1.96	1.09611	.25
Supervision	2.13	1.03606	1.97	.94707	.16
Interpersonal relations	2.04	1.07969	2.10	.98263	.03
Working conditions	1.93	1.03595	1.73	.94978	.20
Work environment	1.72	.86905	1.84	1.07076	-.12

Particulars	Public organizations		Private organizations		Difference of mean (Public - Private)
Personal life and status	1.89	.99427	1.95	.94177	-.06
Company policy and administration	1.84	.89446	1.93	.93227	-.09
MOTIVATION FACTORS					
Achievement	2.24	3.82325	1.86	.90932	.38
Advancement	2.19	4.07703	1.83	.92212	.36
Social recognition	2.42	1.19048	2.24	1.06813	.18
Work itself	2.22	1.07840	1.96	1.02687	.26
Responsibility	2.18	.83958	2.27	.95529	-.09
Opportunity to growth and development	2.15	1.08475	2.07	1.05652	.08
HYGIENEFACTORS	1.91	.57901	1.99	.65473	-.08
MOTIVATIONFACTORS	2.24	.93718	2.10	.61649	.14

*Scale: 1=very poor and 5=excellent, *n=67 for public organizations and 91 for private organizations

The above Table shows that the highest mean value among the factors in public organizations is in the factor of social recognition (2.42) and the lowest is in the work environment (1.72). That means the employees of the public organizations get high social recognition and poor work environment. Accordingly, the highest mean value among the factors in private organizations is in the factor of responsibility (2.27) and the lowest is in the working conditions (1.73), which indicates that, the employees of the private organizations enjoy and are empowered with the sense of responsibility and get poor working conditions. The differences of mean regarding the elements of the hygiene and motivation factors in terms of the public and private organizations of Bangladesh represent the comparison of their presence in the organizations. The factors interpersonal relations (.03), personal life and status (-.06), opportunity to growth and development (.08), company policy and administration (-.09) and responsibility (-.09) in the above Table show the zero differences in their mean values. That means these factors are equally present both in the public and private organizations in Bangladesh. The high positive mean differences show in the factors, such as achievement (.38), advancement (.36), job security (.25) and working conditions (.20). It indicates that the employees in the public organizations of Bangladesh enjoy much more opportunity of achievement, advancement; better working conditions and more job security. The high negative mean differences show in the factors, such as pay (-.19), work environment (-.12), company policy and administration (-.09) and responsibility (-.09). It indicates that the employees in the private organizations of Bangladesh get much pay and better work environment compared to the public organizations, and enjoy sound policies and administration and the sense of responsibility.

7.   Implications of the study

The findings of this study will bring a new insight to the academics and the researchers since a few researches are conducted in this field in Bangladesh. It will also help jobholders be aware about their jobs and related hygiene and motivation factors. The study also will draw attention of the employers/decision makers to be concerned about the presence of the two-factors which contribute to employees' the stay intention, job satisfaction and many other job related crucial issues in any organization.

8.   Conclusion

According to the two-factor theory, the absence of the hygiene factors leads employees to be dissatisfied and on the contrary, the presence of them will not make employees satisfied but it remove their dissatisfaction only. To make them satisfied some other factors (motivation factors) must be offered in organizations. So these factors are much more crucial to be present in any organization. This study shows the comparative analysis of the presence of the two-factors in private and public organizations of Bangladesh. The findings of the study reveal that among the two-factors, social recognition is very high and the work environment is very poor in public sector organizations of Bangladesh. On the other hand, the private sector organizations are extremely empowered with the sense of responsibility but get poor working conditions. Interpersonal relations, personal life and status, opportunity to growth and development, company policy and administration and responsibility are almost same in the both of the types of companies of Bangladesh. The employees of the public organizations of Bangladesh enjoy much more opportunity of achievement, advancement, better working conditions and much job security compared to the employees of private sector organizations. On the other hand, the employees of the private organizations of Bangladesh get much pay and better work environment compared to the public organizations, and enjoy sound policies and administration and the sense of responsibility.

A few researches has been conducted in Bangladesh relating to the research problem of this study, so it will definitely establish a milestone for the students, academics and researchers by contributing the body of knowlegde. During the continuation of study, the researchers encountered some avoidable but common limitations. Because of time and resource constraints the study considered limited sample size. The study used only one technique of data collection because of the time constraints. Some of the respondents took huge time to respond properly to the questionnaire sent to them. Some of the respondents showed reluctance to response mailed questionnaire and asked for face to face conversation.

The researchers of this study suggest the following suggestions for further research in this field:

The sample size should be more than the present study to get maximum accuracy of result; Data should be collected by actively participating in the data collection process; Data collection technique should be more than one.

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Customers' Satisfaction on Mobile Banking: An Analysis between Customers' Expectation and Perceived Risk Service Quality

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Abstract

The rapid growth of mobile phone users and the growing attractiveness of mobile banking facilities in Bangladesh allowed financial institutions to include unbanked people into the banking services along with the challenges of customer retention. The quality of service is also identified as aninfluential factor of customer satisfaction and retention. But, as the area is comparatively new in Bangladesh, very little research has been conducted to quantify the gap between customers' expectation and current service quality. This study attempts to find out the issues regarding customer satisfaction by analyzing the perceived gap between Customers' Expectation and Current Service Quality of mobile banking services in Bangladesh. Based on 500 customers' opinion the study is organized. We found that e-requirement, security, responsiveness, convenience, ease of operations, problem handling, settlement of grievances, contact and help desk support, brand perception and perceived value are the major dimensions of perceived quality of services that must be addressed for better mobile banking services and more satisfaction of customers' in the context of Bangladesh. This study may help the organization to lessen the gap between the demand of clients and current available services.

Keywords: mobile banking, perceived service quality, customer satisfaction, loyalty.

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Introduction

Due to the advancement of ICT, now-a-days we see the massive shift from traditional banking to online and branchless virtual mode of banking. Recently, mobile banking is rapidly shifting the way banking services are being planned and brought. By using mobile banking, customers can conveniently perform their banking transactions anytime and anywhere quite easily. Mobile banking is considered as an Alternative Delivery Channel (ADC) through which the clients interacts and completes bank related businesses such as depositing money, checking the balance, scrutiny the account status, moving money, merchant payment and bill payment.

A customer satisfaction is an abstruse and intangible concept. Definite indicator of the state of satisfaction differs from customer to customer, product to product and service to service. The state of satisfaction depends on a number of factors which combine as psychological, economic and physical factors (Kumbhar, 2011). Based on the rapid changes in the banking industry and high race among banks and financial institutions, the concept of customer satisfaction has become more important. The excellence of service is one of the main reasons of the customer satisfaction. Now the banks are trying to improve their operation and to reduce costs (Shrestha, 2014). However, we feel that, there are may be some likelihood of gaps between customers' expectations and actual opinion of service quality. Therefore, there is a necessity to know the factors that effects customer satisfaction by identifying the gap between customers' hope and current service excellence of mobile banking services in Bangladesh. This matter is important because it will help the banking industry to frame their marketing strategies to promote new dimension in customer satisfaction of mobile banking systems in the future.

Current Status of Mobile Banking in Bangladesh

In Bangladesh penetration rate of the mobile phone is one of the highest in South Asia followed by Sri Lanka and India. Out of 180 million people the total number of subscribers reached at 156.989 million at the end of 2018. Affordable call rate, wide connectivity and availability of high speed 4G internet connections helped for wild adoption of this channel. Dutch-Bangla Bank Limited, one of the top private commercial bank first introduced the mobile banking concept in Bangladesh on March 31, 2011. By 2018, at 18 banks have been offering this service with a base of 60.7 million customers and 0.88 million agents. In 2018 total volume of transactions was recorded at Tk. 3856 billion. Currently bKash of BRAC bank Limited and Rocket of Dutch-Bangla Bank Limited captured about 95% of the market share. bKash holds the lion share

Literature Review

Mobile banking helps the customers of a bank to to access banking through a mobile phone (Barnes & Corbitt, 2003). Mobile banking (m-banking) offers customers to get a variety of banking services like saving and credit information and customers can do payments or transfers of money through mobile phones (Macharia, 2001). Saleem and

Rashid (2011) mentioned that mobile banking is safe and secure due to the high-level encryption and PIN or password-protection.

Majority of the studies reflect customer satisfaction as a vital factor for the banking sector. Customer satisfaction plays avital role in bank's revenue and profitability. Different researches identified that customer satisfaction helps to increase revenue (Fornell, 1981); decreases elasticity of price(Anderson, 1988) and reduce transaction costs (Reich held & E, 1990).According to Kotler and Armstrong (2010), the customer is disappointed when the product's performance is lesser than hopes, satisfied if performance matches expectations and highly satisfied when it leaves behind the customer's expectations. By applying the SERVQUAL model, Amiri Aghdaie & Faghani (2012) identified that reliability, empathy; responsiveness and tangibility are positively connected with customer satisfaction whereas the factor assurance has no impact. Some important factors for influencing customer satisfaction on mobile banking are known as usefulness, relative advantages, ease of use, risk perception and lifestyle and current want of customers by Kahandawa & Wijayanayake in 2014.Mobile banking is also increasing in Pakistan. In a study by Saleem and Rashid (2011) it is seen that organizational, technological, strategic, functional and economic factors have a noteworthy influence on customer satisfaction.

In Bangladesh mobile banking services increasing exponentially. In 2011, Deb et al. studied the dimensions affecting the acceptance of mobile banking in Bangladesh. It is seen that the technical knowledge to operate the handset, convenience and security are the main significant factors, while reliability, cost and confidentiality also have an important influence. Another study by Kabir (2013) on consumers' apparent risk in mobile banking found that seeming ease of use and relative cost are positive factors, while financial, operational and security risks negatively touch the adoption of mobile banking. Regarding customer satisfaction another study performed by Parvin (2013) showed that majority of the customers (more than half) are highly satisfied with a demand of extended services offered through this channel while only 8.3% are very dissatisfied. Another study done by Shohag (2013) on the customers' satisfaction of mobile banking service launched by the Islami Bank of Bangladesh (M-cash) found that users had average levels of satisfaction with the additional requirements of more and sufficient agents and the involvement of all mobile telephone operators providing mobile phone services in Bangladesh.

Generally, the level of customer satisfaction is influenced by the quality of services, price and procuring process. According to Chen and Chen (2009) there are many factors of e-customers satisfaction than formal customer. Riscinto-Kozub (2008) shows that, the customer satisfaction is measured by service quality and service quality measured by different measurement tools and instruments established by various researchers and marketing consultancy organisations (Gronroos's 'Perceived Service Quality Model, SERVQUAL, SERVPERF, SITQUAL, WEBQUAL, etc.)

A summarization of literature review and the dimensions identified by various researchers to measure the service quality are shown in Table 1.

Table-1: A Summary of Literature Review

Author(s)	Aspects/Measurements Used in the Study
Gronroos (1984)	Technical and Functional service quality, Business image
Dabholkar et al. (2000)	Efficiency, comfort of use, performance, apparent control, and suitability
Parasuraman, Zeithaml and Barry (19858)	Trustworthiness, Sensitivity, Guarantee, Understanding and Tangibles
Cronin and Taylor (1992)	Reliability, Responsiveness, Assurance, Empathy and Tangibles
Swaid and Wigand (2009)	Personalization, information quality, website usability, responsiveness, reliability, assurance
Schefter (2000) and Reichheld	Customer support, on-time delivery, fascinating product presentations, convenient and reasonably priced shipping and handling, clear and trustworthy privacy
Zeithaml, Parasuraman, and Malhotra (2000)	Efficiency, reliability, fulfillment, confidentiality, responsiveness, reimbursement, and contact
Munusamy et al. (2010)	Assurance, responsiveness, empathy, tangible, reliability
Szymanski and Hise (2000)	Suitability, Merchandising, Easiness, Information, Deign, security
Gommans, Krishnan, and Scheffold (2001)	Website & Technology, Value Proposition, Customer Service, Brand Building and Trust & Security
Yoo and Donthu (2001)	Ease of use, aesthetic design, processing speed, and security
Ganguli and Roy (2011)	Technology security and information quality, technology convenience, technology usage easiness and reliability, customer service
Loiacono, Watson and Goodhue (2002)	Information fit to task, interactivity, trust, responsiveness, design, intuitiveness, visual appeal, innovativeness, websites flow, integrated communication, business process and viable substitute, accessibility, speed, navigability and site content.
Anderson and Srinivasan (2003)	Convenience motivation, purchase size, inertia, trust and perceived value
Bedi (2010)	Assurance, empathy, reliability, responsiveness, tangible product availability, product convenience, interaction
Zeithaml,Parasuraman&Malhotra in (2000)	Efficiency Fulfillment, System availability, Privacy, Responsiveness, Compensation and Contact
Cho Yoon, and Joseph Ha (2008),	Ease of use, Usefulness, involvement, information factor, Convenience, technology, Community Factor, Entertainment Factors, Brand Name, Price Factor
Nadiri, et al (2009)	Desired, adequate, predicted and perceived service quality

Objectives of the Study

The study has been designed considering the following objectives.

☐   To find out the factors/parameters regarding customers' satisfaction of mobile banking services in Bangladesh.

☐ To see the perceived gap between customers' expectation and current service quality.

☐ To classify the gaps among 'Critical', 'Highly Critical' and 'Less Significant' categories so that management can give emphasize based on the category to improve the customers' satisfaction.

Methodology

With a view to knowing the customers' satisfaction by identifying the gap between customers' expectation and current service quality of mobile banking services in Bangladesh, a total of 500 respondents were selected from all over the country. Sample size distribution with respect to divisions and demographic characteristics of the respondents are given in Appendix-A. Data was collected covering all divisions of Bangladesh. In each division 2 to 4 districts were selected purposively and then from each selected district 2 to 4 Upazila/Thana were also selected purposively. The respondents were selected using judgment sampling method due to the absence of a complete list of customers which was not provided by the banks due to legal barriers. Respondents were then selected in each stage, i.e., from divisional cities, district headquarters and Upazila/Thana/Union/Pourasava level. Finally, 7 Divisions, 18 Districts and 60 Upazila/Thana are covered to select respondents. Data collection was done through personal interview.

After review of the literature and the dimensions identified by various researchers some important construct/parameters of customers' satisfaction were extracted to conduct the study are summarized in the following table (Table-2).

Table 2: Parameters of the Study and Description

S. No.	Construct	Description
1	Availability of Services	Up-to-date technology (USSD/software/Apps), Availability of agents, SMS alerts.
2	E- Requirement	Range of services offered, availability of network, digitalization of business information, Diversity of services.
3	Accuracy	Error free services of this channel.
4	Efficiency	Swiftness of service (withdrawal, depositing, enquiry, getting information, money transfer, response etc.), instant and quick transaction and check out with minimal time.
5	Security	Faith, confidentiality, confidence. Anxiety of money losses, fraud, PIN, password theft; hacking etc.
6	Responsiveness	Problem management, retrieval of the problem, quick service, timeliness service, assisting nature, agentcurtsey, recovery of PIN, password and money losses
7	Easy Operations	Easy to use & functioning of Mobile banking.
8	Convenience	Tailored services, anywhere and anytime banking, suitable language support, time saving.

S. No.	Construct	Description
9	Cost Effectiveness	Price, fee, charges (commission for fund transfer, interest rate, transaction charges, and charges taken by telecommunication operators).
10	Problem Handling	problem resolving process regarding mobile banking services
11	Settlement of Grievances	Recovery of the losses regarding to problems and inconvenience occurred in using M-banking channels.
12	Contact and Help Desk Support	Communication in bank and customer or customers to bank (e-mail, SMS, Phone, interactive website and call center).
13	Brand Perception	Clients overall observation according to promises given by bank.
14	Perceived Value	Combined perception from banking service in term of perceived quality and money used for getting banking services.

A five-point Likertgauge extending from 'very poor' to 'excellent' or 'strongly agree' to 'strongly disagree' was adopted as the scale for the statements in the questionnaire. The survey questionnaire was designed using 17 questions relating to the objectives of the research. Among the questions, 14 were related to the parameters mentioned in table-2. Another three questions were added to see the overall customers' satisfaction and loyalty towards the bank.

The present study considers mobile baking services provided by all 18 banks and adds value by exploring the issues that influence the customers' satisfaction in the context of Bangladesh.

Results and Findings

Table-3 summarizes the customers' satisfaction regarding mobile banking with respect to different parameters (ex. availability, accuracy, security, etc.). Satisfaction Score is calculated by the following formula for each parameter.

$$Satisfaction\ Score\ (\%) = \frac{\sum_{i=1}^{n} S_i}{n \times HS} \times 100$$

Here, $\sum_{i=1}^{n} S_i$ is the sum of scores of n respondents for each question/parameter to understand the satisfaction level. *HS* is the highest score assigned for each question. Actually, we have calculated the satisfaction level of customers for each question as a percentage of maximum satisfaction a customer expects from a bank. In this study we have used five-point 'Likert' Scale 'Very Poor: 1 Poor: 2 Good:3 Very Good: 4 Excellent: 5' or 'Strongly Disagree: 1 Disagree: 2 Neutral: 3 Agree: 4 Strongly Agree: 5', where necessary.

Table-3: Mean and Satisfaction Score

S. No.	Parameters	Mean	Satisfaction Score (%)	Gap	Comments
1.	Availability of Online Banking Services	3.77	75	25	Critical[**]
2.	E- Requirement	3.41	68	32	Highly Critical[***]
3.	Efficiency	3.69	74	26	Critical
4.	Accuracy	3.98	80	20	Less Significant[*]
5.	Security	3.05	61	39	Highly Critical
6.	Responsiveness	3.46	69	31	Highly Critical
7.	Ease of Operations	3.42	68	32	Highly Critical
8.	Convenience	3.34	67	33	Highly Critical
9.	Cost Effectiveness	3.67	73	27	Critical
10.	Problem Handling	2.81	56	44	Highly Critical
11.	Settlement of Grievances	2.62	52	48	Highly Critical
12.	Contact and Help Desk Support	2.77	55	45	Highly Critical
13.	Brand Perception	3.14	63	37	Highly Critical
14.	Perceived Value	3.43	69	31	Highly Critical
15.	Overall Customer Satisfaction	3.05	61	39	Highly Critical
16.	Continue with this Bank	3.45	69	31	Highly Critical
17.	Recommend this Bank to Others	2.78	56	44	Highly Critical

***A service gap of close to 30 and more than 30 was considered to be 'highly critical'.
**A service gap of between less than 30 and more than 20 was considered as 'critical'.
* A service gap below 20 is treated as 'less significant'.

Out of 100 the satisfaction score of the parameter 'Availability of Services' is 75 which indicates a good infrastructure of mobile banking services in Bangladesh including up-to-date technology (USSD/software/Apps), availability of agents and after transaction SMS alerts. In case of accuracy of operations, highest satisfaction (80%) is seen which implies that mobile banking helps bankers to reduce operational errors hence classified as 'Less Significant'. Bottommost satisfaction (52%) is found for handling grievances which states to recover the losses regarding to problems and troublesomeness occurred in using m-banking channels. That means customers are not getting appropriate and quick help after complaning for any dispute. Special attention can be taken in this regard. Moreover, overall customers' satisfaction 61% implies that though mobile banking adopted in our country very widely and rapidly, there are enough scopes to develop good customer relationship by satisfying them more. However, with this level of overall satisfaction (61%) the customers would like to continue their relationship with the bank for the time being, but they don't like to recommend other customers to make a new relationship with that bank. This might lead the customer to search a better bank in the long run putting questions regarding customer retention policy of the bank.

Gaps between 'highest expectation' and 'current service quality' of different parameters were measured purely on the basis of the percentage of satisfaction values for each question/parameter comparing with a reference score '100' which was considered to be the highest and that any organization should like to achieve for outshining. A service gap of close to 30 and more than 30 was considered to be 'highly critical' area for the improvement of the performance dimensions. A service gap of between less than 30 and more than 20 was considered as 'critical' and further needs for improvements and service gap below 20 is treated as 'less significant'.

Figure- 1: Gap between Expectation and Current Service Quality

Source: Author's Survey

From figure-1 and table-3 we also see that scope of services offered, availability of network, digitalization of business information and variety of services (E- Requirement)

are termed as 'Highly Critical'. That is customers are demanding diversified products and services with more account information like e-statements. Security features of the banking like trust, privacy, confidence; fear of money losses, fraud, PIN, password theft and hacking etc. are not seen in a highly satisfactory state. As a result, it is termed as 'Highly Critical' factor for the management. Responsiveness (problem handling, recovery of the problem, prompt service, timeliness service, helping nature, agent curtsey, and recovery of PIN, password and money losses) is also found as a 'Highly Critical' factor which must be addressed carefully to give more pleasure to the customers.In this research 'convenience' was termed as customized services, anywhere and anytime banking, appropriate language support and time saving. The calculated gap between the expectation and satisfaction score is 33, which is termed as 'Highly Critical'. It means that still number of agents is not adequate in Bangladesh to provide the services and most of the services like cash-in and cash-out are not available for 24 hours which mainly depends on the availability of agents. As agents generally run their outlets mostly on business hours and not on a 24-hour basis like an ATM, customers sometimes fail to get services in case of emergencies mainly in rural and sub-urban areas. Absence of Bengali operational menu is also a problem for those customers who are not familiar with English language. It is also found that the use of this channel is not so easy due to the technical complexities and lack of proper awareness. As a result, 'Ease of Operations' is also considered as a 'Highly Critical' factor dissatisfying most of the customers. The parameter 'Efficiency' which considers speed of service (withdrawal, depositing, enquiry, getting information, money transfer, response etc.)is termed as a 'Critical' factor also seeks attention from mobile banking service providers. Problem solving process regarding mobile banking services is also found as a very serious factor of customers' satisfaction and in case of any problem customers fail to get quick and responsive help from the bank due to the poor support from the bank through call center or help desk. As a result,'Contact and Help Desk Support' is also termed as 'Highly Critical' factor in this research which include communication between bank and customer through e-mail, SMS, Phone, interactive website and call center. Though the price/fee/charges, -i.e. commission for fund transfer, interest rate, transaction charges, and charges taken by telecommunication operators (which is termed as 'Cost Effectiveness') is very high compared to other online delivery channels like ATM, Internet banking, etc.; mobile banking customers are not worry about that because this channel is very easily accessible anywhere and it takes least time to get the service. As a result, this factor is identified as 'Critical'. Customers' overall sensitivity according to commitments given by bank for banking services and combined perception from banking service in term of seeming quality and money spent for receiving banking services are also thought as a 'Highly Critical' factor in this research because of the poor satisfaction score.

Conclusion

The study is an effort to discover the gap between customers' expectation and apparent service quality and their influence on customers' satisfaction. Studying several literatures, a set of parameters of service quality were selected to study. By conducting a self-administered questionnaire survey and analysis, we identified that e-requirement,

security, responsiveness, convenience, ease of operations, problem handling, settlement of grievances, contact and help desk support, brand perception and perceived value are the major dimensions of seeming quality of services that must be addressed for mobile banking services in the perspective of Bangladesh. Moreover, overall customers' satisfaction indicates that though mobile banking adopted in our country very widely and rapidly, there are enough scopes to develop good customer relationship by satisfying them more. However, with this level of overall satisfaction the customers would like to continue their relationship with the bank for the time being, but they don't like to recommend other customers to make a new relationship with that bank. This might lead the customer to search a better bank in the long run putting questions regarding customer retention policy of the bank. The findings of the research will benefit the organization to decrease the gap between the demand of clients and current offered facilities. Though there are some limitations, the results of the study might help as a bridge for upcoming research in this area.

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Appendix-A

Table-1: Sample Size Distribution w.r.t Bank-types and Divisions

	District Covered	Mobile Banking Users
Dhaka	5	109
Chittagong	3	65
Khulna	3	65
Rajshahi	3	65
Barisal	2	43
Sylhet	2	43
Rangpur	3	65
Mymensingh	2	43
Total	23	500

Table-2: Sample Size Distribution w.r.t Characteristics of the Respondents

Demography of the Respondents		Active Registered Users	Total
Gender	Male	421	500
	Female	79	
Age	18-30	287	500
	31-40	125	
	41-50	85	
	51-60	3	
	60+	0	
Education	Illiterate	35	500
	Primary	64	
	Secondary	85	
	H. Secondary	124	
	Graduate	160	
	Post Graduate	32	

Demography of the Respondents		Active Registered Users	Total
Income Per Month (BDT)	0-5000	3	500
	5000-10000	65	
	10000-20000	95	
	20000-50000	175	
	50000-100000	120	
	100000+	42	
Occupation	Day Laborer	7	500
	Student	107	
	Housewife	59	
	Govt. Service	41	
	Private Service	121	500
	Business	138	
	Agriculture	7	
	Others	20	

Health and Hygiene for the Improvement of Travel and Tourism Competitiveness: A Review of South Asian Context

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Abstract

Travel and tourism are one of the most important elements of the economic development, as well as of countries' tourist competitiveness. Taking that into account, it is necessary to include wide spectrum of information which influence tourism competitiveness. For that purpose, the Travel and Tourism Competitiveness Index (TTCI) has been developed, which does not show the list of countries attractive for the tourists, but stands for the index for the measuring of factors which contribute to the travel and tourism development. Health and hygiene are of crucial importance for many tourists choosing the destination and planning to visit one country so it is considered as an important index to measure travel and tourism competitiveness. On the basis of this index, this paper analyses the travel and tourism competitiveness, in relation to the countries in the South-Asian countries.

Keywords: *Hygiene and sanitation; destinations; competitiveness; tourism; TTCI; health and hygiene*

Introduction

A good quality of sanitation facilities, appropriate accommodation, fresh drinking water and food inspire a hope amongst tourists for a destination that is able to deliver services with these attributes. In accordance with the rapid growth of travel and tourism industry, it is of significant importance to maintain the consistency records and implement strategies. The competitiveness of travel and tourism industry should highlight the factors that are interconnecting to generate the development goals. This study extends to research in the area of how the hygiene and sanitation safety can potentially increase the performance of any destination as a host to its tourists. The benefits of this role can be reserved for both the parties; host and the guests.

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Tourism destinations can be the role model of freshness in terms of global wellness and health security. Most of the time, tourists want to grab the better comfortable experience when they visit any destination. If the tourist destinations are not clean, travelers will lose their interest and ultimately the business will go down. There are considerable diseases happening due to inadequate water, sanitation and hygiene facilities and practices, particularly in over-crowded destinations of the developing countries.

Asia-Pacific is known as the second-most competitive region in terms of travel & tourism (T&T). The region possesses the best combination of natural and cultural assets. To retain tourism sector one of the influential earning sectors as well as to promote the sustainable growth, governments should work as international partners and set the global benchmarks to develop the T&T sector.

Hygiene and sanitation are the most cost-effective public health interventions. This study analyses the essential importance of proper sanitation facilities and its impact that it can have on tourism. According to the T&T competitiveness index, health and hygiene has six (6) indicators and one of the core essentials. If any destination lacks the proper maintenance in the standards for hygiene safety, water supply and sanitation, it may create the negative impact in the prospects of T&T sector and tourists may feel discouraged from visiting a country. A well-developed, sustainable management of local infrastructural system has become necessary for the appropriateness of tourism amenities and attractions.

To measure the existence of threats to health, this investigation refers Sustainable Development Goals (SDGs) as the agenda directly focused on health and on nutrition and water supply and sanitation. This research paper will look at the water, sanitation and hygiene problems of South Asian region that tourists destinations are facing today, as well as the concerned people in accordance with the global competitiveness score in travel and tourism.

Literature Review

Tourism works as an important economic sector for the people of a country specially the local people of a tourist destination can greatly be benefited by this sector. It can bring a radical change in the social and economic wellbeing of the local population. To develop tourist destination public and private sectors put huge investment to improve the overall infrastructural and non infrastructural section of that particular destination. Whether it is a nature based or manmade tourist spot planned way of development can make it an economically profitable as well as environmentally sustainable project. The complexity and diversity of tourism industry make it a competitive industry. This competitiveness depends on various relative factors. (Vanhove, 2006). Ritchie and Crouch (2005) point out that "what makes tourist destination really competitive is its ability to increase tourist consumption, to attract as many visitors as it is possible, giving them pleasure and unforgettable experiences, and to do it in the profitable way, for the population well-being of the certain destination, and to preserve the natural resources of the destination for the future generations". So it can be easily assumed more competitiveness in tourism industry will attract more tourists more tourists will spend more money on their visit to the destination which eventually will contribute to the GDP of the country and also improve

overall economic condition of the local people. However, in real scenario sometimes the result is quite different (Croes, et.al. 2013). In practice another factor needs to give equal importance and that is the environmental factor (Page, 2011). The balance between competitiveness and environmental factors ensure a balanced growth which results in sustainable development. This balanced growth also creates a positive impression on tourists as every tourist prefers a development in harmony with nature and culture (Dwyer et al. 2011).

Travel and tourism Competitiveness:

Tourism Marketing or destination marketing has recently become a very popular field of research (Lin and Hung, 2008). In marketing competitiveness study is one of the most widely used topic to identify the market position of a particular product or in this case a tourist destination. Due to the effect of globalization the competition in tourism industry has been shifted from a country's internal destination competition to completion among different countries. The degree to which a country can be benefitted from its tourism sector is largely depends on its competitive position in the international market (Gomezelj and Mihali, 2008). Travel and tourism competitiveness index by World Economic Forum aims to measure the factors and policies of tourism competitiveness of different countries. TTCI categorize the competitive factors of tourism in four specific segments. Each segment further divided into fourteen specific pillars. Figure 1 is showing the segments of TTCI competitiveness frame work
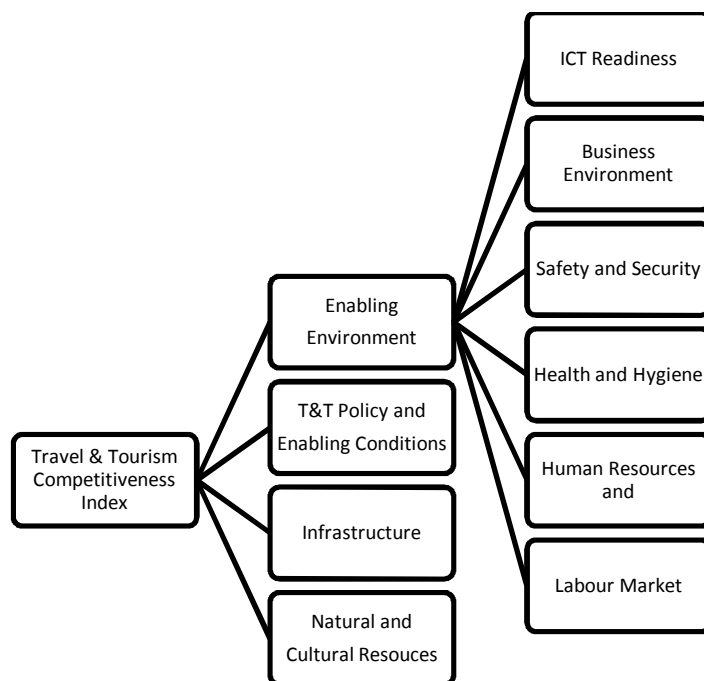

Figure 1: The T&T Competitiveness Index 2015 framework (TTCI, 2015)

Here in the figure it portrayed that to ensure a competitive environment which is conducive for tourism investment six important pillars are necessary among them health and hygiene is one.

The relation of Travel and Tourism's competitiveness with health and hygiene:

In most cases the research on this issue has been conducted covering the health and hygiene aspects of a travelers to a particular location, knowledge and awareness of a traveler about the health and hygiene issue, medical facilities for a traveler in case of sudden sickness and lastly the economic or administrative consequences in case of a tourist's ill health (Bauer I. 1999).

Health and hygiene is an essential for T&T competitiveness. Access to improved drinking water and sanitation within a country is important for the comfort and health of travelers. And in the event that tourists do become ill, the country's health sector must be able to ensure they are properly cared for, as measured by the availability of physicians and hospital beds. The extent to which the government prioritizes the T&T sector also has an important impact on T&T competitiveness. By making clear that Travel & Tourism is a sector of primary concern, and by reflecting this in its budget priorities, the government can channel needed funds to essential development projects for the T&Tsector. This can also send a signal of the government's intentions, which can have positive spillover effects such as attracting further private investment into the sector. Prioritization of the sector can be reflected in a variety of other ways as well, such as government efforts to (WTTC, 2013). Destinations where accommodation, hygiene and sanitation, medical care and water quality are of a high standard pose relatively few serious risks for the health of travelers, unless there is pre-existing illness. This also applies to business travelers and tourists visiting most major cities and tourist centre and staying in good quality accommodation. In contrast, destinations where accommodation is of poor quality, hygiene and sanitation are inadequate, medical services do not exist, and clean water is unavailable may pose serious risks for the health of travelers. This applies, for example, to personnel from emergency relief and development agenciesor tourists who venture into remote areas. In these settings, stringent precautions must be taken to avoid illness (ITH, 2009).

Indicators of health and hygiene factor in tourism:

Few international research findings support the view that sanitation includes far more than toilets, but a range of elements, which are interrelated and of equal importance, such as physical infrastructure, disposal of waste water and solid waste, safer living environments and knowledge of sanitation-related health practices. According to WTTC competitiveness index there are six specific indicators which shows the health and hygiene competitiveness required in case of travel and tourism. Following table shows the indicators of health and hygiene.

Health and Hygiene Competitiveness Criteria
1. Physician density per 1,000 pop.
2. Access to improved sanitation (% pop.)
3. Access to improved drinking water (% pop)
4. Malaria incidence per 100,000 pop.
5. Hospital Beds per 100,000 pop.
6. HIV Prevalence % adult pop.

Table 1: Health and Hygiene Competitiveness Criteria

Source: The Travel & Tourism Competitiveness Index 2017

Despite the economic benefits of the tourism sector, it has been recognized as a potential hazard to public health when pure drinking water, solid foods and sanitized public toilets, is not well prepared. Both foreign and domestic tourists are always aware of and urge the authority to prioritize hygienic imbalance and climate change fallouts so that they do not have to suffer anyway repeatedly. Given this scenario, the purpose of this study was to examine hygiene practices and the necessities of improving health and sanitation safety assurance to increase competitiveness of the tourism sector of Bangladesh. Though Bangladesh Government's related ministries have some prime programs however require further scientific assessment.

Brief Competitiveness of South-Asia T&T Sector

In accordance with the report of Travel and Tourism Competitiveness Index 2019, South Asia is the most improved region since 2017. India, Nepal, Sri Lanka, Bangladesh & Pakistan are the South Asia sub regional countries. Amongst the five countries, India ranked 34 among 140 countries and behind all South-Asian competitors. The report also published that the particular sub region is experiencing the most rapid score growth but environmental sustainability is still a challenge. Safety and security and health and hygiene are the other key weaknesses of the sub-region.

The report finds that while South Asian countries have made improvements in Health and Hygiene sector. Sri Lanka is the only country to decrease in competitiveness 64th to 77th in South Asia. Despite the downtrend, Sri Lanka maintains a standard position 72nd in comparison to other five countries in health and hygiene index component while Nepal's position is the least 106th amongst the five countries. Overall South Asia had improved the performance of its T&T sector in the last decade, but it is still struggling to catch with other developed and developing regions.

Methodology

In this study the secondary data has been used from World Economic Forum's report on travel and tourism competitiveness index (TTCI). World Economic Forum produced this index report every alternative year. This index aims to measure the factors and policies related to ensure travel and tourism competitiveness of different countries of the world. The subject in this paper is the analysis of health and hygiene, as the pillar of the TTCI,

and its impact on the travel and tourism competitiveness in South Asian region. By comparative analysis, the values of this pillar in Bangladesh are compared with the values of the same pillar calculated for the South Asian countries (India, Nepal, Sri Lanka and Pakistan). This paper analyzes the connections among some TTCI elements and the total TTCI. The following hypothesis has been established: physician density per 1,000 inhabitants, access to improved sanitation, access to improved drinking water and hospital beds per 10,000 habitants have equal importance for the improvement pillar - health and hygiene as important element of the tourism sector competitiveness.

Taking into account the structure of the TTCI, the aim of this paper is to determine the degree of impact of the value of some components included in the pillar health and hygiene on its total value, as well as the level in which the value of the pillar health and hygiene affects the value of the sub index regulatory framework and the total value of the TTCI. Therefore, what should be investigated are the impact of health and hygiene on the competitiveness, as well as the components of this pillar that should be improved for the tourist competitiveness increase. This paper is mostly based on the analysis of the TTCI values for the countries included in the analysis. Furthermore, the value of the sub index regulatory framework, which includes the pillar health and hygiene, is explained. The detailed analysis is focused on the health and hygiene pillar values and its components for each of the observed countries.

Findings and Discussion

South Asia is a versatile area for travel and tourism. Many countries of this region play a significant role in T&T market and also showcasing a promising future. Following table 2is presenting the key indicators relevant to tourism industry in South Asian countries available for 2018 and 2019 year. Within observed group of countries it is evident that a highest international tourist arrival has India. The lowest international tourist arrival noticed at Nepal. Countries with highest share of travel and tourism industry in total GDP are India and Sri Lanka, while countries with highest share of travel and tourism employment in total national employment are also Sri Lanka and India.

Key indicators relevant to tourism industry in South Asian countries					
	Bangladesh	India	Sri Lanka	Pakistan	Nepal
GDP per capita	1,749.33	2,104.20	4,099.12	1,196.60	1,034.00
T&T industry GDP (% of total) 2019*	4.4	9.2	12.5	7.1	7.9
T&T industry Employment (% of total) 2019*	3.9	8.1	12.1	6.3	6.7
International tourist arrivals	1,026,044	15,543,000	2,116,400	1,750,000	940,000

Table 2: Key indicators relevant to tourism industry in South Asian countries

Source: World Economic Forum 2019. The Travel and Tourism Competitiveness Report 2019
*T&T industry in this table presents only direct contribution of this industry to total GDP and employment. According to WTTC, if we consider

Following table is showing the value of travel and tourism competitive position of in the process of studying the total values of the Travel and Tourism Competitiveness Index, the Reports about five South Asian Countries. The competitiveness index for 2011, 2013, 2015, 2017 and 2019 were taken into account from World Economic Forum presents Travel and Tourism Competitiveness Report. It demonstrates a comparative analysis of different South Asian country within the passage of time. From the first row it shows Sri Lanka is the highest GDP producing country among the other south Asian countries and also the higher percentages of income of the country has been earned by travel and tourism industry in respect of other countries. It also creates a larger amount of employment opportunity through travel and tourism industry. One tourist creates ten jobs for others. India is the second largest country which is producing income opportunities from travel and tourism sector in South Asia. Pakistan and Nepal is comparatively almost same position in case of income creation from travel and tourism. In spite of having enormous opportunity Bangladesh is not creating that much job opportunity from travel and tourism compare to other South Asian countries.

World Ranking of Travel and Tourism achieved by TTCI										
	2011		2013		2015		2017		2019	
Country/Year	World Rank	Rank in the group	World Rank	Rank in the group	World Rank	Rank in the group	World Rank	Rank in the group	World Rank	Rank in the group
Bangladesh	129	5	123	5	127	5	125	5	120	5
India	68	1	65	1	52	1	40	1	34	1
Sri Lanka	81	2	74	2	63	2	64	2	77	2
Pakistan	125	4	122	4	125	4	124	4	121	4
Nepal	112	3	112	3	102	3	103	3	102	3

Table 3: World Ranking achieved by TTCI for the period of 2011, 2013, 2015, 2017 and 2019.

Source: Travel and Tourism Competitiveness Report 2011, 2013, 2015, 2017 and 2019

By analyzing the ranking of countries by the stated years, it can be noticed that India has the best position. In2011 it was on the 68th place and in 2013 on the 65th place in the rankings. Moreover a tremendous jump seems in 2017 to 2019 by increasing its position from 40th to 34th Pakistan and Nepal maintained more or less the same position in the rankings, taking into account their total score. On the other hand, Bangladesh and India has significantly improved their position related to 2017 to 2019. It shows Bangladesh improve its position five step ahead from 125th to 120th in travel and tourism competitiveness index of world ranking. But the position among other South Asian country is pretty poor.

The scores and ranks of countries according to the health and hygiene pillar															
Country/ Year	2011			2013			2015			2017			2019		
	Score	Rank in the World group	Rank in the group	Score	Rank in the World group	Rank in the group	Score	Rank in the World group	Rank in the group	Score	Rank in the World group	Rank in the group	Score	Rank in the group
Bangladesh	2.6	114	5	2.8	114	5	4.2	107	5	4.3	107	5	4.5	2
India	2.6	112	4	3.0	109	4	4.3	106	4	4.4	104	4	4.4	4
Sri Lanka	4.3	81	1	4.3	83	2	5.2	71	1	5.3	71	1	5.3	1
Pakistan	3.0	107	3	3.3	107	3	4.4	102	3	4.5	101	3	4.5	3
Nepal	3.3	102	2	6.0	30	1	4.9	86	2	5.0	85	2	4.3	5

Table 4: The scores and ranks of countries according to the health and hygiene pillar values within the period 2011- 2019

Source: Travel and Tourism Competitiveness Report 2011, 2013, 2015, 2017 and 2019

This table illustrates that in 2011 to2019, the best country within the observed group was Sri Lanka. Sri Lanka was on the 81st position in the world according to this pillar in 2011. On the basis of the pillar values, according to the latest report of the World Economic Forum, Bangladesh is on the 107th position, whereas in 2011, it was on the 114th.In the case of Nepal, Pakistan and India one can notice oscillatory trend in the health and hygiene pillar value, where Nepal significantly increased the ranking, while Pakistan and India recorded pretty consistent growth. The increase in the value of the observed pillar was recorded in Sri Lanka, which had significant progress. Although the position of Bangladesh has changed in time because of the number of countries included in the report, the pillar value was constantly rising within the range from 4.3 to 5.3.

The performance of Sri Lanka in Health and Hygiene index is best for last ten years. Among the South Asian countries it holds number one position in 2011, 2015, 2017 and 2019. Nepal manages to holds second position. Between India and Pakistan, Pakistan is comparatively in a better position as the third best country in case of health a hygiene index in South Asia. Unfortunately the country Bangladesh is in fifth position for last ten years.

In the next portion of this article a closer observation has been revealed about the elements of health and hygiene index. Earlier it has been mentioned that the health and hygiene index depends on four indicators. Availability of physician, pure drinking, sanitation, number of beds in a hospital; these are the indicators of health and hygiene index.

Health and Hygiene Criteria	Bangladesh			India			Nepal			Pakistan			Sri Lanka		
	2013	2015	2017	2013	2015	2017	2013	2015	2017	2013	2015	2017	2013	2015	2017
1. Physician density per 1,000 pop.	0.3	0.4	0.4	0.7	0.7	0.7	0.2	0.2	0.2	0.8	0.8	0.8	0.5	0.7	0.7
2. Access to improved sanitation (% pop.)	56.0	57.0	60.6	34.0	36.0	39.6	31.0	37.0	45.8	48.0	48.0	63.5	92.0	92.0	95.1
3. Access to improved drinking water (% pop)	81.0	85.0	86.9	92.0	93.0	94.1	89.0	88.0	91.6	92.0	91.0	91.4	91.0	94.0	95.1
4. Hospital Beds per 100,000 pop.	3.0	6.0	6.0	9.0	7.0	7.0	50.0	50.0	50.0	6.0	6.0	6.0	31.0	36.0	36.0

Table 5: Elements of the health and hygiene index of south asian countries.

Source: Travel and Tourism Competitiveness Report 2013, 2015 and 2017

Within the health and hygiene pillar, four components are observed; whose scores make the pillar values. The data about these components are the so-called "hard" data, received from the international organizations or from national sources. In addition, there is data discord in relation to the year they date from and the year for which the component value is calculated. Examining the component the physicians' density per 1000 inhabitants, the constantrise of its value is noticed in Bangladesh and Sri Lanka. Their position on the list oscillated, depending on the number of countries included in the ranking. On the opposite side India, Pakistan and Nepal recorded insignificant value changes within the period from 2011 to 2017. If the ranking of these countries is observed, a consistent trend on the list will be noticed.

The next component refers to improved sanitation and it is presented in percentage terms in relation to the population. Sri Lanka is the only country within the observed countries in which 95% of the population had access to good sanitation over all analyzed years. Slightly lower percentage (50% - 80%) is recorded in Bangladesh and Pakistan. A notable fact is that in 2017 Pakistan able to achieve a better percentage in case sanitation. In India and Nepal, the population access to improved sanitation increased over the course of years (30% - 45%). All countries recorded improvement in relation to this component, which contributed to the improvement of the values of the pillar health and hygiene.

Beside sanitation, access to improved drinking water is also taken into consideration and expressed in terms of percentage. None of the analyzed countries in this paper have 100% access to sanitary safe drinking water for all inhabitants and percent ageranges from 95% to 90%. Sri Lanka, Pakistan, India are dominant over other countries from the group.

The number of hospital beds is an important component in the process of evaluating the competitiveness of a certain destination. Apart from the sufficient number of physicians, it

is also important for a country to have enough hospital beds in the health centers. Nepal is highly ranked (in 2017 – the 50rd position) on the basis of this component, having 3650 beds per 10.000 inhabitants. Sri Lanka has slightly fewer beds. According to the report of 2017 the component value within the pillar health and hygiene, there are 6 beds per 10.000 inhabitants. The situation for India and Pakistan is almost similar; these two countries have lower number of beds. Among the analyzed South Asian countries; Bangladesh, India and Pakistan fall behind concerning the available hospital beds in relation to the total number of inhabitants. Most of the time, tourists want to grab the better comfortable experience when they visit any place. If the tourist destinations are not clean, it will keep away the tourists and ultimately the tourism business will go down. There are considerable diseases happening due to inadequate water, sanitation and hygiene facilities and practices, particularly in over-crowded destinations.

Hygiene and sanitation are the most cost-effective public health interventions. This study analyses the essential importance of proper sanitation system and its impact that it can have on travel and tourism competitiveness index. As per the current statistics, Most of the South Asian countries are not maintaining the standards in hygiene safety, water supply and sanitation in comparison with other countries and affecting the tourism prospects. A well-developed, sustainable management of local infrastructural system has become necessary for the appropriateness of tourism amenities and attractions. To retain tourism sector one of the influential earning sectors as well as to promote sustainable growth for the sector, government should work with international institutions driving exports and generating prosperity.

Tourist destinations are supposed be free from pollutions, unhygienic conditions. The tourism industry does not only deal with the responsibility to let people enjoying the best scenic beauty of any nations but should fulfill all the requirements of making a tourist happy and healthy. Hygiene and sanitation issues may become one the prime reasons that can resist tourists not to visit the destinations.

Conclusion

The above analysis expresses the relation between health and hygiene with travel and tourism competitiveness. It is in the interests of the travel industry that travelers should have the fewest possible problems when travelling to any destination This study importantly suggesting that it is high time to start project based activities especially in health and hygiene fields and it is imperative that tourist be given a continuously positive experience from arrival through to departure to ensure they leave the destinations with pleasant memories and with a fresh healthy mind. Uncontaminated hygiene and sanitation arrangements have become the essential need of tourists who are traveling around the world. Being a developing sub region South Asia, its existing conditions are poor in terms of hygiene, sanitation, water supply, accommodation and catering providers and offers minimal quality of services. The facilities must be appropriate and, in particular simple, affordable and sustainable for all types of tourists. The proper maintenance of basic

hygiene necessities can be a tool to accelerate the efficiency level of services. It will ensure an active involvement of tourists. This study finds travel and tourism competiveness to be growing around the South Asia. It also assesses the comparison of South Asian countries' health and hygiene components that should be available for the tourists in their own regions. There has been improvement and modernization in the South Asian travel and tourism sector, but the countries need to do more to meet the growth and be competitively able to prevent the challenges. The five countries must have sufficient arrangements and management policies to ensure a positive future for their tourism sector. The proper management of all tourism components will help this region to compete with the highest growing regions.

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An Investigation of Visitors' Satisfaction and Revisit Intention towards Heritage Sites: A Case Study on Puthia Rajbari

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Abstract

Despite the fact that visitors' interest in heritage destinations have increased substantially over the last couple of decades, research on heritage destinations is extremely limited on developing country context. Thus, the main objective of this study is to understand the forces that are the causes of satisfaction or dissatisfaction of visitors at heritage destinations. Simultaneously, the study will attempt to investigate the visitors' revisit intention towards heritage sites. A case study approach is undertaken for this study. Based on expectation disconfirmation theory of satisfaction/dissatisfaction, in-depth interviews were conducted to collect the qualitative information. Convenient as well as judgemental sampling techniques were adopted to reach the research participants. Thematic analysis reveals that history and culture, food and accommodation, cleanliness, safety and security, no information centre, expertise of tourist guide, inefficiency of management along with opportunity of pilgrim tourism all together constructs satisfaction among the visitors. Furthermore, the consequence of satisfaction is revisit intention that results from scenic beauty of the heritage site along with escape from daily routine life. The study suggests that an integrated approach incorporating all the stakeholders related to the heritage tourism should work together to bridge between visitors' satisfaction and revisit intention towards heritage sites.

Keywords: Tourism, Satisfaction, Revisit Intention, Heritage Sites.

1. Introduction

Tourism has become an important global economic and leisure activity due to its growing acceptance and benefits. The industry is developing at a very fast speed. UNWTO defined tourism as "a cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes." People use to travel various places for plenty of reasons which incorporate leisure, recreation, business, visiting friends, health treatment, events and religion (Weaver and Lowton, 2002). Unlike tourism, heritage tourism is not

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perceived by the tourists as solely 'recreational' or 'pleasure'. Even tourism in a historical destination is different from heritage tourism (Poria, Butler, and Airey, 2003).Heritage tourism is defined as the subgroup of tourists who are inspired to visit for the place's characteristics in accordance to their perception about their own culture and heritage (Poria et al, 2003).

Researcher has discussed the close relationships among the psychological variables, such as motivation, attitude, perception, and satisfaction in terms of wide range of visitor destinations such as tourism in urban and rural areas, protected areas and heritage sites (Gnanapala, 2015). In Bangladesh, major tourism attractions incorporates historical and monuments, along with beaches, wildlife of various species, forests, hills and tribal people. Among those, two significant religious sites as well as a bio-diverse area have been listed by the **United Nations Educational, Scientific and Cultural Organization – UNESCO** as World Heritage Sites. The Ruins of the Buddhist Vihara at Paharpur and the Historic Mosque City of Bagerhat have been listed as World Cultural Heritage Sites in Bangladesh. Sundarbans, the largest mangrove forest in the world, is designated as a natural World Heritage Site in the country. In addition to the above mentioned UNESCO declared world heritage sites, there are a number of cultural heritage sites in Bangladesh that have immense cultural values and so of tourism potentials. Puthia Rajbari[2] is viewed as a rich cultural heritage site in the Northern Region of Bangladesh.

Puthia is a sub-district under Rajshahi Division, the Northern Region of Bangladesh. Puthia Rajbari was constructed during 1895 by Rani[3] Hemanta Kumari in memory of Maharani[4] Sarat Sundori Devi, her mother-in-law (Puthia Rajbari to house a museum, 2018). According to local myth along with historical review, during the period of Mughal Emperor's rule (1556-1605), Puthia Zamindari was established. Initially, Puthia was a village Laskarpur Pargana, named after a certain fief holder Laskar Khan. He enjoyed the fief of Puthia, which would earn about three lakh rupees during the reign of Sultan Alauddin in Bengal (1493-1519). During the era of the Mughals, Laskar Khan opposed the Mughal rule establishment and abstained from paying revenue to the Mughal Govt. Mughal emperor Akbar (1555-1605) took punitive action against him whereby Laskar Khan was evicted from his fief, which eventually was granted to the Zamindar of Puthia.

Heritage tourism is about the interaction of culture, tourism, and experience during the consumption process of tourism (Kay, 2009). On the other hand, consumer satisfaction defined by the researcher is based on the relationship between the consumer's pre-purchase expectations and post purchase evaluations (Engel, Blackwell, and Miniard, 1990; Handy, 1977). Thus, the individuals make travels in destinations in order to consume diverse goods and service. Satisfaction helps to create, develop, and maintain a favorable publicity and goodwill about a visitor destination. Satisfaction is a measure of how products and services supplied by a destination meets or surpasses the customer

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[2] A mansion or palace built as a residence for a king.
[3] A reigning queen or princess (Rani, n.d.).
[4] (Formerly) an Indian princess who was sovereign in her own right (Maharani, n.d.).

expectations. Also, satisfaction is considered as an important performance indicator of a successful destination operation. In a competitive tourism business, customer satisfaction is seen as the main differentiator and increasingly becomes the key element of business strategy (Kotler, Bowen, and Makens, 2010). Thus, repeat visit intention has been shaped by satisfaction which can be derived from various offered services at any destination (Alegre, and Cladera, 2009).

However, satisfaction is predicted by cognition and affect during travel experience (Homburg, Kosschate, and Hoyer, 2006). On the other hand, visitors travel to fulfill their dreams also considered as to have a psychological relief from the motivators that aroused the travel needs. Thus, motivation and satisfaction are closely interrelated like two sides of a coin and visitors determine the travel decisions based on their expectations. Moutinho (1987) describes satisfaction as a function of the relationship between pre travel expectations and post travel experiences. If the visitors can meet the travel expectations during the stay in the destination, they will be satisfied. On the other hand, if they cannot meet the travel expectations, the visitors will be dissatisfied. Also, Oliver and Desarbo (1998) highlighted that if the visitors' expectations are matched with the actual performance of the product or services, he/she will be satisfied. According to Wang, Zhang, Gu, and Zhen, (2009), visitors' satisfaction is a feeling that generate through the cognitive and emotional aspects of tourism activities. It is mainly based on the visitor's expectations, destination image, perceived quality, and perceived value. Since the tourism is highly service oriented industry the service providers should take the necessary actions to maintain the service standards and the quality. Barsky and Labagh (1992) emphasized that the offerings of the high quality services to satisfy the customers as the most important challenge of businesses in the decade of 1990s. In the services sector, especially in hospitality and tourism, customer satisfaction has become a major issue and a challenge since the customers' attitudes, perceptions, personality and the tolerance of ambiguity may differ from person to person. The consumers perceive the same service in different ways, therefore, the standardization of the services are more difficult than the tangible offerings. Consumer satisfaction is important for the future well-being of the tourism and hospitality organizations as well as the sustainable destination managements. National tourism organizations and other destination management organizations have undergone many issues and problems while promoting the available products and services for different target markets. Therefore, tourism and hospitality organizations need to pay more attention in this regard. Despite the fact that these immense potential of the heritage tourism in some rural areas of Bangladesh, research related to heritage tourism is extremely limited. This study will be an attempt to fill that gap. Based on the problem background the objective of this study is to identify the causes and expectations for which visitors choose to visit a heritage destination followed by the factors that affect visitors' revisit intention towards heritage sites.

2. Rationale of the Study

As research on heritage sites is surprisingly limited in the context of Bangladesh, this study supplements the body of literature in the said field. Findings of the study will definitely help the management authority in order to both modifications of policy guidelines and ensure quality of the heritage tourism destination to better serve the expectations of the visitors. As this is the first ever attempt to conduct a research for both satisfaction along with revisit intention towards this specific heritage site; Puthia Rajbari, this can work as a baseline for further research in future in heritage destinations of the country. As it is expected that the findings can be generalized the outcome of the research and can be applied in the same and similar context in future.

3. Literature Review

Tourism as an industry has grown significantly in recent years. People who visit a destination expect their visit and stay to be unique and enjoyable. The quality of the destinations that make the difference and capture the fidelity of the visitors; under this premise, tourism is an activity of great importance both economically and in terms of the pleasure it gives to holidaymakers worldwide. Nearly all individuals in the world take some sort of holiday away from home every year, although the number of days differs across and within different countries. Tourism is also an activity that can divide rich and poor, through a negative or parasitical effect that damages places: 'visitorification' (Leivadi, Yiannakis, and Apostolopoulos, 1996).The image of the destination and the perception of the image of the visitors are constituted in the brand value of a destination. The intention of visit and selection of the place, lends the factors of study visitor and the needs, motivation, perception, attitude, personality, image. Social factors: lifestyle, family life cycle, family, social class; situational factors: opinions, physical and social environment, time, mood. Psychological factors: prestige, escape; physical factors: rest, fitness, health treatment; demographic factors: age, income, education, marital status, beliefs. Satisfaction was a direct antecedent of short-term revisit intention, but not of mid-term or of long-term revisit intention, and that novelty seeking was a significant antecedent of mid-term revisit intention that was connected to long-term revisit intention. (Jang and Feng, 2007).Visitors were satisfied with amenities related to destination management, with a natural attraction to the heritage sites and relaxation facilities and disappointed with facilities such as health and emergency services, transportation services, and information services (Hassan and Shahnewaz, 2014). Sometimes perceived attractiveness is the most important indicator, rather than services. Most international travelers to one destination are more likely to switch to another destination for their next trip, but many of them hope to revisit the same destinations in the future. Visitor satisfaction can be seen as a visitor's post-purchase assessment of the destination (Oliver, 1981). Positive satisfaction has positive influence on their repurchase intentions (Gotlieb, Grewal, and Brown, 1994). Academic literature has confirmed that satisfaction is a good prediction indicator of the visitors repurchasing choices (Tam, 2000) it has also been noted

that visitors who have had a positive experience doing one activity will probably repeat it (Petrick and Backman, 2002). Given the ability of the satisfaction variable to predict future visitors buying behavior, a large set of authors have analyzed, and still analyze, the antecedent events of consumer satisfaction, however fewer works analyze the consequences of satisfaction (Anderson and Sullivan, 1993) and fewer still try to forecast repurchase intentions in the specific case of visitor destinations. Some studies, like the one by Anderson et al, (1993), analyze the likelihood of repurchasing in the services sector, but they focus on an analysis is of consumer satisfaction, without keeping in mind other variables that influence behavior. Therefore, certain key aspects related to visitor satisfaction should be considered such as; which aspects do consumers actually rate, how they rate them, which variables influence this process, and how both concepts influence consumer loyalty do. When consumers rate their level of satisfaction, they do so in relation to the consumer experience (Anderson, Fornell, and Lehmann, 1994). That is to say, they make a global assessment based on the result of all the services they consume or experience. This can be measured as global satisfaction through the attributes experienced (Churchill and Surprenant, 1982). One theoretical approach that determines how consumers rate products is the classic paradigm of the disconfirmation of expectations theory developed by Oliver (1980). According to this theory, consumers do not simply assess the result of a purchase, but the outcome in relation to their expectations of it. Consumer expectations influence the result of the assessment, because the higher these expectations are the more likelihood there is of a consumer being disappointed and vice versa in the case of lower expectations. These expectations are formed over the course of time, based on marketing, word-of-mouth information, the individuals' experience of the product in the past, and their personal characteristics. Empirical studies in literature have shown that satisfaction influences the likelihood of consumers remaining loyal toa company. Empirical evidence from numerous studies, demonstrates that satisfaction has a positive influence on post-purchase behavior, and that it helps determine the intention whether or not to repurchase a product, or re-use a service in the future (Oliver, 1980). More specifically, in the field of tourism, Baker and Crompton (2000) and Petrick (2004) found empirical evidence of the influence of satisfaction on visitors' future behavioral intentions. Likewise, several studies have shown that it is highly probable that a non-satisfied consumer will never revisit a destination states that an increase in satisfaction does not lead to the same increase in consumer loyalty. In the same sense, Lee, Petrick, and Crompton, (2007) do not obtain a significant relationship between satisfaction and the revisiting intention to a festival. Therefore, the intensity of the relationship can differ, depending on the service analyzed, and depending on other variables that might influence the formation of an individual's expectations. These variables include consumers' experience of the service, or person's requirements derived from interaction amongst the supply, the client and his or her travel companions, or interaction between the latter and other clients (Lee et al., 2007).Positive visitor satisfaction will make visitors want to revisit destination. Visitor satisfaction is important because it influences consumption during the visit and the future loyalty of visitors. More specifically, visitors who are

satisfied with their previous travel experience tend to be more willing to revisit the destination and recommend the destination to friends or relatives (Homburg et al., 2006).The study of visitor satisfaction was originally based on the larger concept of customer satisfaction found in general marketing contexts. Satisfaction was defined as "the degree to which one believes that an experience evokes positive feelings" (Rust and Olive, 1994). Also, satisfaction was considered as "a collective evaluation of individual experiences". Oliver's (1980) expectancy disconfirmation model is one of the most commonly adopted approaches for understanding consumer satisfaction in literature (Hsu, Chiu, and Ju, 2004). The theory proposed that consumer satisfaction is "a function of expectation and expectancy disconfirmation" (Oliver, 1980). The expectancy-disconfirmation theory holds that consumers first form expectations of products or service performance prior to purchasing or use. Subsequently, purchasing and use convey to the consumer beliefs about the actual or perceived performance of the product(s) or service(s). The consumer then compares the perceived performance to prior expectations. Consumer satisfaction is seen as the outcome of this comparison (Oliver, 1980). In the purchasing process, consumers compared the actual performance with their expectation of a product, and the gap between the two determines satisfaction. The theory was also commonly applied in the study of visitor satisfaction, which was explained as the result of the discrepancy between pre-travel expectation and post-travel perception (Beerli and Martin, 2004).

Among a wide range of visitor destinations, heritage sites are becoming one of the fastest growing visitor destinations in many regions of the world (O'Leary, Joseph; Morrison, Alastair; Alzua, and Aurkene, 1998; Poria et al., 2003). Despite the fact that a wide range of cultural heritage sites are there in different areas of Bangladesh, research on satisfaction and revisit intention of the visitors in these heritages sites are notably limited. Thus, this paper aims to understand visitors' satisfaction along with revisit intention towards heritage site based on single case study on Puthia Rajbari. In doing so, this paper concentrates on various aspects of tourism and the satisfaction along with revisit intentions of those visitors to understand specifically the heritage visitors' satisfaction and revisit intention.

4. Research Objectives

It is noted that visitors' overall satisfaction would help to promote an attractive destination image to attract potential visitors and maintain repeat visitors (Moutinho, 1987). Based on this background, it is necessary to understand what leads to visitor's overall satisfaction from both a theoretical and an applied perspective. The broad objective of the research is to identify the causes for which visitors choose to visit a heritage destination. In order to understand the main objective the study will attempt to investigate two related objectives. These are as follows:

1. To understand the expectations of visitors regarding a heritage destination.
2. Identify the factors that affect revisit intention towards heritage sites.

5.   Research Methodology

This study has focused on the visitors of the Puthia Rajbari with a single case study. A case study aims to examine: (a) an extant phenomenon in the real-life context, most of the cases when (b) the edges are unclear evident between fact and context (Yin, 1981). A case study approach has been undertaken to understand causes of visiting heritage sites and revisit intention towards heritage sites. In line with the exploratory nature of this study, a qualitative methodology was adopted. A range of perspectives satisfaction-related questions were documented in addressing the sub-questions Twelve face to face in-depth interviews were conducted with visitors at Puthia Rajbari. Judgmental as well as convenient sampling techniques were adopted to reach the research participants. Hence the aim of this study is to reveal the satisfaction along with revisit intention of visitors towards heritage sites and Puthia Rajbari has been considered as the case, we selected visitors of this specific spot as the research participants. Research participants were selected considering the availability of them on convenient date and time of the researcher. Before starting the interviews, researcher asked for the consent of the prospective research participants by knowing them the reason for the interview. They were provided the semi-structured research questions before interviews so that they could have some idea regarding the case study. Each participant's consent was asked in the meanwhile of their visit at the Rajbari. Researcher asked for the consent of those prospective research participants who seemed more cooperative and knowledgeable to the researcher according to her judgment.

In order to enrich and validate the data, interviews were conducted with practitioners involved with heritage tourism. For diversity purposes, the interviews were taken at several days at the study site. The interviews with the visitors were conducted while they were visiting the destination.

From May 4, 2018 to May 9, 2018 the interviews were conducted. Each interview was minimum 20 to maximum 25 minutes in length. All the interviews were recorded by the researcher with prior permission from the interviewees. Total number of interviews was 12, but the researcher found only 9 interviews usable for this case study. The research participants of those 3 interviews answered maximum questions in yes-no centered way. Their conversations seemed less informative to the researcher so that the researcher could not found any valuable information from those 3 interviews and rejected during data analysis.

Participants were asked research objective related questions by an open-ended question. Hence the interviews were conducted in Bengali; researcher translated each interview in English. Thematic analysis was conducted to develop common themes based on the issues relevant to the research questions as well as objectives. The data analysis identified main themes and possible links between them. Data analysis was straightforward in the sense that the researcher achieved a high level of agreement on the emergent themes.

6. Research Findings

The following parts discuss the destination related eleven factors which influence the visitors' satisfaction levels.

6.1 Scenic Beauty of the heritage site

Interviewees said this destination has strong holistic image. Most of the visitor came here by knowing from other. They want to say this place has good word of mouth publicity because of its holistic image.

> *"When I come first time to this place, the architectural beauty of this Rajbari attracts me. It seems that it is the most beautiful Rajbari in our country. In previous I visited others Rajbari or architectural places. Puthia Rajbari is different from that one. It is very beautiful and a place where people can come again and again"*
>
> *Interviewee no: 6, 8 May, 2018*

6.2 History and Culture

Heritage sites are the places where the visitors can found the history, culture and heritage of different era, mentioned by different respondents. In Puthia Rajbari, the visitors also come to have some knowledge on history and culture of different era of Rajshahi region. According to the interviewees, though we had very rich history and culture, they felt some necessity of more detailed information. They are dissatisfied that they cannot know the details. The absence of proper display and guide make the visitor dissatisfied.

> *"Yes. I like to visit historical place. Before I had visited many historical places: Mahastangor, Natore, Sona mosque etc. That is why I am very much interested to visit here. Puthia Rajbari has a strong and long history. People who know this history are very much interested. But there is lacking in proper display and guide to the visitors."*
>
> *Interviewee no: 8, 9 May, 2018*

6.3 Food and Accommodation

High quality food and beverages play a vital role in any travel experiences. There is an increased recognition for food and beverages as prime travel motivators of visitors. The visitors have to make their own choices about where to stay, what to eat, what to drink and what to do during their holidays. Furthermore, a considerable number of visitors are dissatisfied with the quality and standard of the bathrooms since they equally value the sleeping and bathroom facilities.

> *"There are no available food facilities. At least there will have a food corner. Then guest can pass sometimes, can stay day long. It is very much disappointing".*
>
> *Interviewee no: 1, 4 May, 2018*

6.4   Cleanliness

A considerable number of visitors are dissatisfied with the quality and standard of the bathrooms since they equally value the sleeping and bathroom facilities. Visitors expect well fitted, properly clean, maintained, spacious, and fresh bathrooms.

"It is very disappointing. It is a historical place. Many people are coming here, I saw some foreigner at the morning. It creates a bad image for our country".

Interviewee no: 8, 9 May, 2019

6.5   Safety and Security

As far as sustainable tourism is concerned, the negative behaviors of the local boys badly affect the future well-being of the industry. There is no security guard, so visitors feel insecurity. Interviewees think they can be hampered by muggers.

"Security is not good enough, because there is no security authority. There is no police or BGD[5] or any other security guard. I expect a police or a guard. I think this place is unsecured"

Interviewee no: 6, 8 May, 2018

6.6   No Information Centre

According to interviewee, work is running to construct the museum; they cannot see the museum and also cannot enter the first-floor. Even there is no information centre from where they could have such type information. That is why their knowledge remains incomplete.

"Yes, however I know, it has a great history. It is 400 years old. But much people don't know the history. It is the responsibility of the tourism department to inform people about this history. They can employ visitor guide, make banner to inform people. In first floor work are going for establishing a museum. I can't get the permission to access the first floor."

Interviewee no: 4, 6 May, 2018

6.7   Expertise of Tourist Guide

During the stay at the destination, visitors like to gather more information to upgrade their knowledge. Perhaps, they get somewhat contradictory information from the tour guides when compared to the facts and details that they have collected during the preparation stage of their holidays. Interviewees are negatively disconfirmed for absence of visitor guide.

"I didn't find any visitor guide here. But there are one or two people over here who answer if you ask anything about Rajbari and its history".

Interviewee no: 5, 6 May 2018

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[5] Border Guards Bangladesh- formerly known as the Bangladesh Rifels.

6.8   Inefficiency of Management

Most of the visitors think that the destination is not properly managed. This place is not well decorated. Some place of Rajbari is occupied by land office. And guest is not properly welcome. Visitors are negatively disconfirmed in this construct.

> *"Clean but not neat and clean. Everything is remaining disorderly. It will be good if some people for managing, some flower garden, and cleaner everything. Actually nothing is planned here".*

Interviewee no: 2, 6 May, 2018

6.9   Opportunity of Pilgrim Tourism

Puthia Rajbari has several temples. This place is famous for temples. The people who follow Hindu religious are very much interested to visit these temples. Visitors (especially Hindu) are positively disconfirmed to this place.

> *"I think there have religious image because there is temples, arts on the wall. So interest of Hindu people is more. I came sometimes for religious occasions, fair etc. When I come here, go to the temple, I feel peace in my mind. That's makes me happy".*

Interviewee no: 7, 8 May, 2018

6.10   Escape from Daily Routine Life

Interviewees visit this place during their free time. Without any long term planning they make the decision to visit this heritage site. According to the interviewees, they come in this heritage site to spend some quality time when they have some leisure time. There are no relaxation facilities. But people want to come again to know history and come close with nature.

> *"There are no such relaxation facilities. There is only sitting place in front of the shop and a field in front of the Rajbari".*

Interviewee no: 7, 8 May, 2018

6.11   Revisit intention of the Visitors

Revisit intention is the most important construct to assess satisfaction. Almost all of the interviewee wants to revisit this heritage site. Some of the interviewee visit this place twice or fourth times. According to the interviewee this place architectural beauty and natural climate attract them and visit them again and again. And some want to come again with friends and relatives.

> *"Yes. I will come. It is a good place for enjoying and spending time. If there is some food shop and sitting place it would more good".*

Interviewee no: 10, 9 May, 2018

7.   Discussion and conclusion

Scenic beauty is the major determinants for visitors in selecting a destination, which is also known as the pull travel motives of the visitors. A destinations' image can be defined as general impression of visitors towards a destination. A visitor's global impression is based on the destinations basic qualities, thus, this variable is normally used to define the concept and nature of a destinations image. However, an image is a dynamic concept that changes during the consumers visit a destination. The aim of the study is to analyze the effects of the image that visitors build up during their holiday that in turn influence their intentions of whether or not to return.

Puthia Rajbari is rich with history and culture. It carries about 400 years old history. History carries the previous tradition and big incident of a nation. The term culture relates to people's interactions with one another, that these interactions result in learning and further that learning can be accumulated and passed on. Throughout the evolutionary process, people are observing different distinct society and culture. Human being gets attracted on founding differences by nature. Heritage sites are the places where the visitors can found the history, culture and heritage of different era, mentioned by different respondents. In Puthia Rajbari, the visitors also come to have some knowledge on history and culture of different era of Rajshahi region.

High quality food and accommodation play a vital role in any travel experiences. There is an increased recognition for food and beverages as prime travel motivators of visitors. The visitors have to make their own choices about where to stay, what to eat, what to drink and what to do during their holidays. Accommodation in tourism is known as the second home of the visitors and researcher have identified that many facilities and services affect the hotel selection and visitors' satisfaction. Hotel management should also ensure the consistency of the facilities and standards that are disseminated through the promotional materials; otherwise, the visitors will be dissatisfied and results in negative word of mouth publicity. A considerable number of visitors are dissatisfied with the quality and standard of the bathrooms since they equally value the sleeping and bathroom facilities. Visitors expect well fitted, properly clean, maintained, spacious, and fresh bathrooms. Visitors are highly dissatisfied that there are no good food and accommodation facilities. Interviewees are negatively disconfirmed with food and accommodation services. They said there is no food corner, no sitting place, no hotel place for stay and relaxation.

Visitors prefer to travel in secured locations. Therefore, when selecting a destination, the visitors give more priority for the safety and security situation of the destination. The results highlight that safety and security arrangement and situations have positive influences on the level of perception, which leads the visitors towards higher satisfaction levels. The majority of the visitors highlighted that the behaviors of the boys hindered their satisfaction. As far as sustainable tourism is concerned, the negative behaviors of the boys badly affect the future well-being of the industry.

There is no such initiative to know people about the history of this place. Improper displays with inadequate information, time constraint, less information in books, history and culture have developed the sense of incomplete knowledge among the interviewees.

The tour guides are the closely associated persons with the visitors throughout the round tours and holidays and their behavior greatly affects the visitors' satisfaction or dissatisfaction. In this study, we identify the visitors' perception and satisfaction regarding the quality, friendliness and responsiveness, communication skills (English and foreign languages), site explanations, and ability to provide relevant information. The tour guides are more responsible, dedicated and friendly people and they added value to the holiday spending and satisfaction. However, some visitors highlighted that they are somewhat dissatisfied with the communication skills of the tour guides, especially, their foreign languages, and the ability to obtain relevant and accurate information. Since a holiday is usually a well-planned activity, the visitors have done some preparation, such as collecting more information about the destination during the decision making stage. Therefore, the visitors come with a relatively good knowledge about the areas and aspects of the destination.

Destination management can be defined as the process of creating, guiding and adjusting factors that participate in the creation of a unique visitor product of a destination in which individuals, by working together in groups, effectively realize and set socioeconomic goals. Thereby, destination management represents the group of management staff on all levels who through their work and through the work of others achieve the basic functions of management in an area of destination.

There are seven factors which are considered important by the visitors while selecting their destinations. These factors are- communication, objectivity, basic facilities, attraction, support services, distinctive local features and psychological and physical environment. The relationship of these factors with different demographic features was studied and it was discovered that age and monthly family income of the respondents were found to be the most important variables. Other variables like gender, occupation and background of the respondents were also found to be related to some factors.

Though the visitors are satisfied and like to behave positively, but a considerable number of visitors are dissatisfied and developed negative perceptions about certain areas of the destination that are lacking of food and accommodation facilities, inefficiency of management, lacking of safety and security, behavior of the local vendors, less entertainment and recreational facilities, poor communication skills of the employees, behavior of the boys.

This study conveys many important implications to develop sustainable destination marketing strategies. The perception and satisfaction of the visitors can be improved further through improving the quality and standards of the destination related factors. The success of the destination depends highly on the clear understanding of the visitors' satisfaction which directs them towards destination loyalty. The destination managers should consider and pay more attention to the travel motivation of the visitors to improve

and ensure the expected satisfaction through positive perception and travel experiences. Management should give emphasis on improving services and decorate the destination. The pull motives are related to the destination products, services and other attributes and most of them are common and the visitors can find similar products and attributes from other competing destinations. The managers need to understand: What special benefits can the visitors receive from your destination/products? Why should the visitors visit in this destination? Why should the visitors choose the destination over another to revisit?

The managers should consider more about whether the visitors are satisfied with the exact travel motives of the destination. If the visitors are satisfied with the exact needs, it will lead them towards the destination loyalty. The destination loyalty will be displayed through many ways, such as revisiting, recommendation, positive word of mouth publicity, etc. As concluding remarks, the visitors who have visited Puthia Rajbari, some of them have developed positive perception and satisfactions about history and culture, holistic image, religious image, and some have negative perception about safety and security, food and accommodation, inefficiency of visitor guide and management.

There are some limitations of the study. As only twelve interviews were conducted, the findings of the study cannot be generalized. More research including various stakeholders should be conducted in future in order to generalize the findings.

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Appendix

An Investigation of Visitor's Satisfaction and Revisit Intention towards Heritage Site:
A Case Study on Puthia Rajbari

Interview Question

It is your first time to visit Puthia Rajbari or you visited before?

If yes, then how many time you visited Puthia Rajbari?

How did you know Puthia Rajbari at the first time?

So can you tell me more about your first time at Puthia Rajbari? How did you like Puthia Rajbari when you first visited it? Was it as good as how you expected?

Do you think Puthia Rajbari has a good historical background?

What are the main reasons for your visit to this heritage site?

Can you share with me which kind of work events you went?

Do you think this heritage site has a unique image?

Do you think the staff at this heritage site is friendly towards the guests?

Did you felt any harassment about your personal safety and security?

Have you got available transportation for coming here? The destination can be easily reached.

The environment and all things are clean here?

Have you felt the need of relaxation and recreation facilities? Or is there any opportunity for rest?

Have you find food is available here and quality is good at reasonable price?

Are you satisfied with the destination attributes and services?

Will you visit this place again?

What factors or things will you give priority for visiting this place again?

The Influence of Profitability Attributes on Level of Disclosure: An Evaluation of Commercial Banks in Bangladesh

Rukshana Begum[1]

Abstract

The Banking sector is an indispensable part of the economic development of any country like Bangladesh. The aim of this study is to examine the association between different profitability attributes such as net profit, return on equity, return on assets and earnings per share, and the level of disclosure of the sample banks. For the purpose of this study, the researcher has taken four state-owned commercial banks with five years of data from 2012 to 2016. Un-weighted disclosure index has been used in the case of the scoring procedure of every sample bank. This study reports that the mean disclosure percentages of the sample banks are satisfactory over the period study. This study also reports that there are significant variations in disclosure scores among the sample banks and regression results reveal that the different attributes of profitability do not affect the level of disclosure of the sample banks over the study period.

Introduction

The financial environment of any economy consists of typically five components namely: money, financial instruments, financial institutions, rules and regulations, and financial markets. Among the various financial institutions, banks are a fundamental component and the most active players in the financial system[2]. Bangladesh is a country suffering from immense social, political-economic, and environmental issues and these issues need to be addressed for the overall development of this country. However, economic development is one of the prime factors, which can resolve many of its current problems. The growth of business sectors and the open market economy has created a great opportunity for Bangladesh towards development[3]. Banks play a vital role in the economic life of every nation and act as agents of development in mopping up funds and other resources from the surplus segment of the economy and making them available in the deficit areas, thereby ensuring even developmental spread. The relevance of the

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financial sector is justified by the fact that they not only provide the intermediation used in pooling funds from savers but also at the same time redirect them to investors. It also provides a payment system that facilitates trade and exchange. The financial system also provides a platform for working out of the monetary policies which provide macroeconomic stability for all economic agents[4].

Profit is the prima facie object of every business. A business cannot breathe well without profits. It may be considered as a mirror of the operating performance of a company[5]. Profitability is one of the most important objectives of financial management since one goal of financial management is to maximize the owners' wealth, and profitability is a very important determinant of performance. A business that is not profitable cannot survive. Conversely, a business that is highly profitable has the ability to reward its owners with a large return on their investment[6]. The banking system is considered as the heart of an economy because of its contribution toward the mobilization of savings and thus to the utilization of this country's resources. The profitability of banks is one of the parameters from which resource providers can understand the performance of the banks[7]. Profitability is the ultimate test of managements' operating effectiveness and success of a financial institution. However, profit is one of the quantitative elements which reflect the bank performance story[8].

Disclosure is vital for the optimum decisions of investors and for a stable capital market. Disclosure means effective communication of meaningful information. Proper disclosure of relevant information in the financial statements of a company is of great importance since the members of the company as well as other parties; make most of their appraisals regarding the company on the basis of such statements. Disclosure is concerned with providing information, which is useful in making business and economic decisions by the audience-of-interest and the parties who have the right to receive it [9]. In the competitive

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world, disclosure of timely, sufficient, relevant and accurate information plays a significant role to enable the interested stakeholders to take the sound decisions. This research study highlights the level of disclosure of the sample banks contained in the annual reports in respective years from 2012 to 2016 and for this purpose, the researcher calculated the disclosure scores of each bank during the study period. This study also highlights the association between the different attributes of the profitability of the sample banks the disclosure score over the period under study.

Literature Review

Akter and Hoque (1993) conducted a study on Disclosure Practices in Bangladesh: A Case Study of the Banking Sector, which showed that meaningful performance evaluation of the banking sector is not possible on the basis of the information disclosed in the financial statements. Historically, disclosure is a function of law. In Bangladesh, poor law leads to poor disclosure.

Maleque, Rahman and Ahmed (2010) undertook a research study on Financial Disclosure in Corporate Annual Reports: A Survey of Selected Literature, which showed that most of the organizations, including banks, follow mainly the legal requirements in preparing their financial statements; however, the forms as prescribed by the relevant laws for the preparations of financial statements are outdated and inadequate to ensure the desired disclosure.

Hossain (2008) conducted a study on the Extent of Disclosure in Annual Reports of Banking Companies: The Case of India and found that in disclosing mandatory items, the average score is 88, while the average score for voluntary disclosure is 25. This study also indicates that size, profitability, board composition, and market discipline variables are significant, and other variables such as age, the complexity of the business, and asset-in-place are insignificant in explaining the level of disclosure.

Rao and Desta (2016) examined the Effect of Profitability on Disclosure Practices in the Case of Ethiopian commercial Banks and findings indicate that the profitability of banks measured by return on asset positively affect the level of disclosure of Ethiopian commercial banks; however, bank size and board size have no significant relation to the level of disclosure of Ethiopian banks.

Hawashe (2016) conducted a research study on Voluntary Information Disclosure in the Annual Reports of Libyan's Commercial Banks: A Longitudinal Analysis Approach, which showed that the extent of all five types of information disclosures is low, with an average of 38%; however, there was an improvement in the general level of voluntary disclosure and its categories over a six-year period. In addition, it showed that the level of background information is the highest level of voluntary disclosure over the period of the study and the level of corporate social information is the lowest level of voluntary disclosure in the annual reports of the study time periods.

Objective of the study

The main objective of the study is to measure the influence of profitability attributes on the level of disclosure of banks in Bangladesh. The following two are the specific objectives:

1. To examine the level of disclosure by banks in Bangladesh and to identify whether there is any significant variation in disclosure score among the sample banks.

2. To determine whether the profitability attributes like net profit, the return of equity, return on assets, and earnings per share have a statistically significant influence on the level of disclosure of the sample banks.

Profitability attributes and development of hypotheses

Profit is the ultimate output of any business, and it is an effective way to evaluate the financial manager's efficiency of the company. The profitability attributes assist us to measure the operating efficiency of the company. The management of the company, creditors, and owners are interested in the the profitability of the firm. If the profitability of a company is low, management may disclose less information in the annual report. On the other hand, if profitability is high, management may provide more detailed information in the Annual Report. Profitability attributes are used as independent variable in a number of other studies such as Hossain (2008), Ahmed and Akhter (2007), Ahmed (2009) and Wallace and Naser (1995), Rao and Desta (2016), Hasan and Hosain (2015), Hossain (2012) and Rahman and Uddin (2016). In the present study Net Profit, Return on Equity, Return on Assets, and Earnings per Share are used as measures of profitability. In order to achieve the above mentioned research objectives, an attempt has been made to develop and test the following null hypotheses.

Ho_1: There is no significant variation in the disclosure score comprised in annual reports among the sample banks for the study time periods.

Ho_2: The profitability measured by Net Profit, Return on Equity, Return on Assets, and Earnings per Share does not affect the disclosure scores of the sample banks.

Research Methodology

Sample Selection

The banking sector of Bangladesh comprises two types such as scheduled banks and non-scheduled banks. Further, scheduled banks consist of 06 state-owned commercial banks, 03 state-owned specialized banks, 33 conventional private commercial banks, 08 Islami shariah based private commercial banks, and 09 foreign commercial banks. There are now 5 non-scheduled banks in Bangladesh. To conduct this research, four state-owned commercial banks out of six were selected such as Sonali Bank Limited (SB_1), Agrani Bank Limited (SB_2), Janata Bank Limited (SB_3) and Rupali Bank Limited (SB_4), and those units have been selected on the basis of availability of data.

Sources of Data

With a view to achieving the research objectives, secondary data have been used and collected from the published annual reports of the sample banks in the respective years from 2012 to 2016. Moreover, the relevant materials available on the internet and websites have also been used.

Construction of Disclosure Index

A disclosure index has been constructed to find out the pattern of disclosure scores by the sample banks. There are two types of disclosure indices such as weighted index and un-weighted index. The researcher has constructed the un-weighted disclosure index on the basis of previous research for the purpose of the present study. Each item of information has been given value of 0 if it is not disclosed and a value of 1 has been given if that item is disclosed by the sample banks. The total disclosing number of items by the individual banks is divided by the total number of items in the disclosure checklist to get the disclosure score of every sample banks for every year.

Statistical Tools

The researcher has used various statistical tools like average, standard deviation, coefficient of variation, maximum value, minimum value, t-test, ANOVA test, simple regression, and multiple regressions for analyzing the collected data.

Analysis and Results

Descriptive Statistics

The results of descriptive statistics have been obtained by the use of SPSS program of the sample banks over the study period from 2012 to 2016.

Table-1

Sample Wise Descriptive Statistics of Disclosure Scores

Bank	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Bank_1	5	73.7	76.59	75.35	1.09	1.20
Bank_2	5	70.61	74.96	72.49	1.72	2.97
Bank_3	5	74.22	77.78	76.28	1.63	2.66
Bank_4	5	72.59	76.44	74.77	1.53	2.34

(Source: Compilation of Annual Reports of the Sample Banks)

Table 1 shows the sample wise descriptive statistics of disclosure scores over the study period. The sample Bank_3 shows the highest mean disclosure and sample Bank_2 shows the lowest mean disclosure among the sample banks. However, the sample Bank_1 shows the lowest standard deviation and sample Bank_2 shows the highest standard deviation among the sample banks. The sample Bank_2 ensures the highest coefficient of variation

and the sample Bank_1 ensures the lowest coefficient of variation among the sample banks. This discussion indicates that the sample Bank_3 shows the maximum disclosure percentage and sample Bank_2 shows the minimum disclosure percentage among the sample banks. From the aforesaid discussion, it is found that the percentages of disclosure of the sample banks were satisfactory during the study period.

Table-2

Year Wise Descriptive Statistics of Disclosure Scores

Year	N	Minimum	Maximum	Mean	Std. Deviation	Variance
2012	4	70.61	74.22	72.78	1.60	2.56
2013	4	71.70	74.96	73.92	1.54	2.37
2014	4	71.70	76.67	74.67	2.13	4.54
2015	4	73.48	77.78	75.78	1.76	3.11
2016	4	74.96	77.78	76.44	1.16	1.34

(Source: Compilation of Annual Reports of the Sample Banks)

Table 2 portrays the year wise descriptive statistics of disclosure scores of the sample banks. The highest mean of disclosure has been found in 2016 and the lowest mean of disclosure in 2012 . The highest and lowest standard deviations have been obtained from the year 2014 and 2016 among the study years. The coefficient of variation shows increasing and decreasing tendency. The maximum values of the disclosure are the same in the last two years and the minimum values of the disclosure are the same in the year 2013 and 2014 among the study years. From the above Table, it is apparent that the mean value of percentages of disclosure shows an increasing tendency from the first year to last year. In order to see whether there is any significant variation in disclosure score among the sample banks over the study period, the researcher conducted the ANOVA test using SPSS program and the null hypothesis is Ho_1: There is no significant variation in disclosure score among the sample banks during the study period and the result of ANOVA test are given below:

Table-3

The Results of ANOVA Test

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	39.047	3	13.016	5.679	0.008
Within Groups	36.673	16	2.292		
Total	75.720	19			

(Source: Compilation of Annual Reports of the Sample Banks)

Table 3 shows the result of the ANOVA test regarding the disclosure score of the sample banks in respective years from 2012 to 2016.The F ratios are 5.679 and its significant level is 0.008, and it signifies that the null hypothesis is rejected which means that there is significant variation in the disclosure scores among the sample banks.

Paired Sample T Test

To examine whether there is any significant difference between the disclosure score of the sample banks during the years from 2012 to 2016,the researcher-developed an additional null hypothesis: Ho: There is no significant difference between the disclosure score of the sample banks. For this, a paired sample t-test (sample wise and year wise) was conducted, and the results have tabulated in Table 4.

Table-4

Sample Wise Results of Paired Sample t-Test of the Disclosure Score

Name of Sample	Results of t value	SL	Decisions
S_1 vs. S_2	7.513	0.002	**Significant**
S_1 vs. S_3	-2.969	0.041	**Significant**
S_1 vs. S_4	2.694	0.054	**Significant**
S_2 vs. S_3	-9.947	0.001	**Significant**
S_2 vs. S_4	-8.443	0.001	**Significant**
S_3 vs. S_4	8.298	0.001	**Significant**

(Source: Compilation of Annual Reports of the Sample Banks)

Table 4 shows the results of the paired sample t-test of the sample banks in the respective years from 2012 to 2016. It is evident that the significance levels of all cases are lower than 0.05, which means that the null hypothesis is rejected in all cases. This means that there is a significant difference between the disclosure scores of the sample banks over the study period.

Table-5

Year Wise Results of Paired Sample t-Test of the Disclosure Score

Year	Results of t value	SL	Decisions
2012 vs. 2013	-7.318	0.005	**Significant**
2012vs. 2014	-6.402	0.008	**Significant**
2012vs. 2015	-10.195	0.002	**Significant**
2012vs. 2016	-12.015	0.001	**Significant**
2013 vs. 2014	-2.152	0.120	**Insignificant**
2013 vs. 2015	-4.906	0.016	**Significant**
2013 vs. 2016	-7.244	0.005	**Significant**
2014 vs. 2015	-3.801	0.032	**Significant**
2014 vs. 2016	-3.392	0.043	**Significant**
2015 vs. 2016	-2.158	0.120	**Insignificant**

(Source: Compilation of Annual Reports of the Sample Banks)

Table 5 highlights the results of a paired sample t-test of year-wise disclosure scores of the sample banks in different years. The significance level of all cases, with the exception of

2013 vs. 2014, is lower than 0.05 which means that the null hypothesis is accepted in maximum cases and indicates that there is a significant difference between the disclosure score in the different years of the sample banks.

Regression Analysis

In order to examine whether the dependent variable is influenced by the independent variables, the researcher conducted regression analysis. The dependent variable is the disclosure score of every sample banks and the independent variables are profitability measured by net profit, return on equity, return on assets, and earnings per share of the sample banks. Multiple regressions have also been conducted to examine the influence of all the independent variables in the company on the dependent variable of the sample banks over the study period.

$Ho_{2.1:}$ The profitability, as represented by net profits, does not affect the disclosure score of the sample banks

Table-6

Regressional Results of Disclosure Score vs. Net Profit

Sample Banks	R²	F ratio	SL	Decisions
Sample Bank_1	0.610	4.688	0.119	**Insignificant**
Sample Bank _2	0.018	0.055	0.830	**Insignificant**
Sample Bank _3	0.266	1.089	0.373	**Insignificant**
Sample Bank _4	0.736	8.357	0.063	**Insignificant**

(Source: Compilation of Annual Reports of the Sample Banks)

Table 6 shows the results of regression analysis between disclosure score and net profit of the sample banks for the study periods from 2012 to 2016. The null hypothesis is accepted in all cases, and it can be concluded t1hat the net profit has no significant influence on the disclosure score of the sample banks over the study period.

$Ho_{2.2:}$ The profi1tability, as represented by the return of equity, does not affect the disclosure score of the selected companies

Table-7

Regression Results of Disclosure Scores vs. Return on Equity

Sample Banks	R^2	F ratios	SL	Decisions
Sample Bank_1	0.616	4.812	0.116	**Insignificant**
Sample Bank _2	0.071	0.229	0.665	**Insignificant**
Sample Bank _3	0.265	1.084	0.374	**Insignificant**
Sample Bank _4	0.937	21.441	0.019	**Significant**

(Source: Compilation of Annual Reports of the Sample Banks)

Table 7 explicates the results of the regression analysis of the sample banks between disclosure score and return on equity during the study period.   The null hypothesis is accepted in case of sample banks_1, 2 and 3, which means that the return on equity has no significant influence on the disclosure score of sample banks_1, 2 and 3; however, the null hypothesis is rejected in case of sample bank_4, indicating that the return on equity has a significant influence on the disclosure score of the sample bank_4

Ho$_{2.3}$: The profitability, as represented by return on investment, does not affect the disclosure score of the sample banks.

Table-8

Regression results of Disclosure Scores vs. Return on Assets

Sample Banks	R²	F ratio	SL	Decisions
Sample Bank_1	0.615	4.797	0.116	**Insignificant**
Sample Bank _2	0.067	0.216	0.673	**Insignificant**
Sample Bank _3	0.262	1.065	0.378	**Insignificant**
Sample Bank _4	0.869	19.912	0.021	**Significant**

(Source: Compilation of Annual Reports of the Sample Banks)

Table 8 explains the results of the regression analysis of the sample banks between the disclosure score and the return on assets over the period under study. This null hypothesis is accepted in all cases, with the exception of sample bank_4, indicating that the return on assets has no significant influence on the disclosure score of the sample banks_1, 2, and 3 but has a significant influence on the disclosure score in case of the sample bank_4.

Ho$_{2.4}$: The profitability, as represented by earning per share, does not affect the disclosure score of the sample banks.

Table-9

Regression results of Disclosure scores Vs Earnings per Share

Sample Banks	R²	F ratio	SL	Decisions
Sample Bank_1	0.599	4.481	0.125	**Insignificant**
Sample Bank _2	0.075	0.243	0.656	**Insignificant**
Sample Bank _3	0.191	0.707	0.462	**Insignificant**
Sample Bank _4	0.853	17.370	0.025	**Significant**

(Source: Compilation of Annual Reports of the Sample Banks)

Table 9 shows the results of the regression analysis of the sample banks between the disclosure score and earnings per share. The null hypothesis is accepted in the case of sample bank_1, 2, and 4 which means that the earning per share has no significant influence on the disclosure score in case of the sample bank_1, 2, and 3. Moreover, the earning per share has an influence on the disclosure score in case of sample bank_4.

Explanation of the Results of Multiple Regressions

Regression Model

DS= α + β₁NP+ β₂ROE+ β₃ROA + β₄EPS+ ε (t)

$DS= \alpha + \beta_1 NP+ \beta_2 ROE+ \beta_3 ROA + \beta_4 EPS+ \varepsilon \ (t)$

$Ho_{2.5:}$ The profitability as represented by net profit margin, the return of equity, the return of assets and earnings per share does not affect the disclosure score of the sample banks

Table-10: Model Summary

Model	R	R square	Adjusted R Square	Std. The error of the Estimate	Change Statistics				
					R Square Change	F Change	Df1	Df2	Sig. F Change
1	0.458	0.209	-0.001	1.9976	0.209	0.994	4	15	0.441

(Source: Compilation of Annual Reports of the Sample Banks)

a. Predicators: (Constant), ROE, NP, EPS, ROA

Table 10 shows the results of multiple regressions between dependent and all independent variables. I It is evident that R^2 is 0.209, F ratio is 0.994 and its significance level is 0.441, which means that it is higher than 5%. So, the null hypothesis is accepted and it indicates that the profitability as represented by net profit (NP), the return of equity (ROE), the return of assets (ROA) and earnings per share (EPS), have no influence on the disclosure score of the sample banks over the study period.

Table-11: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	15.862	4	3.966	0.994	0.441
Residual	59.858	15	3.991		
Total	75.720	19			

(Source: Compilation of Annual Reports of the Sample Banks)

a. Predicators: (Constant), ROE, NP, EPS, ROA

b. Dependent Variable: DS

Table 11gives the results of ANOVA test and it is found that F ratio is 0.994 and its significant level is 0.441 which means that the null hypothesis is accepted and it signifies that the profitability, as represented by net profit (NP), the return of equity (ROE), the return of assets (ROA) and earnings per share (EPS), have no influence on the disclosure score of the sample banks over the period under study.

Table-12: Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	74.912	0.486		154.222	0.000
EPS	-0.047	0.050	-1.891	-0.948	0.358
NP	0.000	0.000	2.673	1.247	0.231
ROA	-27.586	21.327	-23.462	-1.293	0.215
ROE	21.380	16.279	23.064	1.313	0.209

(Source: Compilation of Annual Reports of the Sample Banks)

Dependent Variable: DS

Table 12 shows the result of coefficients between the dependent and independent variables of the sample banks in the respective years from 2012 to 2016. The table indicates that the profitability, as measured by earnings per share (EPS), net profit (NP), return on assets (ROA) and return of equity (ROE), were insignificant as per significant levels and signify that the earnings per share (EPS), net profit (NP), return on assets (ROA) and return of equity (ROE) have no significant influence on disclosure scores of the sample banks over the study period.

Conclusion

In order to evaluate the association between the different profitability attributes and the level of disclosure of the sample banks in Bangladesh, the researcher considered four state-owned commercial banks in respective years from 2012 to 2016. Findings indicate that Sample Bank_3 shows the highest mean disclosure and Sample Bank_2 shows the lowest mean disclosure percentage among the sample bank, whereas the Sample Bank_1 shows the lowest standard deviation and Sample Bank_2 shows the highest standard deviation among the sample banks over the study period. The mean value of percentages of disclosure shows an increasing tendency from the first year to last year. On the other hand, the results of the ANOVA test signifies that the significant level is lower than 0.05 and it means that there is a significant variation in disclosure score among the sample banks over the study period. Referring to the results of a paired sample t-test of year wise and sample wise of disclosure score there is a significant difference between the disclosure score in the different years of the sample banks. On the basis of the results of a regression analyses, it is evident that the profitability attributes like earnings per share, net profit, return on assets and return of equity were statistically insignificant, which means that there

is no significant effect on disclosure scores of the sample banks over the study period. At present, disclosure is a demanding issue in the field of the decision making process, and hence, banks should ensure adequate and quality disclosure contained in their annual reports so that the interested stakeholders can get the due information, thereby enabling them to take the right decision insofar as investment is concerned. As the control authority, the Bangladesh Bank should take necessary action to ensure that their prescribed rules and guideline are properly followed for disclosure of information through preparing the different financial statements comprised in the annual reports of the banks in Bangladesh.

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Influencing Factors of Working Environment of Female Readymade Garment Workers in Bangladesh: A Review on Existing Literature

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Abstract

Ready Made Garment (RMG) industry of Bangladesh is the highest foreign earning sector of the country. It is the second largest exporter in the world after China. There are 4.20 million workers working in this sector in about 5000 companies where more than 90% of workers are female who came from the rural areas of Bangladesh. Hence, female workers are the prime factor of this important industry of Bangladesh. But the working environment of these RMG companies is hardly conducive to work and not up to the international standard. Female workers are often harassed at the workplace and manipulated by their supervisors in this industry. Hence, this study aims at identifying the working environmental factors of female RMG workers of Bangladesh. This is an exploratory research based on secondary data. The prime objective of this study is to develop a conceptual framework on the environmental factors of the female garment workers in the RMG industry of Bangladesh. Descriptive statistics were used to describe the readymade garment industry of Bangladesh. Meta-analysis methodology is used for this study. This study identified that the female garment workers work in a suppressive and unfavorable environment. They are abused by their supervisors and their colleagues at work. Sometimes, they are also sexually harassed at the workplace where they work. Therefore, they always remain in tension and work with high physical and mental pressures that have put negative impact on their work performance. This study suggests that the managers of RMG companies should change their behavior towards these illiterate female workers and are to be protected from the manipulation at work. Industrial laws may strictly be used by the government to overcome this problem.

Keywords: Working Environment, Female Workers, Readymade Garment, Bangladesh.

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1. Introduction

Bangladesh started its journey in the industrial sector with Readymade garment industry (RMG) in 1978 (Adnan, Rakib & Rahman, M. 2015). Gradually, this sector has expanded and become the highest export earners of the country. Now, it is the second highest exporters of RMG in the world after China. There are 4.00 million workers are working in this sector where more than 90% of workers are female (Khayer, Khondker & Hye 2017).RMG is the first industry to provide large-scale employment opportunities to rural women in Bangladesh, where women traditionally did not work outside their home. Female workers are the core element of this industry who are really instrumental for the development of this industry in Bangladesh. Now, Bangladesh Garment Manufacturers and Exporters Association (BGMEA) have 4,482 members. The total export earnings of Bangladesh in 2016-2017 were 28149.84 million USD out of which 80.81% was from RMG sector of the country (BGMEA, 2017). Therefore, the working environment of these large-scale female workers is very important. The environment includes the environment at home, the situation on the way to the company, at the workplace, and from the workplace to home. It has been observed that the overall environments of these female workers are not conducive to their work and their lives. It is full of difficulties and disturbs even at work. The working condition does not allow a decent level of living for garment workers that are exploited and forced to meet exhausting production quota for a very little level of wage and very low social security (Mariani, 2013). As girls find industry, they tend to postpone marriage and childbirth. This has made rural women financially solvent and they can raise their voice in the family as they contribute financially. RMG sector has also contributed to female empowerment across and within Bangladeshi households (Hashemi, Schuler and Riley, 1996). Therefore, this sector has been working as the catalyst for the development of the economy of Bangladesh for the last three decades (Kabeer & Mahmud 2004).It has been proved in research that RMG has been making substantial contributions to building the economic development of the millions of poor people of Bangladesh. It is maintaining 6% annual average GDP growth with significant contributions and has brought about remarkable social and human development (Nusrat et al 2016 & Tasnim et al 2017). RMG is now the single biggest export earners of Bangladesh. The industry has changed the lives of millions of people through the significant transformation of the socio-economic lives of the workers (Sikhdar, Sarkar & Sadeka2014).Due to National and international reform platforms-National Action Plans (NAP), Accord and Alliance- workplace safety of the workers has been ensured. The Corrective Action Plans (CAPs) has also been enacted (BGMEA, 2017).

The working environment is very important for the female workers in Bangladesh (Jahan2012). The environment has a direct impact on the workers lives at home and work and their productivity. The working environment for most of the RMG workers is not yet fully decent and dignified in Bangladesh. Sometimes, they work under the unsafe and unhealthy situation. The living condition at home is also very poor (Khosla,2009).

Majority of the workers live in slums or in tin-shed houses where 4 to 6 families share the use of a gas burner, water supply, and toilet, etc. Sometimes, female workers are tortured by their husbands at their home. These issues in their living area put negative impact on their efficiency and productivity at work. Sometimes, female workers are violated on the way to and from the workplace. They do not feel safe during the journey to a workplace. No factory provides transport facilities to these workers.

The female garment workers employment opportunity has created some vulnerability because of health susceptibilities, mental pressure, low living standards, unsafe working condition, etc (Huq, Stevenson & Zorzini 2014&Begum 2016). The major factors that are influencing workers mind for their commitment are ensuring satisfactory salary and timely payment, admissible benefits, supervisors' behavior, acceptable working environment, hygienic canteen, and medical facility, etc. Workers satisfaction is also dependent on non-financial factors like work description and orientation, unbiased evaluation of work performance, flexibility, training, job security, efficient and supportive co-workers and line managers, good work environment, etc. (Bhattacharya & Rahman1999).

Keeping these observations in mind this study aims at finding out the direct and indirect environmental factors that affect the female workers of the RMG industry in Bangladesh and to developing a conceptual framework.

2. Objectives and Research Questions of the study

The objectives of this study are outlined below:

i. To identify the influencing factors of working environment of female readymade garment workers in Bangladesh,

ii. To develop a conceptual framework of influencing factors of working environment of female readymade garment workers in Bangladesh.

This paper aims to address the following research questions:

i. What are the influencing factors of working environment of female readymade garment workers in Bangladesh at work?

ii. What are the challenges faced by the female RMG workers?

3. Research Methodology, Conceptual and Analytical Framework

Research Methodology

Meta-analysis methodology which is the process of joining data from various studies to know the previous study areas as well as the existing chance for future study is used in this study that showed the existing study of working environment at RMG sector for female workers in Bangladesh. A survey table of meta-analysis is given in the next section which represents the existing this type of studies in Bangladesh. This is an exploratory research.

The study has been conducted to develop a conceptual framework of environmental factors for female RMG workers in Bangladesh through literature review with secondary data analysis. This study used published information as a source of data which included peer reviewed journals and conference papers, working papers of international organizations, websites, etc. for the purpose of analysis. This study is exclusively based on desk research, depending on the accumulated evidences on this sector to understand the factors which affect the female workers in the RMG sector of Bangladesh.

Therefore, I developed a protocol for this review.

Figure 1: Filtering of papers from searching and selection of studies

Searching conducted

100+ papers identified

Initial screening on title and abstract → 45+ excluded
- Not revert based on their titles and abstracts

55 papers included

Full papers sought → 25 excluded
- Not Obtain

30 paper obtain

Second stage screening on full text documents → 8 studies excluded-
- Appropriateness of theoretical soundness and study design employed

22 studies were selected

Including studies on impact of microfinance on empowerment of rural woman in Bangladesh → 7 studies excluded-
- Appropriateness of theoretical soundness and study design employed

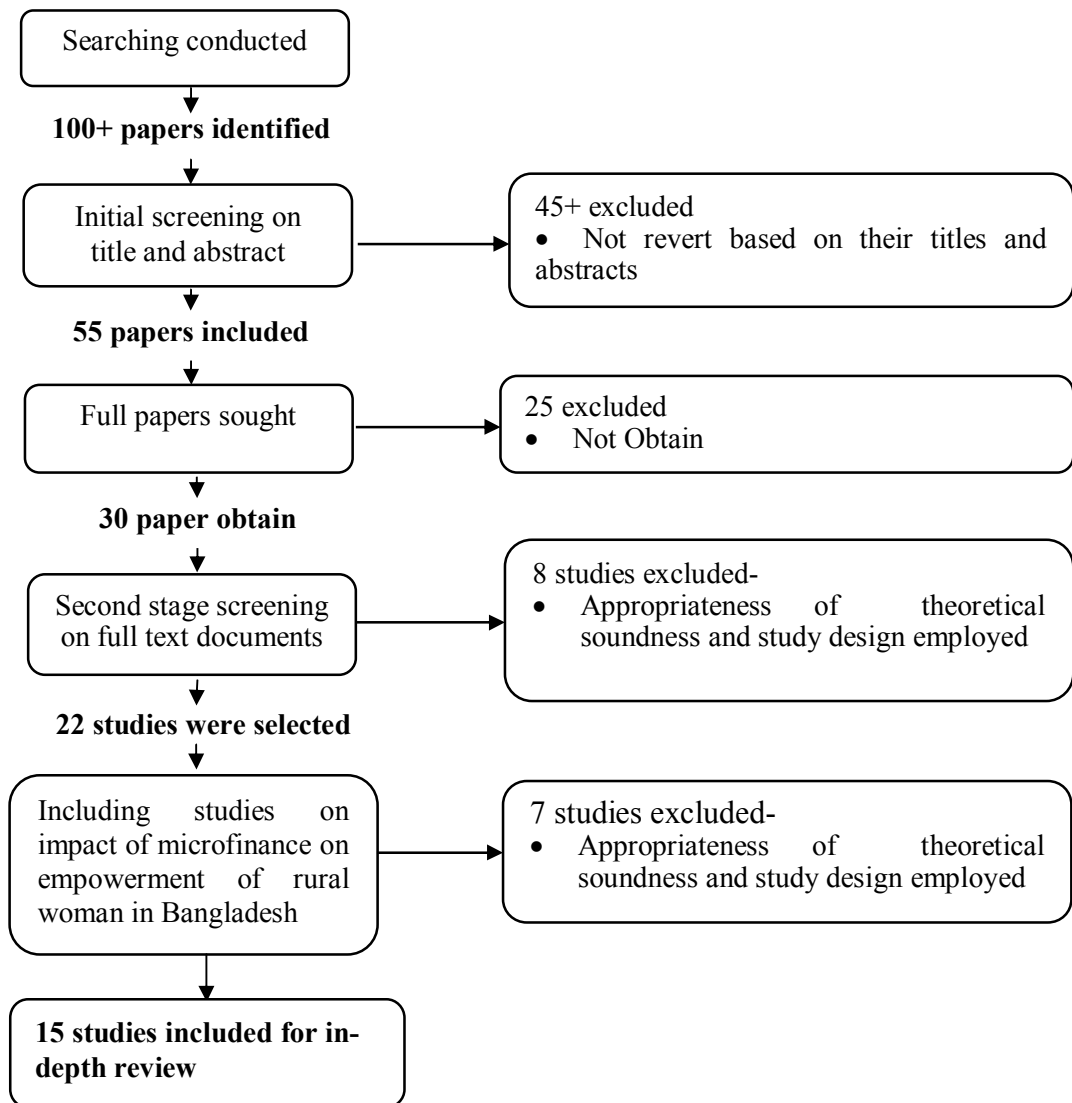**15 studies included for in-depth review**

Figure -1 shows the inclusion and exclusion of the studies. Online Academy database and search engines such as: web of science, Google Scholar research Gate etc. were searched using appropriate keywords such as: working condition, readymade garments workers, working environment of female workers etc. My search results were then screened for relevance in two stages. This involved systematically applying predesigned inclusion criteria· . Initial searching was done by receiving the titles and abstracts. The study had to be conducted in Bangladesh evaluating the factors that affect the working condition of female readymade garments workers. Second searching was done by receiving the full text document. When appraising the quality of studies for inclusion in this review I considered the appropriateness of the theoretical soundness, the study design employed and conclusion drawn. 22studies were selected and 8studies were excluded. Afterwards I examined the methods of analysis and their appropriateness to the study questions and reflected on the completeness of the reporting findings, 7 studies were excluded and 15 studies were included. The findings of these 15 studies were then synthesized and included in the in-depth review of this is study using two approaches: what are the factors affecting the working environment of the female RMG workers of Bangladesh and a narrative synthesis of qualitative findings.

Readymade Garments

Readymade Garments (RMG) are mass-produced finished textile products of the clothing industry. They are not custom tailored according to measurements but rather generalized according to anthropometric studies. They are made from many different fabrics and yarns. The first RMG factory was established in the New York in 1831. During the American civil war the need for readymade uniforms helped the garment sector grow in the United States. There were changes in the societal views towards RMG at the end of nineteenth century. The RMGs were no more limited within lower class people. In Bangladesh the RMG sector has got a greater significance than any other sector in terms of growth and foreign exchange earnings. It started its journey in the 1980s and has come to its present position today. The late Nurool Quader Khan was the pioneer of RMG industry in Bangladesh. In 1978, he sent 130 trainees to South Korea where they learned how to produce garment products. With those trainees, he set up the first factory "Desh Garments" to produce garments for export. This sector makes a significant contribution to the national economy by creating huge employment opportunities and reducing poverty through socioeconomic development. But there are some challenges as well in this sector. The "Made in Bangladesh" tag has also brought fame for Bangladesh across the globe. This sector accounts for 83% of total export earnings of the country (www.bgmea.com.bd).

Working Environment

An employee's motivation to work is heavily influenced by his or her environment. Working environment is the location where a task is completed. The Factories Act1965,

The Industrial Relations Act 1969, The Factories Rules 1979 and Bangladesh Labour Act 2006 emphasized following issues:

➢ Physical geographical location.

➢ Immediate surrounding conditions in which an employee operates.

➢ Physical condition and infrastructural facilities.

➢ Social interactions at work place among peers, subordinates and supervisors/ managers.

➢ Congenial working atmosphere which is free from any type uncertainty and harassment.

➢ Occupational health and safety issues

➢ Rules and regulations being followed

➢ Other compliance issues etc.

Working Conditions

Working conditions are at the core of paid work and employment relationship. It covers a broad range of topics and issues from working time (hours of work, rest periods and work schedules) to remuneration as well as the physical conditions and mental demands that exist in the work place. The issue of working conditions is equally important in informal economy workers, migrant workers and rural producers. The ILO monitors trends and developments regarding working time, work organization and work-life balance around the world. It also analyses key and emerging issues in order to provide ILO constituents and policy makers with practical information and research based policy advice. The ILO has emphasized following areas:

a. Collective bargaining as a key means through which employers and their organizations and trade unions can establish fair wages and working conditions. It is based on Collective Bargaining Convention 11981 (No 154 and 163). It also provides the basis for sound labour relations. Typical issues on the bargaining agenda include wages, working time, training, occupational health and safety and equal treatment.

b. Employment security protects workers against income fluctuations as a result of job loss due to dismissal caused by economic downturns, enterprise restructuring or other reasons. The growth of non-standard forms of work such as temporary contracts, job through employment agencies, dependent self-employment and marginal part-time work has increased workers' concerns over employment security.

c. Wages are among the most important conditions of work and a central subject of collecting bargaining. The ILO is committed to promoting policies on wages and incomes that ensure a just share of the fruits of progress to all and a minimum living wage for all employed in need of such protection. It is based on ILO Conventions Minimum Wage Fixing Conventions 1970 (No 131).

d. Working time is an issue that has been central to the work of the ILO since its inception. It is described by the Hours of Work (industry) Convention 1919 (No 1). Some of the major challenges include: excessive hours of work and the need to protect workers health and safety by limiting working hours and providing adequate periods for rest and recuperation including weekly rest and paid annual leave.

e. Work and family measures are policy solutions intended to facilitate all workers' access to decent work by explicitly and systematically addressing and supporting their unpaid family responsibilities. It is stated in the ILO Convention on Workers with Family Responsibilities 1981 (No 156).

f. Domestic workers engaged in domestic work within an employment relationship have become a priority target of ILO's work since the adoption in 2011 of convention no 189. Domestic workers should enjoy effective protection against all forms of abuse, harassment and violence.

Decent Work Place

According to ILO decent work involves opportunities for work that are productive and deliver a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men.

Since 1919 the ILO has maintained and developed a system of international labour standards which aimed at promoting opportunities for women and men to obtain decent and productive work in conditions of freedom, equity, security and dignity. In today's globalized economy, international labour standards are essential components in the international framework for ensuring that the growth of the global economy provides benefits to all.

The United Nations Economic and Social Council defines "decent work" as employment that respects the fundamental rights of the human person as well as the rights of workers in terms of conditions of work safety and remuneration, respect for the physical and mental integrity of the worker in the exercise of his/her employment.

4. Li**terature Review**

Manufacturing sectors like jute and jute related goods, leather related products, home textile, footwear, garments, etc are contributing to a significant percentage of Bangladesh economy. Within the various segments, RMG is the most successful manufacturing sector with the greater contribution to the national GDP (Hossan, Sarker and Afroz, 2012). This industry attained a high success in terms of foreign exchange earnings, exports, and employment of rural women, industrialization, and an increase of GDP within a short period of time. This is because of the high quality of products, goodwill, and competitiveness of the companies (Bari et al. 2014&Haider, 2007). The RMG industry of

Bangladesh opened the luck of underprivileged rural women of the country to work at the factories and changed their socioeconomic lives and lifestyles (Mahmud, 2012). Female workers are working an average of 11 to 12 hours per day and receive an average salary of fewer than 7,000 takas per month (Sikder, Sarker and Sadeka, 2014). They also do not receive required overtime payment on time. Employers prefer female workers not only because they are available but also because they are vulnerable group, docile, illiterate and easily manageable than male workers (Hossan, Sarker and Afroz, 2012). Bangladesh female garment workers are getting opportunity to work and earn their livelihood due to the development of this industry in the country. But this employment opportunity has also created some vulnerability because of health susceptibilities, mental pressure, low life standards, unsafe working condition, etc. The working situation for most informal women workers in Bangladesh is far from decent and dignified. The work is insecure and unstable, the incomes are low and irregular, the working hours are long, and the conditions are unsafe and unhealthy, lack of access to information, markets, finance, training and technology. Women works are deprived of their basic political and socio-economic rights to. There are many barriers exist for women workers to participate as equals and make themselves heard. The social division of gender and gender roles in society affect the organizing of women workers. Most of the workers face difficulties relating to their housing condition as majority of them live in slums. RMG Manufacturing and export has become a lifeline for both urban and rural people. It is the only major labor-intensive sector of the county with huge employment-generating potential and the biggest source of remittance earnings. The worst-ever industrial accident, the collapse of Rana Plaza in 2013, caused the death of 1129 workers and the life-threatening injuries of 2515 workers and the fire at Tazreen Fashions in 2012, caused the deaths of 117 workers and severely injured a further 200 workers have led to downturn in the growth of this sector in past few years. These accidents have not only shocked the entire nation but also it drew the attention of the whole world (Ahmed, et al 2016). These all are the due to the negligence of the environmental factors of the factory managers.

Due to illiteracy, the labor law is not exposed to the female workers in Bangladesh. Most of the female workers are not aware of their rights as per the labor rights acts 2006 (amended in 2013). The major factors that influence workers mind for their commitment of work are ensuring satisfactory salary and timely payment, admissible benefits, supervisor's behaves, acceptable working environment, hygienic canteen and medical facility to keep the labor satisfied into their work (Ferdous,2015). Satisfaction of the worker can be justified as a worker's overall evaluation of his or her work as favorable or unfavorable (Locke, 1976). In the RMG factories poor practices like the absence of trade unions, informal recruitment, irregular payment, sudden termination, wage discrimination, excessive work and employing child labor etc. are going on (Ahmed, 2012). According to Bansari (2010), recruitment policies are highly informal compared to western standards and there are no written formal contracts and appointment letters. Therefore workers are vulnerable to losing their jobs at any time. However, fear of losing their jobs and lack of alternative job opportunities compel workers to continue in unsatisfactory employment.

Observation shows that labor standards and rights are commonly ignored in the RMG factories in Bangladesh. Work areas are often overcrowded with limited workspaces, injuries, fatalities, disablement, and death from fire and building collapses are frequent in the RMG sector. The absence of labor standards monitoring system and ineffective building codes, poor enforcement, and outdated labor laws and lack of awareness of labor rights among workers are the major dissatisfaction in this sector (Morshed,2007). The female garment workers face housing and transportation problems to live in and commuting their working place. The workers remain worried about their job because any time they can be suspended from the job. The workers feel a headache for sound pollution in their workplace. Physical weakness and sometimes eye trouble is reported by the workers. It is also very painful for the workers to work without sitting for too long time (Sikder, Sarker & Sadeka, 2014). The working conditions of Bangladeshi garment workers have featured regularly in the campaigns. The absence of written contracts, long working hours, delayed payment of wages, and routine violations of health and safety standardsare the major concerns (Mahmud and Kabir, 2003&Akhter et al., 2010).

RMG industry has been the blood of Bangladesh economy. In the recent years, it has been observed that the workers have come down in the street and making insurgency on their demand and tried to destruct public properties. The results show that the main causes of labor unrest include lack of minimum facility and safety at work, sub-standard living conditions, deferred payment of wages and benefits, international conspiracy and coercive role of the law enforcing agencies too much dependency on buyers, pressures from the workers and local terrorist, use of worker by others and rumors, un-fulfillment of education demands of their children, distorted minded workers, political instability of the country, too much workload lack of promotion opportunity, insufficient wages to survive etc. (Ahmed, Raihan & Islam, 2013). The factors that affect the environment in the workplace and the relation between workers and management are too long working hours, abusive management, unsafe working condition, regular wage payments not done on time, unpaid overtime, firing for sickness etc are the prominent ones (Heath, 2016). The RMG sector provides good employment opportunities for the poor, low skilled women workers. But it also creates vulnerabilities, mental pressure, low living standards etc. (Shahab,2015). Female labor is attractive in Bangladesh because women are paid less than men for similar jobs. The women workforce in the RMG sector is mostly non-unionized women, which has also enabled entrepreneurs to keep the wage levels depressed. The creation and protection of industrial competitive advantage in the global economy lies in the adoption and diffusion of new technologies. It is thus important to endow women workers with basic education and vocational training (including computer literacy) (Bhattacharya & Rahman, 1999).

RMG workers are also not familiar about their rights at work. International human rights instruments such as, the International Covenant on Economic, Social and Cultural Rights (ICESCR), the ILO Convention on Equal Remuneration for Men and Women for work of Equal Value, 1951 and the ILO convention on Discrimination (Employment and

Occupation) 1958 can ensure various rights to promote women's economic rights. Similarly, Universal Declaration on Human Rights 1948, Beijing Platform for Action 1995 and Millennium Development Goals 2000 also recommends the government to take effective actions for women's economic empowerment. At the level of individual development, Sen (2001) work on human capabilities stresses empowerment as both a means and an end. It is a process of developing individual capacities through gaining education and skills in order to empower individuals to fight for a better quality of life. Sen sees poverty as an indication of the inability of people to meet their basic needs, whether physical or more intangible, through participation, empowerment and community life. Kabeer (2004) also insists on the centrality of empowerment for the struggle to achieve gender equality. United Nations Security Council Resolution 1325 in 2000 has also emphasized women's equal participation, protection, and prevention from all sorts of gender discrimination. Women are frequently subjected to verbal and physical abuse and sexual harassment. Occupational Health and Safety (OHS) practice is considered an important issue for organizations to deter industrial accidents (Ansary & Barua, 2015).

According to Chowdhury & Tanim, (2016) managers of successful organizations comprehend that in order to make most out of the organizational system, it is important to ensure that the employees are safe, sound, and healthy at work. Proper compliance with OHS legislation can help organizations avoid the costs of litigation arising from poor health and safety standards. It has been claimed in research that the safety and protection of employees carry greater financial implication than many in corporate leadership roles recognize. The tremendous success is greatly attributable to women workers, who account for the lion share of the total labor force employed in the sector. But women were exploited easily due to lack of technical knowledge and training. Globalization, as manifested in the RMG sector, failed to offer opportunities to the female labor force. Garment industries were exploited them as a cheap source of labor (Halim & Kabir, 2005). In the garment factory, most of the female workers' age is between 15 to 30 years (Heath & Mobarak, 2015). This very young age is also responsible for various kind of harassment such as harassed by colleagues or on the way to and from the house. Their wage payment is not regular. Sometimes it was paid after the first week of the month. In the garment industry, men and women hold different jobs and consequently are exposed to different types of hazards. Female workers work in low-paid and less skilled jobs where work hazards are comparatively high (Majumder & Begum, 2000). In Bangladesh, it is a legal requirement for any RMG factory owner to administer and comply with the country's labor law and other OHS provisions imposed on them. Yet, there still are employers who seem to take safety less seriously than they should. Evidence can be found from empirical studies that, during the last decade, the majority of workplace accidents that occurred in the RMG sector in Bangladesh were related to the employers' lack of administration, negligence, and avoidance of the OHS provisions (Alamgir & Haque, 2013).

RMG industry is under the threat of continuous unrest in Bangladesh. Workers are not happy with their wages and working environments of the factories. The issue of labor unrest is not only related to worker's wages but also related to other non-wage issues such as the high load of overtime work, lack of leisure and holidays, overall working

environment etc. The wages given to the garment workers are not adequate to survive. Absar (2001) argued that low wages and sub-standard living condition are major causes of labor unrest in the RMG sector of Bangladesh (Zaman, 2001). The rights of the labors are not well protected. That means there is poor governance in the RMG sector of Bangladesh (Ahmed, Greenleaf & Sacks, 2014).The trade unions are not allowed (Ahmed, Raihan & Islam 2013). As such, the overall working environments of the RMG workers are important to explore for the sustainable development of this industry in Bangladesh. Factors related to the working environment of female RMG workers in Bangladesh are shown in Chart- 1.

Chart 1: Factors of Working Environments of Female RMG Workers in Bangladesh

Authors with (year)	Low wage	Overtime without payment	Health care facility	Managers / Supervisors misbehavior or harassment	Lack of appropriate safety and security measures	Delay / Irregular payments	Long working hours	Absence of Maternity leave or leave without payment	Bonus and other fringe benefit	Canteen facility, water and sanitation	Lack of child care facility	Written Appointment letter/ /Job security	Training facility	Promotion opportunity	Standard of living	Education of Children	Transportation during commuting	Sexual harassment by male colleagues	Harassment by people during commuting	Freedom of Association
Islam et al (2015)	✓	✓	-	✓	✓	✓	✓	✓	-	-	✓	✓	✓	✓	-	-	✓	✓	✓	✓
Bari (2014)	✓	✓	✓	✓	-	✓	✓	✓	-	✓	-	-	-	-	✓	✓	✓	-	-	✓
Tasnim et al (2017)	✓	✓	✓	✓	✓	-	✓	-	✓	✓	-	-	-	-	-	-	-	✓	-	-
Sikder et al (2014)	✓	✓	✓	✓	-	✓	-	✓	-	-	✓	✓	-	-	✓	-	✓	-	-	-
Ahmed et al (2013)	✓	-	-	-	✓	-	✓	-	✓	-	-	-	✓	✓	✓	✓	-	-	✓	-
Ferdous (2015)	✓	-	✓	✓	-	✓	-	-	✓	✓	✓	-	-	-	-	-	✓	-	-	-
Mahmud and Kabeer (2003)	-	✓	✓	-	✓	✓	✓	✓	-	-	-	✓	-	-	-	-	-	-	-	-
Shahab (2015)	✓	✓	-	-	✓	-	-	-	-	-	✓	-	-	-	-	-	-	-	✓	-
Heath (2016)	-	✓	-	✓	✓	✓	✓	✓	✓	-	-	-	-	-	✓	-	-	-	-	-
Bhattacharya and Rahman (1999)	✓	-	-	-	-	-	-	-	✓	-	-	-	✓	✓	-	✓	-	✓	-	-
Banerjee (2010)	✓	-	✓	✓	-	-	-	-	✓	-	-	-	✓	-	-	-	-	-	-	-
Absar (2001)	✓	-	✓	-	✓	-	-	-	-	✓	-	✓	-	-	-	-	✓	-	-	✓
Nusrat (2016)	-	✓	✓	-	-	-	-	-	-	✓	✓	-	-	-	-	-	-	✓	-	-
Akter Rozina (2016)	-	✓	-	-	-	-	✓	✓	-	✓	✓	✓	-	✓	-	-	-	-	-	-
Mohammed (2015)	-	-	-	✓	✓	✓	-	-	-	-	-	-	✓	-	-	-	-	-	-	-
Total	10	9	8	8	8	7	7	6	6	6	6	5	5	4	4	4	4	4	3	3

Keeping this in mind, this study strives for identifying the factors related to the working environments and the lives of female readymade garment workers in Bangladesh.

5. Analytical Framework on Environmental Factors of Female RMG Workers in Bangladesh

The environmental factors for RMG female workers are very important. Their living environment at home, the situation prevails on the way to the workplace from home and also the environment that exists in the workplace is very import. The environmental factors are shown in Figure 2.
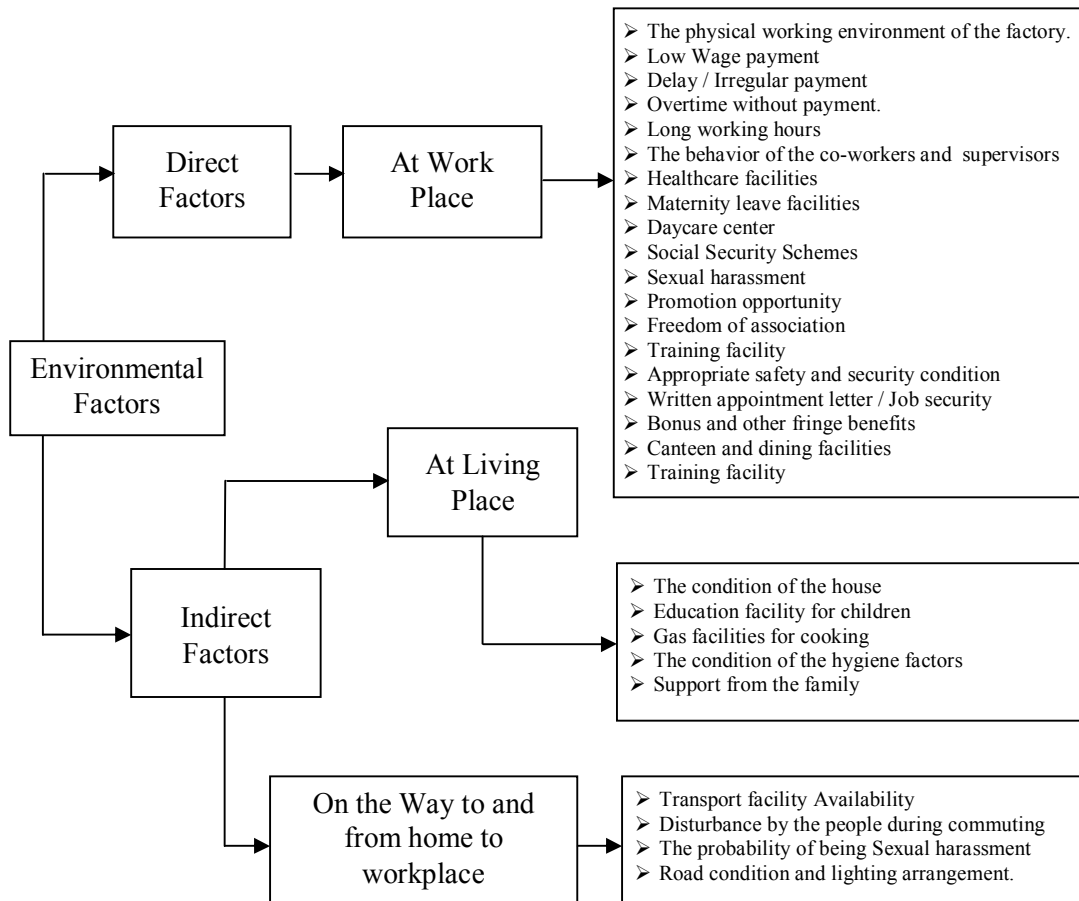

Figure 2: A Conceptual Framework on Working Environment of Female RMG Workers in Bangladesh**.**

Source: Author's own compilation

Figure 2 shows that the environmental factors for female RMG workers can primarily be divided into two segments. One is the direct factors and the other is the indirect factors. Direct factors are those that affect directly at work. There are 17 direct factors that influence the working environment such as, Physical working environment of the factory,

Low wage payment, Delay / Irregular payment, Overtime without payment, Long working hours, Behavior of the co-workers and supervisors, Healthcare facilities, Maternity leave facilities, Daycare centre, Social Security Schemes, Sexual harassment, Promotion opportunity, Freedom of association, Training facility, Appropriate safety and security condition, Written appointment letter / Job security, and Bonus and other fringe benefits. The indirect factors are divided into two segments such as, at the living place and on the way to home and workplace. These are factors at the living place where it is seen that six factors predominantly influence the workers at their homes. The factors are condition of the house, education facility for children, condition of their kitchen, gas facilities for cooking, condition of the hygiene factors and support from the family. The other indirect factors that affect the female workers during commuting between living place to the workplace and the workplace to living place. The factors are concerned with Transport facility Availability, Disturbance by the people during commuting, Probability of being Sexual harassment and Road condition and lighting arrangement.

6. Findings and Discussion

Direct Factors at Work Place

➢ **The physical working environment of the factory**.

The physical environment of any factory is very much important factor for the workers. There should have adequate breathing space for comfortable working condition.

➢ **Low Wage payment**.

This is the most important factor among all the factors. Generally workers run their daily livelihood from the wages they get. In most of the factories workers are low paid.

➢ **Delay / Irregular payment**.

In many factories workers wage payment is not given regularly at the beginning of following month. This creates a lot of inconvenience for the workers as they need to pay their house rents and other dues at the beginning of each month.

➢ **Overtime without payment**.

In many factories overtime payments are not paid judiciously. It creates resentment among the workers. Overtime payments should be given in time and with proper accountability.

➢ **Long working hours**.

In most of the factories working hours are too long without break. Because of nature of job in many cases workers remain standing for a long time.

➢ **The behavior of the co-workers and supervisors**.

Behavior of supervisors and co-workers is very important factor in RMG sector. Sometimes supervisors and co-workers abuse specially the female workers.

➢ **Healthcare facilities**.

Basic health care facilities are not adequate in many factories.

➢ **Maternity leave facilities**.

As per the law all the female workers are entitled to get maternity leave with full payment. But some factories do not sanction proper maternity leave with payment.

➢ **Daycare center**.

As per the law all the factories should have day care center for the small babies of the workers. It helps female workers to groom up their children with adequate care and they can also concentrate better for their work.

➢ **Social Security Schemes**.

Various social security schemes like family security project, group insurance etc should be adopted for the workers welfare. These projects increase the motivation level of the workers.

➢ **Sexual harassment**.

Majority of the workers are female. As such they are very vulnerable for being exploited by the supervisors or male co-workers. The management needs to take extra precaution to avoid this type of incidents.

➢ **Promotion opportunity**.

It is a big motivational factor for the workers. If there are adequate promotion prospects for the workers, they would be more sincere and motivated for the job.

➢ **Freedom of association**.

Freedom of Association and collective bargaining power are the basic human rights of the workers. By this they can ensure their rights and privileges entitled to them. This ensures additional protection to their respective jobs.

➢ **Training facility**.

The workers should be trained with the advancement and innovation of technology. But all the factories do not posses this facility.

➢ **Appropriate safety and security condition**.

As per the factory law required safety measures against building and fire safety is very important factor for the workers. All should maintain building code and fire safety precautions properly to avoid any hazards.

➢ **Written appointment letter / Job security**.

Written appointment letter mentioning the terms and conditions of the job to be given to all the workers. But many factories do not follow it strictly.

➢ **Bonus Payment and other admissible fringe benefits**.

Bonus and other admissible benefits are very important motivating factor for the workers.

Indirect Factors

At Living Place

➢ **The condition of the house**.

The living standard of the workers has impact on their work standard. If they can stay in a better accommodation then they can concentrate more in the work place.

➢ **Education facility for children**.

There are some factories where there are schooling facilities for workers' children. If children's education is ensured, they can remain tension free.

➢ **Gas facilities for cooking**.

If workers get gas supply at their houses, it becomes very convenient for them for cooking. It becomes additional support to them.

➢ **The condition of the hygiene factors**.

The hygiene and sanitation factors have direct impact on the workers' health state.

➢ **Support from the family**.

Most of the workers are female; therefore their support from the family is very important factor. If husbands and other family members are supportive, the female workers can contribute more.

On the Way to and from home to workplace

➢ **Transport facility availability**.

Transport facility is an important factor for the workers. They need to come for the work in the early morning and sometimes they need to go back to their home at night. In both the cases factory provided transport facility is very helpful for them.

➢ **Disturbance by the people during commuting**.

Sometimes female workers are being disturbed enroute while coming or going back from the work place. If they move through safer route they remain secured.

➢ **The probability of being Sexual harassment**.

Sometimes female workers are being sexually harassed enroute especially in the early morning or during evening or night hours. Therefore, often they remain in tension about this issue.

➢ **The road condition and lighting arrangement on the way**.

The condition of the road and the lighting arrangements enroute is also important aspect for the workers. This affects their regular movements.

7. Conclusions and Recommendations

RMG sector of Bangladesh provided good employment opportunities to the poor, low skilled, submissive women workers of the country. The "Made in Bangladesh" tag in the Bangladeshi garment products has traveled across the world as an emblem of Social and Economic freedom of Bangladeshi women. This has been created the excessive use of the illiterate rural women who are highly vulnerable, are with mental pressures, and are with low living standards. There are multiple factors that influence the working environment that has been identified by this study. All the factors were divided into three categories.

Firstly, environment prevailing at the workers' home or the place where they reside. The condition of the house, the kitchen facilities available, the toilet facilities and other hygiene factors availability, education facilities for the children and also the cooperation and assistance from the husbands and other family members.

Secondly, prevailing environment on the way to and from the workplace. The road condition, transportation facilities availability, disturbance by the people and the probability of being sexually harassed on the way are the factors that influence the workers.

Thirdly, the environment prevails at the workplace. These environments include the physical working environment of the factory, minimum wage, overtime and other financial payments in time, the behavior of the co-workers, supervisors, and managers, healthcare facilities, maternity leave facilities, day care center, social security schemes etc. Due to illiteracy, most of the female workers are not aware of their rights as per the labor rights acts in 2006. In the RMG factories poor practices like not offering any written appointment letter, the absence of trade unions, informal recruitment, irregular payment, sudden termination, wage discrimination, excessive work and abusing child labor etc are going on in many factories.

Therefore, female workers are vulnerable to losing their jobs at any time. The fear of losing their jobs and lack of alternative job opportunities compel workers to continue in unsatisfactory employment. Labor standards and rights are commonly ignored in the RMG factories in Bangladesh. Work areas are often overcrowded with limited workspaces, injuries, fatalities; disablement and death from fire and building collapses are frequent in the RMG sector. The absence of labor standards monitoring system and ineffective building codes, poor enforcement, and outdated labor laws and a lack of awareness of labor rights among workers are the major dissatisfaction in this sector. The workers remain worried about their job because any time they can be suspended from the job. The workers feel a headache for sound pollution in their workplace. Physical weakness and sometimes eye trouble is reported by the workers. It is also very painful for the workers to work without sitting for a too long time. The absence of written contracts, long working hours, delayed payment of wages and routine violations of health and safety standards are also some major environmental concerns. This study recommends some measures for improving the working environment of the female workers in the RMG industry of Bangladesh. The recommendations are outlined below.

i. Policymakers of the RMG sector should follow the industrial laws and labor laws to create conducive working environments and offer better protection measures for the female workers.

ii. Develop a mechanism for stopping disturbances from the male colleagues, take punitive measures against guilty supervisors for their misbehavior and harassment.

iii. Promotion prospects for the workers should be introduced for making the more motivated and committed.

iv. Regular long working hours and overtime hours create many problems with their health and also in their family. So working hours should be minimized by increasing the minimum regular salary. The routine salary payments should be done in due time.

v. Garment factories should consider providing affordable housing facilities and transport facilities for the workers.

vi. Improvement of health, hygiene and sanitation factors at work should be ensured.

vii. Determine target based incentive bonus system, as well as other incentives such as leaves, health benefit and other bonus systems, should be increased.

viii. The government monitoring by the Department of Inspection of Factories and Establishment should be enhanced to ensure better implementation of compliance factors.

ix. Stop the exploitation of workers and to make the enterprise more sustainable. The establishment of independent trade unions to monitor and protect workers right should be encouraged with keeping enough room for worker's participation and engagement in the company decision making process.

x. Provide equal opportunity to both male and female workers. There should not be any gender discrimination.

xi. These workers are to be protected while they commute from their homes to the workplace by the law enforcing agencies of Bangladesh.

This is an attempt to identify the environmental factors of female RMG workers in Bangladesh through literature review. However, there is an ample scope to identify more factors in this regard and discover significant environmental factors through further research conducting an empirical survey among the female garment workers in Bangladesh.

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Training and Development from Employee's Perception: A Study on First Security Islami Bank Limited (FSIBL)

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Abstract

Training has implication for efficiency at work & employee development. Due to globalization, changes in technology, political and financially viable environment, to train their employees is one of the finest conducts to prepare them for adopting with those challenges & gaining superiority other others. To retain organization's competitiveness, there is only one way to train their employees. The present study focuses on the existing training practice that is offered by the bank and also enlightens us the major factors that influence employee's perception about training and development practice. This study determines the organizational perspective and employee's perspective about training and development and reveals the five major dimensions from which employee's views training practice those are decision making & efficiency, financial & non financial benefits, personal & professional development, sense of superiority and career growth.

Key words: Training, Development, Employee's perception, Career development, skill, motivation.

Introduction

Human Resource is an inevitable part of an organization & every organization must need quality human resource for its success so that, they can able to create competitive advantages for their organization. Good human resource creates a competitive advantage by enhancing the productivity of the employees. On the other hand, training is an indispensable way to keep an organization competitive.

Training is the important function that directly contributes to the development of human resources.[1]

Companies invest more in training for producing improved financial results in terms of higher sales, gross profits per employee, stock growth, and better ratio of market to book value.[2]

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If organizations invest in right type of employee training it can enhance employee performance as well as competencies and skills. In addition, training is seen as a useful means of coping with changes fostered by technological innovation; market competition, organizational structuring and most importantly it plays a key role to enhance employee performance.[3]

Training refers to a planned effort by a company to facilitate employees' learning of job related competencies.[4]

The strategic importance of human capital and their interaction, as an asset, with other important assets of the organization because it is always taken in form of cost volume relationship.[5]

Literature review

Many studies have been done & give some important direction in this vital field. Though there are sufficient research studies on training and development, but very small quantity of research studies have been directed on First security Islami bank Limited. In this context concise literature review has been shown to reflect the research gap.

Sarah M.K.N. Mwanje(2010) wrote an article entitled "Career development and staff motivation in the bank." This specific objective of the study was to assess career advancement after training. It recommends that bank should motivate trained employee through various enhanced system of rewards and it also shows that training program should be real and operational so that they can find out training gaps as well as HRD should follow-up on trained employees.

Imran and Tanveer(2015) wrote an article on "impact of training and development on employees' performance in banks of Pakistan." They opined that training and development is important for the business at all the levels and in all sectors. They arranged a descriptive and quite explanatory approach to carry out a study for checking the impact of training and development on performance of the employees working in the banks of Pakistan. The study has three objectives based on assessment of current practices, impact check and better investment proposal for the bank. This study measure the influence of training and development on respondents' skill like job knowledge, work quality and quantity, functional skill, employees motivation and the level of loyalty. It results that job knowledge, work quality, functional skill, motivation and loyalty all are linked either strongly or moderately on supporting direction with employee performance.

Halidu Salihu Gambo,(2015) made an study on "The Impact of Training and Development on Workers' Productivity "for TET Fund Academic Staff Training and Development 2010 Sponsorship. This study uncovered that training and development programmes improve employees' skills and performance at work place & considered as an effective tool for sustaining and enhancing workers' productivity in the academia.

Job Tukunimulongo (2016) adopted a descriptive on "Effect of On-The-Job Training on Employee Performance in Kenya. "The main purpose of the study was to determine the

effect of on-the-job-training on employee performance in Mumias Sugar Company, Kakamega County. The study found that it is possible to reduce gap between current performances and expected future by training and development and training will enhance employee task efficiency that result employee satisfaction. This study shows that a significant direct relationship between on the job training and employee task requirement.

T.Deshpande(2016) given an article on "impact of globalization on selection procedure and training programs in banking sector."He mentioned that human resource management must cope with the radical change due to globalization and competition. To adopt with those challenges, competences like skill, knowledge and attitude among bank staff can ensure competitive advantage through training and development.

B. Vamsi Krishna(2017) made an study entailed "Human resource development training in rashtriya ispat nigam limited." They mentioned that the training programs are different in nature and wrap almost all the job requirements. One of the important objectives was to find out the relation between training and actual job performance. The study shows those effective training programs are offered by the HRD department of RINL which is positively outfit to the requirements of the organization.

From the above literature review, it is observed that few research works has been done on training and development in Bangladesh specially in banking sector. The field is new and promising for First Security Islami Bank Limited (FSIBL) also. Because it cares for training which is regarded as the most appropriate means for development of human resources of an organization and they mention that no such alternatives has ever been found that could develop knowledge, skill and efficiency of the employees in performing their duties the way training does. This study may unfold to identify the new perspective regarding training and development from employee's point of view because it is also important for FSIBL to know how do employees perceive Training Plan that they invest every year for its regular Professional Development Programs, Education and Research Programs. This has created a good research gaps as to assess the employee's perception about training and development practice in First Security Islami Bank Limited (FSIBL).

Objectives of the Study

The objectives of the study are as below:

1. To know the present training practice in First Security Islami Bank Limited (FSIBL).
2. To know the major factors that influence employee's perception about training and development practice in First Security Islami Bank Limited (FSIBL).

Scope of the Study

The study is limited to head office of First Security Islami Bank limited in Dhaka head office. Five divisions are selected purposively for the study. Only three years (2016, 2017 & 2018) data has been collected for the study. Summary of training courses and workshops, number of participants in different courses and workshops, summary of cost, working days & participants, Training programs, employee perception on training programs are the main discussion of the study.

Methodology of the Study

Research Design

This present study has been conducted using primary and secondary data. It is an empirical research that quantitatively measures the impact of T & D on various skills and retention factors from employee's perception. I have adopted the descriptive and explanatory approach to fulfill the study objectives. Survey sampling will be used to collect relevant data and responses. Questionnaires will be delivered in the five divisions of FSIBL by hand through my friend's (one of the employee of that bank is working in Head office, Dhaka) reference.

Selection of the study area

The researcher selected five divisions of First Security Islami Bank Limited in head office, Dhaka. Moreover due to time, resource, confidential & accessibility constraints, the study has been confided to the five divisions in head office.

Table -1

Divisions
Finance and Accounts Division
Human Resource Division
Management Information System Division
Branch Control Division
Investment Administration Division
Total no of division = 5

Sample Size

The total number of members of selected divisions of each are shown in the below table. The total numbers of 40 respondents were selected by using random sampling techniques.

Table -2

Divisions	Number of Members	Total interviewed respondents
Finance and Accounts Division	30	20
Human Resource Division	10	5
Management Information System Division	10	5
Branch Control Division	10	5
Investment Administration Division	10	5
	Total= 60	**Total= 40**

Methods of data collection

The required data are obtained both from primary and secondary sources. The nature of the data and data collection methods used are as under:

Table: 3

Methods/Instruments used	Nature of data
Interviewing Schedules	self development, recognition, promotion, job knowledge enrichment, financial reward, pride and prestige, investment risk, cognitive skill, supervisory power over other's, error in daily task.
Books, official records/documents (published and unpublished)	The concept of training and development, strategies of the bank for training and development, annual training plan & budget, summary of training courses and workshops, cost and other information related to the study.

Two types of data will be used mostly in studies i.e. primary data (newly gathered data for sake of problem at hand e.g. surveys, interviews, focus group discussions etc) and secondary data (data collected from existing sources e.g. Organization records, published papers, reviews etc). For this study as questionnaire survey has been used so the data for analysis is primary one. However, most part of the secondary data is being used in literature review section. A structured questionnaire has been used to collect the responses from the targeted sample. So, questionnaire will be the research instrument.

Data Analysis

Statistical approaches has been applied through SPSS (Statistical Package for Social Sciences 25) to analyze the responses collected on the questionnaire. The result has been drawn on the basis of factor analysis for meeting the research objectives. Factor Analysis has been used to test whether the variables are correlated or not among themselves. From the literature, variables have been taken.

Result and finding of the Study

All the year round they have tried to arrange different trainings, workshops, seminars and their main purpose is to make a better performance than the previous once.

Table: 4

Training Performance of last three [03] years

Year	Foundation Courses	5 days & above	1 day	Others	Total Courses
2016	7	10	11	8	36
2017	11	5	12	13	41
2018	7	7	21	6	41
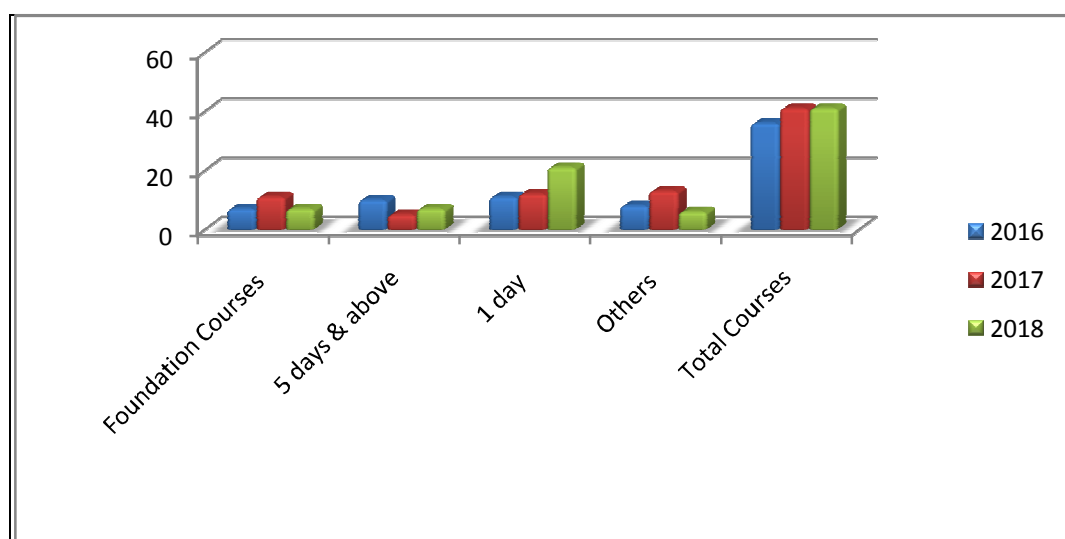
From table 4, it is found that training program of last three years where 25 foundation courses in addition with 93 other courses have been offered by FSIBL over the three years.

Table: 5

Number of Participants in Different Courses and Workshops- 2018

Foundation Courses	5 days & above	1 day	Others	Total Participants
265	324	1265	331	2185
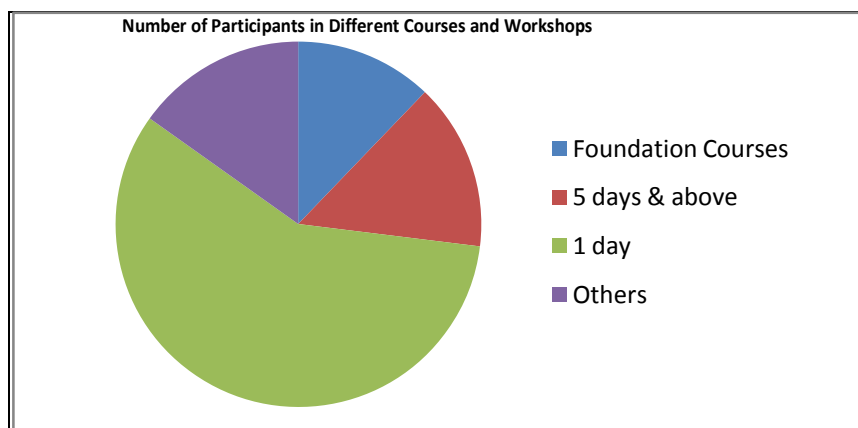
The picture shows that the bank rendered training to 2185 participants in the year 2018. Among these 265 participants attended in Foundation Course, 324 participants in five day & above courses, 1265 participants attended in one day workshops and 331 participated in other day's workshop.

Table: 6

Summary of cost, working days & participants of the last three [03] years

Year	2016	2017	2018
Cost	5477941	7099631	7313749
Working days	214	238	201
Participants	1760	1804	2185

Comparison in terms of Working Days and Participants

Table: 7

Year	Working Days	Participants
2016	214	1760
2017	238	1804
2018	201	2185

FSIBL state that they believe in more quality than quantity. But In the year 2018 they have tried to increase quantity besides ensuring quality. The total number of participants in 2016 was 1760, in 2017 was 1804 and in 2018 was 2185 which exceeded the previous year by the number 381 participants. They have arranged training for 201 days in 2018, where it was 238 days in 2017 and 214 days in 2016.

Factor Analysis

Table: 8

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.607
Bartlett's Test of Sphericity	Approx. Chi-Square	178.704
	df	78
	Sig.	.000

The KMO measures the sampling adequacy (which determines if the responses given with the sample are adequate or not) which should be close than 0.5 for a satisfactory factor analysis to proceed. Kaiser (1974) recommend 0.5 (value for KMO) as minimum (barely accepted). Here Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .607 so we can say that factor analysis is acceptable.

Bartlett's test is another indication of the strength of the relationship among variables. It tests the null hypothesis that the correlation matrix is an identity matrix. Here significance label is .000 so we may reject the null hypothesis and say that there is a co-relation with some of the variables. So our factor analysis is good according to **KMO & Bartlett's test.**

Table : 9

Communalities		
	Initial	**Extraction**
Self development	1.000	.698
Recognition and certificate	1.000	.705
Promotion	1.000	.724
Job knowledge	1.000	.793
Financial reward	1.000	.690
Pride and prestige	1.000	.810
Work become more easier	1.000	.635
Minimize investment risk	1.000	.782
Decision making skill	1.000	.767
Supervisory power over	1.000	.742
Error in daily task	1.000	.827
Career development	1.000	.743
Outside training facility	1.000	.469
Extraction Method: Principal Component Analysis.		

Communalities

The next item from the output is a table of communalities which shows how much of the variance (i.e. the communality value which should be more than 0.5 to be considered for further analysis & these variables are to be removed from further steps factor analysis) in the variables has been accounted for by the extracted factors. Here all the factors are more than 0.5 so we may consider for further analysis.

Table: 10

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.026	30.970	30.970	4.026	30.970	30.970	2.516	19.351	19.351
2	1.612	12.398	43.368	1.612	12.398	43.368	2.269	17.453	36.804
3	1.512	11.628	54.996	1.512	11.628	54.996	1.695	13.039	49.844
4	1.131	8.702	63.698	1.131	8.702	63.698	1.543	11.867	61.711
5	1.103	8.482	72.179	1.103	8.482	72.179	1.361	10.468	72.179
6	.876	6.739	78.918						
7	.760	5.848	84.766						
8	.558	4.296	89.062						
9	.525	4.042	93.103						
10	.337	2.596	95.699						
11	.218	1.678	97.377						
12	.184	1.417	98.794						
13	.157	1.206	100.000						
Extraction Method: Principal Component Analysis.									

<p style="text-align:center">**Total Variance Explained**</p>

Total Variance Explained

Table no: 9 tells that how many factors have been extracted by SPSS. Here number of original variables are 11 and reading has come only for 5 that means SPSS has converted variables into 5 new factors. Last cumulative 72% which shows 72% of the variance in this particular data has been explained by five factors which is a good sign due to capturing more than half of the data.

Table: 11

Component Matrix[a]					
	Component				
	1	**2**	**3**	**4**	**5**
Self development	.436	-.122	-.611	-.236	.252
Recognition and certificate	.165	-.288	.582	.422	.278
Promotion	.388	.484	-.124	.543	-.172
Job knowledge	.464	.329	-.402	.287	.474
Financial reward	.616	.194	.315	-.389	-.150
Pride and prestige	.794	.177	.314	-.222	-.032
Work become more easier	.715	-.242	.032	-.153	-.201
Minimize investment risk	.759	-.314	-.257	-.026	-.201
decision making skill	.503	-.591	.197	.270	-.229
Supervisory power over	.416	.548	.047	.291	-.425
Error in daily task	.750	-.352	-.226	.199	.223
Career development	.346	.198	.514	-.067	.561
Outside training facility	.486	.364	.014	-.307	.073
Extraction Method: Principal Component Analysis.					
a. 5 components extracted.					

First column of component matrix has 11 variables and components are five. Component matrix does not vary clearly about which variable are going into which factors or which variables are very closely matched with which factors.

Table: 12

Rotated Component Matrix[a]					
	Component				
	1	2	3	4	5
Self development	.285	.143	.682	-.168	-.320
Recognition and certificate	.228	-.069	-.113	.006	.797
Promotion	.064	.040	.212	.819	.051
Job knowledge	-.015	.085	.807	.345	.124
Financial reward	.229	.789	-.073	.094	.021
Pride and prestige	.339	.785	.088	.194	.183
Work become more easier	.660	.437	.078	.040	-.033
Minimize investment risk	.776	.256	.278	.103	-.162
Decision making skill	.822	-.026	-.129	.040	.269
Supervisory power over other	.073	.296	-.066	.799	-.083
Error in daily task	.686	.109	.553	.053	.191
Career development	-.148	.502	.201	-.065	.651
Outside training facility	-.009	.622	.241	.137	-.068
Extraction Method: Principal Component Analysis.					
Rotation Method: Varimax with Kaiser Normalization.[a]					
a. Rotation converged in 7 iterations.					

The rotated component matrix, refers that which variables are highly correlated with which variables or have high loading value.

Table-11 shows that in component no 1 have both high loaded value .822 & .776 respectively and these two variables give the result where employee perceive training as a tool for enhancing decision making skill & efficiency aspect.

In component no 2, variable number 5 & 6 are coming in one factor which has also high loading value .785 & .785 that results financial reward and pride and prestige is considered into another factor may characterize as motivational aspect of training.

In component no 3, .807 and .682 has been picked up due to having high loading value which present Job knowledge and self development is considered as an another exclusive factor that employees are valued for personal & professional development aspect.

In component no 4, promotion and supervisor power is high loading factor .809 & .799 which are correlated with each other. So it has been revealed that training may be viewed as improving sense of superiority.

In component no 5, variable no 2 & 12 are coming in one factor which are correlated with each other. In this factor, Recognition and certificate & Career development is considered into career growth aspect.

Table: 13

Component Transformation Matrix					
Component	1	2	3	4	5
1	.634	.594	.382	.288	.129
2	-.678	.385	.115	.603	-.123
3	-.072	.349	-.625	-.044	.693
4	.147	-.614	.085	.632	.441
5	-.333	-.001	.666	-.391	.541
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.					

Concluding remarks of the Study

So from the above analysis it exposed that employee perceived training from five exclusive factors that respondents are valued and training has made its significant contribution to rising decision making & efficiency by minimizing investment risk. Training is also measured by employees of FSIBL as a part of pride and prestige and financial reward which may consider as a financial and non financial motivational factor. Training has also a momentous role in personal & professional development, by offering promotion. In addition with employees are also viewing training practices in FSIBL as an expansion of sense of superiority and career growth.

Suggestions and policy implications of the Study

In the view of conclusion of the study, following suggestions are given as to develop the effectiveness of training practice in FSIBL.

2. Training is expensive so training should be organized in a way for rising job related competency that can contribute bank's competitiveness.

3. Supervisor should encourage employees to transfer of training so that all employees can apply those knowledge and skill in day to day activities.

4. Customer service, productivity, employee retention and growth and coping with the retirement of skilled employees are some of the issues affecting bank so training should consider those factors.

5. Attitude and morality is also a significant contributor for the growth of bank so it is needed to offer those types of training for employees.

6. Training should offer before vertical and horizontal movement in the form of promotion   so that bank can make sure the stability of leadership for all vital position.

7. Before offering training to the trainees it is very important to assess the need for training otherwise training will not meet its objectives.

8. After getting training, the trainee's performance should be monitored so that it can be understood the before and after effect of training session.

9. To identify which trainees get most benefit or least from the program.

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Barriers for Developing Halal Tourism in Bangladesh: An Empirical Study

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Abstract

Tourism is a growing contributing industry to the economy in many developing countries like Bangladesh. In this perspective, Halal tourism can be the key focus area by attracting the Muslim tourists from all over the world similar to many other Muslim majority countries in Asia and Middle East. Due to proper attention of the concerned authority the development of Halal tourism is still in its immature stage in our country. This study tried to find out various barriers for developing Halal tourism practices in Bangladesh. The qualitative data was collected for this study through in-depth interview from the Muslim tourists as well as management practitioners from the different tourism destinations. The government of Bangladesh should take necessary steps to develop halal tourism and take benefits from this growing industry to its economy.

Keywords: *Halal Tourism, Development, Barriers, Bangladesh.*

1.   Introduction

Halal tourism is becoming one of the new products in the tourism industry which can be significant to the Muslim majority countries like Bangladesh. Halal tourism industry has shown a great potential to be a successful new source of economic growth for many Muslim as well as non-Muslim countries. Halal tourism is any object or action which is permissible to be used or engaged by Muslims according to the Islamic teachings in the context of tourism industry (Battour, 2016). Although halal tourism is a relatively recent phenomenon, Halal holidays for leisure purposes are estimated to be one of the fastest growth sectors in the industry (Wingett & Turnbull, 2017). Though Bangladesh is a Muslim majority country but the concept of Halal tourism here is not introduced well like other Muslim majority countries in the world. Bangladesh has huge potentials to enlargement its halal tourism segment and contribute to economic development through earning from Muslim tourists from home and abroad.

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2.   Related Literature Review

2.1   *Tourism in Islam*

In Islam, making a pilgrimage that requires Muslims to travel far from their home has been a ritual practiced by Muslims for centuries. For example, travelling to Mecca for the Hajj pilgrimage in the Kingdom of Saudi Arabia at least once in a life time is one of the orders described in the five pillars of Islam.

However, travelling in Islam does not always necessarily refer to the Hajj pilgrimage: it can also refer to leisure and/or any other activities. One surah in the Qur'an—named surah Al-Ankabout (literally, the spider)—explains one purpose of tourism: consideration and contemplation. The following surah asks Muslims to travel the world to contemplate the creation of God:

"Travel through the earth and see how Allah did originate creation; so will Allah produce a later creation: for Allah has power over all things." (Surah Al-'Ankaboot 29: 20)

"Travel through the earth and see what was the end of those who rejected Truth" (Surat Al-An'am 06: 11).

"Do they not travel through the earth, and see what the end of those before them was?" (Surah Mohammed 47: 10).

Above these are some of the verses from the holy Quran where it stimulates the mankind to travel and to see the creations of the creator Allah (swt). So, Islam and tourism are very closely related with each other. Hence it can be suggested that Islam as a religion supports its adherent seeing the world, and that this behavior later developed into Islamic tourism, Muslim tourism and then Halal tourism.

When traveling to another place, every Muslim is supposed to refrain from any behavior that may dilute their faith and infringe the Islamic law. Islam determines what food and drinks are lawful or permissible and are allowed to be consumed by Muslims (known as Halal), the way to dress, what entertainments may be seen, and how to behave. It also forbids gambling, financial transactions that involve the giving or taking of interest, and any kind of personal relationships.

2.2   *Muslim Populations and Global Halal Tourism Market*

The advance of Muslim population is fast and constant around the world. As per Pew Research, there were almost 1.6 billion Muslims globally in 2010 and this figure is projected to hit 2.8 billion in 2050, which is almost 30% of the world's total population (Economist, 2011). Since Islam is the second largest religion with stable growth of followers, the growth of this population is projected to reach 25.13% in 2020 and 33.14% by 2075 (Kettani, 2010). It is expected to make up 26 percent of the world's population by 2030. By 2050, this Muslim population increase will be faster than the world's population as a whole (Pew Research Center, 2011).

Implemented Shariah practices related to the tourism sector are in its early stages, just as Islamic banks were before conquering a substantial market share in the international banking market. Halal tourism as a business opportunity is expected to become one of the most flexible types of tourism (Chitakasem, 2007). Though halal tourism is a moderately contemporary phenomenon, halal holidays for leisure purposes are projected to be one of the fastest advance segments in the industry (Wingett & Turnbull, 2017). 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 (GMTI, 2018). In 2017, there were an estimated 131 million Muslim visitor arrivals globally – up from 121 million in 2016 – and this is forecasted to grow to 156 million visitors by 2020 representing 10 percent of the travel segment (GMTI, 2018). According to Pew Research Center (2011), Halal tourism will be continuing as lucrative business because of the facts from the demand side. The Muslim population continues to be the fastest growing religious segment in the world. Facts show that Muslims constitute a global market of approximately 230 million travelers by 2026 as potential customers (GMTI, 2019).

2.3   Elements of Halal Tourism

In the literature, numerous expressions have been used to describe the Halal tourism in tourism and hospitality service; namely Halal Tourism, Islamic Tourism, Muslim-Friendly Tourism, Halal Friendly Tourism and Shariah Tourism. Many studies have been done in many Muslim as well as non-Muslim countries to know the elements to develop Halal tourism. Though Bangladesh is a Muslim majority country but here is very few study regarding this issue yet surprisingly and these studies absolutely not this issue rather related to this issue.

Halal tourism refers to any religious travel such as Umrah, Hajj or visiting to any religious or Holy sites (Muhammad 2008). Furthermore it includes any activities that permissible in Islamic Shariah. Therefore the elements of Muslims friendly tourism are halal friendly hotel, halal transportations (halal airlines), halal food premises, Islamic tour packages or any other halal activities such as halal logistics and Islamic finance which support it in order to develop the niche of halal tourism product in future (Zulkifli et al., 2011). Muslim travelers' requirements are halal food, restaurants, accommodation, transport preferences, the provision of prayer facilities, separate facilities for males and females, alcohol free bars and other amenities (Oktadiana, Hera, Pearce, Philip L. & Chon, Kaye 2016).

Muslim travelers' requirements in terms of prayer also receive plenty of attention, although the researchers note a lack of focus on festivals and holidays that are important to the Muslim community. In particular, they point to neglect in the consideration and management of Eid-ul-Fitr, the celebration at the end of Ramadan (Oktadiana, Hera, Pearce, Philip L. & Chon, Kaye 2016). Greater attention could also be paid to certain aspects of the verbal and non-verbal components of communication. Although certain key Muslim needs, such as the rules about food, receive adequate coverage, there is little mention of appropriate forms of address, rules about touching, using the right hand to pass objects and preferences for social distance and eye contact. The researchers explain that

non-verbal communication also includes acceptable Muslim dress codes and principles for covering the body. Host communities could benefit from specific advice on these issues, moderated according to the different requirements of the tourists' countries of origin (Oktadiana, Hera, Pearce, Philip L. & Chon, Kaye 2016). Battour et al. includes many aspects of Muslim tourists' by defining halal tourism as a type of religious tourism that represents allowable activities under the Islamic teachings in terms of behavior, dress, conduct, and diet (Battour et al. 2012). Halal tourism is offering facilities to cater for Muslim religious considerations and address Muslim needs. This tourism includes the Shariah based components in accommodations, transportation, food premises, finance, tour packages and other activities (Chandra, 2014). Numerous activities and services of halal tourism are becoming famous and popular in the tourism industry due to tourists demand and satisfaction. Some Muslim countries highlight their tourism destinations as 'Muslim friendly destinations' to attract Muslim tourists (Battour and Ismail, 2015). These countries are offering Shariah compliant' hotels to the tourists with Qibla direction, halal food and beverages (Carboni et al., 2014). The food suppliers are using halal chicken and halal meat for Muslim tourists to fulfill their needs. Muslim friendly applications such as accommodations, products, services, packages and restaurants are providing in a smart phone to help the tourists (Stephenson, 2014). Muslim friendly airports and halal holidays (Battour and Ismail, 2015) are the best practices to satisfy Muslim tourists. Separate recreation facilities for women such as swimming polls, beach activities, bathing suits, prayer rooms, spa with halal cosmetics are attracting the Muslim women tourists. Malaysia and Turkey have launched another halal tourism activity namely Muslims friendly cruise is to attract the tourists (Salama, 2016).

Figure 2.3.1: Several Components of Halal Tourism

Source: Global Muslim Travel Index (2019, p. 13)

3.   Objectives of the Study

The main objective of this study is to find out barriers for developing Halal tourism in Bangladesh. Also this study tried to explore the concept of tourism in Islam, global Halal tourism market and elements of Halal tourism with the help of existing literature.

4.   Methodology of the Study

As the focus of this study is to find out barriers for developing Halal tourism in Bangladesh, so the researcher used in-depth interview method in this study to collect qualitative primary data from the Muslim tourists as well as management practitioners of tourism in Bangladesh. Purposive sampling techniques were adopted to reach the respondents. Before starting the interview, respondents were asked for the consent. The interviews with the Muslim tourists were conducted while they were visiting the destinations or sites.

From the October 15, 2019 to January 20, 2020 the interviews were conducted. The total number of conducted interviews was 23. Each interview was minimum 18 to maximum 22 munities in length. All the interviews were recorded by the researcher with prior permission from the interviewees. Respondents were asked research objectives related questions by an open-ended question. Therefore the interviews were conducted in Bengali and very few in English; the researcher translated each Bengali interview in English. Thematic analysis was conducted to develop common themes based on the issues relevant to the research objectives. The data analysis identified main themes and possible links between them. Data analysis was forthright in the sense that the researcher reached a high level of agreement on the developing themes. And the secondary data used in this study were collected from various books, journal articles, daily newspapers, websites, etc.

5.   Findings of the Study

The following parts discuss barriers for developing Halal tourism in Bangladesh:

5.1   *Absence of Promoting Halal Food and Beverage*

Bangladesh as a Muslim country provides foods and beverages most of which are halal in general due to Muslim's common values and norms. As foods and beverages are considered as important element of tourism, Muslim tourists are not exception from this. The major difference between Muslim and non-Muslim tourists are issue of halalness of the same. The Muslim tourists prefer the halal one. Many of the Muslim countries have successfully promoting their tourism by focusing the aspect of halalness of their food and beverage for tourists in order to attract Muslim tourists from different countries of the world. In this present study, it was attempted to know the views of some selected Muslim tourists and it was evident from their opinions that they got halal foods and beverages in most cases but the same was not focused in any way in the promotional activities of the destination marketers of Bangladesh tourism. So, the problem does not lie in providing halal food and beverage, rather it's a problem of proper promotional activities. Based on

the result, it can be recommended that Bangladesh destination marketers should have proper promotional initiatives highlighting the assurance of providing halal foods and beverages for attracting Muslim tourists to our destination.

5.2 *Not Providing Proper Prayer Facilities*

In most of the destinations and sites of our country the prayer facilities are available but it is not sufficient. There are absence of washed mats, Qibla direction, proper wudhu facility, prayer time announcement etc. Some Muslim tourists claimed that the prayer mats in the Mosque is too much dirty and emphasized to wash the prayer mats regularly. Some of them said about to ensure the proper wudhu facility in the Mosque. Many of the foreign Muslim tourists were talked about the absence of Qibla indicator and it creates problem for them as they travelled from country to country. In reality, there is no Qibla direction in the praying place of our destinations and sites. So, the tourism marketer of our country should set up Qibla indicator in various destinations and sites that would help the foreign Muslim tourists to find out the Qibla direction in the destinations places and sites.

5.3 *Problematic Dress Code*

We know Islam provides dress code for the Muslims both for male and female. Many of the tourists talked about the dress code of the other tourists as well as the management practitioners. In the current study, it was found that the Muslim tourists were annoyed at the unlawful dress code of the residential hotel receptionists and the others guests also. Short dresses of female tourists disturbed the Muslim tourists in the sea beach. Some of the Muslim tourists recommended to separate the halal tourism spot from the usual place in the sea beach area.

5.4 *Problem at Accommodation*

Though the accommodation facility is good enough for the tourists in our country but the existing problem for the Muslim tourists at staying in the hotel where the Islamic *Shariah* is not practiced is a big issue for them. Some of the tourists talk about the accommodation problem like allowing male and female guests in the same floor, allowing bachelor and married couple in the same floor and so on. And they also talked about to solute these problems by separating the male and female guests into different floor, separating bachelor and married couple into different floor and so on.

5.5 *Free Mixing*

In any destination of our country the tourism marketer has to control the issue of modern free mixing to develop halal tourism as it is a *Shariah* instruction. Muslim tourists from home and abroad will not consistent with free mixing as it is prohibited in Islamic manner. But most of the tourism destinations and sites of our country are not free from free mixing as the Muslim tourists claimed. Even the Islamic heritage sites are not out of it. Basically, many youth boys and girls were gossiping in the destination places that were indicated by the Muslim tourists. So, the authority should take proper action in this regard to give pleasure to the Muslim tourists.

5.6   Conventional Transportation/Airlines

Many halal tourism practices countries provide halal transportation or commonly known as halal airlines to Muslims tourists to attract tourist from all over the world especially from the Muslim world. They provide Muslim friendly services like halal food, fruit juices in replace of alcohol, separating the passengers as per gender and so on. The most annoying matter of the Muslim tourists is to get services from the women air hostess who dressed up is not in an Islamic manner as some of the foreign Muslim tourists said. Some Muslim tourists said about the separation of air flight from the usual air flight in the time of *Biswa Ijtema* in every year.

5.7   Common Tour Packages and Entertainment

The content of the halal tour packages must be based on Islamic principles. It should include visits to the Islamic monuments, heritage sites, remarkable mosques, promote event during the month of Ramadan and visitation to the local Muslim communities and mosques. In the present study, it was found that many tour operator of our country arranged many entertainment and enjoyment programs for the tourists but most of these programs break the Islamic *Shariah* law. So it is recommended that, the tour packages and entertainment programs for the Muslim tourists should be separated from the common tour packages and programs. And special entertainment facility can be arranged for Muslim tourists only like Quran reciting competition, description of *Seerah*, describing the *Tafseer* and so on.

5.8   Absence of Islamic Finance

Though the Islamic finance is available in Bangladesh in many sectors but the tourism sector is not considered as a good place for financing. This hinders the halal tourism development in Bangladesh. Some management practitioners especially small business entrepreneur emphasized on interest free loan for providing goods and services to the tourists in the destination area. In this study, it was found that some of the businesspeople who supply goods and services to the tourists claimed that many other sectors of our economy get interest free loan but this potential sector is out of interest free loan. They recommended to include the tourism sector into the interest free loan list for developing the halal tourism in Bangladesh.

5.9   No Halal Certification Authority

As halal certification is an integral part of the promotion of halal tourism for any country so the concerned authority of Bangladesh should take necessary actions in this regard as like other halal tourism hubs in the world. About all of the OIC member countries developed a halal certification authority to develop halal tourism. Many Muslim tourists from the non-Muslim countries were confused to take meal because they are used to halal certification meal in their home country. So it creates a problem in our tourism destination's hotels and restaurants. Some hotel managers said about the halal certification issue in Bangladesh. They said there in no halal certification authority in our country absolutely. They are waiting with eagerness for a halal certification institution that will help to develop halal tourism in our country. So the government should take necessary steps in this regard as soon as possible.

6.   Conclusion

The global Halal tourism market is growing day by day, it is essential for Bangladesh to develop a framework for the Muslim tourists to attract them from all over the world. In order to develop the Halal tourism concept in Bangladesh, this study has described the barriers those must be eradicated. It is important for individuals and organizations involved in the tourism and hospitality industries in Bangladesh to be more aware of providing and promoting the Muslim friendly products and services to the Muslim tourists to develop Halal tourism in our country. Our country has huge opportunities to develop the fast growing halal tourism concept due to the increasing number of Muslim local visitors and foreign travelers.

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