Dedicated to the Father of the Nation Bangabandhu Sheikh Mujibur Rahman

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This volume of Journal of Business studies of Barishal University is dedicated in honour of the Father of the Nation Bangabandhu

Sheikh Mujibur Rahman on his birth centenary celebration



Dedicated to the Father of the Nation Bangabandhu Sheikh Mujibur Rahman

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Editorial

The Barishal University Journal of Business Studies (BUJBS) (ISSN 2411-247X) is an interdisciplinary academic journal that focuses on business, social science, and economics. BUJBS is published biannually and is available both in print and electronic format. It is our great honor and privilege to declare the journal of the Faculty of Business Studies (issue-7, volume 1) as the 'Mujib' edition. This edition aims to convey our solidarity with Bangabandhu Sheikh Mujibur Rahman, the Father of the Nation. His majestic presence in our history lends significance to our liberation war and our independence in 1971.

I would like to express my heartfelt gratitude to Shibli Rubayat Ul Islam, Dr. Mojib Uddin Ahamed, and Dr. Mubina Khondkar, professor of the University of Dhaka, and Dr. M. Shah Newaj Ali, Professor and former UGC member for their advice and continuous support in the publication of the 'Mujib' edition. As the world grapples with the deadly Covid-19 pandemic, it is essential to remember that Bangabandhu himself faced innumerable obstacles and hardships throughout his legendary life as the unchallenged hero of Bengal and he conquered them all with typical moral grit and resilience. It is a powerful reminder that despite the pandemic's dangers and obstacles, we must complete our unfinished responsibilities and thereby fulfill our duty to our country and people. This Mujib edition represents our devotion to academic life and commitment to broaden our academic study and scholarly research.

This publication of the Mujib edition was our highest priority. We have spared no effort in trying to make it interdisciplinary and global so that we can achieve Bangabandhu's goal of 'Sonar Bangla'-an intellectually autonomous and culturally liberal Bangladesh. It is my firm belief that this special edition will take us a long way to achieve qualitative changes within academia and beyond and make a substantial contribution to our country's continuous development.

Our goal is to give BUJBS readers a new platform for knowledge sharing. The editorial board and I strongly encourage you to submit unique and plagiarism-free articles. If you have any queries about the journal or submission requirements, please contact the editor at deanbusiness@bu.ac.bd.

With thanks.

Professor Dr. Md. Sadegul Arefin

Editor in chief Barishal University Journal of Business Studies (BUJBS) University of Barishal



Small and Medium Enterprises (SME) Development and Economic Growth of Bangladesh: A Narrative of the Glorious 50 Years

Md. Masudur Rahman, PhD*
Mubina Khondkar, PhD*

Abstract

The father of the Nation, Bangabandhu Sheikh Mujibur Rahman took significant policy measures for the improvement of the rate of literacy, reduction of poverty, industrialization, and strategic action plans for SME development. With the passage of time, the economy of Bangladesh has gradually developed through several phases, adopting strategies that resulted in a significant economic boom in the last decade. The growth of the economy can be attributed to the positive shifts - from agricultural-based to industrial-based. from input-driven to productivity-driven, and from traditional knowledge-based-technology-orientated economy. Small and medium enterprises (SMEs) have been playing an essential role in the development of the economy of Bangladesh, and it can be claimed that it is the backbone of industrial development in the country. This paper attempts to discuss the extent to which the economy has benefited from the expansion of the SME sector and identifies the contribution of the SME Foundation in the process of uplifting and flourishing SMEs. The SME Foundation has been doing a remarkable job in this regard with continuous endeavors to facilitate innovation of new products, the introduction of new production technologies, marketing of goods and services, skills development training, advocacy, policy formulation, and linkage with national and international organizations. The study reveals that the development of the SME sector played a major role in contributing to the economic growth through providing support to the existing SMEs, creating non-traditional opportunities, generating employment, making the labor force more skilled and effective through training, enhancing labor productivity, and improving product and services quality. SMEs are accounting for 25% of the GDP of Bangladesh and 80% of total industrial jobs; and therefore, significantly has been contributing to 6% to 8% of the economic growth rate in the last decade.

Keywords: Bangladesh, Bangabandhu, economic growth, Small and Medium Enterprises (SME), SME development, SME Foundation

1. Prelude

In 1956, when the Father of the Nation, Bangabandhu Sheikh Mujibur Rahman was the Minister of the *Industries, commerce, labour, anti-corruption, and village aidministry*, established the East Pakistan Small Industry Corporation (EPSIC) to promote SMEs in the then East Pakistan, i.e., present Bangladesh. He realized the crucial importance of the role of the SME sector in the national economic development and identified the

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significance of institutional support in facilitating activities. Since the independence of Bangladesh in 1971, the economy of the country gradually progressed with steady trends. This can be identified as exceptional progress since at the time of its birth it has a devastating economic condition due to the war of independence, the legacy of discriminated economic treatment from the then Pakistan, and insignificant industrial development in this part. This progress has been possible as there has been a visible increase in the gross domestic product (GDP) over the last 50 years. The average GDP growth rate was 2-3% in the 1970s, around 3.5% in the 1980s, 4.5-5% in the 1990s, and more than 6% over the first decade of the 21st century (Helal and Hossain, 2013). GDP growth rate was 8.2% in 2019 and 5.2% in 2020, and the forecasted GDP growth rate of 2021 is 6.8% and 2022 is 7.2% (ADB, 2021).

In Bangladesh, women constitute roughly half of the population. So, the development processes of the country can be accelerated ensuring their active participation. Given the economic and social contribution made by the entrepreneurial programs, it is significant to understand the factors that lead to the success of women-owned businesses. An understanding of these factors may result in measures that could reduce the failure of these businesses.

Bangladesh reached the 'lower-middle-income status' in 2015 and is on track to graduate from the UN's Least Developed Countries (LDC) list in 2026; and the poverty level declined from 44% in 1991 to 15% in 2016 (World Bank, 2021a). The country has done a phenomenal improvement in agriculture, industrial sectors, garments, manufacturing, andservices. SMEs are associated in every way with all these booming sectors. In most economies, SMEs play a major role and are particularly important for developing countries (World Bank, 2021b). It is evident that SMEs influencea flourishing economy. Positive economic impacts can be in the form of increased employment and earning opportunities, enhanced standard of living, increased investments, infrastructural development, and new business linkages and opportunities (Rahman, 2010). Emphasis is given on the necessity of adequate financial and institutional supports to promote SMEs as it is often identified that institutional support is less for them compared to that of large-scale investments, although their prospects are high (ibid).

This paper attempts to unfold the achievements of Bangladesh over the last 50 years since its independence. It provides an overview of the conditions and development of SMEs in Bangladesh and discusses their contributions to the economy. It identifies the plans and policies the government of Bangladesh (GoB) and the related institutions have been adopting to enable the development of SMEs and to boost local consumptions and



exports. The paper is structured with a prelude at first, the analysis of literature on the role of small and medium entrepreneurs on the economic development of Bangladesh is presented at second, identification of major objectives at third, discussion on methodology at the fourth, discussion on the evolution of SMEs at fifth, discussion on the evolution of SME Foundation at sixth, analysis of the current situation at seventh, and recommendations and conclusion at last.

2. Context of the Economic Development of Bangladesh

The theoretical framework of the economic development of Bangladesh over the last 50 years might be contextualized based on the review of literature on the roles of the small and medium entrepreneurs. The significant role of entrepreneurs in the process of economic development is described by W. W. Rostowwhile exploring the relationships between entrepreneurship development and economic growth (Shapero, 1971; Rostow, 1971). The five stages of growth include the traditional society, the preconditions for take-off, the take-off, the drive to maturity, and the age of high mass-consumption (Rostow, 1959 and 1990). The process of economic growth centers around the theory that over a period of two or three decades the economy and the society start transforming in such a way that economic growth becomes an obvious outcome, and this transformation is usually identified as the take-off (Rostow, 1971). This theory somewhat tallies with the progression of economic growth of Bangladesh and explains the experiences of the shifts among the self-sustained stages of economic growth. Early research (Khondkar, 1992) claimed that entrepreneurship is an essential factor to national wealth-building; therefore, Bangladesh needs the talent, ability, and drive of the entrepreneurs to utilize the resources to transform into profitable enterprises required for industrialization and economic development. A country's prosperity depends on its ability to produce useful products and services and to spread the benefits to the mass people (ibid). Although entrepreneurs usually vary in demographic profiles, it is often claimed that their success can be attributed to the common traits of commitment (Rahman and Alam, 2018).

Global poverty reduction has been associated with economic marginalization of the least developed areas and emphasis is given on maintaining political stability, taking poverty reduction initiatives, and regularly assessing poverty reduction initiatives to augment the resilience capacity of poverty alleviation and to foster economic development (Li *et al.*, 2021). In Bangladesh, the rate of poverty reduction exhibits a downtrend, however, it is not compatible with the high growth rate of the GDP; and inequality is also increasing at a fast pace (Titumir, 2021). Livani (2021) identified that economic growth in Bangladesh has been mainly constrained by trade barriers and a lack of women's economic



empowerment and suggested that increased international trade and more liberalized trade participation and ensuring equal gains for women can be an effective tool for economic growth and poverty reduction. Anti-poverty interventions are supposed to give proper attention to gender issues, sustainability, research and development (R&D), and access to information (Ahmed *et al*, 2011).

The basic tool for achieving growth is industrialization, as it creates jobs and reduces unemployment. It creates opportunities for the population to participate in skilled activities by transforming them into human resources and assets for the country. Worldwide, SMEs are one of the major contributors to job creation and global economic development as they represent about 90% of the businesses and offer more than 50% of the employment opportunities (World Bank, 2021b). In emerging economies, SMEs are contributing about 40% of the GDP and creating 7 out of 10 jobs; however, access to finance is a key constraint to their growth (ibid). The following Table 1 presents the sector-wise percentage contributions to the GDP of Bangladesh over the last 50 years.

Table 1. Sector-wise Contribution to GDP

Year	Agriculture (%)	Industry (%)	Services (%)
1972-1973	49.76	9.00	36.46
1980-1981	46.58	11.08	42.34
1990-1991	29.23	21.04	49.72
2000-2001	25.03	26.20	48.77
2010-2011	18.00	27.38	54.61
2019-2020	13.48	30.82	55.71

Source: BBS, 2021, 2017, and 2010.

One study found that Bangladesh Small and Cottage Industries Corporation (BSCIC) has a significant role in industrial expansion and poverty reduction in Bangladesh and it significantly influences household consumption and poverty reduction. A 1% increase in income from BSCIC will increase the yearly household consumption by 0.73%, whereas it is only 0.36% in the case of non-BSCIC income (Haider *et al.*, 2015). To achieve the Millennium Development Goals and the South Asia Development Goals, Bangladesh needs to adopt appropriate policies and strategies. BSCIC, The SME Foundation, the National Association of Small Cottage Industries of Bangladesh (NASCIB), and Bangladesh Women's Chamber of Commerce and Industry are the key partners to achieve the goals.



Despite SMEs in Bangladesh account for 25% of the total labor force, this sector gets limited assistance from support service providers and faces constraints like lack of credit facilities, market access, modern technology, and business information (Alam and Ullah, 2006). It is found that for a long time, fair trade practices have been introduced through the ECOTA Forum, which is a national networking body of non-government organizations (NGOs) and SMEs engaged in small-scale cottage industry-based exports, to ensure better coordination for better marketing and linking with the market abroad to ensure fair price to the traders and to help them develop related skills (Rahman, 2002). It is identified that lack of support, resources, finance, and access to entrepreneurial learning work as barriers to self-employment; and funded support for their along with undergraduate and postgraduate entrepreneurial learning entrepreneurship course provisions are required (Edwards and Muir, 2005). There exists a limitation for SMEs' access to international trade and it is caused by a lack of required technological know-how and a lack of knowledge about the opportunities offered by foreign markets (Damin, 2021).

In the SME sector, many opportunities are either left untapped or partially utilized with less efficiency and effectiveness due to the lack of formal financial assistance in terms of loans, leasing, and others. Both GoB and private sector banks usually do not offer adequate financial assistance to facilitate SME development. If they offer loan packages for the SME sector, then existing leakage may get reduced, and more business initiatives will get consistent financing, resulting in a better earning for the people (Rahman, 2010). Nowadays, information and communication technology (ICT) is considered an inseparable concept for economic development and if an adaptive and sustainable technology framework can be developed by efficiently utilizing labor forces then we can develop our economy further (Muzareba and Rahman, 2014). During this COVID-19 pandemic and in the changing environment of the new normal, it has been particularly realized that ICT can contribute to the progression of all sorts of economic activities. A recent study has emphasized the use of ICT for development (ICT4D) in Bangladesh and identified that internet-based entrepreneurs often make considerable economic gains though that sometimes come with a few social consequences which the culture has to deal with (Muzareba, 2021).

A significant number of women entrepreneurs are contributing to the SMEs of Bangladesh through their performance, and they were found to be playing significant roles in reducing poverty and unemployment (Rahman *et al.*, 2020). However, most of them are constrained by the lack of a starter capital, shortage of collateral, limited access to the capital market, lack of market access, related theoretical knowledge, and ICT skilled manpower (ibid). Micro-finance institutions (MFIs), such as the Grameen Bank



and BRAC have been contributing through their credit programs to assisting disadvantaged rural women, and credit with a social development approach is claimed to be more likely to achieve the goal of poverty reduction (Khondkar, 1998). Although microcredits impact the productivity of its clients and contribute to poverty reductions, possibilities of alternative policy options should also be considered (Islam, 2016).

3. Objectives

The broad objective of the paper is to grasp the roles of the development of SMEs in the economic growth of Bangladesh over the last 50 years. The specific objectives are outlined below.

- i. To address how the five-year plans of the GoB led the development in the SME sector.
- ii. To examine the development challenges and prospects of the sector.
- iii. To examine the roles of SMEs as well as their contribution to the economy.
- iv. To analyze the contribution of SME Foundation to the SME sector.

4. Methodology

This study uses a qualitative research approach and involves analyses of primary and secondary data. To achieve the objectives of the study, it uses textual analysis and content analysis. Therefore, the methodology used in this study included identification, analysis, and examination of relevant documents and communication artifacts to draw interpretations to identify patterns in research issues in a replicable and systematic manner. It is a widely accepted and used methodology that uses the available data and text to gain information related to the problem at hand (Krippendorff, 2018; Dumay and Cai, 2015). The textual examination provided pieces of evidence that were in written, spoken, and/or visual message forms which assisted to comprehend the phenomena. Facts were driven based on the contents and meanings of the texts of their discourse and structure (Stemler, 2015; Fursich, 2009). Books, articles published in quality journals, research papers, annual reports, and audio-visual data related to the economic growth of Bangladesh and its relation to the SME sector are considered as the contents. Primary and secondary data were collected from different sources including the Asian Development Bank (ADB), United Nations Development Programme (UNDP), World Bank, Bangladesh Bank, Bangladesh Bureau of Statistics (BBS), and SME Foundation. The discussion and discourses throughout the paper have developed analytical interpretations and resulted inprobable theoretical outcomes and policy implications.

5. Evolution of SMEs in Bangladesh

After the dreadful war of independence, SMEs started to play an important role during the early years of 1972-1975 to recover the country's economy. Private sectors were



motivated to participate in the national development with the philosophy of social justice and economy of equality to make the country self-reliant and self-sustained. It was realized that as women and youths form a significant portion of the population, their active participation was required to accelerate economic activities. To achieve that, the GoB gradually privatized the nationalized industries, promoted the free market concept of economy, took steps for development activities in rural and suburban areas, and created opportunities for self-employment through making supportive arrangements for small, medium, and cottage industries. This flow of privatization matches with what Humphrey (2019) also claimed that privatization allowed the traditional society to cope with modernization and facilitated economic growth. GoB could thus influence human resource developments and ensure easing of the economic growth by doing these.

In 1972, the Bangladesh Planning Commission was formed which prepared the development plans for the socio-economic development of the country. The development philosophy at that moment was to establish equality and social justice. The First Five Year Plan (1973-1978) was formulated during the regime of the Father of the Nation, Bangabandhu Sheikh Mujibur Rahman, and it reflected his philosophy of putting pivotal emphasis on self-reliance of the country. It gave special attention to agriculture and small and cottage industries. At that time, the father of the nation dreamed of a vision that SMEs can play a major role in creating an egalitarian society that is free from all forms of exploitation in Bangladesh (Sobhan, 2021). It is now observed that SMEs are playing a major role in increasing employment by bringing economic growth and enhancing job equality. In the beginning, there was the dominance of public ownership of industry and public control of a large part of foreign trade (Muhith, 1993). During the implementation of the new industrial policy of 1972, the number of private sectors increased, and some selected public sectors were decentralized. For industrial development, 650 industrial enterprises were converted into private ownership entities where about 50% were weak industries earlier. In that situation, a new strategy was introduced where private and foreign direct investments (FDI) were given more emphasis (BIDS, 1990). These initiatives created opportunities for export-oriented labor-intensive industries. The employment of women in public and private sectors increased due to the extension of education and training, and to accelerate it further there was a quota for them in overall employment. The youth also have been offered opportunities for technical training to form enterprises and build various economic infrastructures.

Consecutive national five-year plans emphasized the continuation of the economic development initiatives to gradually increase the rate of economic growth. To ensure the progress of the women and the youth, some human development training programs were



also taken. Women's education was particularly emphasized. The country has been progressing significantly in terms of the human development index (HDI) as it is ranked at 133 among 156 associated countries with an HDI of 0.632 (UNDP, 2020). Employment opportunity was enhanced through the development of new entrepreneurs, and sub-contracting to SMEs by the large and medium enterprises. Agro-based and export-oriented industries were also encouraged in a similar manner. Gradually, the policymakers realized the importance of this sector and eventually tried to create a supportive environment for the progress of the sector, mainly through financing, policy reforms, skill development training, and providing institutional support.

6. Evolution of SME Foundation

At first, the SME sector received a formal institutional focus through the formation of East Pakistan Small Industries Corporation (EPSIC)in 1956, and after the independence that institution became BSCIC. In 2008, SME Foundation was established as a company, limited by guarantee and licensed under section 28 of the Companies Act 1994 by the GoB to implement and support small and medium ventures (SME Foundation, 2021). SME Foundation was formed to implement the government's policies and strategies and facilitate the private organizations in their initiatives to accelerate the performance of SMEs. The vision of the SME Foundation is to nurture SMEs to contribute to social progress through reducing social inequality, decreasing poverty, increasing the rate of employment, and making impacts on economic growth. The mission is to provide proper guidance for promoting the growth of SME sin the case of both the productive and service-oriented enterprises to encounter the challenges of the free-market economy and globalization (SME Foundation, 2020). The goals of the foundation are to develop SMEs by encouraging, motivating, and organizing entrepreneurs through planning, developing, capacity building, awareness-raising, evaluating, and undertaking advocacy programs.

In line with the mission and vision, the SME Foundation has been accomplishing various programs organized for the development of the SME sector. It is assisting the implementation of SME policies adopted by GoB. The major responsibility of the foundation is to aid the implementation of government-guided development policies related to revenue and financial advice, quality assurance of SME products, skill development strategies, technopreneurship development, making information accessible through web portals, international technology exchange programs, and virtual platform.

Significant research and policy advocacy supports are also provided by the foundation. The main goal of the research and policy advocacy is to support the activities related to forming an SME-friendly environment for efficient business management. The SME



Foundation constitutes the detailed procedures with updated information and data for the formulation of SME-related policies and strategies to overcome the existing regulatory barriers in the country. The foundation regularly undertakes R&D initiatives to assist the formulation of short-term, long-term, and contextual plans for SME development. The database of the web portal of this foundation provides detailed information, which is regularly updated to ensure access to current information about SME entrepreneurs and all other stakeholders.

In 2013, SME Foundation identified 177 clusters in the country and started cluster-based activities. The main goal was cluster development through enhancing the personal skills, management skills, and technical skills of the entrepreneurs and employees. Typically, a cluster is a concentration of enterprises producing similar products or services and is situated in geographical proximity, and having common strengths, weaknesses, opportunities, and threats (SME Foundation, 2021). In Bangladesh, the key criteria to define SME clusters are similarity and homogeneity of products and services, enterprises produce goods and services under respective units, the number of units are 50 or above, there exists geographical proximity of the units, and units are scattered over an area of three-to-five-kilometer radius. For instance, in the Bogra region, there are about 4,000 industrial units of SMEs operating in seven clusters (Moazzem*et al.*, 2016).

Finance and credit services are offered by the Finance and Credit Services department of the foundation under the Credit Wholesale program. These loans are provided through selected banks and non-banking financial institutions, as no loan is provided directly from the foundation. Loan fairs, banker-entrepreneur conferences, seminars, loan-related matchmaking, training of bankers, and communication through media coverage are organized on regular basis in various districts of the country to enhance awareness about the increased financing opportunities in the SME sector. Notably, collateral-free loans at single-digit interest rates are provided to the SME sunder the clusters all over Bangladesh and the loan recovery rate is 100% (SME Foundation, 2021). During this COVID-19 pandemic, the government allocated BDT100 crore as a stimulus package for the SME sector and this amount has been distributed fully within the targeted time frame.

The SME Foundation organizes various skills development initiatives which include diverse training programs to enhance the skills of existing entrepreneurs and to facilitate the creation of new entrepreneurs. It also organizes training programs in collaboration with various training institutes and other SME-related associations. Training activities focus on entrepreneurship development, SME cluster-based skills development, technology and ICT, training of trainers, productivity, product quality improvement, financial

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management, and marketing. Regarding the integration of contemporary technological developments with entrepreneurial initiatives, the foundation organizes regular events on the adaptation and use of modern technology, borrowing and adopting advanced foreign technologies, green technology, and efficient use of energy. It offers training and assistance regarding product and services compliance and related certification. Therefore, it is also assisting enhancement of product quality and acquiring quality certification. The foundation provides supports related to product quality assurance and quality certification, for instance, ISO-9000 and ISO-14000 are provided to the SMEs. Development of advanced quality designs and packaging systems are also supported.

Another important role of the SME Foundation relates to women's entrepreneurship development. It encourages, supports, and ensures the inclusion of women entrepreneurs in the mainstream of the development process. It thus contributes to the empowerment of women through some remarkable activities such as the institutional capacity building of women entrepreneurs, chambers, and trade bodies. A significant contribution is made through enhancing policy advocacy in creating women entrepreneur-friendly environment and uplifting the networks and platforms connecting women from all corners of Bangladesh and enabling their voices raised and heard.

Business support services are also provided by the SME foundation, such as promotion and market expansion of the SME products, the establishment of interconnections between consumers and entrepreneurs, guidance, making information and data on new business creation and management available through the advisory service center, publication, and distribution of business information in the form of manual, SME product fair, and national SME entrepreneur award competition. During this COVID-19 pandemic, the SME Foundation started an e-commerce site to support the entrepreneurs to overcome the challenges of selling their products and services through traditional channels.

7. Analysis of the Current Situation

Bangladesh is simultaneously experiencing both urbanization and industrialization (Chen et al, 2014). The expansion and performance of small and medium-scale manufacturing industries are associated with the proximity to river or water bodies and roads, and the country being riverine can explain that reality to a degree (Hassan et al, 2020). Although Bangladesh achieved a steady economic growth rate from 6% to 8% during the last decade, however, due to the impacts of the COVID-19 pandemic the GDP growth rate became 5.24% in 2019-2020, compared to 8.15% in 2018-2019 (GoB, 2020). This industrial growth is mainly attributed to the growing numbers of SMEs, as around 80% of the employment in the industrial sector is in the SMEs (Hassan et al, 2020; GoB, 2017).



Although agriculture is a vast source of employment in this agrarian economy, the industrial sector is enabling the economic boost. The industrial sector contributes about 33% of the GDP and has grown by over 11% in 2016–2017 (GoB, 2017; CPD, 2018). There has been a significant increase in the per capita GDP of Bangladesh; it was USD 94.38 in 1972 and it became USD 1968.79 in 2020 (World Bank, 2021c). A good amount of export earnings is coming from the manufacturing sector. The backbone of this economic growth is the ready-made garment (RMG) sector. FDI flow to Bangladesh was USD 3.6 billion in 2018 and USD 1.6 billion in 2019; and the share in the global apparel market was 6.3% for Bangladesh in 2020 (Rahman, 2021). In 2020, the share of RMG exports was approximately 83% of the total exports and this was an increase from 2011 when it was 78.15% (Statista, 2021). RMG factories are associated with small factories or businesses through sub-contracting where SMEs are involved with the manufacturing of different types of garment accessories. Thus, the growth of the RMG sector also contributes to the creation of a supply chain network between the RMG and the SME sectors.

In the last 50 years, Bangladeshi expatriates sent more than USD 231 billion in remittances (The Business Standard, 2021). Remittances from migrants change the shape of GDP and play a significant role in the SME sector. USD 11.8 million was remitted in 1974-1975 which rose to USD 350 million in 1980-1981, USD 750 million in 1990-1991, and USD 21.75 billion in 2019-2020 to Bangladesh (Khan and Sultana, 2021). Although most of the remitted money is sent through legit channels, some portion of the money is remitted through illegal channels, but there has always been an increasing influx of inward remittance (Barkat *et al.*, 2014). Even during this COVID-19 pandemic, remittance inflow showed about 11% growth in 2019-2020 and it became a record high USD 24.77 billion in 2020-2021 with a 36% growth (Bangladesh Bank, 2021; The Business Standard, 2020). Families of around eight to ten million migrants live in rural areas. A significant portion of these vast remittances is spent on productive investments activities there. In addition to that, significant growth in manufacturing activities in the industrial sectors such as textile, leather, pharmaceuticals, light engineering, plastics, furniture, agricultural processing, and shipbuilding are evidenced in the country.

8. Recommendations and Conclusion

Bangladesh is an overpopulated country with the predominance of a domestic market of 160 million people and thus GoB needs to motivate the people to use domestic products to contribute to economic growth through enhancing demand for local products. During any natural hazards such as this COVID-19 pandemic, people ought to understand the importance of the domestic market to ensure continuity of the economic cycle. Policymakers should encourage entrepreneurs to participate in regional and national level



fairs, more importantly in online fairs on digital platforms. Steps can be taken to increase the number of visitors and buyers in all online fairs. Large industries should come forward to purchase products from SMEs at the local and national levels. Small and medium entrepreneurs should update their business plans to bring on-demand products such as personal protective equipment (PPE), masks, hand sanitizers, gloves, and so on. Proper guidance should be developed to find alternative markets for selling respective products. Government support should be extended towards entrepreneurs in the areas of production, transportation, marketing, and sales in the coming days. SMEs can be categorized based on employment size and the technology used in the organization, to facilitate contextual policy and infrastructural supports. There should be effective partnerships with different financial institutions to ensure the necessary funds for SMEs. In addition to backward and forward linkages, assistance and supports to entrepreneurs could be provided regarding other important issues such as connectivity to the global market, strong social networking, and effective and efficient subcontracting.

Although there has been tremendous advancement in the SME sector, SMEs in Bangladesh are still facing a few domestic and global challenges in achieving economies of scale and competing globally. Common challenges include a lack of working capital, a lack of technological capabilities, a low level of related ICT penetration, a limited number of skilled human resources, and a lack of regular R&D activities, dependency on the domestic market, severe competition in the global market, and red tapes of bureaucracy. These findings suggest that there are ample scopes for future endeavors for furthering SME initiatives. Therefore, a positive first step might be formulating a workable framework in the digital platform for SMEs to overcome the challenges.

SMEs can play a major role in creating an egalitarian society in Bangladesh, according to the dream of the father of the Nation, Bangabandhu Sheikh Mujibur Rahman. SMEs are playing a significant role to increase employment, production, and ensure economic growth. The present government has given priority to the SME sector considering it as a driving force for economic development. The SME Foundation has been significantly contributing by supporting policy advocacy, technical assistance, proficiency, and skills development training, promotions, sales-matchmaking, and marketing of the new products. Bangladesh has so far been making notable economic progress every year. However, because of weak infrastructure and a lack of a fully supportive business environment, the industrial base of the country has not yet been able to stand on a solid base. Considering these challenges, appropriate smarter strategies need to be adopted so that the SME sector can get a supportive environment that will help to create production networks for large industries. For grooming the SME sector, proper arrangements and



regular monitoring of their activities are vital. The future economic growth of Bangladesh depends on the SME sector and the government's continual assistance and instructions are imperative in this regard. Some of the suggestions are put forward in the list below for future policy implications.

- SME development is a high priority to create new jobs to absorb the growing workforce of Bangladesh and therefore deserves more focused primacy attention from the key stakeholders.
- The education system of the country must be geared towards supplying a workforce that can efficiently contribute to the labor market. In addition to the existing education platform, vocational and technical training need to be expanded further.
- Analysis of the context evidences the necessity for the training of entrepreneurs involved in SMEs, in order to ensure their further development. The development of women entrepreneurs, who are involved in SMEs, through appropriate training is an integral part of the positive force required for the economic development of Bangladesh.
- Special attention should be given to the frequently overlooked issues such as poor communication, lack of networking, unfavorable rules and regulations, unfriendly business environment, societal resistance, and lack of training and development.
- Further scope for value addition by identifying new possibilities in the SME sector and ensuring curation and patronization of related innovations need to be focused on to align Bangladesh with the fourth industrial revolution.
- Assistance in the form of requirements can be offered to micro and small enterprises for up-gradation to the respective next level.
- Recognition and inclusion of informal SMEs might significantly increase the contributions of the SME sector to the economic development of Bangladesh.
- A workable framework in the digital platform, utilizing the benefits of ICT adoption for SMEs, needs to be formulated to overcome the existing related challenges and to enable the economy to encounter the new challenges posed by the post-pandemic new normal realities.

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Factors Affecting Young Generations' Attitudes Toward Mobile Marketing in Bangladesh

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Abstract: The purpose of this study is to identify the young generations' attitudes towards mobile marketing in Bangladesh. For conducting this study, a quantitative research method was followed and the required data were collected from various professions such as students, businessmen, service holders, and others from Patuakhali, Barishal, Khulna, and Gopalgonj where 100 respondents were selected randomly for conducting this study. Through Pearson correlation analysis, the result shows a negative relationship between entertainment and irritation withyoung generations' attitudes towards mobile marketing while informativeness, credibility and behavioral aspects are positively correlated withyoung generations' attitudes towards mobile marketing. Online marketing sites should develop their trust and at the same time, mobile marketing should be more available to the remote areas of Bangladesh.

Keywords: Young Generations', Attitude, Mobile Marketing, Bangladesh.

Introduction

The business has shown a new prospect after the advancement of information technology. Today, information technology has become a popular medium of marketing. The way, people communicate are changing dramatically with the blessing of mobile phone." (Friedrich, Gröne, Hölbling, & Peterson, 2009).

Nowadays, mobile advertising is mainly based on SMS. Mobile internet and advertisement will combine the text, graphics, voice, and music which represents an additional attraction for using mobile (Mansour, 2012). In the last couple of years, the use of internet has been increased for different purposes by mass people (K. Lee & Joshi, 2007). People use the internet that they will engage in online shopping. For obtaining proper knowledge of e-commerce, it can be viewed from various perspective (Chi Lin, 2003). The marketing activities in the scope of e-commerce are added as broad perspective, when the narrow perspective defines e-commerce as the conduct of business transactions over the internet as well." Day by day, e-commerce is gaining popularity which presents a promising medium of trade.

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On their mobile phones, young people use the internet more than ever before. Mobile marketing is now a common way for the young generation to launch the desired product. Informatics has influenced everything in the business. Owing to the emergence of massive competition, the company must follow innovative marketing strategies. It has therefore been noted that producers must make use of the technical advances on the market for sustaining their competitiveness on the market (Day 1994). These technological advances contributed to the introduction of mobile telephones, and this was a landmark in the media. This change made it easier for people from different countries to interact with each other, as well as cultural backgrounds and profiles. Also, in the absence of computers, it has become much easier to access the internet using cell phones.

With the arrival of the mobile Internet, cell phones affected young generation. By pressing a button, people can easily access the world beyond their control. "Now, clients are more aware of the market shift as the market is expanding beyond the domestic boundaries and is seen as an integral part of every sector. This trend contributed to the establishment of mobile marketing since mobile is an indispensable part of young people's lives (Lacohée, Wakeford& Pearson, 2003). There is no or little study on identifying factors affecting young generations' attitudes towards mobile marketing in Bangladesh." Thus, the objective of this study is to overcome this gap.

Background Information

Tsang, Ho, & Liang, (2004) "defined attitude is an important concept in research on marketing and information systems. According to Fishbein's (1967) attitude is a learned predisposition of human beings. An individual would respond to an object or an idea or several things or opinions as per the above predisposition. Kotler (2005) stated attitudes are a person's permanent favorable or unfavorable evaluations, emotional feelings, and actions towards some objects or ideas. Mansour, (2012) also defined attitude as a tendency or a predisposition to respond towards a certain object, idea, person, situation, and it influences an individual's choice of action, and responses to challenges, rewards, and incentives. The success and effectiveness of mobile marketing depend on various factors. He found that to succeed in mobile marketing, first," it should be accepted by consumers. The effective mobile marketing is possible if consumers permit the continuous reception of messages regarding the advertising on their mobile phones.

In order to adopt mobile marketing, many studies on consumer intentions on these issues have been conducted. The researchers examined the link between mobile advertising attitudes, behavior and consumer attitudes. The results show that users generally have negative attitudes towards mobile advertising unless expressly agreed, and the most critical factors affecting the responses' positions, followed by credibility



and irritation, are the direct relationship between consumer attitudes and consumer behavior and entertainment (Tsang et al., 2004). Bauer, Reichardt, Barnes, & Neumann, (2005) found the factors that initiated customers to accept the mobile phone as a means of communicating promotional activities. The study also identified that entertainment value and information value as the drivers of the adoption of the mobile phone as a means of advertising.

S.-F. Lee & Tsai, (2006) investigated the relationship of consumer motives for receiving mobile advertising and their attitudes toward mobile advertising as well as investigating the relationship between consumer intentions for receiving advertisements on their mobile phones in the first stage of the study.

Leppaniemi&Karjaluoto, (2005) "developed and tested a conceptual theoretical framework for investigating customers' intention to engage in permission-based mobile marketing. The study shows that the use of mobile communications describes a considerable figure of attitude towards mobile advertising and support the conceptual model.

Mobile Marketing

Mobile Marketing Association has defined mobile marketing as the use of wireless media for delivering content and transmission of direct responses (Punyatoya&Durgesh, 2011). The Wireless Advertisement Association, however, defined mobile marketing as the delivery of ads via the wireless network to mobile telephones (Xu, 2006).

Mobile marketing is a relatively new marketing division, referring to the two-way marketing contact between companies and customers that takes place through mobile devices. The efficacy of marketing strategies was significantly improved when mobile devices were used in combination with conventional media and, in that case, future consumers were more likely to buy (Ninčević, Krajnović, & Bosna, 2015).

Mobile advertisement is an enticing medium used by different companies to interact directly with consumers who have become busier and more difficult to meet (Punyatoya&Durgesh, 2011). Mobile advertisement campaigns include ubiquity, interactivity, high scope, high retention rate, individuality, flexibility, low cost, and high response rate (Bauer et al., 2005). Companies can engage customers via call-to-action that is not possible through other media channels and make customers respond through text messaging, multimedia messaging, image messaging, Bluetooth notifications or voice channels (Carter, 2008). Jun & Lee (2007) found versatility, ease, Furthermore, multimedia content positively linked to mobile advertisement attitudes. But Whitaker (2001) indicated that many customers saw cell phones as a private and personal item and were more hesitant to share information with new firms.



Methodology of the Study

A quantitative research method was adopted to conduct this study and a set of self-administrative questionnaire was distributed to the selected respondents for collecting data. During December 2019 to January 2020, data were collected randomly from 100 respondents located in Patuakhali, Barishal, Khulna, and Gopalgonj of various professions such as students, businessmen, service holders, and others aged between 15 to 35. Collected data were analyzed by using the *Statistical Package for Social Science* (SPSS version 16.0).

A set of questionnaires consisting of 18 questions were developed to investigate the attitude of the young generation towards mobile marketing in Bangladesh.

The questionnaires were divided into two sections: Part A (Personal Information) contains 4 questions designed to understand the demographical background such as profession, age, gender, and marital status (Shown in Table 1). Part B (Attitudes towards mobile marketing) contains 14 questions designed to know the users' motives towards mobile marketing (attitude towards mobile marketing, entertainment, informativeness, credibility, irritation, and behavioral aspect attitude towards mobile marketing).

Table	1:	Demos	graphic	Profile
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Profession	Percentage	Age	Percentage	Gender	Percentage	Marital Status	Percentage
Students	60%	15-25	65%	Male	56%	Married	33%
Businessmen	15%	26-35	65%	Female	44%	Unmarried	67%
Service Holders	20%						
and Others	5%						

Results and Discussions

Correlation Analysis

The correlation was used to measure the degree of the linear relationship between variables. "The values of the correlation coefficient are always ranged from +1 to -1. A correlation coefficient of +1 indicates that the presence of a perfect positive relationship between the two variables, while a correlation coefficient of -1 indicates a perfect negative association between the two variables. On the other hand, a correlation coefficient of zero indicates the absence of relationship (association) between two variables (Brooks, 2014). The table below shows the correlation matrix among variables."



Table: Correlation matrix among variables.

		Attitude	Entertainment	Informativeness	Credibility	Irritation	Behavioral Aspect
	Pearson Correlation	1	174	.408**	.1910	0420	.461**
Attitude	Sig. (2-tailed)		.0840	.0000	.0570	.6780	.0000
	N	100	1000	1000	1000	1000	1000
	Pearson Correlation	174	1	1050	337**	.616**	.1310
Entertainment	Sig. (2-tailed)	.084		.3010	.0010	.0000	.1950
	N	100	1000	1000	1000	1000	100
	Pearson Correlation	.408**	1050	1	0830	.1570	.488**
Informativeness	Sig. (2-tailed)	.000	.3010		.4110	.1190	.0000
	N	100	1000	1000	1000	100	1000
Credibility	Pearson Correlation	191	337**	0830	1	642**	201*
	Sig. (2-tailed)	.057	.0010	.4110		.0000	.0450
	N	100	100	1000	1000	1000	100
	Pearson Correlation	042	.616**	.1570	642**	1	.307**
Irritation	Sig. (2-tailed)	.678	.0000	.1190	.0000		.0020
	N	100	1000	1000	1000	1000	1000
Behavioral Aspect	Pearson Correlation	.461**	.1310	.488**	201*	.307**	1
	Sig. (2-tailed)	.000	.1950	.0000	.0450	.0020	
	N	100	1000	1000	1000	1000	1000
**. Correlation is significant at the 0.01 level (2-tailed).						1	
*. Correlation is significant at the 0.05 level (2-tailed).							

The above table shows that Entertainment and Irritation are negatively correlated with Attitude towards mobile marketing while informativeness, Credibility, and Behavioral aspects towards mobile marketing are positively correlated with Attitude towards mobile marketing. Besides, Entertainment, Irritation, informativeness, Credibility, and Behavioral aspects towards mobile marketing has less than 50% value and this indicates that they are not strongly correlated with Attitude towards mobile marketing.



However, "if it is seen carefully, When Attitude is taken as Pearson's R, there is a negative relationship between Attitude and Entertainment which means as one variable increases in value, the second variable decreases in value. Attitude also has a negative relationship with Irritation. On the other hand, there is a positive but less significant relationship between Attitude and informativeness and Credibility and Behavioral Aspect."

When "Entertainment is taken as Pearson's R, there is a negative relationship among Entertainment, Attitudes, informativeness, and Credibility which means as one variable increases in value, the second variable decreases in value. On the other hand, there is a weak positive relationship between Entertainment and Behavioral Aspect. But Entertainment is moderately correlated with Irritation."

When **in formativeness** is taken as Pearson's R, there is a negative relationship among **informativeness**, **Entertainment**, and **Credibility** which means as one variable increases in value, the second variable decreases in value. On the other hand, there is a weak positive relationship among **informativeness**, **Attitudes**, **Irritation** and **Behavioral Aspect**.

When Credibility is taken as Pearson's R, there is a negative relationship among Credibility, Entertainment, informativeness, Irritation, and Behavioral Aspect which means as one variable increases in value, the second variable decreases in value. On the other hand, there is a positive but less significant relationship between Credibility and Attitudes.

When "Irritation is taken as Pearson's R, there is a negative relationship among Irritation, Attitudes, and Credibility which means as one variable increases in value, the second variable decreases in value. On the other hand, there is a weak positive relationship between Irritation, Informativeness, and Behavioral Aspect. But Irritation is moderately correlated with Entertainment."

When "Behavioral Aspect is takenas Pearson's R, there is a negative relationship between Behavioral Aspect and Credibility which means as one variable increases in value, the second variable decreases in value. On the other hand, there is a weak positive relationship between Behavioral Aspect, Attitudes, Irritation, and in formativeness."

Conclusion

As Bangladesh is a developing country, touching technology in Bangladesh's rural areas is a significant challenge. In rural areas, people are introduced to lower Internet connections speed. Mobile marketing is not so joint here. However, in urban and



semi-urban areas, people use more than one phone. The Internet is popular here. People use online shops and become affected by mobile marketing. Nevertheless, in many ways, people still prefer physically shopping, as online marketing is a confidence problem. That is why the online marketing site should improve its trustworthiness while at the same time bringing mobile marketing to remote areas in Bangladesh. The economy of Bangladesh is growing with a steady and satisfactory (> 7%) GDP growth rate. Per capita income is now \$17887 dollar. Increased income has enhanced people's purchasing power, improved standard of living and brought chance in consumption pattern. More than nine million (9.31million) people use internet service in Bangladesh. More than 80% people live in rural areas where uninterrupted and high speeds of internet are big crisis. Most rural people are unable to afford smart phone that is essential for mobile marketing and do not have right idea about mobile marketing. People of urban and semi urban areas are familiar with and interested in mobile marketing. Better customer service, trustworthiness, availability of internet facilities at less cost are essential for making mobile marketing popular.

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Modeling Intention to Use Online Recruitment Websites: Insights from the Theory of Planned Behavior

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Abstract

The main purpose of this study is to empirically examine the psychological factors that may affect individuals' intention to use online recruitment websites to search for jobs under the framework of the theory of planned behavior (TPB). The hypotheses of the study were tested using structural equation modeling (SEM) with convenient sample of 357 graduating students. The results showed that all the independent variables (i.e., attitude, subjective norm and perceived behavioral control) significantly and positively influenced individuals' intention to use online recruitment websites to find jobs. Noticeably, attitude was found to be one of the strongest factors to predict respondents' intention to use online recruitment portals in a collectivistic society like Bangladesh, followed by perceived behavioral control and lastly subjective norm. In line with the research findings, this study has discussed some theoretical contributions and practical implications for career counselors and online recruitment service providers. The paper concludes with presenting some limitations and future research directions.

Keywords: Attitude, Bangladesh, Job search, Online recruitment, Perceived behavioral control, Subjective norm, Theory of planned behavior.

1. Introduction

Worldwide unemployment level is dramatically increasing during the COVID-19 pandemic, making job search research more demanding. Undoubtedly, finding satisfactory employment is challenging for a job seeker and perhaps even more so for university graduates because they lack prior work experience and professional networks (Wang et al., 2017). There are some formal and informal sources to find job related information. Formal sources include company's published job circular, company recruitment official websites, online recruitment services, employee referrals etc. Informal sources include word of mouth, social networking sites (e.g., Facebook, Twitter, LinkedIn, YouTube, etc.).

Although a series of studies examined the key determinants for finding satisfactory jobs (Jung et al., 2016), social scientists have remained interested in the process of job searching (Manroop & Richardson, 2016). To the best of knowledge, most of the previous studies were conducted in the United States (e.g., Holmstrom et al., 2015; Russell et al., 2015) and European societies (e.g., de Bruyn & Cameron, 2017; Leenders et al., 2019), but comparatively few studies have examined the applicability of the theory

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of planned behavior (TPB) in an Asian context (Junget al., 2016). However, little is known about how these previous studies predicted applicants' job search behaviors in developing countries, even less so in the context of Bangladesh. Arnold et al. (2006) emphasized that empirical studies on job searching based on the TPB still remain important for career choice and development. Song et al. (2006) also found that characteristics of unemployed job seekers vary from country to country.

On these grounds, studies conducted in the Western context may not be generalized for an Asian context (Debnath et al., 2011). Jung et al. (2016) reported that "there is a lack of empirical assessment of theory-driven models of job search in non-Western research" (p. 191). To the best of knowledge, no study has investigated the efficacy of the TPB in the job search domain in the context of Bangladesh. Though there are few unemployment studies that have taken place in Bangladesh (e.g., Rafi et al., 2019; Rahman & Hasan, 2018), a theoretically developed and empirically tested job search model has not been applied in this context yet.

Therefore, the present study aims to fill this gap by investigating the efficacy of the TPB in predicting intention to use online recruitment websites to search for jobs in the context of Bangladesh, a developing country in South-east Asia.

2. Literature review and hypotheses development

2.1. Job search

Job search is an important phase of career development for any individuals, and is specially more critical for unemployed individuals (Song et al., 2006). It refers to the process by which job seekers find out their potential job providers and seek paid employment in those organizations (de Bruyn & Cameron, 2017). Creed et al. (2009) defined job search as the expenditure of time, effort and resources for activities such as preparing resume, browsing company websites, reading job advertisements and contacting possible employers. Unemployment and job search have become critical matters of political, social and economic concerns for any country (Manroop & Richardson, 2016).

2.2. Online recruitment website

There are various sources of recruitment, in this digital era, traditional recruitment efforts have been replaced by web based recruitment (Banerjee & Gupta, 2019). Advances in technology and computer applications have played a dominant role on the practice of internet recruitment in recent years and as a consequence, organizations and job applicants are using recruitment website as a part of recruitment process in an increasing rate



(Brahmana & Brahmana, 2013). This increase may be due to the incremental advantages for online recruitment over the traditional recruitment in terms of time and cost efficiency (Banerjee & Gupta, 2019; Lin, 2010), and easy accessibility to a large amount of job and organization related information (Maree et al., 2019). In addition, both the employers and job seekers can enjoy the wider and more immediate scope of communication (Williamson et al., 2003). In fact, as the potential job seekers are geographically spread out across the world, organizations will have to use internet recruitment as a source of applicant attraction for the coming years in future (Banerjee & Gupta, 2019).

2.3. The theory of planned behavior (TPB)

The TPB is considered as one of the well accepted theories of predicting wide range of human behaviors (Armitage & Conner, 2001). According to Ajzen (1991), individuals' actual behavior is mainly predicted by their behavioral intention, which in turn, can be determined by the three proximal TPB variables (i.e., attitude, subjective norm and perceived behavioral control).

Georgiou et al. (2012) defined 'intention' as an individual's degree of willingness to perform (or not to perform) the behavior in question. Attitude refers to individuals' personal feelings (positive or negative) about performing the behavior whereas subjective norm indicates the level of social pressure to perform the behavior and the degree to which individuals want to comply with the social pressure (Zikic & Saks, 2009). 'Perceived behavioral control' refers to individuals' levels of confidence that they possess the required skills and abilities to perform a particular action (Yizhong et al., 2017).

When applied to the current study, the TPB suggests that individuals' intentions to use online recruitment websites are predicted by their positive or negative feelings about using the websites (i.e., attitude), the level of social pressure from their important people to use online recruitment websites (i.e., subjective norm), and their confidence in their skills and abilities to use online recruitment websites to find their preferred jobs (i.e., perceived behavioral control).

2.4. The context of this study

Studies about unemployment that were conducted in western countries cannot be applied to non-western countries due to the socio-economic and cultural differences between these societies; therefore, the study tested the efficacy of the TPB in predicting graduating students' intention to use online recruitment websites for finding the desired jobs. There are many online recruitment service providers currently operating in Bangladesh (e.g., chakri.com, bdjobs.com, alljobsbd.com, bd-career.com, deshijobs.com, etc.). According to the latest Labor Force Survey by the Bangladesh Bureau of Statistics,



the unemployment rate of university graduates is 46%, which is ten times higher than the overall national unemployment rate of 4.37% (Neazy, 2019). In addition, individuals are losing their jobs during the COVID-19 pandemic. As a result, university graduates are facing increasing employment pressure.

In line with the TPB's suggestions, many previous studies have found support for the efficacy of the TPB in predicting individuals' job search behaviors in developed and developing countries (e.g., Carmack & Heiss, 2018; Fort et al., 2015; Jung et al., 2016; Yizhong et al., 2017). Particularly, job search attitude, subjective norm and perceived behavioral control have been found to be significant in predicting job search intention (Van Hoye et al., 2015).

Therefore, based on the previous research findings and the argument made by Ajzen (1991) that intention to perform a behavior is determined by personal attitude, confidence and social pressure to perform the behavior, this study also hypothesized the following for online recruitment research in the context of Bangladesh (shown in Figure 1):

- **H1.** There is a statistically significant positive effect of individuals' attitude on their intention to use online recruitment websites to find jobs.
- **H2.** There is a statistically significant positive effect of subjective norm on individuals' intention to use online recruitment websites to find jobs.
- **H3.** There is a statistically significant positive effect of individuals' perceived behavioral control on their intention to use online recruitment websites to find jobs.

Based on the literature review and hypotheses considered for the study, the following research framework was envisioned:

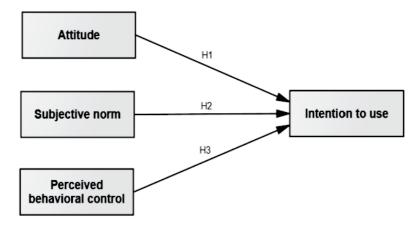


Figure 1. Research model



3. Research methods

3.1. Samples and procedure

A self-administered questionnaire was developed to collect data through online survey form. Before conducting the final survey, a pilot study of 25 convenient samples was done to measure the applicability and understandability of the measurement items of the questionnaire. The pilot test showed no major considerations except one argument against the mandatory requirement of all the questions. In fact, it is one of the benefits of online survey form to avoid any missing values in the data set; therefore, the argument was not taken into consideration for the analysis. The survey took 10 to 15 minutes to answer all the questions. After the pilot study, final survey was conducted through the online google form. A total of 374 graduating students answered the questionnaire out of which 357 observations were found to be suitable for the final analysis. It is because during the data cleaning process, 17 observations were found to be unengaged during answering the questions (i.e., answering all the questions at same level of agreement or disagreement ignoring the positive or negative measurement items). Out of the 357 observations, 58.1% were male and 62.9% were graduate students. Average age of the respondents was 22.75 years. The sample size (N=357) of the present study is suitable for the structural equation modeling (SEM) as it exceeds the minimum sample size requirement for the focal 4 constructs (Hair et al., 2009).

Table 1. Results of EFA and CFA

	CFA	CD	4.575	MSV	Cronbach's	Multicollinearity		
Constructs and items	loadings	CR	AVE	MSV	(a)	Tolerance	VIF	
Perceived behavioral control		.78	.57	.29	.77	.85	1.17	
Pbc1	.63							
Pbc2	.68							
Pbc3	.59							
Pbc4	.82							
Subjective Norms		.86	.57	.26	.86	.88	1.17	
Sn1	.67							
Sn2	.79							
Sn3	.71							
Sn4	.66							
Sn5	.74							
Sn6	.58							
Sn7	.62							



Attitude		.73	.67	.42	.72	.87	1.15
Att1	.58						
Att2	.71						
Att3	.74						
Intention		.79	.55	.41	.79		
Intention Int1	.73	.79	.55	.41	.79		
	.73 .74	.79	.55	.41	.79		
Int1		.79	.55	.41	.79		

Note. All CFA loadings are significant at ***p< 0.001. Pbc = Perceived behavioral control, Sn = Subjective norm, Att = Attitude, Int = Intention Pbc5, Att4 and Int4 were deleted because of having poor factor loadings and cross loading for more than one component.

3.2. Measures

In the present study, the TPB core variables (i.e., attitude, subjective norm and perceived behavioral control) on one side, and the intention to use online recruitment websites on the other side, were as considered independent variables and dependent variable respectively (shown in Figure 1). The measurement items of each construct (i.e., variable) were selected based on the previous research that reported to be reliable and valid. All the items were measured on five point Likert scale ranged from 'strongly disagree' (1) to 'strongly agree (5). 7 items of subjective norm were selected from Carmack and Heiss (2018) and Vinokur and Caplan (1987), 5 items of perceived behavioral control were selected from Van Hooft and De Jong (2009). 4 items of attitude and intention each were selected from Lin (2010). Example of items for each of the construct are: 'Using job-search website to find jobs is a good idea' (for attitude), 'I intend to use job-search website to find a job' (for intention to use), 'Using job search website is within my personal control' (for perceived behavioral control), and 'My parents want that I should use job search website to find jobs' (for subjective norm). There was no control variable for this study as the preliminary analysis did not show any significant correlation between gender, age, education, and their intention to use job search websites.

3.3. Analysis

There were four consecutive analyses for the present study. *First*, to assess the underlying assumptions of regression analysis, preliminary analyses such as common method bias (CMB) test, normality test, and multicollinearity test were conducted. *Second*, exploratory factor analysis (EFA) was done for dimension reduction as this study is exploratory in nature for the job search research in the context of Bangladesh. *Third*,



confirmatory factor analysis (CFA) was conducted for testing the reliability, convergent validity and discriminant validity of the measurement items. *Finally*, path analysis (i.e., structural equation modeling) was conducted to examine the research hypotheses of this study. Statistical package for social sciences (SPSS; ver. 25) and analysis of moment structures (AMOS; ver. 25) were used for data analysis of the present study.

4. Results

4.1. Common method bias (CMB), normality and multicollinearity test

To confirm whether the present study survey material was free from the influence of common method variance (CMV), Harman's single fact or test was conducted which revealed that common method bias was not a major concern for this study (as single factor accounted for 29.16% which did not exceeded the threshold of 50% to explain the variance). Preliminary analysis showed no abnormality and major outlier in the data set. Collinearity statistics in Table 1 also showed that all the independent variables were free from multicollinearity problem i.e., the variance inflation factors (VIF) were below the threshold of 10, and tolerance values were above .10 (Hair et al., 2009).

Table 2. Means, standard deviations and correlations among the studied variables

Constructs	M	SD	1	2	3	4
1. Subjective norm	3.61	.61	1			
2. Perceived behavioral control	3.86	.60	.37***	1		
3. Attitude	3.78	.61	.37***	.43***	1	
4. Intention	3.70	.65	.51***	.55***	.65***	1

Notes: ***Correlation is significant at the 0.01 level (2-tailed). M = Mean, SD = Standard deviation. N = 357

4.2. Exploratory factor analysis (EFA)

The EFA was conducted using principle component analysis (PCA) and varimax rotation method. The criteria used to select factors and items were: Eigen values greater than or equal to 1; factor loadings greater than 0.40; and no cross loadings above the threshold of 0.30. The results showed that 1 item for each construct of attitude, intention and perceive behavioral control had cross loadings and lower factor loadings; therefore, those items were not considered for the final analysis of the study.



4.3. Confirmatory factor analysis (CFA)

To confirm the reliability and validity of the measurement items of the present study, CFA was conducted. Construct reliability was examined by assessing the composite reliability (CR), Cronbach's α and the average variance extracted (AVE) values. CR and Cronbach's α for each construct of the study ranged from .73 to .86, and .77 to .86 respectively, exceeding the minimum threshold of .70 (shown in Table 1). In addition, the AVE values for all the factors ranged from .55 to .67, exceeding the minimum requirement of .50, indicating the convergent validity of the constructs (Fornell & Larcker, 1981). In addition, the maximum shared variance (MSV) for each construct is lower than the AVE of the respective construct (shown in Table 1). The factor loading soft he measurement items for each construct ranged from .58 to .82 and were statistically significant (p<.001), indicating support for convergent validity (Anderson & Gerbing, 1988).

As the chi-square (χ^2) statistics is sensitive to sample size (Van Hoye et al., 2015), some established fit indices such as the ratio of χ^2 to degree of freedom (χ^2 /df), comparative fit index (CFI), the goodness of fit index (GFI), the standardized root mean square residual (SRMR) and the root mean square error of approximation (RMSEA) were considered to assess the construct reliability and validity. The fit indices of CFA indicated adequate model fit for the present study (i.e., χ^2 /df = 2.80, CFI = .91, GFI = .91, SRMR = .06, RMSEA = .07), suggesting that the model represents the data well (Hu & Bentler, 1999).

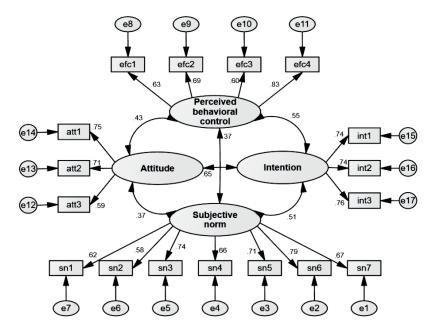


Figure 2. Measurement model



4.4. Path analysis (Structural model test)

Given that the measurement model fit the data well, measurement model was then converted into structural model by joining up the latent construct according to the research hypotheses of the present study. A similar set of fit indices was taken into consideration to assess the suitability of the structural model. As noted earlier, there was no control variable in the structural model. In line with the CFA, the results showed similar fit statistics for the structural model, suggesting that the structural model is suitable for testing the research hypotheses (shown in Figure 3). Therefore, all the research hypotheses were tested based on the standardized path coefficient (β) of the structural model. As expected, all the variables of the study were positively and significantly correlated to each other (shown in Table 2). The standardized path coefficients (β) of the structural model showed that the dependent variable (i.e., intention to use job search website) is positively and significantly influenced by all the independent variables (i.e., attitude, subjective norm and perceived behavioral control) of the study (see Figure 3). It is to be noted that all the independent variables together explained 56% (R²) of the total variance of the dependent variable. Therefore, based on the results of the path analysis, it can be said that all the research hypotheses (H1, H2 and H3) of the present study were supported i.e., attitude, subjective norm, and perceived behavior control significantly and positively can influence individuals' intention to use online recruitment websites to find their desired jobs.

5. Discussion

The main purpose of the present study was to predict individuals' intentions to use online recruitment websites through the lens of the theory of planned behavior. Within the research model, the study identified that all the indicators (subjective norm, attitude and perceived behavioral control) significantly affect intention. These findings are not uncommon in recruitment literature. For example, previous studies also showed the positive and significant relationships between all the TPB core variables and intention (e.g., Carmack & Heiss, 2018; Fort et al., 2015; Yizhong et al., 2017). However, one thing should be noted here that within the research model, attitude was the strongest factor $(\beta = .44, p < .001)$ to predict intention followed by perceived behavioral control ($\beta = .27$, p < .001) and lastly, the subjective norm ($\beta = .24$, p < .001) was the weakest but significantly predicted intention (shown in Figure 3). Though it was not hypothesized, subjective norm was expected to be the strongest factor to predict intention within the present research model in the context of a collectivistic country like Bangladesh. For instance, a study conducted in China (a collectivistic society) by Song et al. (2006) found subjective norm to be the strongest factor that influenced Chinese job seekers intentions to search for jobs. One possible explanation to have this inconsistency in findings might



be because of the measurement items that were selected for the present study. Previous research stated the role of measurement items for having inconsistent results in job search literature (e.g., Fort et al., 2015).

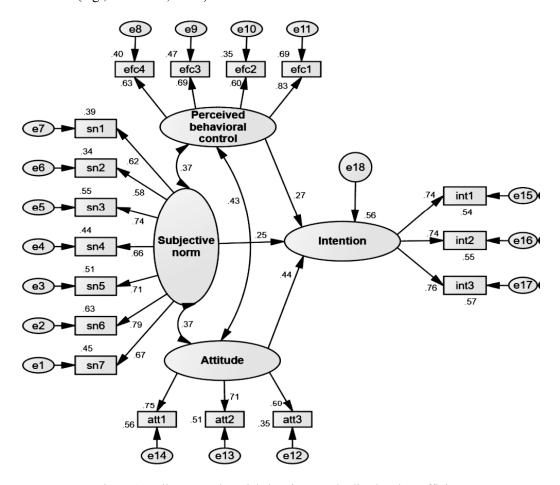


Figure 3. Full structural model showing standardized path coefficient

Note. Model fit statistics: $\chi^2 = 316.35$, $\chi^2/df = 2.80$, CFI = .91, GFI = .91, SRMR = .06, RMSEA = .07

Another compelling reason might be the sample characteristics of the present study. As noted earlier, average age of the respondents of the present study was 22.75 (SD = 1.76) which fall in the category of millennial generation. One of the most important characteristics of millennial (often called Generation Y) is individualistic personality (Twenge, 2009). This might result in the findings of the present study. The respondents'



marital statuses may have also influenced the results because individuals with families are more likely to feel pressure to have a job than individuals without families (Van Hooftet al., 2005). Because all of the respondents were unemployed and most of them were male (mentioned before), few would be married under these circumstances in Bangladeshi culture.

6. Implications

This study provides some theoretical contribution and practical implications for the career counselors and online recruitment website owners. *First*, to the best of researcher's knowledge, there is a limited study on job search research in the context of Bangladesh. This is the first study that focused on job search research by empirically applying the TPB in the context of Bangladesh. The study confirmed the efficacy of the TPB for recruitment literature in the context of Bangladesh. Therefore, this study provides one step forward for further research to examine the generalizability of the present research findings.

Second, through the present study, the practitioners, particularly the e-recruitment service providers can understand the psychological factors that may affect job seekers' intention to use the recruitment websites, and accordingly, they can plan and reshuffle the website features to retain the existing users and attract the potential users. Providing update information regarding the jobs and the organization, resume writing service, ease of navigating the website would add value to the existing features of the websites.

Third, the results also indicated that the service providers can influence job seekers' intention to use online recruitment websites by exploiting the social network to increase the level of social pressures (i.e. subjective norm). They can give emphasis on 'word of mouth' and 'word of mouse' (i.e., social networking sites such as Facebook, twitter, YouTube, LinkedIn etc.).

7. Limitations and future research directions

This study was not without some limitations. *First*, self-administered questionnaire was used to collect data from a single university and in a single point of time which limit the generalizability of the research findings (Podsakoff et al., 2003). One must be cautious to make generalization based on these findings. Therefore, future research may consider a longitudinal study to make the findings more robust and applicable.

Second, this study did not consider the actual behavioral aspect of the full model of the TPB. Past studies (e.g., Sheeran & Webb, 2016) argued that intention may not always lead to actual behavior. Therefore, inclusion of the actual behavioral construct might



produce different results for the present study. Along with this line, future researchers may consider the full model of the TPB to give more justifiable insights to the career counselors and the recruitment policy makers.

Third, as mentioned earlier, in comparison to the other two factors, subjective norm showed poor but significant positive effect on intention that signals the necessity of further research to confirm the findings of the study. It would be a value addition to the present model if future researchers could consider some external variables such as cultural dimensions (i.e. individualism vs. collectivism) and examine its role in the theoretical framework of the TPB in the context of Bangladesh.

Finally, this study did not consider any external variable to the original TPB model. Ajzen (1991) claimed that any variable external to the original TPB model can only influence the intention and behavior indirectly, not directly. Therefore, it would be wise if future research could consider distal or external variables to examine its role in the TPB framework in job search literature in the context of Bangladesh.

8. Conclusion

In summary, this study showed that all the proximal TPB core variables positively and significantly influence intention to use job search websites. More specifically, while attitude was the most influential factor, subjective norms played the least role in predicting individuals' intention to use online recruitment websites in the context of a collectivistic country like Bangladesh. However, it can be strongly argued that the fundamental notion of the TPB is applicable for recruitment research in the context of Bangladesh. Despite having some limitations mentioned above, these findings do not substantially challenge the objectives of this study.

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The Surge of Online Shopping During Covid-19 Pandemic: A Study on Dhaka City Dwellers

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Abstract: Covid-19 Pandemic has created a crisis moment around the whole world. This has led to the surge of online shopping. Therefore, this study tried to find out the customers' satisfaction with various features of online shopping during Covid-19 pandemic. To achieve the objectives of the study, data has been collected from 216 Dhaka city dwellers experiencing some sort of online shopping during the pandemic. The respondents have been chosen based on judgemental sampling. This study found that customers are satisfied with product quality, product variety, information quality and some aspects of security, delivery, and payment options of online shopping during the pandemic. In contrary, customers are not completely satisfied with security, delivery, and payment options of online shopping during the pandemic such as sharing credit card information, easy payment method, similarity of promised and delivered product etc.

Keywords: Online shopping, Customers' satisfaction, Covid-19 pandemic.

1. Introduction

The marketing environment around the world has strongly affected by the rapid development of internet. Businesses are findings creative approaches to sell theirv products and services online (Jayasubramanian, 2015). Online shopping has automated customers' purchase process. Customers can purchase online anytime anywhere which means they can access to online shopping 24 hours in a day, seven days in a weekand 365 days in a year (Praveenkumar, 2015). Online shopping is now a rapid growing phenomenon. Customers has increased the amount of online shopping because they think it is easy compared to traditional shopping (Kolesar and Galbraith, 2000). Online shopping is also hassle free, cheap, offer large choices of products, allows price comparison etc.

The recent Covid-19 or Coronavirus pandemic forces many countries of the world to go for lockdownto ensure social distance for which customers has increased their online shopping than before (Stanciu, 2020). Pure-play online retailers saw an increase in their orders in US and Canada from 55% to 76% during this crisis moment compared to previous year (Savage, 2020). While Amazon and Walmart are benefitting in this crisis moment (Savage, 2020), some well-known retailers such as Debenhams, Topshop etc. are facing competition from online stores (Pantano, 2020). Customers are shopping

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differently because of this containment measures. Similarly, many retailers are implementing new online services, home delivery and virtual queue to limit the number of customers (Pantano, 2020). As customer has increased their online shopping worldwide during this crisis moment, it is important to know whether customers are satisfied by their online shopping or not. Hence, this study tried to find out the factors of online shopping (such as, security, payment methods, delivery, product variety, product and information quality) with which customers of Dhaka city, Bangladesh are satisfied and with which they are not satisfied during Covid-19 pandemic.

The rest of the paper is organized into four m ain sections. At first relevant literature is reviewed based on which research question and hypothesis are developed. In the second part, research methodology has been discussed followed by analysis and findings. Then conclusion has been drawn along with some recommendations.

Objectives of the Study

The objectives of the study are to find out:

- 1. Customers' satisfaction with different aspects of online shopping during Covid-19 pandemic. and
- 2. The magnitude of the satisfaction of different aspects of online shopping during Covid-19 pandemic.

Literature Review

There is plethora of literature related to online shopping, customer satisfaction and consumer buying behaviour. In this section relevant customer satisfaction with online shopping has been reviewed as literature related to online shopping during Covid-19 pandemic is very limited.

Online shopping refers to the buying of goods and services via internet. Online shopping also known as e-shop, e-store, web-shop, webstore etc. (Praveenkumar, 2015). Customer satisfaction on the other hand, implies meeting customers' expectations through product performances. Satisfied customers often have the intention to re-purchase the product (Syed and Norjaya, 2010). Customers' satisfaction with online shopping can be defined as the extent to which online shopping meets customers' expectations (Li and Zhang, 2002).

Many factors work as an antecedents of customer satisfaction with online shopping. Karim (2013) found that customers purchase from internet because they think it has many features like time saving, easy to use, less shopping stress, availability of information, less expensive etc. Similarly, customer satisfaction with online shopping also depends upon service quality, delivery and customer service, personalization, cost, privacy etc.



(Canavan et al., 2007; Kim and Kim 2004; Ladson and Fraunholz, 2005; Lee and Lin, 2005; Rajamma et al., 2007; Ramus and Nielsen, 2005; Yun and Good 2007). Zatalini and Pamungkas (2016) also mentioned privacy, security and delivery speed as factors that ensure customer loyalty in online shopping.

Customers' belief and attitude about security and convenience influence their intention to purchase online (Limayen et al., 2000). Schaupp and France (2005) identified three factors the influence customers' satisfaction with online shopping. Those are: Technology factors (such as privacy, security, usability etc.); Shopping factors (such as trust, convenience, delivery etc.) and Product factors (such as product value, product customization etc.). Similarly, Liu et al. (2008) argued that payment method, customer service, delivery, information quality, merchandize attributes, product variety, low price etc. act as strong predictor of customers' satisfaction with online shopping. Szymanski and Hise (2000) also mentioned wide variety of product assortment as an antecedent of customers' satisfaction. The reliability of the content of the websites help customers to perceive lower risk and reach at a better decision which in turn influence customers' satisfaction (Kateranttanakul, 2002)

In contrast, there are many factors related to online shopping about which customers have doubts such as privacy, online payment system, security and return policy (Karim, 2013). Delayed delivery or non-delivery risk has negative impact on customers' satisfaction with online shopping (Javadi et al., 2012; Liu et al., 2008). Likewise, Customers Choose online payment method based on convenience and are concerned about the online payment method because they want secure payment, protection of personal data and privacy (Franzak et al., 2001). Therefore, making online payment method easy will increase customer satisfaction with online shopping (Grace and Chia-Chi, 2009). At the same time, with the decrease insecurity risk, the satisfaction with information service of the online shopping increases (Elliot and Fowell, 2000; Suh and Han, 2003; Vehovar, 2003). So online retailers need to ensure privacy, timely delivery easy and secure payment method to ensure customer satisfaction. Table 1 shows the factors that influence customers satisfaction with online shopping either positively or negatively.

Table 1: Factors affecting customer satisfaction with online shopping

Factors	Description
Security	It includes sharing credit card information, safety of online transaction, reliability etc.
Payment methods	Different payment methods such as cash on delivery, credit card and debit card payment, easy payment methods etc.



Delivery	On time delivery, delivery of promised product, home delivery, good packaging etc.
Product quality and variety	Large assortment of products, product availability etc.
Information quality	Availability of information to make better purchase decision, information is easily understandable etc.

Research Gap: After reviewing the above literature, it has been found that there is plenty of research regarding customer satisfaction with online shopping, but the covid-19 pandemic gives it a new dimension. Many people who never relied upon online shopping were bound to do online shopping due to the covid-19 pandemic (source: informal discussion with respondents). Many developed countries already initiated research about the surge of online shopping during the pandemic. But in Bangladesh, there is no such research. Hence, this research will try to find out the satisfaction of customers with online shopping during Covid-19 Pandemic. The following research questions and hypothesis has been developed to achieve the objectives of the study:

RQ 1:What aspects of online shopping satisfied customers during Covid-19 pandemic?

H0₁:Customers are not satisfied with product quality, information quality and product variety of online shopping during Covid-19 pandemic.

RQ 2: What aspects of online shopping dissatisfied customers during Covid-19 pandemic?

H0₂: Customers are not dissatisfied with security, payment methods and delivery system of online shopping during Covid-19 pandemic.

Contribution of this Study: This study will add new insights to the existing literature by identifying customers satisfaction with online shopping in a crisis moment that is Covid-19 pandemic.

Methodology

This is a descriptive study where the main objectives were to find out the features of online shopping with which customers are satisfied and with which customers are not satisfied during Covid-19 pandemic. To achieve the objectives of the study both secondary and primary data have been collected. Secondary data sources were various journal articles, website publications etc. whereas primary data were collected from the respondents directly.

As no specific sampling frame is available regarding who did online shopping during this Covid-19 crisis, judgemental sampling technique has been used to choose the



respondents, where the number of sample (216 for this study) has been determined based on previous research (Jayasubramanian, 2015; Karim, 2013; Praveenkumar, 2015). An online survey has been conducted among 216 respondents who are Dhaka city dwellers and did online shopping during Covid-19 pandemic to collect the primary data. Online shopping deemed to be appropriate considering the crisis created by Covid-19. A5-point likert scalestructured questionnaire which was adapted from Guo et al. (2012) whose Cronbach alpha has already been tested, was used to collect data where all the questions were close ended. Close ended questions are easy to use and help to reduce interviewer bias (Collis and Hussey, 2009). The questionnaire had two parts. First part consisted of personal information of the respondents and the last part comprised of the factors that affect the customers' satisfaction with online shopping.

The collected data has been analysed using statistical software SPSS. Frequency distribution, factor analysis and multiple regression analysis were conducted to analyse the data. The plan was to conduct multiple regression analysis, but the presence of multicollinearity led to end up with factor analysis then multiple regression analysis.

Analysis and Findings

This section provides details of analysis and findings comprising of three parts. The first part includes descriptive statistics, second part includes test of multicollinearity and factor analysis followed by multiple regression analysis.

Descriptive Statistics: Table 2 below showsthat about 34.7% of the respondents spend around 4 to 6 hours daily on internet and 25% of the respondents spend 1 to 3 hours daily on internet. Among 216 respondents19.4% are using internet for 4 to 6 years and another 19.4% are using internet for 7 to 9 years. 72 respondents reported that they find different fake online stores during the Covid-19 pandemic whereas 144 respondents did not find any fake online stores during the pandemic.

Particulars Frequency Percentage Time Spend on Internet daily 1-3 hours 54 25.0 4-6 hours 75 34.7 7-9 hours 48 22.2 10-12 hours 30 13.9 9 4.2 13 and above hours **Total** 216 100.0

Table 2: Frequency Distribution



Years of using Internet								
1-3 years	15	6.9						
4-6 years	42	19.4						
7-9 years	42	19.4						
10-12 years	81	37.5						
13 and above years	36	16.7						
Total	216	100.0						
Finding fake online page during this pande	mic							
Yes	72	33.3						
No	144	66.7						
Total	216	100.0						

(Source: Survey data)

Test for Multicollinearity: Multicollinearity has been tested using correlation matrix, KMO and Bartlett's Test of Sphericity. Table 3 shows that among 153 correlation values 36 correlation values are high (above .5) which implies the presence of multicollinearity.

Table 3: Correla1tion Matrix

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Sharing Credit Card Information	1																	
2. AdequateSecurity Features	098	1																
3. Reliability	151	.303	1															
4. Safe Transaction	194	.505	.709	1														
5. Complete payment option	.439	.361	.399	.266	1													
6. Acceptability of Payment Method	558	209	.348	.012	025	1												
7. Easy payment Method	.799	.071	.011	281	.521	456	1											
8. Well Packaging	.336	.330	.337	.077	.313	279	.552	1										
9. Mode of Delivery	.600	.315	.177	.010	.593	434	.780	.447	1									
10. Timely Delivery	495	.160	.172	124	046	.552	234	.095	386	1								
11. Product Quality	512	.261	.298	016	.116	.694	228	146	123	.710	1							
12. Delivered Promised product	.241	.408	.342	.067	.223	240	.499	.914	.374	.197	033	1						
13. Product Range	332	.427	.487	.333	.379	.459	071	.008	002	.563	.753	.090	1					
14. Product Availability	532	.332	.119	165	.149	.520	169	.078	093	.746	.748	.164	.575	1				
15. Product Variety	.041	.883	.393	.634	.546	214	.142	.318	.380	002	.164	.329	.432	.166	1			
16. Understandable Information	022	.131	.312	.094	.492	.353	.155	075	.183	.340	.632	109	.817	.352	.245	1		
17. Complete Information	.016	.601	.485	.728	.506	064	014	.125	.313	339	093	.106	.177	.009	.720	014	1	
18. Information Availability	085	.718	.600	.536	.549	.129	.148	.318	.384	.186	.413	.283	.627	.400	.726	.457	.633	1

(Source: Survey data)

The value of KMO measure of sampling adequacy is .684 (**Table 4**) which implies the presence of multicollinearity as the value is higher than .5. The value of Bartlett's Test of



Sphericity leads the rejection of null hypothesis that population correlation matrix is an identity matrix as approximate Chi-Square is 5333.529 with 153 degrees of freedom which is highly significant (p=.000). Hence conducting factor analysis is appropriate (Sriram, 2012).

Table 4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Meas Adequacy.	.684						
Bartlett's Test of Sphericity	Bartlett's Test of Approx. Chi-Square						
	df						
	Sig.	.000					

(Source: Survey data)

Factor Analysis: Principal Component Analysis (PCA) is used to determine the appropriate number of factors to use them as predictors in regression analysis. To explain the total variance in the data PCA extracts factors based on information contained in the original variables. Now at first number of factors has been determined.

Appropriate Number of Factors: The appropriate number of factors has been determined based on eigenvalue criteria and amount of total variance explained. Based on eigenvalue criteria which is greater than 1 the appropriate number of factors is 5. Similarly, based on total variance explained **(Table 5)** 5 factors are appropriate as the 5 factors explains 24.715%, 46.246%, 64.517%, 77.429%, and 87.801% of variance respectively which is more than threshold value of 60% (Malhotra and Dash, 2012).

Table 5: Total Variance Explained

Factors	Extraction S	ums of Squar	ed Loadings	Rotation Sums of Squared Loadings			
	Eigenvalue	% of Variance	Cumulative %	Eigenvalue	% of Variance	Cumulative %	
1	5.719	31.772	31.772	4.449	24.715	24.715	
2	4.725	26.247	58.019	3.876	21.531	46.246	
3	2.487	13.815	71.835	3.289	18.271	64.517	
4	1.732	9.619	81.454	2.324	12.912	77.429	
5	1.142	6.347	87.801	1.867	10.372	87.801	

(Source: Survey data)

Interpretation of Factors: The factors can be interpreted in following ways based on rotated component matrix (**Table 6**): Factor 1 has high coefficients for variables namely



acceptability of payment method, timely delivery, product quality, product range, product availability and understandable information. Hence it can be labelled as *Product, payment, and delivery features*. Factor 2 has high coefficients for adequate security features, safe transaction, product variety, complete information, and information availability. Therefore, can be termed as *Security, variety, and information quality*. Factor 3 has high coefficients for sharing credit card information, complete payment options, easy payment method and mode of delivery which can be labelled as *Payment method with mode of delivery*. Factor 4 possesses high coefficients for delivered promised product and well packaging that can be labelled as *Reliable Delivery*. Factor 5 possesses high coefficient for reliability and hence labelled as *Reliability*.

Table 6: Rotated Component Matrix

		Principle Co	omponents		
Variables	F1 Product, payment, and delivery features	F2 Security, variety, and information quality	F3 Payment method with mode of delivery	F4 Reliable Delivery	F5 Reliability
Acceptability of Payment Method	.665	254	323	190	.419
Timely Delivery	.819	110	309	.290	056
Product Quality	.928	.082	099	083	.054
Product Range	.812	.326	.108	076	.271
Product Availability	.839	.168	177	.181	206
Understandable Information	.716	.071	.460	290	.222
Adequate Security Features	.204	.905	.029	.265	113
Safe Transaction	125	.670	171	047	.662
Product Variety	.113	.914	.192	.134	.080
Complete Information	175	.813	.081	062	.376
Information Availability	.411	.711	.234	.134	.289
Sharing Credit Card Information	445	112	.801	.128	071
Complete Payment Option	.211	.387	.717	.015	.268



Easy Payment Method	111	057	.873	.378	123
Mode of Delivery	119	.292	.805	.208	038
Delivered Promised product	.039	.163	.193	.939	.055
Well Packaging	039	.136	.299	.901	.113
Reliability	.239	.295	.051	.256	.854

(Source: Survey data)

Regression Analysis: As previous analysis shows that five factors are appropriate the following regression model has been developed for the study:

$$Y = \beta 0 + \beta 1F1 + \beta 2F2 + \beta 3F3 + \beta 4F4 + \beta 5F5 + e$$

Where, Y= Satisfaction with Online Shoppingduring Covid-19 pandemic

F1 = Product, payment, and delivery features

F2 = Security, variety, and information quality

F3 = Payment method with mode of delivery

F4 = Reliable Delivery

F5 = Reliability

e= Residual

Table 7 summarises the estimation of regression model. It can be seen from the table that Value of R2 is .583 which is highly significant as p=.000. Hence the null hypothesis that coefficient of multiple determination in the population is zero (i.e. R2pop = 0) has been rejected and 58.3% of variance in the dependent variable can be explained by the independent variables.

Table 7: Regression Model Summary

Model	R	R	Adjusted R	Std. Error of the	P value
		Square	Square	Estimate	
1	.764	.583	.573	.46510	.000

(Source: Survey data)

Table 8 implies that all the regression coefficients are significant at 1% level. The magnitude of importance of 5 factors in descending order are Security, variety, and information quality, Reliability, Reliable Delivery, Payment method with mode of delivery and Product, payment, and delivery features where payment method with mode of delivery and reliability negatively influenced the customers' satisfaction during covid-19 pandemic.



Table 8: Multiple Regression Coefficients

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	В	Std. Error	Beta			
Constant	3.653	.032		115.426	.000	
Product, payment, and delivery features	.167	.032	.234	5.253	.000	
Security, variety, and information quality	.316	.032	.444	9.972	.000	
Payment method with mode of delivery	196	.032	276	-6.185	.000	
Reliable Delivery	222	.032	312	-6.995	.000	
Reliability	.283	.032	.397	8.915	.000	
Dependent Variable: I am satisfied with my online shopping during Covid-19 pandemic						

(Source: Survey data)

Conclusion and Recommendation

This research tried to find out the customers' satisfaction with various aspects of online shopping during the Covid-19 pandemic. It found that customers are satisfied with product quality, product variety, information quality, reliability and some features of security, delivery and payment methods of online shopping which is similar to the findings of Liu et al. (2008), Schaupp and France (2005); Szymanski and Hise (2000). In contrast, customers are not satisfied with some aspects of security, delivery and payment method of online shopping during the pandemic such as easy payment method, delivery of promised product, sharing credit card information which is similar to the findings of Javadi et al., 2012; Karim, 2013; Liu et al., 2008. So, below are some of the recommendations that online retailers may follow:

- Online retailers should try to ensure security of online transaction such as protecting the credit card information of customers.
- They should give the customers various payment options like cash on delivery, credit card payment, bKash payment etc.
- Should ensure on time delivery during a pandemic.

This study is however is not without limitations. Firstly, the sample size is not very large. Secondly, only Dhaka city dwellers have been surveyed through online. The other city dwellers may have different opinions and experience. Hence, some cautions should be maintained while interpreting the results of this study. Apart from that, there is opportunity to conduct further research on this topic. Customers' perceptions and expectations can be compared for better understating of customers' satisfaction with online shopping during a pandemic. Likewise, the survey can be conducted among the other city dwellers of Bangladesh.



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Factors Influencing Organic Food Buying Intention Among Generation Y in Bangladesh

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Abstract: Organic food is produced by avoiding synthetic chemicals, such as pesticides, fertilizers, and genetically modified organisms. This study examines the critical antecedents of organic food buying intention among generation Y in Bangladesh. In this study, the research model incorporated constructs from previous literature, where researchers identified significant relationships with organic food purchasing intention. This research work used structural equation modeling to assess the data obtained by an online survey of 109 participants aged 25-42. The results imply that health consciousness, perceived value, and perceived quality have significant positive relationships with organic food buying intention among generation Y. The finding of this study also indicates that health consciousness is the most significant factor in predicting buying intention.

Keywords: Organic food, Buying intention, Generation Y, Structural equation modeling, Bangladesh

1. Introduction

Organic food is a product made from an agricultural method that avoids pesticides and synthetic fertilizers (Shafie and Rennie, 2012). Besides, USDA (2002) illustrated that organic food is produced without using artificial fertilizers, pesticides, synthetic components of sewage sludge, bioengineering, or ionizing radiation. Van Loo et al. (2010) also mentioned in their study that organic meat, such as poultry, eggs, and dairy products, comes from animals given no other hormonal medicine antibiotics. Organic food has been perceived as healthier products that protect the environment and ensure more outstanding quality (Schifferstein and Ophuis, 1998; Rozan et al., 2004; Magnusson et al., 2003; Pearson, 2001; Jones and Clarke-Hill, 2001; Gil et al., 2000a; Aguirre et al., 2003; FAO, 2003; Mann, 2003; Saba and Messina, 2003). These foods have more nutritional components because organic food's breeding and growth are being done naturally without using hormones and harmful chemicals (Shaharudin et al., 2010). The United States Department of Agriculture (USDA) argued that organic food emphasizes the greater use of renewable resources and preserving soil and environmental quality for future people. Moreover, information technology advancement has increased access to information (Mungai et al., 2020). People are now more concerned about their food safety, food habit, and healthy food consumption. Consequently, though organic products are being sold at a premium price, people

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purchased them because of having a passion for a higher standard of living and a healthier lifestyle (Hassan et al., 2015). For the above reasons, the demand for organic food consumption has increased. According to the International Federation of Organic Agriculture Movements (IFOAM), organic food's global sales have increased by 5 billion US dollars from 2010 to 2012 and reached 64 billion dollars in 2012 (Willer and Lernoud, 2014). Similarly, organic food production is also very profitable because of its excessive price and cost-effectiveness (Kristiansen et al., 2006). Furthermore, increased demand for organic food is observed in city dwellers in recent times. Therefore, many chain shops and online marketers sell organic foods (Al-swidi et al., 2014; Giovannucci, 2007).

Bangladesh is an agriculture-based country, and the lion's share of its economic growth comes from agricultural sectors (Raihan, 2012). Above 80% of people in this region are directly and indirectly involved in agriculture that why it has a significant impact on our national economy (Biswas et al., 2019). However, due to the rapid use of artificial fertilizers, soil quality and food quality are deteriorating. As the people involved in agriculture are mostly illiterate, they have little knowledge about organic farming. Positively, farmers have recently shown awareness about organic agriculture (Sumi and Kabir, 2018). The government of Bangladesh also made a national agricultural policy in 2016, where the National Organic Standard Board (NOSB) has been formed under the ministry of agriculture. The main aim of BOSB is to develop, upgrade the standard, and facilitate organic products to export.

In this study, researchers target generation Y, the generation of the new millennium. The term "Generation Y" first appeared in an Advertising Age journal where children born after 1977 were considered for analysis. Generation Y refers to people born between 1978 and 1994 (Sheahan, 2006). Naumovska (2017) argued that Generation Y is a distinctive and influential consumer segment whose behaviours, habits and psychology are often discussed (Naumovska, 2017). The persons who are the member of Generation Y influenced by trends, and they also like to be trendy (Bochert et al., 2017). Besides, Generation Y is a significant portion of consumers in terms of purchasing decisions, and they also play significant roles in their family purchase decisions (Lategan et al., 2017). In this study, researchers were interested in examining the organic food buying intention among Generation Y in Bangladesh. As far as we know, little or no research has been conducted to examine the factors influencing organic food buying intention among Generation Y. Therefore, this research initiative was taken to fill the above-identified gaps. This study's findings will provide useful insights for practitioners and academicians, which help them make realistic decisions.



2 Literature Review

Many studies have investigated the influence of different factors on organic food purchasing intention (Dipeolu et al., 2009; Dodds et al., 1991). The concern for health and the environment has boosted the rapid production and colossal consumption of organic foods recently. According to many researchers, the trend to use organic food is somehow linked with environmental issues because farmers only use ecologically sustainable chemical-free fertilizer and pesticides for the cultivation of organic food (Soil Association, 2000; Grunert and Juhl, 1995; Grunert, 1993; Sparks and Shepherd, 1992). Therefore, peoples have a lively passion for it. Magnusson et al. (2003) found that young people have a favourable attitude toward organic foods. Young people are more concerned about trendy products, and they have good connections with close peers and people from other parts of the country (Ayub et al. 2020). Therefore, young consumers have a potential impact on the organic food market. Besides, many young entrepreneurs are engaged in producing organic foods such as fish, meat, fruits, and vegetables. Recently they concentrated on organic rice, which remains the leading staple food in Bangladesh (Lernoud, 2018).

In the context of Bangladesh, several studies were conducted on organic foods. A study concentrated on consumers' perception regarding organic farming in Bangladesh identified that price constraint is the main barrier for not expanding the organic rice market in Bangladesh (Murshed and Riaz Uddin, 2020). Moreover, another study focused on scopes and challenges of organic wheat cultivation revealed that better partnership and cooperation among farmers, NGOs, marketers, and certifiers could translate the possibilities into realities, and successful implementation will minimize the poverty of poor farmers of Bangladesh (Sarkar et al., 2011). Furthermore, Ferdous et al. (2020) conducted research to identify the potential and challenges of organic food in Bangladesh. They argued that organic agriculture could be a default production system in Bangladesh if the existing bottlenecks are addressed. Sarkar and Itohara (2010) also initiated a study to examine whether organic farming helps smallholders ensure household food security. They found a significant portion of organic farmers attained household food security. Also, they showed that organic farming duration, education level, farm size, household members, and access to extension services have significant impacts on organic farming. A study of organic tea buying intention demonstrated that trust, perceived value, health consciousness, product attributes, and environment consciousness significantly impact organic food buying intention (Sumi & Kabir, 2018). Rahman and Noor (2016) explored organic food buying intention in Bangladesh and found attitude and subjective norms significantly influence the purchase intention. The existing previous literature focused on scope, challenges, potentials, constraints, perception, and intention towards organic food in Bangladesh. Although some studies in Bangladesh's context focused on determining organic food buying intention, they did not



focus on more specific areas. Intention varies among different age groups (Kapoor & Munjal, 2017). Therefore, researchers aimed to determine factors influencing the buying intention among generation Y in Bangladesh. The insights of particular age group towards organic food buying intention will be helpful to make better decisions.

3 Theoretical Framework and Hypothesis

Researchers conducted various studies to examine organic food buying intention. Ueasangkomsate and Santiteerakul (2016) used food safety, health concern, and others to predict organic food buying intention. Besides, Wang, Pham, and Dang (2020) and De Toni et al. (2017) discussed people's perception of quality that motivates organic food consumption. Furthermore, the perceived value was also used to assume people's buying intention. Price sensitivity was used to predict organic food buying intention. After analyzing the previous literature on organic food consumption's behavioural perspectives, four constructs have been identified to measure organic food's buying intention among Generation Y oriented people in Bangladesh. The conceptual model combing food safety consciousness, health consciousness, perceived quality, and perceived value constructs to predict organic food buying intention among generation Y (Gen Y) based people. The subsequent sections describe the hypotheses made in this research initiative.

3.1 Food Safety Consciousness

Food safety consciousness is the consumers' awareness about chemical fertilizers, artificial food additives, and food preservatives used during food production or food processing (Yee et al. 2005). Teng and Lu (2016) found that food safety concern has a significant positive relationship with organic food involvement. Hus et al. (2016) has identified that consumers' perception of food safety influences their decisions about specific food choices (Hus et al. 2016). Food safety consciousness affects the consumption of organic products (Van Loo et al., 2013). Accordingly, we developed the following hypothesis.

H1: There is a positive relationship between food safety consciousness and buying intention.

3.2 Health Consciousness

Health consciousness is the active participation of the customers' healthcare system (Gould 1988). Teng and Lu conducted a study in 2016 has identified organic food consumption and health consciousness has positive influences on it. Health consciousness was also an important indicator of organic food consumption (Kriwy and Mecking, 2012). Accordingly, we developed the following hypothesis.

H2: There is a positive relationship between health consciousness and buying intention.



3.3 Perceived Quality

It is said that organic food is high-quality food comparing to traditional food because of its natural components such as pesticides, bioengineering components, and artificial fertilizer are not used (Boobalan and Nachimuthu, 2020). In customers' decision-making, quality is the prime indicator than other features (Suciu et al., 2019; Molinillo et al., 2020; Konuk, 2019). Food quality is also a vital factor for purchasing products (Ranjbar Shamsi et al., 2020). According to Suciu et al., in 2019, when people buy organic food, they think it's better than traditional food. For this, we developed the following hypothesis.

H3: There is a positive relationship between perceived quality and buying intention.

3.4 Perceived Value

Perceived value includes a general judgment about good and service utility based on the customer's perceptions of what they get and paid (Zeithaml, 1988). According to Sweeney and Soutar (2001), perceived value is in four classes in a general sense: 1. Functional values measure the utility that customers perceived in the time of decision making. 2. Economic value related to money in exchange. Social value attached to social acceptance, and 4. Emotional value is linked with positive memory when a choice is made. We used these dimensions to define the perceived value. A previous study from Shaharudin et al., in 2010, found that perceived value about organic food is complimentary and linked up with safety, taste, nutrients, and price. However, perceived value about organic food can reduce the risk through its food, using suitable cultivation methods and handling procedures (Gil et al., 2000). Hutchins and Greenhalgh(1997) and Gil et al., 2000 found that organic food consumers are intended to pay much than other traditional food. Based on that literature, we developed the following hypothesis.

H4: There is a positive relationship between perceived value and buying intention.

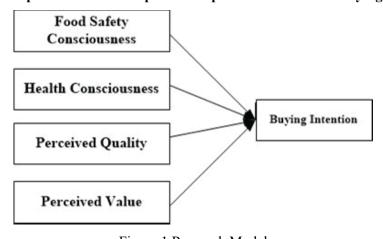


Figure 1 Research Model



4. Research Design and Methods

4.1 Measurement Instruments

In this study, the components of each item have been collected from previous works. Table 1 shows the details of the measurement items of each variable.

Table 1 Measurement Items

Constructs	Items	Sources	
Food Safety	FSC1: I think organic foods are safer to eat.	(Ueasangkomsate	
Consciousness	FSC2: I think organic foods do not contain genetically modified ingredients.	& Santiteerakul, 2016)	
	FSC3: I think organic food can reduce food poisoning risk.		
	FSC4: I think organic foods are chemical-free		
Health	HC1: I think organic food products are good for our health.	(Ueasangkomsate	
Consciousness	HC2: I think organic foods are of high quality.	& Santiteerakul, 2016)	
	HC3: I think organic food products contain no preservatives or artificial colors.	===,	
	HC4: I think organic foods have high nutritional value.		
Perceived	PQ1: I think organic foods are of good quality.	(Wang, Pham,	
Quality	PQ2: I think the quality of organic food is acceptable.	& Dang, 2020; De Toni,	
	PQ3: I think organic food gives me a greater confidence	Eberle,	
	that I am consuming something healthy.	Larentis, & Milan, 2017)	
	PQ4: I think the quality of organic food is better than other types of food.		
Perceived Value	PV1: I think the money that I spend (would spend) with organic food is (would be) well spent.	(De Toni, Eberle, Larentis, &	
	PV2: I think what I receive/would receive (benefits) by consuming organic food compensate/would compensate for the price that I pay/would pay for them.		
	PV3: I think organic foods are/would be a good buy.		
	PV4: I am willing to pay a bit more for foods that do not harm my health.		



Buying	BI1: I intend to buy organic foods in the future.	(Teng & Lu,
Intentions	BI2: I predict I will buy organic foods in the future.	2016; De Toni, Eberle,
	BI3: I plan to buy organic foods in the future.	Larentis, &
	BI4: I will encourage friends, neighbours, and family to buy and consume organic food.	Milan, 2017)

4.2 Questionnaire Design and Data Collection

This study collected the primary data by an online survey. Following the convenience sampling method, researchers consider the easily accessible and readily available respondents to respond to the questionnaire. The questionnaire consisted of 26 questions, and the questionnaire had three parts. Part A briefly described organic food and study's objectives. Respondents were ensured that their responses are confidential, and their responses will be used only for research purposes. The introductory part also includes guidelines about the age limitation to comply with the definition of Generation Y and eligibility criteria (familiarity and interest in organic food). Part B asked for demographic questions, e.g., age, gender, marital status, education level, occupation, and family income. Part C had questions for each construct used in the proposed model. A 5- point Likert scale has been used in this study where it ranging from (1) "strongly disagree" to (5) "strongly agree" was used in the measurement questions. For collecting empirical data, a google form was opened on October 1, 2020 and closed on October 26, 2020. The link to the google form was sent to the target respondents through email, Facebook group, and Facebook Messenger. After closing the acceptance of data, researchers got 130 samples from the online survey and by reducing extreme values, 109 samples were considered for analysis.

4.3 Analysis

In this study, Structural Equation Modeling (SEM) has been used to analyze the empirical data. SEM is a two-step modelling process, where the measurement and structural modeling assess the proposed hypothesis. Because of sample size and residual distribution independence, this model is better than other statistical tools (Chin, 1998). Additionally, this model comprises a component-based method for model estimation (Chin, 1998). The survey data downloaded from google form and transferred to Microsoft Excel, then imported into smart PLS 3.00 for analysis. Besides SEM, we used SPSS 16.00 to examine the demographic status of this study.

5 Results and Discussions

5.1 Demographic Information

The result shows that over 66% of the respondents were aged between 25-29 years, along with a large percentage of respondents being male (81%), while 28% were female.



Besides, the proportion of single and married is almost the same (51:49). Master's degree holders also dominated the respondents (77%), while Bachelor's degree holders were only 27%. In terms of family income, 38% of the participant's family earning is 20,000-30,000 taka per month, and 20% out of the total respondents have monthly income more than 70,000 taka.

Table 2 Demographic Information

Items		Frequency	Percentage
Age	25-29	66	61.00
	30-34	29	27.00
	35-39	8	7.00
	40-42	6	6.00
Gender	Male	81	74.30
	Female	28	25.70
Marital Status	Single	56	51.00
	Married	53	49.00
Education Level	HSC	3	3.00
	Bachelors	27	25.00
	Masters	77	71.00
	PhD	2	2.00
Occupation	Student	45	41.00
	Housewife	12	11.00
	Businessman	6	6.00
	Service Holder	46	42.00
Family	20,000-30,000	38	34.90
Income(Monthly)	30,000-40,000	18	16.50
	40,000-50,000	13	11.90
	50,000-60,000	11	10.10
	60,000-70,000	7	6.40
	Above 70,000	22	20.20

5.2 Measurement Model

In this study, the reliability and validity have been assessed through the measurement model. The measurement model assesses the construct reliability, convergent validity, indicator reliability, and discrimination validity criteria. Here, the value of Cronbach's



alpha represents the latent construct's reliability, and the average variance expected (AVE) of each construct is used to ensure convergent validity. In general, the optimal level of Cronbach's alpha is 0.70, but in the case of exploratory analysis, the value can be accepted at 0.40 or higher (Hair et al. 1995; Hulland 1999). Additionally, the composite reliability (CR) of the constructs should be 0.70 or higher, but in the case of exploratory analysis, the value can be accepted at 0.40 or higher (Hair et al. 1995; Hulland 1999). In addition, the outer loading of the measures of 0.70 or higher is preferred, but exploratory research considers 0.4 or higher as acceptable (Hulland, 1999). AVE should be 0.50 or higher (Richard et al. 1989). Table 3 shows that all values are above the recommended level, indicating good internal consistency and convergent validity. Discriminant validity was assessed by Fornell and Larcker (1981). Table 4 shows that AVE's calculated square roots were greater than the correlation estimates with other constructs, indicating satisfactory discriminant validity.

Table 3 Measurement Model

Constructs	Items	Loadings	Cronbach's alpha	CR	AVE
Food Safety	FSC1	0.762			
Consciousness (FSC)	FSC2	0.667	0.724	0.022	0.554
	FSC3	0.776	0.734	0.832	0.554
	FSC4	0.767			
Health Consciousness	HC1	0.767			
(HC)	HC2	0.817	0.775	0.055	0.597
	HC3	0.734	0.775	0.855	
	HC4	0.769			
Perceived Quality	PQ1	0.778			
(PQ)	PQ2	0.817	0.002	0.870	0.627
	PQ3	0.839	0.802		
	PQ4	0.729			
Perceived Value	PV1	0.67			
(PV)	PV2	0.739	0.704	0.819	0.531
	PV3	0.787	0.704		
	PV4	0.714			
Buying Intention(BI)	BI1	0.848			
	BI2	0.866	0.861	0.906	0.706
	BI3	0.861			0.706
	BI4	0.784			



Note: FSC: food safety consciousness; HC: health consciousness; BI: buying intention; PQ: perceived quality; PV: perceived value

Table 4 Discriminant Validity

Constructs	FSC	НС	BI	PQ	PV
FSC	0.745				
HC	0.689	0.772			
IU	0.466	0.596	0.84		
PQ	0.513	0.549	0.592	0.792	
PV	0.503	0.478	0.542	0.562	0.729

Note: FSC: food safety consciousness; HC: health consciousness; BI: buying intention; PQ: perceived quality; PV: perceived value

5.3 Structural Model

In this study, researchers used the Partial Least Square Structural Equation Modeling (PLS-SEM) to measures the standardized path coefficients. The reason for using PLS-SEM is that it has few restrictions on the unbiased estimates of the sample size (Falk and Miller, 1992). Moreover, PLS-SEM is a useful analysis tool for this study to examine the path coefficients that depicts the strength of the relationship between factors. In this paper, PLS path coefficients are shown in table 5. 5000 Bootstrapping samples have been created from the prescribed dataset and assessed the statistical significance of the said hypothesis at 95% confidence level. Table 5 shows the hypotheses results of direct paths with path coefficient (β), t-statistics, p-value, and status of the developed hypothesis. Here, EC (β = 0.358; t-statistics=2.902; p-value <0.004), PQ (β = 0.289; t-statistics=3.354; p-value <0.001) and PV (β = 0.232; t-statistics=2.747; p-value <0.006) positively influence respondents organic food buying intention. So the results support the hypotheses H2, H3, and H4. Health consciousness has a positive influence on respondents' buying intention of organic food. The perceived quality of organic food has a positive influence on respondents' buying intention, and the perceived value of organic food has a positive influence on respondents' buying intention. However, Hypothesis H1 cannot be accepted at a 5% level of significance.

Table 5 Structural Model

Path	В	t- Statistics	p-Value	Comments
H1: FSC→BI	-0.046	0.47	0.638	Not Supported
H2: HC→BI	0.358	2.902	0.004	Supported
H3: PQ→BI	0.289	3.354	0.001	Supported
H4: PV→BI	0.232	2.747	0.006	Supported



Note: Significant at p < 0.05; FSC: food safety consciousness; HC: health consciousness; BI: buying intention; PQ: perceived quality; PV: perceived value

Table 6 Predictive Relevance

Constructs	R Square	Q Square
BI	0.489	0.310

Note: BI: Buying Intention

6 Discussion and Implication

This research aimed to determine the key Factors Influencing Organic Food Buying Intention Among Generation Y in Bangladesh. In this context, a research model was developed with the relevant constructs identified in the previous literature. This study's empirical results indicate that health consciousness has a positive impact on organic food buying intention. These findings demonstrate that respondents perceive organic foods have high nutritious values and don't have preservatives and artificial colors, which is good for health. Therefore, they intend to buy organic foods. The previous literature has confirmed this finding (Teng and Lu, 2016; Kriwy and Mecking 2012). Furthermore, the perceived quality was identified to impact organic food buying intention significantly. This result suggests that Gen Y people believe organic foods are of good quality, and they feel confident about healthy food consumption when they consume organic foods. This understanding motivates GenY people to buy organic foods. This finding is consistent with the findings of Suciu et al. (2019), Molinillo et al. (2020), Konuk (2019), RanjbarShamsi et al. (2020), and Suciu et al. (2019). Similarly, the perceived value was also found to impact the buying decision of organic food positively. This result depicts that respondents assume that money spent on organic food is a worthy decision. Also, they perceive that organic foods' consumption provides more benefits than they pay for them. This phenomenon leads them to buy organic foods. These findings corroborate the findings of Hutchins and Greenhalgh (1997), Gil et al. (2000), and Canevari et al. (2003). However, earlier findings of Teng and Lu (2016) and Van Loo et al. (2013) showed that safety consciousness is a significant indicator of organic food buying intention among people. Still, in our research, this factor is not consistent with previous findings.

7 Conclusion and Scope of Future Research

In this research initiative, the objective was to determine the influential factors of organic food buying intention among Gen Y in Bangladesh. Researchers developed a research model with the relevant constructs identified in the earlier literature. The empirical result depicts that HC, PQ, and PV have significant and positive relationships with organic food



buying. HC is the most significant determinant of organic buying intentions, followed by PQ and PV. Besides, the R2 of BI is 0.489, indicating a good explanation of power. Therefore, BI can explain the variance of 48.90%. Furthermore, Q2 of BI is 0.310, indicating considerable predictive relevance.

This study's findings will help organic foods growers, marketers, suppliers, and distributors connect to find out their final targeted customers. Marketers can easily segment their market share and identify the ultimate need for Gen Y classed people. It can also help the concerned government authorities to make vibrant policies in this regard.

Although this report has a significant contribution to organic food buying intention among Gen Y people, it has some downsides that need to explain. Firstly, this research is only for a particular generation of people aged between 25 and 39 years. So this study cannot be generalized as a whole. Secondly, the convenience sampling method has been applied in this research. Therefore, this sampling method may restrict the generalization of the empirical results. Thirdly, researchers did not consider the impact of control variables, e.g. age, gender, marital status, and family income. This study could be extended with a large and balanced sample size. Furthermore, future researchers may use other relevant constructs, e.g., social influence, price sensitivity, environmental consciousness, ethical consumer identity, organic knowledge, and trust, which may enrich this model's explanatory power.

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PART 01: Demographic Factors

Please supply the following information by making a cross [X] sign in the appropriate box where the options are provided.

1	Age	□ 25-29	□ 30-34		
		□ 35-39	□ 40-42		
2	Gender	□ Male	□ Female		
3	Marital Status:	□ Married □ Single			
4	Education	□HSC	□ Bachelors		
		□Masters	□ PhD		
5	Occupation	□Service Holder	□ Businessman		
		□Student	□ Housewife		
6	Family Income	□ 20,000-30,000	□ 30,000-40,000		
		□40,000-50,000	□ 50,000-60,000		
		$\Box 60,000-70,000$	□Above 70,000		

PART 02: Measurement Questions

Constructs	Items				
Food Safety	FSC1: I think organic foods are safer to eat.				
Consciousness	FSC2: I think organic foods do not contain genetically modified ingredients.				
	FSC3: I think organic food can reduce food poisoning risk.				
	FSC4:Ithink organic foods are chemical-free				
Health	HC1:I think organic food products are good for our health.				
Consciousness	HC2: I think organic foods are of high quality.				
	HC3: I think organic food products contain no preservatives or artificial colors.				
	HC4:I think organic foods have high nutritional value.				



Perceived	PQ1:I think organic foods are of good quality.					
Quality	PQ2:I think the quality of organic food is acceptable.					
	PQ3: I think organic food gives me a greater confidence that I am consuming something healthy.					
	PQ4: I think the quality of organic food is better than other types of food.					
Perceived Value	PV1: I think the money that I spend (would spend) with organic food is (would be) well spent.					
	PV2: I think what I receive/would receive (benefits) by consuming organic food compensate/would compensate for the price that I pay/would pay for them.					
	PV3: I think organic foods are/would be a good buy. PV4:I am willing to pay a bit more for foods that do not harm my health.					
Buying	BI1: I intend to buy organic foods in the future.					
Intentions	BI2:I predict I will buy organic foods in the future.					
	BI3: I plan to buy organic foods in the future.					
	BI4: I will encourage friends, neighbours, and family to buy and consume organic food.					



Failures of Social Audit in Garment Factories in Bangladesh: Causes and Possible Corrective Measures

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Abstract: The social audit is one of the most ubiquitously used medium for protecting especially the workers of garments factories in Asia. However, the efficacy of the current framework of social audits is frequently questioned and widely held responsible for disasters in garment factories in recent years. We attempt to identify the underlying traits of social audit scenario in Bangladesh based on structured interview of twenty-five officials from eight garment factories located at Gazipur district and Savar area of Dhaka district of Bangladesh. We find that the current social audits have some loopholes in that factory owners manage impression of auditors by e.g. modification of workplace, coaching workers to behave in a desired way, and falsification of documents ahead of audit visits. Moreover, workers' fear about loss of job and lack of awareness about their rights contribute to failures of social audits. Recommendations to improve social audit effectiveness have been discussed.

Keywords: Social Audit, Garment Factories, Workers and transparency and accountability.

1. Introduction

Social audit, a process used to determine the impact of an organization on the society and to report to the community, is a widely emphasized issue over the past few decades. It is a monitoring and control mechanism that emphasizes on transparency and accountability of organizations to the society (Gonella et al., 1998). It, along with social accounting, has the potential to accelerate the growth of the garment industry of Bangladesh which has witnessed a heavy toll of human lives before a recent improvement in working conditions, if conducted effectively.

There have been more than 1,800 garment workers burned, crushed, killed and trampled in preventable building collapses and factory fires (e.g. fire accident at Tazreen Fashions in 2012, collapse of Rana Plaza in 2013, boiler explosion in Multifabs factory in 2017) in the last decade in Bangladesh. The collapse of Rana Plaza in 2013 constituted the deadliest industrial disaster in the history of textile production and caused death of 1100 people and injured around 2500 others (Schoen, 2019). Moreover, frequently garments workers have to go to streets for their legitimate wages and other rights. This phenomenon suggests that the social audits undertaken by the companies themselves failed to a great extent. In

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addition, negligence of social audit companies and social compliance initiatives are blamed for the manmade and preventable factory accidents (Kelly et al., 2019). For example, in the case of Rana Plaza, accredited auditors had deemed this facility safe just weeks or months before it was reduced to ruins (Kelly et al., 2019).

This study attempts to identify the underlying factors behind the failure of social audits in the garments industry of Bangladesh. Moreover, it explores the possible ways to make social audits and inspections more effective. To accomplish the objective, we have used a structured questionnaire survey along with secondary data from various sources.

As previous studies concentrated on mainly other large suppliers of Ready Made Garments (RMG) (e.g. India, Vietnam etc.) (Mansingh & Kumar, 2006), garments industry is the single largest contributor to the export volume (around 80%) and Gross Domestic Product (GDP) of Bangladesh, poor social performance is widespread in this sector, our study will certainly benefit policy makers along with adding valuable insights to existing literature.

2. Literature Review

In recent years, global brands and retailers sourcing from developing countries like Bangladesh are more committed to social responsibilities and codes of conduct of the suppliers (Mamic, 2005; Barrientos & Smith, 2007) and social audit has been the widely used mechanism for their implementation (Mansingh & Kumar, 2006). A social audit is an internal assessment of a company's endeavors, procedures, and code of conduct regarding social responsibility and the company's impact on society to create, improve, and maintain its overall public image. Typically, the scope includes social and public responsibility along with employee treatment e.g. work environment including safety, freedom of harassment, and equal opportunity, worker pay and benefits etc.

However, the same model of social audit may not be able to result in desired outcomes across different contexts due to political, bureaucratic, cultural and societal differences across countries and therefore, a custom-made locally grown method of factory investigation will be more suitable and should be complemented with equally important improvements like complaints, worker training, proper buying practices (Mansingh & Kumar, 2006). Moreover, implementation of codes of conduct takes place in a complex social and institutional environment where currently they fail to challenge existing commercial practices or embedded social relations that underpin poor labor standards in global production systems (Barrientos & Smith, 2007). So, effective social auditing, accounting, and reporting is the last resort for remediation of labor conditions in the global RMG supply chain.



Gerrefi (1994) argued that the global garments industry is a buyer-driven commodity chain where buyers outsource and subcontract production without assuming any risk for managing their own production sites while exercising negotiating power over product cost, quantity, and timing of product delivery. By driving down production costs for maximizing their own profit, in their negotiations with garment factories which intensely compete for contracts, retail and brand firms are indirectly responsible for the downward pressure in employee wages and workplace safety (Gerrefi, 1994; Scheper, 2017). Therefore, this downward pressure on production costs at garment factories by buyers may force the factory owners to bypass/weaken the social audits / social audit results which culminate in safety and structural issues such as those responsible for building fires and collapse. Therefore, proper buying practices and an active role in the remediation efforts of the global garments industry by the buyers is one important solution to social audit ineffectiveness.

Kelly et al., (2019) stated that transparency and accountability of business-driven social compliance initiatives, and corporate-controlled audit firms and genuine worker involvement are required to protect the workers from further exploitation. They contend that in the current social audit environment there is no scope for mandatory disclosure of audit outcomes, no accountability of audit companies for baseless opinion, weak voice of workers and/or unions (Kelly et al., 2019).

Kamal & Deegan, (2013) reported that the garments companies lag behind in terms of disclosing social and environment related governance practices which is an important prerequisite to ensure transparency and accountability of the firms in terms of their approach to social audit.

Although the state responded to the Rana Plaza collapse by passing Bangladesh Labor Amendment Act, circumstances didn't/wouldn't improve because of low enforcement of the provisions for factory inspections (Human Rights Watch, 2013; Khan & Wichterich, 2015). Much of the progress that has been achieved in worker rights and regulation of the garments industry is driven by the buyers which underscores the central role of foreign brands and retailer firms in factory governance (Schoen, 2019). For example, Khan & Wichterich (2015) argued that the multi-stakeholder agreements e.g. Accord on Fire and Building Safety in Bangladesh (Accord), Alliance for Bangladesh Worker Safety (Alliance), at the international level and the National Tripartite Plan of Action (NTPA) at the domestic level made initial progress towards achieving safety and labor conditions although their activities lost momentum and intensity over-time. It is argued that underlying power structures of the transnational apparel chains and the actual imbalance of power among the stakeholders are responsible for failure of above remediation



initiatives (Khan & Wichterich, 2015). Therefore, specific international and local law addressing these problems and their strict enforcement is also essential for worker rights and safety in the RMG industry.

3. Methodology

We have developed a questionnaire and conducted structured interviews of twenty-five officials from eight garment factories located at Gazipur district and Savar area of Dhaka district of Bangladesh. The majority of the labor unrests have been observed to have happened in these two districts during the last couple of years. The questionnaire constitutes twenty items (12 closed ended and 8 open ended questions). The reliability of 11 (Five Point Likert Scale) items in the questionnaire has been tested by using SPSS software.

Moreover, we also depend on secondary sources e.g. journals, periodicals, research monographs, the website and the annual reports of Bangladesh Garment Manufacturers and Exporters Association (BGMEA) to corroborate our survey results and develop our recommendations.

4. Results and Discussion

Table 1: Results of 11 close ended questions (Five Point Likert Scale)

Statement	Strongly Disagree (%)	Moderately disagree (%)	Neither disagree nor agree (%)	Total disagreed and neutral	Moderately agree (%)	Strongly agree (%)	Total agreed (%)
(1)	(2)	(3)	(4)	(2+3+4)	(5)	(6)	(5+6)
Pressure from international buyer drives social audit	4	4	16	24	40	36	76
Unbranded buyers and non-specialized retailers don't care about the requirement of social audit of their source company	4	4	12	20	44	36	80
Huge unemployed force causes social audit failure	4	36	32	72	28	0	28
Social audit is only confined to information gathering rather than rectifying problem	4	4	16	24	44	32	76



Falsification of documents is an influential cause of social audit failure	0	4	12	16	48	36	84
The workplace is changed at the time of conducting the social audit	0	4	36	40	44	16	60
Workers and labor unions are kept outside from the social audit process	12	20	20	52	36	12	48
Announcing audit visit in advance give factory managers time to convey a false impression of working conditions	4	4	24	32	40	28	68
Factory managers train workers to behave in a desired way before interviewed during audit process	24	32	20	76	16	8	24
Workers are scared or frightened for their own Job that make them reluctant to file a complaint during audit	4	4	8	16	56	28	84
The vast majority of social audit is conducted by inexperienced and unskilled staffs	4	16	60	80	16	4	20

Table (1) reports the response of the participants regarding the extent to which they agree to the given statements in the questionnaire. The results suggest that pressure from international buyers stimulate local suppliers to undergo social audits (76% respondents) and unbranded and non-specialized retailers are reluctant to put pressure on suppliers to undergo social audits (80% respondents). Therefore, international buyers can play and should play a major role in improving social performance of local factories by eliciting regular and systematic conduction of social audits. The gap between major brands and unbranded buyers and non-specialized retailers should be narrowed by taking proper steps.

Moreover, major drawbacks that cause failure of social audits are (at least 50 % respondents moderately or strongly agree): confinement of social audit to information



gathering rather than correction of problems (76% respondents), falsification of related documents (84% respondents), modification of workplace to draw a positive impression among auditors (60% respondents), advanced announcement of the audit visit schedule (68% respondents), workers' fear about loss of job and forbearance from filing complaint during audits (84% respondents). Therefore, inappropriate focus and insufficient emphasis on corrective measures and impression management by employers are agreed to be typical of social audits in garment factories in Bangladesh.

The major reason that causes social audit failure is impression management by coaching/intimidating workers so that they behave in a desired way in front of auditors and short-term modification of the workplace ahead of audits and falsification of documents. This is possible due to acute unemployment problem and workers' fear about potential job loss, lack of consciousness about rights among workers, pre-announcement of the audit visits etc.

Table 2: The respondents' view about the most important cause of social audit failure

Reasons	Ranked First (% of respondents)				
Workers frightened/scared about potential job loss	40				
Advance announcement of audit	24				
Falsification of documents	16				
Inexperienced audit staffs	12				
Widespread unemployment	8				

Table (2) presents our respondents' opinion about the most dominant one among different factors of audit failure. Workers' fear or scare about potential job loss and forbearance from filing complaints (40% respondents) is ranked as the most dominant/widespread characteristic of social audit. Then comes advance announcement of audit (24% respondents) followed by falsification of relevant documents which are used by auditors as sources of evidence (16% respondents), inexperienced or underqualified audit staffs (12% respondents), and widespread unemployment and lower scope for finding jobs if fired (8% respondents). The first three factors again suggest that there is wide scope for impression management and widespread efforts are made by employers to do so. Moreover, a significant number of respondents report that there is a lack of adequate qualification and experience among the people who conduct such audits.



5. Conclusion and Recommendations

Sustainable labor practices and safe working environment is the most important prerequisite for sustaining the RMG industry of Bangladesh. A number of high-profile accidents in the garment factories during the last decade have brought the issue of social audit as a remedy to the grievances of the workers in this industry. The current model of social audit has fallen prey to manipulations by factory owners as evidenced by labor unrests due to chaos in payment of wages and accidents in different factories in recent years. We have attempted to identify the loopholes in the widely used social audit process by using a questionnaire and structured interview of twenty-five executives of eight factories located in Gazipur district and Savar area of Dhaka district of Bangladesh. We find that workers' fright about possible loss of job, falsification of relevant documents, and advance announcement of audit visits lead to wide manipulation by factory owners on social audit process. We recommend the following measures:

R1: Verification of auditors' activities can strengthen the efficacy of social audit by cross checking audit opinion or results from time to time. The audit firms should disclose information about the qualification of auditors, audit procedures, and results.

R2: Provision of incentives to suppliers for improved working environment and labor practices can motivate suppliers to allow impartial and honest social audits and implement proposed corrective measures. Clothing brands and retailers should develop unique incentive schemes and share cost of sustainable practices.

R3: Facilitation of unannounced audit can constrain the scope for workplace manipulation to a large extent. Therefore, the social audits should not be announced before and strict measures should be taken to ensure this end.

R4: Facilitation of interactions between auditors and workers shall enable workers to raise their voice about working conditions and other rights. So, a grievance handling system must be place to ensure interaction between workers and auditors.

R5: Conduction of training and education programs to educate workers about the code of conduct, their rights, and responsibilities shall ensure more consciousness among workers regarding the safety and quality of the workplace. Moreover, such programs need to be conducted for audit staffs as well to enhance their audit skills and qualifications.

R6: Freedom of unions and collective bargaining agents may make the hands of the workers even stronger, enhance social audit process and improve worker safety and ensure a higher standard of life for them.



6. Research Limitations and Avenues for Further Research

Our research is based on a single method (survey) and the number of respondents is not sufficiently large and covers a single group (officials/executives). Therefore, our findings may not reflect the reality. Future research may benefit from research triangulation i.e. use of multiple methods simultaneously and survey of multiple groups e.g. workers, union leaders, officials, owners, foreign buyers, human rights groups etc. Moreover, exploratory research covering social audit practices used in developed countries may help better insights about how to make social audits in developing countries more effective.

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Equity-based CEO Compensation, Earnings Management and the Role of Corporate Governance: A Conceptual Framework

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Abstract: Equity-based CEO compensation is on the rise in the corporate domain worldwide. The aim is to minimize agency costs. Paradoxically, it can backfire too. A systematic review on relevant literature does prove this apprehension. Taking this apprehension into cognition, on the back of agency theory, this paper conceptualizes that the equity-based CEO compensation does actually accelerate earnings management. However, the monitoring and controlling role of governance structure and attributes of the firm can mitigate this lusty process of managing accounting numbers.

Keywords: Equity-based compensation, Earnings Management, CEO duality, Board Size, Board Independence, Institutional Investors.

1. Introduction

Equity or ownership-based incentive is viewed as an instrument to reduce the adverse effects arising from the shareholders being distant from the management of a company they own (Jensen and Meckling, 1976). This separation of management from ownership is known as agency gap and has been viewed as the root cause for the adoption of equity-based compensation scheme by listed companies. Agency theory argues that managers are driven by self-interest and opportunistic behaviour and as a result, in any given situation managers will try to maximize his or her utility in a transaction. In this regard, equity-based compensation has been deemed to act as a deterrent against potential earnings management behaviour by top managers and thus it is a means to mitigate agency conflict that arises between outside shareholders and inside managers (Shleifer and Vishny, 1997). Since 1990 US companies have experienced an exponential growth of share-based incentive plans for their CEOs (Ofek and Yermack, 2000). For example, equity-based CEO compensation increased three times between 1980 and 1994, and then doubled again between 1994 and 2000. Such a large-scale adoption of equity-based incentives by firms manifests that stock-based compensation act as an instrument to align the interest of owners and managers in the same page. Therefore, a considerable number of studies has been undertaken to assess the impact of equity-based incentives on CEO behaviour. For example, Mehran (1995) documents that performance of firms is

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positively associated with the stock-based compensation of CEOs. Firms adopting equity-based compensation package for CEOs argue that exposing CEOs to stock prices will create an incentive for top management to protect the interest of owners (Bergstresser and Philippon 2006).

However, adopting an equity-based compensation also increases the likelihood of earnings management by CEOs. For example, Bergstresser and Philippon (2006) find that when compensation is tied to performance-based stock options, CEOs use discretionary accruals to manipulate the reported earnings. Discretionary accruals refer to the adjustment made to the cash flow by managers (Healy, 1985). For example, managers can choose a particular depreciation method or allocate a large portion of fixed overhead to inventory to inflate the current net income. Xerox is an ideal example where executives found to be manipulated earnings during 1990s. Over the period of 1990, CEO of Xerox exercised share options and sold a large number of shares to secure a capital gain from selling the stocks. However, in 2002 Securities and Exchange Commission (SEC) filed a case against Xerox for the manipulation of net income and revenues reported in the financial statements. As a consequence, Xerox was forced to correct its revenues from 1997-2001 which resulted in the reduction of net income by \$1.4 billion. SEC accused the company for artificially inflating the earnings by using a variety of methods such as inappropriately recognizing revenue from the equipment leases which violated the rules of Generally Accepted Accounting Principles (GAAP). During this period, CEO of Xerox exercised stock options which worth over \$20 million. Bergstresser and Philippon (2006) document that the value of stock options exercised during the time of misreporting of earnings is three times higher than prior five years. It is not only the Xerox where misreporting of earnings corresponds to the stock-based incentive program but also companies such as Enron, Tyco and Waste Management. In this vein, Michael Jensen opines that equity-based compensation can motivate managers to adopt income increasing techniques in order to extract benefit from the subsequent disposal of shares from their own companies (The Economist, 2002).

The central role of corporate governance is to reduce the agency conflict between owner-shareholders and managers-hired to invest in projects that increase the wealth of shareholders. Corporate governance has been defined as the set of rules and regulations that guide the decision-making process of managers when there is an agency problem i.e. separation of ownership and management (Larcker, Richardson, and Tuna, 2007). Some of these mechanisms include independent board, institutional investors, board size, and restriction on CEO duality. Research related to the effectiveness of corporate governance shows that weaker governance structure is associated with greater agency problem and



CEOs with these firms extract greater amount of compensation (Core, Holthausen and Larcker, 1999). In the same vein, weaker corporate structure may increase the likelihood of earnings management by CEOs (Larcker et al., 2007). Due to weaker monitoring mechanisms, CEOs may manipulate earnings when large chunk of compensation is tied to stock options. It is also found that CEOs of companies with weaker corporate governance tend to have higher pay package (Armstrong, Ittner and Larcker, 2012). In this backdrop, the study conceptualizes the positive association between CEO compensation and earnings management. Furthermore, firms with weaker governance structure are subject to higher earnings management by CEOs when compensation is tied to equity-based stock options.

Methodology

In conceptualizing the framework, the study follows the systematic literature review process suggested by Tranfield, Denyer, & Smart (2003). Papers were searched using the keywords in the top tier accounting journals mainly (The Accounting Review, Journal of Finance, Journal of Accounting and Economics, Journal of Accounting Research, Journal of Financial Economics, Accounting, Organizations and Society, British Accounting Review, Accounting, Auditing and Accountability Journal, Abacus, Accounting Forum, Journal of Accounting Literature, Review of Accounting Studies and Accounting Horizons). 'Earnings Management', 'CEO compensation', 'Equity-based compensation', 'Earnings Manipulation', 'CEO remuneration', 'CEO pay' were the keywords used for searching the relevant articles. These words were searched in the title, abstract and keywords section of the target journal. After downloading the papers, both the researchers independently read all the papers' title and abstract sections. After matching the results of the independent check, some papers were discarded due to their less relevance. Through this process, total number of papers comes to 49. Then, these papers were thoroughly read. Indeed, the framework of this paper is actually the result of the rigorous study of these 49 renowned publications.

Review of literature

Equity incentive and earnings management: There is no universally accepted definition of earnings management in accounting literature. Beneish (2001) argues that accounting academics differ in defining earnings management despite a surge of empirical and experimental study in this field since mid-1980s. For this study, it is attempted to define earnings management that conforms to the existing literature of accounting. Earnings management refers to the process of manipulating accounting numbers within the periphery of Generally Accepted Accounting Principles (GAAP) with the intention of bringing earnings to a desired level (Davidson, Stickney and Weil, 1987). According to



Schipper (1989) earnings management is an intervention in the process of preparing financial statements within the boundary of accounting standards with the intention of securing personal gains. He argues that earnings management refers to the opposite action of facilitating objective preparation of financial statements. Healy and Wahlen (1999) state that earnings management takes place when managerial discretion is used to alter the underlying meaning of a transaction that are presented in the general-purpose financial statements and in doing so, performance of the firm appears to be financially lucrative and managers can benefit from the bonuses that are tied with this performance.

There are two view points on earnings management in accounting literature: information view and opportunistic view. Information perspective posits that corporate managers can use their discretion to objectively present financial information that reflects true firm performance (Burgstahler, Hail and Luex, 2004). It argues that as insider managers are better positioned to report accounting earnings that contain higher degree of informativeness for outside investors. On the other hand, opportunistic view holds that managers are always on the look out to manipulate reported earnings so that they can secure maximum amount of bonuses (Burgstahler and Dichev, 1997). Burgsthaler et al., (2006) opined that being insiders, it is difficult to constrain such managerial behaviour.

Equity incentive has been viewed as a mechanism to reduce the negative consequences arising from shareholders' not being able to participate in the management of their own firms (Jensen and Meckling, 1976). Encouraging a manager to have ownership in the company is a mechanism toeliminate the adverse effects of agency conflict. Agency theory contends that the more a manger owns equity in a company, the higher the likelihood that he or she acts to protect interest of general shareholders (Core and Guay, 2002). Prior study investigating the association between managerial stock ownership and firm performance find evidence that equity incentives have a positive impact in aligning the owners and managers (Hanlon, Rajgopal and Shevlin, 2003). However, such incentive mechanisms can also make managers to overemphasize on short-term stock prices and increasing the likelihood of earnings management (Cheng and Warfield, 2005).

Equity incentive: The motivation for managing earnings comes from the increased risk associated with the equity- based incentive package that is offered to managers. Managers deem stock options as risky incentive because their rewards are now contingent upon hitting a target benchmark in terms of stock price or accounting numbers. Managers are by default risk averse and prefer compensation package that comprises of flat salary and bonuses (Scott, 2009). Therefore, whenever ownership-based incentive plan is offered, managers will try to reduce the increased risk associated with such compensation package (Cheng and Warfield, 2005). For instance, Ofek and



Yermack (2000) investigate the underlying mechanics between equity incentive and managerial ownership and document that when mangers are compensated through stocks, they try to sell these stocks to reduce the increased risk that are associated with ownership of stocks. They further argue that managers will continue to sell the equity shares as long as they perceive risk associated with equity incentive is higher than their desired level. Scott (2009) argues that when share prices increase, a large chunk of managerial wealth becomes concentrated in the stocks given as incentive and holding those shares becomes riskier. Equity incentive is riskier than non-equity-based compensation because stock prices are sensitive to many external factors that are beyond the control of managers. On the contrary, non-equity-based compensation is fixed and does not change with regard to any internal or external factors. As managers are risk averse, they have a propensity to sell shares allocated to them to reduce the risk associated with owning stocks. However, this additional risk from stock ownership can also motivate them to maintain share price at a level from which they can realize maximum benefit.

Therefore, we can conclude that as current earnings are a prediction of future firm earnings which is reflected in the stock prices, managers use their discretionary power to artificially inflate accounting earnings to maintain a high share price in the market so that they can extract maximum gain by selling their equity (Stein 1989). In addition, we should also bear in mind that stock price of firm moves for many reasons other than accounting earnings that are not under the control of a CEO. For example, Ron Johnson, CEO of JC Penny lost 97 percent of his total pay which was tied to the stock due to the poor earnings performance of the firm (Adams, 2016). This happened in the year 2012. Another example would be CEO of Bear Stearns, Jimmy Cayne who lost \$900 million from the demise of Bear Stearns. To understand the magnitude of risk associated with equity incentive and earnings management, Palmrose, Richardson and Scholz (2004) study on the reaction of stock prices to the manipulation of earnings will give us an idea why shareholders want to tie up CEO compensation with stock ownership. In the study they found earnings restatements (indication of material manipulation of accounting earnings) because the stock prices to generate negative returns of -9 percent. Based on this study Adam (2016) argues that with the current level of equity ownership included in the compensation, CEOs would have lost \$4.5 million. But they would not have lost a single penny if they had been offered a fixed salary. The longest serving Chairman of US Securities and Exchange Commission, Arthur Levitt argues (1998) argues that equity incentives may motivate managers to engage in earnings management and thus reducing the value of informativeness of accounting earnings.



Relationship between accounting earnings and stock price: For this study it is particularly important to understand how accounting earnings are linked to stock prices. Because it will explain what motivates CEOs to manipulate accounting earnings when their compensation packages contain equity ownership in the company. The theory that explains how accounting earnings manifest into stock return (share-value) is based on three assumptions about information contained in the firm's net income and stock prices (Nichols and Wahlen, 2004). First assumption entails that current earnings in the income statement of a company provides information as to the earnings potential (future profitability) to the stockholders. Second, current and future income of a company contains information about the current and expected future dividend to the stockholders or owners. Finally, stock price is determined by converting current and expected future dividends into present value to shareholders. According to this theory if accounting earnings (net income) contain any new information it will trigger a change in the stockholder's expectation of future dividend payment that will correspond with a change in share price of a company (Beaver, 1998). The following diagram explains the relation between accounting earnings and stock price.

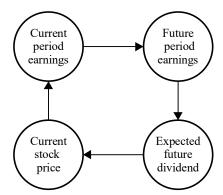


Figure 1: Stock earnings – stock price cycle

Since current earnings contain information that changes stock prices, CEOs may have an interest to manage earnings in a way so that their managerial wealth is increased when their compensation packages include equity incentive. This framework indicates two important dimensions associated with relationship between equity incentive and earnings management. First, it shows that managerial wealth is subject to stock price movements and many factors are beyond the control of managers that can influence the movements of share prices. Second, accounting items that comprise earnings of firms are completely under the control of CEOs and they exert all their discretionary power to influence the stock prices to benefit and to reduce the risk associated with equity incentive.



Corporate governance: Corporate governance refers to a system of policies, processes and structures that guide the decision-making behaviour of managers in a way that serve the interest of shareholders (O' Donovan, 2002). Good corporate governance ensures the optimum utilization of firm resources for the long-term benefits of equity owners i.e. shareholders. Corporate governance has also been defined as the set of mechanisms through which shareholder that are not part of the managerial decision-making safeguard themselves against the opportunistic behaviour of insiders (managers) (La Porta et al., 1999). These governance mechanisms generally refer to the laws and regulations enforced by the regulatory bodies as well as internal policies, structures and practices followed by the employees of an organization. Shleifer and Vishny (1997) define corporate governance as an instrument designed to ensure that stockholders get their fair share of wealth.

In economic literature, there are two dominant perspectives -market competition and legal environment-to ensure good governance in organizations (Coffee, 1999). Market competition highly criticizes enforcing any law in controlling managerial behaviour. According to market competition view managers' behaviour is shaped by the norms developed from a healthy competition among rival firms. Market based mechanisms stress that an efficient market is able to detect value destroying behaviours of mangers and consequently, those mangers get exposed to all other firms in the industry. The likelihood of being treated as an inefficient manger keeps a CEO restrained from doing any wrong towards the interest of shareholders. The market-based mechanisms argue that in a competitive environment manager will always try to prove themselves better than their rival firms to secure a constant flow of resources (capital) from the investors (shareholders). Any underperformance will penalize managers by diverting fund to other firms. This likelihood of losing capital compels mangers behave in a way that best serves the interest of general shareholders.

On the other hand, legal perspective refers to the enactment of laws and regulations directing towards controlling the unethical and value destroying behaviour of mangers. Here, unethical behaviour refers to the involvement of mangers in fraud such as embezzlement of funds and providing false statement regarding the earnings potential of their firms. For example, Andrew Fastow, CFO of Enron Corporation blatantly lied about the current as well as future earnings of the company. However, governance regulations could be within organizations, industry or whole country. For example, after Enron and WorldCom debacle, US Congress passed Sarbanes and Oxley Act to increase the financial reporting transparency for the listed firms.

However, in accounting discipline corporate governance mechanisms can be divided into two broad categories- board characteristics and ownership structure (Denis and



McConnell, 2003). Board characteristics refers to the independence of board measured by the percentage of outside directors, size of the board, CEO duality and composition of audit committee and remuneration committee. On the other hand, ownership structure refers to the managerial entrenchment (percentage of equity holdings by managers), institutional ownership and percentage of activist shareholding.

Board of directors are the members elected by general shareholders and are entrusted with the responsibility of monitoring the managers so that interest of general shareholders is protected. CEO and top managers are accountable to general shareholders through board of directors. Board members have the powers to hold CEO responsible and can demand explanation for any behaviour that they deem unethical. It is the board of directors who select and appoint CEO on behalf of the shareholders. They set performance evaluation criteria and remuneration package for managers. CEO is required to present broad corporate strategy before the board members for approval. However, board members can also be replaced if they are found to be in collusion with CEO and other top managers or violating any code of conduct. Therefore, board plays a significant role in monitoring the behaviour of CEO so that top managers work in favour of shareholder' interest.

Independence of board indicates that directors can make decisions without being influenced by managers. As agency theory suggests CEOs are driven by opportunistic behaviour, managers will try to influence board decisions in favour of them. An ethically strong and independent board is able to resist pressure from management. The generally accepted criterion to measure the board independence is the proportion of outside directors in relation to inside directors (Bertrand and Mullainathan, 1999). Inside director is defined as the board member who has been internally promoted to the position of director. As a former employee insides director might have a material relationship with CEO which may act as a threat to the independence of a board member. New York Stock Exchange (NYSE), the largest capital market in the world provides a comprehensive definition of board independence. According to NYSE, independent director cannot have any material relationship with the firm, shareholders and employees. They cannot be employees or former employees during the previous three years, cannot draw more than \$120,000 from the company, and cannot be employees or partners of external auditors. Outside directors also bring their diverse expertise which may not be available among directors where board members are internally promoted. Such knowledge and skills of external directors may help them scrutinize managerial activities more precisely and impartially (Beasly, 1996). Klein (2002) argues that board independence is inversely related with earnings management. His study finds that if board members are



independent, manipulation of accounting earnings is decreased. Xie (2001) also document the similar findings. The likelihood of committing earnings management activities by CEO is less if independence of board is maintained.

Board size indicates to the number of directors a board has. It has been argued that the higher the number of directors, the higher the likelihood of earnings management. The rationale for such argument is that in a large board, communication among directors is not as effective as small board. A small board is able to communicate efficient and can reach consensus during critical time. This gives small board leverage over large boards in terms of flexibility of decision making. For example, Fama and Jensen (1983) argue that small board can monitor CEO activities more effectively and consequently, reduce the earnings management.

CEO duality refers to a situation where CEO and chairman of the board is the same individual. When a person holds both CEO and chairman position, it creates conflict of interest. In one end, as a CEO he dictates all the financial, operational and strategic activities of a company. On the other hand, chairman of the board has the responsibility to monitor the activities of CEO. Therefore, if same individual holds the both posts, he or she can manipulate activities of board in a way that gives maximum benefit to CEO. Cornett, Marcus and Tehranian (2008) argue that the potential for earnings management becomes higher when CEO is also the chairman of the board.

Institutional investors also act as a monitoring device in reducing the manipulation of accounting earnings. Because intuitional investors have necessary expertise and resources, they can exertpressure on CEO if anomaly is found in earnings. For example, Hartzell and Starks (2003) found that corporate monitoring by institutional investors can limit managers' opportunistic behaviour. Generally, institutional investors refer to investors who have shareholdings more than 5% (Cremer and Nair, 2005). Researchers consider having more than 5% share in a firm will provide an investor monitoring power over managers. Examples of institutional investors are pension funds, insurance company and investment trust. Smith (1996) argues that managerial discretion on earnings is reduced in the presence of institutional investors.

Corporate governance and agency problem: Jensen and Meckling (1976) in their seminal study argue that corporate governance would reduce the agency cost by curbing the self-serving behaviour of mangers. According to them agency cost refers to the various monitoring expenses due to the separation of ownership from management. For example, cost incurred to sue a manager for committing fraud and costs for publishing additional financial disclosures. Agency theory argues that due to the separation of ownership and management, managers have goals other than maximizing shareholders'



interest. Good governance mechanisms ensure that interest of shareholders is well protected, and managers duly follow the internal bylaws and regulations imposed by the external bodies such as Securities and Exchange Commission and Financial Accounting Standards Boards. Corporate governance is introduced to reduce the agency conflict between managers and shareholders. This stream of research supports the regulation view of governance that has been mentioned earlier in theprevious section. Governance mechanisms such as independence of board, restricting dual role, board size and institutional investors reduce the opportunistic behaviour on the part of the managers.

Development of propositions and the framework

Equity incentive and earnings management: Equity incentive has been defined as the stocks given to a CEO as bonuses if he or she is able to reach certain performance benchmarks mentioned in the compensation agreement. As earnings information is reflected in the stock price i.e. share price changes in response to the accounting earnings and accounting standards allow managers to use their discretion with regard to earnings, managers are able to influence stock price by managing earnings. When managerial compensation includes equity, CEOs tend to manipulate earnings so that they can benefit from selling the stocks given at a high price. Therefore, managers who want to benefit from selling the shares have incentive for earnings management if two conditions are satisfied. First, if stock price captures the accounting information; and second, if managers can benefit from the high stock price of their companies. For example, Stein (1989) documents that stock market utilizes firm specific accounting information to determine stock price for that firm. It indicates if a company has highearnings, stock price will be higher for that company. So, according to agency theory as insiders, managers can manipulate reported earnings in a way so that they can benefit from selling their shares at high prices. Lee (2001) finds CEOs can benefit by managing reported earnings. The study documents when share price is high following an earnings announcement, CEOs tend to sell their shares given as equity incentive. Therefore, we formulate the first proposition-

P1- There is a positive relationship between equity incentive and earnings management such that the higher the equity incentive, the higher the earnings management.

Corporate governance as a moderating variable: Corporate governance mechanism has been put in place to control the earnings management behaviour of CEOs. Through earnings management, CEOs publish accounting reports which do not portray the true economic picture of firm performance and as a result, shareholders make wrong economic decision about their investments. Our hypothesis is that the in the presence of corporate governance mechanisms such as CEO duality, board size, independence of board and institutional investors, managerial propensity to manipulate earnings will be



decreased. Corporate governance mechanisms work through the overseeing functions of board of directors. They monitor activities of managers on behalf of the general shareholders and hold CEO accountable when interest of general shareholders is at stake. Earnings management is a cost on shareholders that arises due to the agency conflict.

CEO duality as a moderating variable: Weishbach (1988) argues that board of directors are the first line of protection for shareholders against the self-serving behaviour of CEOs that damages the interest of general shareholders. If a CEO holds the position of board chairman, he or she can effectively control all spheres of corporateactivities. Dual role of CEO acts as a threat to the independence of boards. It creates a scenario where management becomes the monitor of management. Regulatory body such as SEC highly discourages CEO duality and argues that duality may increase the likelihood managerial earnings management (Brickley, Coles, & Jarrell, 1997). Because of CEO duality, board of directors loses monitoring power over managers and lack of monitoring allows managers to use their discretion to increase earnings so that they can benefit from selling their equity shares when stock price is high. Based on the argument above we formulate the following proposition-

P2- Positive relationship between equity incentive and earnings management is moderated by CEO duality such that at the presence of dual CEO role the relationship becomes stronger.

Board size as a moderating variable: Yermack (1996) finds that small board can exercise more power in aligning the interest of CEO with shareholders. As the size of the board increases, board loses flexibility in terms of decision making and CEO can take advantage of such situation. In a large board coordination of communication among board members becomes challenging (Jensen, 1993). Rather than bickering among themselves, a small board can spend more time in scrutinizing the managerial activities. This may result in the reduction of earnings management activities of CEOs. Therefore, we formulate the following proposition-

P3- Positive relationship between equity incentive and earnings management is moderated by the presence of board size such that the higher the board size, the higher the earnings management.

Board independence as a moderating variable: Independence of board is maintained if the percentage of outside directors is higher than the inside directors. When a board is dominated by the internally promoted directors, CEO may exercisecontrol over the board because of the past relationship between he or she had with the current board members. Brickley et al. (1994) argue that outside director's function more independently of CEO influence and play better role in monitoring the managerial behaviour. Fields and Keys



(2003) also document that outside directors may strengthen board's ability to monitor managerial activities. According to Patton and Baker (1987) when board is independent, CEO chooses long-term value maximizing investments which increase the wealth of shareholders. As independence enhances boards' monitoring ability, we formulate the following proposition-

P4- Positive relationship between equity incentive and earnings management is moderated by the presence of independence of board such that the higher the independence of board, the lower the earnings management.

Institutional investor as a moderating variable: Bushee (1998) argues that institutional investors remove managerial incentive for earnings management by increasing monitoring activities over managers. According to him institutional investors can influence the board in controlling the opportunistic behaviour of managers. Due to large investments in a company, institutional investors try to ensure that CEO does not cut long- term profitable investments at the expense of short-term gain. Opler and Sokobin (1997) find that in the presence of institutional investors firms experience a positive turn in profitability due to monitoring and guidance from them. Besides, institutional investors supply a large chunk of the capital for the company, so it is in the interest of the firm to keep them satisfied by maintaining transparency in earnings. Cornett et al. (2008) argue that large investors have the resources to force and discipline managers in a way so that CEO does not engage in any self-serving activities. Based on these arguments we propose:

P5- Positive relationship between equity incentive and earnings management is moderated by the presence of institutional investors so that the higher the presence of institutional investors, the lower the earnings management.

These propositions actually manifest the following empirically testable conceptual framework:



Figure 2: Conceptual Framework

Implications and conclusion

Based on critically reviewing the literature from top notch accounting and finance journal, this study reveals the scope of potential earnings management driven by equity-based CEO



remuneration. That is, this paper digs into the mechanisms adopted by managers provoked by their self-serving biases to manipulate firm earnings to impress potential investors. Thus, it fills the nuance literary gap in earnings management which is virtually absent. It also proves that equity-based remuneration of the managers is actually a double-edged sword. This study also contributes to the understanding of the role of corporate governance in constraining the activities of cooking the books by the managers. Hence, this research also contributes to the current literature of corporate governance by enriching our understanding which governance mechanisms are most effective in controlling the earnings management. Practically, the regulators will get new insights as to the earnings management mechanisms and the role of corporate governance. Thus, they can suggest/impose appropriate regulatory mechanisms in containing the ill practice by the management and ensuring interests of the stockholders. It is to mention that our framework has taken into consideration only four corporate governance variables. However, future research can enrich the framework by considering other governance attributes.

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Local Residents' Attitude Towards Socio-economic Impact of Tourism: A Study on Kuakatain Bangladesh

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Abstract: Tourism has become one of the fastest growing economic sectors over the decades across the world. As well as tourism plays a crucial role on the social and economic development of Bangladesh. The aim of this study is to explore the attitude of local residents towards the socio-economic aspects of tourism in Kuakataof Bangladesh. Data were collected using self-administered questionnaire. This study was conducted on 96 local residents (N=96) of Kuakata using stratified random sampling method. Keeping in view of theories and facts that a theoretical model was proposed in this study and SPSS-16 used to analyze collected data. The descriptive statistics, correlation analysis and multiple regression analysis were carried out to measure the relationship and impact between predictors and dependent variable. The study revealed that living standard, employment opportunities, earning capacity, cultural development and social value have a positive relationship with local resident's attitude. The findings of the study will help to enforce sound, systematic and sustainable tourism development (STD) and ensure community participation in Kuakata.

Keywords: Local residents' attitude, socio-economic impacts, stratified random sampling, SPSS, sustainable tourism development, community participation

1. Introduction

Tourism is one of the largest and the fastest growing sectors in all over the world. Tourism fetches considerable volume of foreign exchange inflows, infrastructure development, employment generation, regional development and multiplier economic effects which positively affect the social and economic development of a country. (Nayomi&Gnanapala, 2015). Tourism can be an influential cohort for economic benefit as well as helps to broaden mutual understanding among societies. Tourism is an industry and alike other industry it also uplift and extend regional and national economy. (Lincoln, 2011). Kuakata is the second largest sea beach, situated in the southern part of Bangladesh fromwhere both sunrise and sunset can be enjoyed. Even it is a place of rare and unique beautythat has the potential to become one of the major tourist attractions of Bangladesh.

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Bangladesh is in the growth stage while the income generation from tourism comes into subject. In 2009, Bangladesh can attract only 2,67,107 foreign tourists amounting to Taka 5,56,270 million (\$6266 million) from this industry (Hossain, 2013). In the year of 2010, only 3,00,000 foreign tourists had visited Bangladesh though 70% (2,10,000 tourists) of the number covers business and official purposes as the prime objective and 30% (90,000 tourist) were pure tourists (Hossain, 2013). According to statistics of the world travel and tourism council (WTTC) published in 2013 shows that the travel and tourism industry propagates 12, 81,500 jobs in 2012 or 1.8% of the country's total employment. In terms of employment generation Bangladesh ranked 157th out of 178 countries worldwide in 2012. Travel and tourism industry yielded directly or indirectly 27,14,500 jobs or 3.7% of the country's total employment in the year of 2012. Tourism is a potential vehicle which is a joint combination of both forward and backward linkages that helps to ameliorate the economy of many nations worldwide. It has both positive and negative impacts whereby benefits outweigh the cost (Jarkko, 2013). Tourism policy was enacted in 1992, so now it is an appropriate time to evaluate the social and economic impact of tourism development and to explore the nature of these impacts on the local community especially to identify and analyze positive and negative impacts of tourism. Anthropologist and sociologist examined the impact of tourism on local residents mainly on four heads namely economic, social, cultural and environmental factors both the positive and negative sides (Kadt, 1979). Positive and friendly attitudes of local residents help to attract and host tourists; on the other hand, negative reactions to tourists create avoidance and unwillingness to visit the destination because they feel uncomfortable (Fridgen, 1991). Kuakata commonly known as the "Sagor-Kanna" (Daughter of the sea/Ocean's Daughter), is the second largest sea beach, which is situated at the southern part of Bangladesh from where both sunrise and sunset can be seen and enjoyed. It is situated at the 21°48′55.98" north latitude and 90°07′18.62" east longitude by its municipal central zero point. Kuakata is under Latachapali union and kuakatapourashava at Kalapara Thana in Patuakhali district. It is a panoramic sea beach of Bangladesh which is 18 kilometers (11 mi) long and 3 kilometers (1.9 mi) wide. Local residents of kuakata are not still so conscious and aware about the socio-economic impact of tourism in their community. We know that host community perceptions are the focal point for planning, designing, marketing, maintaining tourism activities. The findings of the study will aid the investor, competitors, and all the stakeholders to have a diaphanous understanding about the aggregate milieu of kuakata. Tourism industry is fundamentally a service industry and a healthy ratio of tourism stakeholders concern the economic benefits of tourism. Local peoples concern, their perception towards tourism help to shape general understanding of tourism in the respective tourist spot and ensure future success as well.



2.Literature Review:

Tourism comprises the overall activities of a person from travelling to and staying in a place or country nationally or globally; outside his or her own residence for not exceeding 12 months consecutively for business, leisure, study or any other purposes except to the activities directly related to remuneration (European Commission, 2002). Tourism is a nomenclature that mention the relationship emerge from the interaction between and among host (residents) and guest (tourists) (Hodgson, 1987). The host community's' repercussion towards the impacts of tourism has been explored by the academic literature mainly on economic, environmental and socio-cultural propagations (Ororele, 2009).

The literature review recommended that each tourism impact multitude involves favorable and unfavorable outcomes and sometimes, residents' reaction are incompatible. Host community perceive that positive economic impacts of tourism helps to facilitate the flow of foreign exchange, generate employment, improve the standard of living in developing countries, (Jenkins, 2015), enhance local economy, augment investment and ensure economic diversification as well, (Kayat, 2010; Dimitriadis, 2013), increases foreign exchange and improves the country's balance of payment, (Maken, Gee, & Choy, 1997). Local and foreign tourists expand their money while visiting a tourist spot, as a result the revenue increases and the local government is benefited by increasing tax collection, (Byrd, 2009). Tourism generates both direct and indirect employment whereas acommodation, travel agencies, catering are the direct source of employment; on the other side construction, agriculture are the indirect source of tourism (Goeldner& Ritchie, 2009). Host residents' also bear the negative impacts of tourism; mainly they perceive that by means of tourism the prices of local goods and services increase and this further increase the cost of living commonly known as inflation and also causes an uneven distribution of the economic benefits.

Environmental impact of tourism is the central care around the globe at present because ecological issues are valued highly. Tourism may create some discrepant impact to the tourist destination because it causes environmental pollution and degradation, (Keyser, 2009); causes traffic congestion, dilapidated roads, parking problem, degradation of flora and fauna, air and water pollution, littering in beach, evacuate natural resources and finally causes deforestation, (Kuvan & Akan, 2005). On the contrary, (Frauman& Banks, 2011) stated that due to tourism the environment issues of the host destination are widely emphasized and this help to stimulate the host and guest as well as respective authorities to protect or preserve natural resources and conserve environment.



Socio-cultural impact of tourism on host community has also valued and perceived differently by local residents and thus it's a debated issue (Martin, 2008). Local residents expressed that they can meet and come in touch with interesting people from different regions, different countries, and different cultures due to tourism (Dyer, 2007). Interactions with different cultures help to enhance overall understanding and intercultural communication. Positive socio-cultural impacts of tourism comprised the increased community services, cultural and recreational facilities, cultural events management (Nyaupane, 2006); while (Butler R., 1999) think that tourism destructs traditional lifestyle and culture, exploits relationships, (Mbaiwa, 2004); loss of native language (White, 1974), increase prostitution (Belisle & Hoy, 1980), destroy community character (Delamere & Hinch, 1994), worsen residents attitude over time (Dogan, 1989), stress on local workers and exploit them (Freitag, 1994) and leads to a loss of authenticity that means the behavior of the host people become tricky and superficial (Brougham & Butter, 1961). There is always a dominant influence of foreign culture on the developing countries. As a result, host communities' attitudes in developing countries are negatively affected by tourism (Graburn, 1976). (Faulkner, 2000) has found that local residents do not think that tourism disrupts their ways of life, destroying social and family structure and threatens traditional culture and lifestyle.

Three factors for example (1) economic dependency, (2) residents' social factors and (3) community participation shape the perceptions of local residents towards the development of tourism (Nunkoo & Gursoy, 2011). The economic benefit must be matched with the social disruptions (Ko & Stewart, 2002). The changes executed by tourism as well as the damage done by tourism must be paralleled (Brunt & Courtney, 1999). Local residents form a positive attitude towards direct benefit rather than indirect and long term benefits derived from tourism. Smaller host community have stronger reaction towards tourism development than larger host communities because smaller host communities resides alongside of tourist spot as a result they can observe the direct consequences of tourism for example, infrastructure development, land allocation, accommodation facilities, tourist behavior, government initiatives, investors perception, competitors behavior (Capenehurst, 1994).

There are a number of models that have been developed by the researchers to explain the impact of tourism on the host community. Interaction between host and guest depends on cycled ringed with four stages; Euphoria, Apathy, Irritation and Antagonism (Doxey, 1975).

The host residents attitude towards tourism impact can be explored through different theory, for example, (1) attribution theory (Pearce, 1989), (2) dependency theory (Presister, 1989), (3) social representation theory (Andriotis& Vaughan, 2003) and (4)



social exchange theory (Ap, 1992). Among the four theories, social exchange theory is one of the most used theory that has been used by the authors to examine the host attitude towards tourism impact. The philosophy of this theory suggest that residents examine the cost and benefits as a result of tourism (Gursoy, 2002). If the local people see that the tourism and by means of tourism, they are being benefited or causing favorable outcomes to their community, the local peoples provide support to tourism industry (tourism activities continue) and if the local peoples feel that tourism is causing harm or simply doing nothing for the local community, they will feel distressed (tourism disconnect) and hold a negative image to the tourism (Kozak, 2016).

Based on the above literature review and research objectives, we have developed the following hypotheses:

- **H**₁: Living standard has a significant positive relationship with the attitude of local residents.
- **H₂:** Employment opportunities have a significant positive relationship with the attitude of local residents.
- H₂: Earning capacity has a significant positive relationship with the attitude of local residents.
- **H₄:** Cultural development has a significant positive relationship with the attitude of local residents.
- $\mathbf{H}_{\mathbf{z}}$: Social value has a significant positive relationship with the attitude of local residents.

3. Objectives of the Study

3.1. Broad Objective:

The main objective of this study is to explore and investigate the local resident's perception towards the impact of tourism in Kuakata.

3.2. Specific Objectives:

More specifically, the proposed study is supposed to fulfill the following research objectives.

- 1. To explore the attitude of local residents of Kuakata about the impact of tourism on their economic development.
- 2. To investigate the attitude of local resident of Kuakata about the impact of tourism on their social change.

4. Rationale of the Study

Researchers have conducted several researches on Kuakata. Most of them focus on problems and prospects, tourists' satisfaction, overview of beach, current status and so on.



Few researchers has been conducted on the socio-economic impact of tourism on the local community or local residents of Kuakata. This paper will look into the impact of tourism on Kuakata and the residents' perception towards the impact of tourism will be evaluated. The findings of this study will be helpful one for followings:

- 1. To help the local representatives, government officials, and different non-governmental (NGOs) and voluntary organizations to enforce sound, systematic and sustainable tourism development in Kuakata.
- 2. To stimulate local resident towards tourism and this interaction will help to ensure sustainable community tourism development.
- 3. To enrich existing body of knowledge and this will help the future researchers to form their studies theoretical framework on socio-economic impact of tourism.

5. Research Methodology:

- **5.1** Nature of the Study: The main objective of this study is to find out the impact of tourism on local residents' attitude on their social and economic life by testing hypotheses. So the study followed both descriptive and causal research.
- **5.2 Research Approach:** The purpose of this study is to capitalize the relationship between research and theory so a deductive research approach would be the best fit in accordance with the paper. Both qualitative and quantitative research approaches has followed for the study to drive to the conclusion.
- **5.3 Data Collection Method:** The study was designed in a cross-sectional way. Data were collected in February 2020 through face to face interview in Kuakata, Bangladesh. For collecting primary data, a questionnaire was designed based on the objectives of the study. Data were collected from both primary and secondary sources. Primary data were collected through a survey method and secondary data were collected from various published journals, article, annual report of UNWTO and BPC.
- **5.4 Design of Questionnaire:** The data were collected through a self-administered questionnaire where each variable is given numerical value at interval scale from strongly disagree (1) to strongly agree (5).
- **5.5** *Use of Variables:* Some socio-economic factors are the independent variables and local residents' impact on tourism is the dependent variable in this study.
- **5.6 Study Area and Target Population:** The study was conducted on the local people of Kuakata. The target population of this study are the local residents who are living alongside the Kuakata sea beach area for at least 5 consecutive years and minimum 18 years old.



5.7 Sampling and Sample size: This research was conducted using stratified random sampling and sample size was determined on the basis of (Yamane, 1967) formula: $N=N/[1+N(e^2)]$

n=Sample Size; e=Level of precision; N=the population size(2921). Here, at 95% confidence level and 10% precious level(out of 100 samples 95 cases will be within the 10% sampling errors of tolerance), we get, n=96. That means the size of the sample of this study is 96 respondents.

- **5.8 Data Processing:** The collected data from the field work was processed by using Statistical Package for Social Sciences (SPSS)-10. Respondents demographic characteristics has been presented through descriptive statistics, correlation analysis has been done to measure the perceived relationship among variables and finally multiple regression analysis has been done to test the hypotheses of the study.
- **5.9 Regression equation:** The dependent variable in this test is the Attitude of Local Residents (AOLR). The independent variables include Living Standard (LS), Employment Opportunities (EO), Earning Capacity (EC), Cultural Development (CD) and Social Value (SV).

The regression equation was written as follows:

 $Y = \beta 0 + \beta 1 * X 1 + \beta 2 X 2 + \beta 3 X 3 + \beta 4 X 4 + \beta 5 X 5 + e$

Y= Dependent variable (AOLR)

 β = Beta

X1= LS (Living standard)

X2= EO (Employment Opportunities)

X3= EC (Earning Capacity)

X4= CD (Cultural Development)

X5= SV (Social Value)

6. Results and Discussions:

6.1 Respondent Demographic Characteristics:

This section provides the socio demographic information, for example respondent's gender, age, education level, marital status, professional status and average monthly income. The study was conducted on 96 (n=96) respondents. Respondent demographic characteristics are presented below in following Table-01 through descriptive statistics:



Table-01: Respondent Demographic Characteristics

Serial no	Variables	Categories	Frequency	Percent (%)
01	Candan	Male	66	68.75
01	Gender	Female	30	31.25
		Up-to 20 years	28	29.17
		21-30 years	26	27.08
02	Age	31-40 years	22	22.92
		41-50 years	17	17.71
		Above 50 years	3	3.12
		Self-educated	27	28.12
	Education	Primary	30	31.50
03		SSC	16	16.67
		HSC	16	16.67
		University level	7	7.29
	Marital Status	Married	53	55.21
04		Unmarried	41	42.71
		Others	2	2.08
	Desferri	Services	26	27.10
05		Business	38	39.58
05	Professions	Housewife	11	11.46
		Others	21	21.86
		Below Tk.10,000	36	37.50
06	Avg. Monthly Income	Tk. 11,000-20,000	33	34.38
00	Avg. Monumy income	Tk.21,000-30,000	22	22.92
		Tk.31,000-40,000	5	5.20

Source: Field survey



From the above table, it is showed that out of 96 valid respondents, 66 respondents were male and 30 respondents were female. This results indicates that male people were more concerned about the impact of tourism in Kuakata tourist spot and male were more involved in tourism jobs, and services. The majority of the respondents (29.17%) were up to 20 years, the second predominance respondents age was between 21 to 30 years (27.08%). In case of education, most of them were uneducated. The ratio of married respondent was higher than unmarried respondents. Most of the people of Kuakata were fisherman and farmer that's why others category profession holds 21.86%. Most of the respondents' average monthly income was below 10000 Taka.

6.2 Descriptive Statistics:

Descriptive statistics provide simple summaries about the sample and about the observations that have been made. The mean and the standard deviation of 22 statements shows favorable attitude of local people at Kuakata towards tourism impact were represented in Table-2.

Table-02: Mean and Standard Deviation

Serial No.	Statement	Mean	SD
01	Tourism increases the standard of living.	3.7083	0.89345
02	Tourism helps to develop infrastructure facilities for local people.	3.3438	1.28003
03	Tourism assists to diversify local economy and investment.	3.1979	1.41882
04	Tourism brings economic benefits for the local residents of Kuakata.	3.9688	0.93418
05	Tourism generates employment for the local residents.	3.0000	1.50088
06	Tourism raises entrepreneurship of Kuakata.	2.7083	1.63460
07	Tourism creates more jobs for external than local residents.	2.2396	1.33570
08	Local peoples do not get higher level jobs.	2.8438	1.57164
09	Tourism jobs are basically seasonal or part time.	4.1771	1.04624
10	Tourism creates new markets for local products.	2.4688	1.46505
11	Tourism development helps to increase the earnings level of local people.	3.1875	1.32437
12	Tourism benefits the local businesses.	3.3646	1.48054
13	Local residents are deprived from getting maximum amounts of tourist's money.	3.4167	1.31922



14	Tourism increases expenditure and cost of local community.	2.8958	1.42518
15	Local residents are encouraged to arrange variety of cultural program for tourists.	2.6354	1.26951
16	Tourism brings a positive change in local traditional life style.	3.0417	1.36818
17	Tourists and local residents exchange culture positively.	3.1979	1.29468
18	Tourism causes cultural invasions.	2.7500	1.42902
19	Tourism upgrades social structure of local people.	2.5625	1.15906
20	Tourism increases recreational opportunities for local residents.	3.32188	1.33143
21	Tourism creates social problems (gambling, prostitution, crime, drug use, and hijacking).	4.0938	0.94120
22	Tourism causes environmental pollution.	3.9688	0.98892

Source: Field survey

This table shows that majority of the respondents are agreed with tourism jobs are basically seasonal or part time (mean score is 4.1771). Therefore, they are not able to fulfill their family expectations. Most of the respondents are agreed with tourism creates social problems (gambling, prostitution, crime, drug use, and hijacking) (mean score is 4.0938). On contrary the mean score (2.5625) indicate that tourism is not upgraded the social structure of local people. And the mean score (2.4688) dictates that tourism does not create new markets for local products. Fewer respondents are responded that tourism creates more jobs for external than local residents where mean score is (2.2396).

The following Table-03 draw out the overall attitude level of local people of Kuakata towards tourism on social and economic life:-

Table-03: Overall Attitude towards Tourism

Variables	(Positive attitude) %	Neutral %	(Negative Attitude) %
Living Standard(LS)	64.06	14.32	21.62
Employment Opportunities(EO)	45.14	10.59	44.27
Earning capacity(EC)	55.73	12.76	31.51
Cultural development(CD)	47.40	14.58	38.02
Social Value(SV)	57.03	18.23	24.74
Overall	53.87	14.10	32.03



Depending on the responses of 96 respondents, considering the socioeconomic factors of tourism in Kuakata, researcher tried to satisfy and answer study's objective (1 & 2). From the above discussions and finding results, researcher comes to a conclusion that 53.87 local people believe that those factors affect their socioeconomic life positively, 14.10% were neutral and 32.03% perceived that those factors aren't exist which negatively affect their socioeconomic life.

6.3 Correlation Analysis:

Pearson's correlation analysis used for determining the relationship with each independent variable to dependent variable. For each variable sample size (n) is 96. and correlation is significant at the 0.01 level (2 tailed). The correlation table has presented below in Table-04:-

Table-04: Correlation Analysis

Independent Variables	Dependent variable (Attitude of Local Residents)				
	Sig.(2- Tailed)	Pearson Correlation			
Living Standard (LS)	.000	.603			
Employment Opportunities (EO)	.000	.468			
Earning Capacity (EC)	.004	.294			
Cultural Development (CD)	.000	.564			
Social Value (SV)	.000	.541			
**. Correlation is significant at the 0.0	**. Correlation is significant at the 0.01 level (2-tailed).				

From the above table it is showed that the value of LS is .603 or 60. 3%; means that there is a strong and positive correlation between living standard and attitude towards tourism impact. This result means that the more enhanced the living standard, the more positive attitude will be formed among local residents towards tourism impact in Kuakata. On the other hand, the value of EO is equal to 0.468 or 46.8%, which indicates that there is a moderate but positive correlation between employment opportunities and attitude towards tourism impact. The value of EC is 0.294 or 29.4% shows that there is a weak but positive correlation between earning capacity and attitudes towards tourism impact that means the earning capacity of local people isn't rising significantly due to tourism in Kuakata. The value of CD is 0.564 (56.4%) shows that there is a strong and positive relationship between cultural development and attitude towards tourism impact. The value of SV is 0.541 (54.1%) shows that there is a strong and positive relationship between social value and attitude towards tourism impact.



6.4 Multiple Regression:

In order to validate the relationship of factors in the research model, a regression analysis was conducted to test the five (5) hypotheses identified in this study.

Results from Table 5 shows the R^2 and Adjusted R^2 isf 82.2% and 81.2% respectively, indicating that how much of the total variation in dependent variable AOLR (Attitude of Local Residents) can be explained by the independent variables (living standard, employment opportunities, earning capacity, cultural development, and social value). The F-stat was reported to be at 82.883 and was significant at a 1% significance level. This also indicates that the combined factors are able to simultaneously explain the attitude of local residents' quite well (i.e. It is a good fit for the data).

In this part of the paper, an attempt was made to determine the factors that are positively as well as significantly correlated with the attitude of local residents toward tourism impact in Kuakata. Regarding each variable factor, results from the regression analysis demonstrated that four out of the five factors were key determinants for whether subjects intend to attitude of local residents. These factors are Living Standard, (LS; β =.260), Employment Opportunities, (EO; β =.390), Earning Capacity (EC; β = .136), Cultural Development (CD; β =.348) and Social Value (SV; β =.427). In contrast, the results shows Earning Capacity (EC; β =.136). The results are presented in Table-05:

Table-05: Multiple Regression

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
(Constant)	.490	.138			
Living Standard	.157	.031	.260	3.538	.001
Employment Opportunities	.205	.025	.390	5.091	.000
Earning Capacity	.069	.023	.136	8.226	.000
Cultural Development	.202	.028	.348	2.947	.004
Social Value	.228	.026	.427	7.259	.000
n=96				8.866	.000
R Square	.822				
Adjusted R Square	.812				
F-stat	82.883				
Dependent Variable: Attitud	e of Local F	Residents			



The result of the table revealed a statistically significant impact of Living Standard, Employment Opportunities, Earning Capacity, Cultural Development and Social Value on Attitude of Local Residents. (LS, EO, CD and SV) are the strongest predictor of attitude of local residents toward tourism impact. On the other hand, earning capacity has insignificant contribution on local residents' attitude toward tourism impact.

6.5 Hypothesis selection and rejection criteria:

Table-06 shows the condition of hypothesis selection and rejection criteria:

Table-06:	Hypothesi	s Selectio	n & Re	jection

Hypothesis	Estimates	Standard error	p-value	Result
H1: LS→AOLR	.157	.031	.001	Accepted
H2: EO→AOLR	.205	.025	.000	Accepted
H3: EC→AOLR	.069	.023	.000	Accepted
H4: CD→AOLR	.202	.028	.004	Accepted
H5: SV→AOLR	.228	.026	.000	Accepted

From the above table, it can be interpreted that, standardized beta coefficient of Living Standard, (LS) with the individual value of $\beta 1 = .260$, t = 5.091 and p-value < 0.05 (Accept H1), Employment Opportunities, (EO) with the individual value of $\beta 2 = .390$, t = 8.226 and p-value < 0.05 (Accept H2), Earning Capacity (EC) with the individual value of $\beta 3 = .136$, t=2.947 and p-value < 0.05 (Accept H3), Cultural Development (CD) with the individual value of $\beta 4 = .348$, t=7.259 and p-value < 0.05 (Accept H4), Social Value (SV) with the individual value of $\beta 5 = .427$, t = 8.866 and p-value < 0.05 (Accept H5).

So, the entire hypotheses developed in the study are accepted.

7. Findings & Recommendations:

A large number of studies have been conducted by many researchers to study the socio-economic impacts of tourism in Cox's Bazar. This study was conducted to discover the perceptions of local people towards the consequences of tourism and tourists' activities on their economic and social life in Kuakata. The present study reveals that the level of attitude of local residents of Kuakata through five independent variables i.e. living standard, employment opportunities, earnings capacity, cultural development and social value. The finding of these five factors are quoted below:



7.1 Living Standard:

Living standard is an important determinant to identify the socioeconomic impact of tourism. Nearly 59.38%) think tourism helps to develop the infrastructure development for local people, (27.08%) think that tourism related infrastructural development in kuakata are not up to the mark; (53.12%) conceive that tourism assist to diversify local economy and investment in kuakata whereas (40.63%) conceive that tourism doesn't assist to diversify local economy and investment; (73.96%) opined that tourism bring economic benefit for them, (6.25%) opined that tourism don't bring economic benefit and (19.79%) were neutral considering the economic benefit of tourisn. Finally from the study, we have found that 64.06% respondents believe that tourism improve their standard of living in Kuakata and 21.62% local residents hold negative perception towards the economic impact of tourism on living standard.

7.2 Employment Opportunities:

Employment opportunities is one of the most important factors to identify the economic impact of tourism on local people. From the study we can see that (51.04%) believe that tourism generates employment opportunities for the local residents whereas (40.63%) believe that tourism doesn't generate employment opportunities; (50.00%) think that tourism doesn't raises entrepreneurship capabilities and stimulation among local people and (38.54%) believe that tourism raises entrepreneurship; (63.54%) disagreed that tourism creates most of jobs for external workers than local residents in kuakata and (20.83%) believe that external workforce are getting more jobs in kuakata; (84.37%) believe that tourism jobs are basically seasonal and part time, (6.25%) are neutral and 9 respondents (9.38%) don't believe that tourism jobs in kuakata is part-time; 54 respondents out of 96 respondents believe that tourism don't create new market for local people and 36 respondents believe that tourism creates new market for local product in kuakata. In summary we have explored that 45.14% holds positive attitude while 44.27% hold negative attitude towards the employment opportunities generated through tourism industry.

7.3 Earning Capacity:

Earning capacity is one of the most influential determinates to explore the perception level of local residents' towards tourism. (57.29%) respondents believe that tourism development helps to increase the earning capacity of local residents, (29.17%) respondents believe that tourism development doesn't increase the earning level of local people & (13.54%) were neutral regarding the statement; (63.54%) respondents think that tourism benefit local businesses whereas (29.17%) don't think tourism is helping local business and (7.29%) were neutral; (60.42%) respondents believe that they are



depriving from getting maximum amounts of tourists money, (22.92%) thinking that they are getting maximum amounts of tourists money & 16 respondents (16.66%) holds neutral response; (41.67%) respondents think tourism increases expenditures and cost of local community, (44.79%) disagreed that due to tourism their daily expenditure and living cost is increasing and 13 respondents (13.54%) were neutral.

From the study it is showed that 55.73% respondents hold positive attitude while 31.51% hold negative attitude towards the economic impact of tourism on earning capacity.

7.4 Cultural Development:

Culture is the characteristics and knowledge of a particular group of people, encompassing language, religion, cuisine, social habits, music and arts. Approximately (35.4%) respondents opined that they are not encouraged to arrange the variety of a cultural programs for tourists satisfaction in kuakata beach area; (44.8%) respondents believe that tourism brings positive changes in their traditional lifestyle and (37.6%) respondents don't believe that local community life style is changing for tourism development that means tourism impact on local community's life in kuakata has perceived differently; (39.6%) respondents opined that they are neutral when the question asked about their interaction with the tourist that means they are not concerned tourism impact. Tourism has not a significant impact on local resident's culture in kuakata that's why 50 (52%) respondents disagreed that tourism causes cultural invasions.

From the study, we found that nearly 47.40% respondentshold positive attitude while 38.02% hold negative attitude towards the social impact of tourism on cultural development.

7.5 Social Value:

Tourism also contribute to increase the local people pride and identity to their communities. So, social value is one of the influential determinants of attitude of local people towards tourism impact. Almost (27.08%) respondents believe that tourism upgrade their social structure & (53.13%) think that tourism don't upgrade their social structure; (46.88%) respondent believe that tourism increases recreational opportunities for them through establishing different Park (National Eco Park, Resorts, five star hotels) and (27.08%) opined that tourism don't increase the recreational facilities in kuakata for them except natural beauties; (83.33%) respondents believe that tourism creates some social problems, on the other hand and (8.34%) disagreed with this statement; (70.9%) respondent believe that tourism degrades the environment of this beach and its surrounding environment, while 18 respondents were neutral and 10 respondents partially disagreed that due to tourism environment pollution is occurring.



From the study we observed that nearly 57.03% residents holds positive attitude and 24.74% residents holds the negative attitude towards the social impact of tourism on their social life.

Most of the people of Kuakata are found uneducated and don't know how to participate in the tourism administration and management action. Community participation and direct communication and association of local people with tourist are not obvious in the Kuakata zone. Local people are deprived of proper knowledge and understanding about tourism and how tourism impacts their daily life.

Based on the above findings, the followings recommendations should be suggested for ensuring and getting fullest benefits from tourism industry in Kuakata:

- Encourage local community participation in tourism business.
- The authority can provide necessary training program, different types of social awareness raising programs and give them opportunity in tourism decision making process to ensure community participation.
- Stimulate local businessmen to set up modern facilities and enriched hotel, parks, restaurant etc. Infrastructure facilities and transportation systems should also be developed.
- Enhance domestic tourism to attract domestic and foreign tourist, so that employment opportunities will create for local people.
- Government should formulate master plan for Kuakata tourist spot and overall tourism development.
- Arrange various cultural program for example theatre, exhibition, and beach competition to enrich cultural development process.
- Ugly tourism services such as exploitation, prostitution and child abuse should be checked strictly from Kuakata tourist spot.
- Stimulate tourism marketing programs to attract tourist from both home and abroad.
- Local people must be trained institutionally with Tourism and Hospitality industries and practically prepare them to become a qualified tour guide.
- The Ministry of Tourism, Civil aviation, foreign ministry and community-based rural tourism should be enforced.
- Tourism operating center (TOC) should be established in Kuakata from where the overall tourism policy and guidelines would be enacted.



8. Conclusion and Implications:

Tourism is one of the dynamic sectors around the globe at present. Bangladesh has enormous natural beauties and some renowned tourist spots. Kukata is one of the beautiful tourist destination in Bangladesh containing huge potentiality of socio-economic benefit for local people. Tourism also helps to ensure both the national earning and international currency inflows. Local people of any tourist spot is one of the most important stakeholders in tourism business. This study focused on measuring the local resident's attitude towards the tourism impact on Kuakata. From the study, it has been found that there is a strong correlation between tourism impacts and local residents' attitude and there is a significant impact of the socioeconomic factors of tourism on local resident's life. The study could identify the both of negative and positive socio-economic impacts of tourism. The identified positive economic impacts are infrastructure developments, income generations, direct and indirect employment opportunities and increased the value of local properties and social impact are changing local residents' life style, cultural development and increasing different social activities.

The study also could identify the negative economic impacts like local people can't involve with higher level jobs, increased price of local products, economic dependence of the local community on tourism and economic inequality and social negative impacts are creating social problems (gambling, prostitution, crime, drug use, and hijacking) and causing cultural invasions. Lower-level contribution of community ideas for tourism development were founded. The community perceptions regarding tourism was positive and community has eagerness to develop tourism industry in this area. Structural and formal relationship among different parties i.e., local residents, local political leaders, professional experts and the policymakers must be interlinked to ensure the tourism development in Kuakata. Local residents' views and attitude towards the socio-economic impact of tourism must incorporate to develop the policies and strategies.

From a practical standpoint, the research findings in this study suggest factors that are crucial to the development of tourism in Kuakata. In order to encourage local people to involve or to continue to tourism industry, this study reveals that before making policies regarding tourism development, policymakers must try to identify local people perceptions and opinion. Transportation & infrastructure systems will be developed. The hotel and motel also have taken numerous policy decisions and practices to ensure the delivery of benefits of tourism to the local community. Local people will get more employment opportunities and earning capacity will raise to establish more enriched hotel, parks and restaurants. Finally the Ministry of Tourism and Civil Aviation of the Government of Bangladesh can give special attention to developing Kuakata Beach as



an international standard beach. Local participation can be encouraged, as tourism generates additional income to the local people and contributes to boosting up the local to National economy.

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Does More Area of a Country Attract More FDI? A Composite Analysis Through the Driscoll-Kraay and Generalized Method of Moments

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Abstract: This study investigates the impact of land area, forest area, surface are, agricultural land, arable land on Foreign Direct Investment. Panel Data of 186 Countries from 1990-2018 were collected from the website the World Bank. Ordinary Least Square (OLS), Pooled Ordinary Least Square (POLS), Driscoll-Kraay (DK), Second Stage Least Square (2SLS), Generalized Methods of Moments (GMM) methods are used in this study. This research found that land area and arable land had significant positive relationship and surface area had significant negative relationship with Foreign Direct Investment (FDI) in all the model, forest area had significant positive relationship with Foreign Direct Investment (FDI) in all the method. Agricultural land had significant positive relationship with Foreign Direct Investment (FDI) in POLS and GMM model and the others model agricultural land and FDI had the insignificant relationship.

Keywords: Foreign Direct Investment, Land Area, Forest Area, Surface Area, Agricultural Land, Arable Land.

1. Introduction

Nordhaus (1992) has demonstrated that the steady-state growth rate of productivity per capita in a natural resource system is relative to the rate of technical development optimized for a "drag of population growth" due to decreasing returns and a "drag of natural capital" due to declining levels of exhaustible natural resources.

Huge rents from natural resources may create opportunities for large-scale rent-seeking behavior on the part of producers, thereby diverting resources away from more socially productive economic activity (Auty, 2001; Gelb, 1988). Tornell and Lane (1998) demonstrate that trade-offs and natural resource booms may cause political exchanges or games between influential interest groups—games that result in current account deficits, excessive fiscal redistribution, and reduced development. In serious situations, civil wars—such as the Diamond Wars in Africa—break out, not just are diverting development factors from economically beneficial purposes, but also undermining state structures and the rule of law.

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Barro (2001) lists variables such as high education, good health, low mortality, low government welfare spending, the rule of law and favorable trade conditions as central to development. In his study, he developed a positive association between the growth rate of real per capita GDP and the initial human resources of 98 countries between 1960 and 1985. As a result, several studies have followed his lead in investigating these prime variables as the channels by which FDI has an effect on development.

Blonigen and Wang (2005) attribute positive correlation findings in most experiments to inaccurate data sampling. They claim that, contrary to their methodology, most experiments blend the two distinctive samples and sometimes assume that there is a strong connection. They also found that FDI is more likely to "crowd in" investment in LDCs than DCs.

Li and Liu (2005) find that FDI not only directly, but also indirectly, influences development through its relationship with human resources. Furthermore, they find a negative coefficient for FDI when the technological difference between the source and the host economy is minimized by a large sample, Borensztein et al. (1998) found similar findings, i.e. This inward FDI has positive impacts on development with the greatest influence from the relationship between FDI and human capital.

Abundance of natural capital can contribute to Dutch disease, which can occur in many forms. The natural resource boom and the related rise in exports of raw materials will push up the real exchange rate of the currency, likely reducing exports of products and services (Corden, 1984).

Recurrent booms and busts aim to increase actual exchange rate fluctuations (Gylfason et al., 1999), decreasing investment in the tradable market as well as exports and imports of goods and services. Dutch disease may also exist in countries that do not have their own currency (e.g. Greenland, which uses the Danish crown; see Paldam, 1997).

Abundance of natural resources can reduce private and public incentives to acquire human capital due to high levels of non-wage income—e.g. dividends, social investment and low taxes. Empirical evidence indicates that, across countries, school enrolment at all levels is inversely linked to the reliance on natural capital, as measured by the share of labor engaged in primary production (Gylfason et al., 1999).

There is also evidence that, across countries, public spending on education compared to national revenue, planned years of schooling and secondary school enrolment are both inversely correlated to the share of natural resources in national wealth (Gylfason, 2001). This is critical because more and better schooling will be good for development.



This paper has five sections. Section One regarding Introduction, Section two discusses the review of the literature, Section three is the methods, Section four is about the findings and discussion, and finally section five of this paper give some recommendations and conclusion.

Literature Review:

Temple (1999) suggests that economic success is closely associated with educational achievement across countries after a few outliers have been omitted from the Benhabib and Spiegel (1994) analysis, which found no support in their evidence that schooling is important for economic growth (Sachs and Warner 1999; Rodriguez and Sachs 1999).

Abundant natural capital can spread social capital in the same way as human capital (Woolcock, 1998; Paldam and Svendsen, 2000). Unconditional foreign aid may be the case (Burnside and Dollar, 2000). Eskeland and Harrison (2003) link the sectoral composition of inward FDI in the host country to the calculation of emission severity and control variables in two main source countries.

The possible impacts of FDI on the local climate of host developed countries remain problematic (Meyer 2004). Some reports suggest that pollution-intensive industries from developed countries (with stringent environmental legislation) tend to be moved to emerging countries with low environmental regulations in order to reduce their costs. This theory, known as the emissions haven, also suggests that FDI is exacerbating pollution or environmental destruction in the host nation (Mani and Wheeler 1998; Bommer 1999; Keller and Levinson 2002; Xing and Kolstad 2002; Cole 2004; List et al . 2003; Copeland and Taylor 1994; Dong et al . 2012; Tang 2015).

In the other hand, other studies have shown that FDI companies from developing countries introduce new technology and sound management practices that lead to environmental change. These good management practices and advanced environmental technology allow the development of "pollution halos" in developed countries by reducing pollution (Christmann and Taylor 2001; Eskeland and Harrison in 2003; Baek and Koo in 2008).

International companies can exert pressure and corrupt governments in the host countries to manipulate environmental regulations to their benefit (Cole and Fredriksson 2009). The impact of FDI on the environmental degradation of the host country depends on the degree of institutional development (Wang and Chen 2014). FDI halo effects would arise if the government gives greater weight to healthcare than bribes charged by the lobby party (Cole et al. 2006), which means good governance.



Examining the determinants of FDI in Africa, Onyeiwu and Shrestha (2004) find that the abundance of natural resources encourages FDI inflows. Asiadu (2006) also indicates that countries with natural resources can bring more FDI to the SSA. Hailu (2010) analyzes the demand-side determinants of FDI inflows to African nations. Its findings indicate that natural resources have also been established as a major factor affecting the flow of FDI to Africa. In view of 53 African nations, Anyanwu (2012) concludes that Natural resource endowments (especially oil) attract significant FDI to Africa. Finally, Kariuki (2015) considers a favorable and important association between the commodity price index (as a proxy for natural resource endowment) and the FDI flows into the ASS.

FDI and environmental destruction relations between developing and developed countries have been the focus of a variety of theoretical and scientific studies with mixed findings. Some studies have shown that the beneficial impact of FDI on environmental destruction by emissions has been attributed to a discrepancy in national environmental standards that produces "pollution havens" in developed countries for dirty factories (Mani and Wheeler 1998; Bommer 1999; Keller and Levinson 1999 Xing and Kolstad 2002; Cole 2004; List et al. 2003; Copeland and Taylor1994; Dong et al. 2012; Tang 2015).

In the other hand, other researches have indicated a negative influence of FDIs on environmental pollution, as well as on the global economy. Requires international firms to disseminate best corporate practices and new sustainable technology, producing "pollution halos" in developed countries (Christmann and Taylor 2001; Eskeland and Harrison 2003; Baek and Koo 2008). Increased demand needs more supply and thus more natural resources are used in the production process, which leads to environmental destruction (Dinda 2004).

Developing nations, where environmental requirements are more loose, are attracting the inflow of filthy international money, contributing to a higher proportion of polluting factories in industrial composition (Wang and Chen 2014). On the other hand, as developed countries are rich in cheap labor capital, less polluting, labor-intensive factories could be able to grow due to FDI inflows (He 2006). Finally, the technical impact explains the structural improvements in the manufacturing process. This transition can be made both directly by the transfer of advanced environmental technologies (Christmann and Taylor 2001; Eskeland and Harrison 2003) and indirectly by an increase in economic growth and, as a result, an increase in income due to FDI inflows, contributing to demand for environmental standards (Roca 2003).



The conventional statement of the PHH that the strictness of environmental legislation influence the trends of FDI has limits to the degree that multinational companies can affect the environmental policy of the host country (Desbordes and Vauday 2007). Thus, the net influence of FDI on local ecosystems depends on the degree of structural growth of the host country (Cole et al. 2006; Cole and Fredriksson 2009; Wang and Chen 2014).

Methods:

Composite step by step model based study had been conducted

- i) Ordinary Least Square (OLS): To define the relationship between FDI and macroeconomic variables using STATA 15, the OLS model had been used.
- ii) Pooled Ordinary Least Square (POLS): POLS model had been used to identify the relationship between FDI and macroeconomic variables using STATA 15.
- iii) Driscoll-Kraay (DK): DK model had been used to identify the relationship between FDI and macroeconomic variables using STATA 15.
- iv) Two Stage Least Square (2SLS): To define the relationship between FDI and macroeconomic variables using STATA 15, the 2SLS model had been used.
- v) Generalized Method of Moments (GMM): Multivariate regression model had been used to identify significant explanatory variables which can explain the reasons for relationship between FDI and macroeconomic variables using STATA 15.

Variables and description:

Sl.no.	Variable	Description	Unit
1	lnFDI	Log normal of Foreign direct investment, net	USD
		inflows (BoP, current)	
2	LnLA	Log normal of Land area	sq. km
3	LnFA	Log normal of Forest area	sq. km
4	LnSA	Log normal of Surface area	sq. km
5	LnAGL	Log normal of Agricultural land	(% of land area)
6	LnARL	Log normal of Arable land	(% of land area)



Hypotheses: Based on the above literature following hypotheses have been developed.

No.	Hypotheses							
H1	There is significant positive relationship between foreign direct investment and land area of a country.							
H ₂	There is significant negative relationship between foreign direct investment and forest area of a country.							
Нз	There is significant positive relationship between foreign direct investment and surface area of acountry.							
H4	There is significant positive relationship between foreign direct investment and agricultural land.							
H5	There is significant negative relationship between foreign direct investment and arable land.							

Results and Discussion:

After collection of the data, it has been used in step by step manner. Firstly, data on FDI had been converted into billion USD. Then it has been log normalized for ensuring normality in the data. All the independent variables have been log normalized to ensure the consistency in analysis with FDI. After that multivariate partial regression model has been run for FDI based on different types of area of a country. The nature of relationship of the explanatory variables has been examined for every model. With some discrepancies, most of the variables have been found to be consistent in their nature of relationship with FDI. The nature and degree of relationship among the variables have been tested with robust regression models. These are Pooled Least Square (POLS), Driscoll Kraay (DK), Two Stage Least Square (2SLS) and Generalized Method of Moments (GMM). A cross examination and matching has been observed for every regression model to find out the uniformity in findings in these models. In the result section firstly descriptive statistics of the variables would be presented, then pairwise correlation matrix for the determining variables of wealth efficiency would be reported, after that robust regression model results for the democracy indices would be presented. Then the impact and nature of relationship of these variables with FDI would be elaborated in detail.

Descriptive Statistics:

Summary of the descriptive statistics of all the variables used in the models of this study is given below. The table includes the number of observations, mean score, standard



deviations, minimum and maximum score for each and every variable.

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.
FDI	5394	8.402e+09	3.718e+10
LA	5394	775810.9	2267104.4
FA	5394	232001.03	892207.25
SA	5394	806987.8	2392550.9
AGL	5394	35.275	23.711
ARL	5394	13.055	13.579

Table 1 shows the summary of the data collected for 186 countries, 29 years on 6 variables. With main dependent variable FDI is showing an average of 8.40 billion USD for the countries studied along with a very high standard deviation of 37.18 billion USD which indicates there is considerable disparity in FDI among the countries of the world. Table also shows land area average is 775810.9squares kilometer while forest area and surface area average is 232001.03 and 806987.8 squares kilometer respectively. The standard deviations of land area, forest are and surface areas are 2267104.4, 892207.25, 2392550.9 squares kilometer. On the other hand, average agricultural land is 37.275% of total landarea and the average arable land is 13.055% of total land area. The standard deviation of agricultural land is 23.711% of total land area and the average arable land is 13.579% of total land area.

Pairwise correlation matrix:

With the aim to identify the impact of democracy indices on FDI, first, we are going to analyze the correlations among the variables we obtained from literature. A combined correlation matrix is given below to report the variables.

Table 2: Pairwise correlations matrix

Variables	(1)	(1)	(3)	(4)	(5)	(6)
(1) FDI	1.000	1.000				
(2) LA	0.503	0.503				
(3) FA	0.396	0.396	1.000			
(4) SA	0.509	0.509	0.901	1.000		
(5) AGL	0.024	0.024	-0.067	-0.029	1.000	
(6) ARL	0.050	0.050	-0.057	-0.071	0.590	1.000



Table 2 shows little association among the variables indicating very low chance of endogeneity. Limited by the layout, only the correlation coefficient matrices and collinearity test results are provided here. However, the results meet the requirements of the correlation coefficient test and VIFs test. Also, the results show significance at least at .10 levels for all the variables. No variable is showing association over .90 levels.

Econometric Models:

Multiple regression models have been run with the same dependent (FDI) and independent variables (LA, FA, SA, AGL, ARL). In the following section the results of those models are presented and interpreted below.

Table 3: Ordinary Least Square (OLS) model

LnFDI	Coef.	St.Err.	t-value	p-value	[95% Conf	St.Interval]	Sig
LnLA	4.205	.889	4.73	0	2.462	5.949	***
LnFA	176	.053	-3.32	.001	28	072	***
LnSA	-3.589	.891	-4.03	0	-5.335	-1.842	***
LnAGL	.061	.159	0.38	.703	251	.373	
LnARL	1.184	.133	8.89	0	.923	1.445	***
Constant	9.126	.659	13.85	0	7.834	10.417.	***
Mean dependent var		16.8	27	SD depend	ent var	10.183	
R-squared		0.0	44	Number of	obs	5394.000	
F-test		49.406		Prob > F		0.000	
Akaike crit. (AIC)		40112.8	68	Bayesian c	rit. (BIC)	40152.426	

^{***} *p*<.01, ** *p*<.05, * *p*<.1

Table 3 shows land area and arable land have significant positive relationship with FDI. The more the land area and arable land of a country can attract more FDI for that country. On the contrary other independent variables such as forest are and surface have significant negative relationship with the FDI which indicates that a country having high forest and surface can not attract FDI more for that country. Agricultural land has positive relationship with FDI but insignificant nature of relationship with FDI though the overall model is significant at 10% level. For more robustness of the results, the next model is run.



Table 4: Pooled Ordinary Least Squares (POLS) model

Regression results

LnFDI	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
LnLA	3.832	.917	4.18	0	2.034	5.63	***
LnFA	504	.073	-6.87	0	647	36	***
LnSA	-3.297	.911	-3.62	0	-5.083	-1.512	***
LnAGL	1.135	.27	4.21	0	.606	1.664	***
LnARL	.908	.262	3.47	.001	.395	1.421	***
Constant	10.164	1.391	7.31	0	7.438	12.89	***
Mean depe Overall r-s Chi-square R-squared	squared e	16.8 0.0 123.6 0.0	30 I 45 I	SD dependent var Number of obs Prob > chi2 R-squared between		10.183 5394.000 0.000 0.066	

^{***} p<.01, ** p<.05, * p<.1

Table 4 shows land area, agricultural land and arable land have significant positive relationship with FDI. The more the land area, agricultural land and arable land of a country can attract more FDI for that country. On the contrary other independent variables such as forest are and surface has significant negative relationship with the FDI which indicates that a country having high forest and surface cannot attract FDI more for that country. For more robustness of the results, the next model is run.

Table 5: Driscoll-Kraay pooled OLS model

Regression with Driscoll-Kraay standard errors	Number of obs	=	5394
Method: Pooled OLS	Number of group	s =	186
Group variable (i): ID	F(5, 28)	=	79.09
maximum lag: 3	Prob > F	=	0.0000
	R-squared	=	0.0438
	Root MSE	=	9.9621

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			J			
LnFDI	Coef.	Std.Err.	T	P>t	5%Conf.	nterval]
LnLA	4.205	1.403	3.000	0.006	1.332	7.079
LnFA	-0.176	0.121	-1.450	0.158	-0.425	0.072
LnSA	-3.589	1.405	-2.550	0.016	-6.467	-0.710
LnAGL	0.061	0.429	0.140	0.889	-0.818	0.939
LnARL	1.184	0.206	5.730	0.000	0.761	1.607
_cons	9.126	1.377	6.630	0.000	6.305	11.947



Table 5 shows only land area and arable land has significant positive relationship with FDI. The more the land area and arable land of a country can attract more FDI for that country. Surface area has significant negative relationship with the FDI which indicates that a country having high surface cannot attract FDI more for that country. On the contrary other independent variables (FA, AGL) have significant negative relationship with FDI though the overall model is significant at 1% level. For more robustness of the results, the next model is presented.

Table 6: Two stage least square model
Instrumental variables (2SLS) regression

LnFDI	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
LnLA	4.205	.889	4.73	0	2.462	5.949	***
LnFA	176	.053	-3.32	.001	28	072	***
LnSA	-3.589	.891	-4.03	0	-5.335	-1.842	***
LnAGL	.061	.159	0.38	.703	251	.373	
LnARL	1.184	.133	8.89	0	.923	1.445	***
Constant	9.126	.659	13.85	0	7.834	10.417	***
Mean dependent var		16.8	27	SD depend	ent var	10.183	
R-squared		0.0	44]	Number of	obs	5394.000	
F-test		49.4	06 1	Prob > F		0.000	
*** . O.I ** . O.T * . I							

^{***} p<.01, ** p<.05, * p<.1

Table 6 shows land area and arable land have significant positive relationship with FDI. The more the land area and arable land of a country can attract more FDI for that country. On the contrary other independent variables such as forest are and surface has significant negative relationship with the FDI which indicates that a country having high forest and surface cannot attract FDI more for that country. Agricultural land has positive relationship with FDI but insignificant nature of relationship with FDI though the overall model is significant at 10% level. For more robustness of the results, the next model is run.



Table 7: Generalized method of moments (GMM) model

Regression results of system GMM model

LnFDI	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
L.LnFDI	.153	.018	8.48	0	.117	.188	***
LnLA	2.197	1.857	1.18	.237	-1.442	5.836	
LnFA	596	.149	-4.01	0	887	305	***
LnSA	-1.953	1.66	-1.18	.239	-5.206	1.301	
LnAGL	1.536	.601	2.56	.011	.358	2.714	**
LnARL	.811	.618	1.31	.19	401	2.023	
Constant	10.753	9.588	1.12	.262	-8.04	29.545	
Mean dependent var		17.0	00 5	SD depend	ent var	10.097	
Number of obs 50		5022.0	00	Chi-square		109.484	

^{***} p<.01, ** p<.05, * p<.1

Table 7 shows only agricultural land has significant positive relationship with FDI flow. The more agricultural land a country has the FDI it attracts. Forest area has significant negative relationship with FDI flow. The more forest areacannot attract more FDI for the countries. On the contrary other independent variables (LA, SA, ARL) have mixed relationship with FDI though the overall model is significant at 10% level.

- **6. Conclusion:** Based on the findings of the study, it is concluded that a country can positively look forward to getting more FDI which have more land area, forest are, surface area, agricultural land and arable land. The more the land area, agricultural land and arable land of a country have the more FDI it can attract. On the contrary other independent variables such as forest are and surface have significant negative relationship with the FDI which indicates that a country having high forest and surface area do not help in attracting FDI. The results are robust based on the identical output of the different model used in the study. The insight of these findings may require separate study. Overall, the study of 186 countries through 29 years' dynamic panel data has come up with valuable findings to understand the economies of the world with respect to FDI and land area of a country.
- **6.1.** Contribution of the paper: The broad finding that FDI is necessarily being influenced by the land area of a country. Specifically, this paper had mainly contributed in two aspects: firstly, it has predicted and shown the relationship of FDI



with land area across the countries of the world and secondly it has scrutinized and identified the impact of different form of land holding of a country on FDI flow through robust models like DC, 2SLS, GMM. Complementarily, the paper has the following implications:

- a) Theoretical Implications: The academia would be complemented through the analysis on the impact of land area on FDI. This study had shown how to use these different regression models jointly to come up with the same results. Besides, academics of economic arena would be aware of the fact that land areaiseffecting FDI. They will also be assisted to analyze further how to conduct more refined studies regarding FDI and various forms of land areas of a country. The concept of FDI and land area can also be used in broad theoretical discussion of the economic world in upcoming future.
- b) Practical Implications: After establishing the findings of the study about how land area can be better perceived to boost and attract more and more FDI is an important finding. The economic arena would be assisted to think about the importance of land area in attracting FDI. Society as a whole be benefited by the findings as it will create a sense of importance towards land ownership which will lead to set up a normative view towards the development of a nation. More and more concentrations would-be put-on land area besides other determinants of FDI. Also, a global sense of land area based economic evaluation will draw attention at large.
- **6.2 Limitations and further research opportunities:** Data were not collected for all the countries of the world because of the availability in the database. Also, more than 29 years' data would have been more conclusive. Data had to be converted for analysis which may lead to discrepancies. Besides, many variables have been untouched in this research. Future study may be conducted on finding out the most important determinants of FDI besides the land area.

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Smartphone Addiction Pattern Among University Students in Bangladesh: An Analytical Approach

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Abstract: The smartphone is an indispensable digital gadget for communication, socialization, and entertainments. But, too much surfing of smartphone leads to addiction. This paper aims to analyse university students' addiction patterns of Smartphone in a descriptive research formate in Bangladesh. For this research, 438 convenient and snowball sample data have been collected through the google form questionnaire from all over the country. Findings show that almost every student has a smartphone and around 60% of students are using feature phones. The study shows that 2.5 hours or more use of smartphone is considered as excess use but average use of smartphone is 3 hours in a day. But due to excess use of smartphone, 78.1% students agree about distraction of concentration of the study. This study shows the excess use of smartphone for non-academic purposes rateher than academic study. The reasons behind this problem are the use of social media apps like Facebook, self-addiction, and unlimited Wi-Fi facilities in the hands of students. It's a worrying situation that a student uses the smartphone for more than 10 hours on an average for different purposes in a day where they use it for 65 minutes on an average for study purposes. If this continues, students will be detached from books and study, which may lead to an ignorant nation.

Keywords: Smartphone, Addition, Social Media, Academic Study

1. Introduction

The purpose of using smart phone is making our lives smart and dynamic. Smartphone is discovered in 2000 by Ericsson and now it is one of the most popular gadgets among the people. Smartphone is a gadget that is the combination of cell phone and computer functionality. Like other countries, the usage of smartphine in Bangladesh is also increasing tremendously among the young generation. According to the statistics of BTRC, the total number of Mobile Phone subscribers has reached 166.114 Million at the end of February 2020 (BTRC, 2016). In each year, more than 6.00 million new users are added to existing smartphone users (Ericsson Mobility Report, 2015). It's seen that young grown-up generation and also children are very much addicted to these devices for playing games and watching videos online.

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The smartphone combines both computer and mobile phone features into one device having web browsers that can be connected through mobile internet, and Wi-Fi internet network. The main concern is that it has both side edges. It is a source of education and entertainment through the usage of numerous applications. In the modern era, the smartphone has connected every class of people under one umbrella through websites and social networking such as Twitter, Facebook, YouTube, etc. Smartphone users usually involve in browsing web, checking email, pocking social networking sites, sending text messages through a figure touch with giant screen facility. However, the excessive usage of a smartphone harms the users who gradually become addicted. It has been observed that smartphone addiction is more severe than the addiction to mobile phones, computers, and even the internet (Arefin et al., 2017). In this case, young University students seem to be more vulnerable by the overuse of smartphones as the excessive use of smartphones may lead to the breakdown of study attention and decrease learning quality and productivity. Due to the overuses of the smartphone, physical and mental problems are commonly aroused among the students. But still, it's not found that how much time of smartphone usage is regular use and what extent appears to be the overuse of it. So to find out the answer to this question, it has been tried to measure the overuse of smartphones and factors that influence students to overuse this modern gadget. This study is conducted to know about the smartphone addiction pattern among university students in Bangladesh.

2. Objectives of the Study

Smartphone has brought many opportunities to the students' hand, but it has also shown some severe drawbacks in case of Bangladesh. The main objective of this study is to present an overview of the Smartphone addiction pattern among university students in Bangladesh. This study covered the following specific goals:-

- To find out the overuse of smartphone among university students'in Bangladesh
- To examine the factors that mostly influence to use and overuse smartphone among the students
- To propose recommendations based on the findings to overcome the smartphone addiction problems among the students.

3. Literature Review of the Study

In this twenty-first century, the smartphone is considered as the most dynamic digital communication modes among all classes of people around the world. In the past, cell phones were generally used for calling and texting purposes. But currently, access to email, immediate photo sharing, video calling, and video conferencing, in addition to



calling and texting, have been made possible through the use of the smartphone (Mehtaj, 2016). It has almost entirely changed the lifestyle of people of all classes and levels of people's day to day activities, particularly for young aged people (Bianchi & Phillips, 2005). Smart devices like smartphones, tablets, and computers are the most frequently used digital devices. Extreme low prices, availability of the supply, and trend of uses, students are also habituated with these digital devices. Without a smartphone, university students wouldn't be able to pass a single day and even can't continue their studies smoothly. The main concern is that due to extreme portability with mobile internet and convenience to use, students are passing more time on social media, playing online games, and also doing other activities online (Mubassira& Das, 2019).

Smartphone currently is equipped with the full capabilities to display photos, play games, play videos, navigation, built-in camera, audio, and video playback and recording, send and receive an email, built-in apps for social web sites and surf the Web, wireless Internet and much more (Gowthamip & Venkatakrishnakumarp, 2016). In other words, it can be said a powerful device for Mobile phones are currently ubiquitous among college students as well as all classes of people (Chen et al., 2015). Corresponding to the enormous penetration rate of smartphone users, now the number of students with mobile devices is more than ever, and smartphone use is increasing every day among higher education students (Dahlstrom & Bichsel, 2014). The literature review tells that there are mixed conclusions from various studies regarding the positive and negative impacts of Smartphone usage among university students. Smartphone is used by the people to be connected with an extensive range of people but at the same time they become isolated leading to a micro-culture that is a dangerous phenomenon (Sarwar and Soomro, 2013). Students experience disturbance in sleep, deficiency of energy and exercise, poor eating habits, fatness and bad academic performance due to smartphone addiction (Alosaimi et al., 2016).

A large number of global populations (especially college and university students) use smartphones, due to its wide range of applications in recent years. Though the smartphone is beneficial in numerous ways, it has many disadvantages, such as the reduction in work efficacy, personal attention, social nuisance, and psychological addiction (Jeong & Lee, 2015). The mobile phone is becoming part and parcel to students concerning managing critical situations and maintaining social relationships (Asia's Smartphone Addiction, 2016). This behaviour may reduce thinking capabilities and it may affect cognitive functions and induce dependency. Regularly checking the phone without reason, feeling anxiety without the smartphone, midnight checking, and distracted with smartphone applications are the signs of smartphone addiction (Babadi-Akasheetal., 2014).



Kahyaoglu Sut et al. (2016) found that 85% of both university faculty and students said cell phones were distracting, and 45% noticed that vibrating phones in the classroom were problematic. Its antagonistic impact is additionally found in business-related errands, classroom leanings (Hiscock, 2004; Selwyn & Neil, 2009), and scholastic execution (Kuss & Griffths, 2011). Low et al., (2011) conducted a study based on cell phone use and other electronic devices in the classroom and found that 45% of students spend more than 4 hours in a day on their cell phones. A survey conducted at the University of Colorado and several other universities in 2010 found that text messaging and emailing are two of the most commonly used functions on smartphones among college students, followed by reading news, watching videos and reading books (Miakotko, 2017). Reese Bomhold (2013) surveyed 62 undergraduate university students regarding smartphone application use. The frequently used application types expressed by students were mostly by social and communication, secondly search engines, thirdly tools and productivity (75%), then games or music (65.9%). Little used or not owned application groups were hobbies (44.6%), casual reading (41.3%), finance and banking (40.5%), and shopping (34.1%). In another research on 35 academic students specified 70 applications were used for educational purposes as search engines two-third, online encyclopedias or homework websites only 14.4%, dictionaries or translators little above than 10%, tools for calculators or flashcards and libraries or databases are minimal percentages.

In the same way, Jesse (2015) examined smartphone and app usage among college students. The results showed that social media (Twitter, Facebook, Instagram, Pinterest) applications are used by the average college students the most. Hossain and Ahmed (2016) investigated the educational use of smartphones by university students in a developing country. The respondents stated that they used their smartphones for accessing educational information very high 65.5%, reading news is almost the same, entering social media sites is around 60%, receiving sports news (40.8%). Entertainment and listening to music is about 38%. The academic smartphone use purposes of supporting learning needs included consecutively reading full-text articles, viewing learning videos, recording class notes, preparing class notes, and library reference.

Deloitte report in (2021) revealed how people aged between 18 and 24, a typical age range for university, use mobiles. Almost half of them check their phones immediately after waking up. Within five minutes of waking up, 30% of them check their phones. More than 70% of them check their phones within half an hour after waking up. Within the group of people aged over 25, only 10% check their phones straight away after waking up, and 20% check within five minutes. In their Study, Akıllı and Gezgin (2016)



examined the relationship between different behaviour patterns of 683 university students and their nomophobia (fear of no mobile phone) levels. Their results indicated that 39.4% of the participants have been using smartphones for more than four years. When participants' daily smartphone checking behaviour was examined, it was found that 34.4% of the participants check their smartphones 49 times or more in a day. When participants' smartphone control behaviour after waking up was examined, it was found that 83.6% of the participants check their smartphones immediately after waking up. Cell phones could be a useful teaching tool to use in the classroom. The first example is the Dropbox app; students use the Dropbox App for file sharing within the school (Bianchi & Phillips, 2005).

A second example is Evernote; students can use this App to review their lecture notes after class is over. Finally, it is stated that students can also use their cell phone cameras to take pictures of the black/whiteboard or to record their professors' lectures during class to review later (Goswami & Singh, 2016). Literature shows those students are using the smartphone for academic and non-academic purposes. Gikas and Grant (2013) revealed the benefits of mobile devices for student learning. Mobile computing devices aided students to access information promptly. Continual connectivity provided by mobile devices facilitated communicate with the classmates and instructor, interact with the course content, and support content collaboration in a situated and contextualized way. Learning in a variety of ways such as recording videos or voice memos, creating virtual history sites, texting messages and e-mails, and reinforcement of the course material through engaging in polls and providing answer to the questions anonymously have been possible through mobile computing devices for the students. These diversified ways inspired students to communicate and collaborate about course content, and to discuss the course content at length in the class sessions. Smartphone is used by the youth for several purposes including for relaxation and to share information (Ahad and Anshari, 2017). Besides becoming a communication device, university students in the United Kingdom use mobile phone for various functions including alarm clock, camera, music player, diary and phonebook (Walsh et al, 2008). Students use their mobile phone to learn English in the countries such as China, Germany and Japan, (Roberson and Hagevik, 2008). The University of Sheffield (2011) revealed that smartphones (87%) are more likely to be used than any other equipment in lectures.

In a study by Ahmed et al., (2017) near Dhaka city, Bangladesh found that youths use maximum time in mobile phones including considering smartphone as an integral part of their life and leading to the addiction on it. But here it's not clearly specified that how much time is spent in a mobile phone that can lead to the addition and affect in the



students' life. In another study by Alsayed et al., (2019) found 94.8% students carry mobile phone everywhere, 93.3% use mobile phone for checking group study and website checkup rather than individual study. This research also indicated that the respondents (51%) had been using smartphones to speak to family and others, 25% to use social media, 19% to use multimedia applications, and the remaining 3% to play games, etc. including 54% accept that this activity leads their CGPA in less than 3 in the academic study (Rashid & Hossain, 2019). In a separate study, it was found that females are most frequent users than the male students and also found that both male and female show less interest to use smartphone for academic purposes (Mehtaj, 2016). Owing to the use of smartphones, one-fourth of the study participants were discovered to have feelings of wrist and hand pain that may lead to more physiological and physiological complications (Parasuraman et al., 2017). In summary, all studies mainly show the statistics of the use of smartphone and its impact on the students and youths life but did not specify how much time is spent on mobile phone. So, to fill this gap, this study has been conducted among the university students in Bangladesh to find the specific time used on smartphone and its impact on their academic life.

4. The methodology of the Study

This paper is intended for exploring the smartphone addiction pattern among the university students in Bangladesh. This research has been conducted based on the primary data that has been collected from public, private, and national university students in Bangladesh. Before conducting actual studies, a focus group discussion has been conductd with 15 students from department of Management Studies in undergraduate and graduate levels students in university of Barishal. Where consultion has been made with the students and they were asked to write about present use of smartphone. Based on the writings, opinions and discussions, questionnaire has been prepared in google form and a pilot study has been conducted with 10 samples in Jnue 2019. After conducting pilot study, some minor correction of the questionnaire has been done and total 438 convenient and snowball samples data have been gathered form both undergraduate and graduate level students in different universities of Bangladesh.Questionnaire has been prepared in two parts. Part one is related to socio-demographic information and the other part is related to the questions of five-point likert scales comprising Strongly Disagree =1, Disagree=2, Neutral=3, Agree=4, and Strongly Agree=5. Mostly, questions were focused on the used time of smartphone by the students. But to be more specific, students were also asked questions related to using apps in phone and also time spent in each apps etc. Besides that, multiple item questions have also been used to know the name of different apps, its frequency and estimated time spent on the usage of those apps. The data have



been analysed using SPSS and MS excel for finding the results of the research. In addition, secondary data has been collected from journals, books, articles, websites, reports, and other relevant sources. This is a descriptive types of research based on the students' response in case of Bangladesh. Overall, this research has found the acute situation of smartphone use by the students and the effects of it on students' lifestyle.

5. Data Analysis and Findings

5.1 Respondents' Demographic Background

Table 1: Respondents' Demographic Information

Background Characteristics	Respondents	Percentage				
Gender						
Male	340	78				
Female	98	22				
Respondents' University						
Public University	311	71				
Private University	115	26				
National University	12	3				
Years/level of education						
Honor's 1st Year	77	17.6				
Honor's 2nd Year	32	7.3				
Honor's 3rd Year	138	31.5				
Honor's 4th Year	85	19.4				
Master's / MBA / MBBS	106	24.2				
Total	438	100%				

Source: Survey data

In table 1, it is found that the number of male respondents are 78%, and female 22%. On the other hand, more than two-thirds of the students are from public universities; the rest of them are from the private universities of Bangladesh. And the highest number of students, 31.5% are studying at Honor's 3rd year.



5.2 Usage Patttern of Smartphone and Feature phone

Table 2: Smartphone and Feature phone users

Decision	Smart	phone	Smartphone & Feature Phone		
Decision	Frequency Percentage		Frequency	Percentage	
Yes	427	97.5%	256	58.4%	
No	5	1.1%	143	32.6%	
Sometimes	6	1.4%	19	4.3%	
No comment	0	0%	20	4.6%	
Total	438	100	438	100.0	

Source: Survey data

Table 2 represents the scenario of smartphone users and smartphone & feature phone users. Among 438 respondents, almost everybody has a modern smartphone. The surprising point is that about 58.4% of respondents use both the smartphone as well as the feature phone. Here, it can be said that the feature phone is used for communication, and a smartphone is generally used for communication and availing smart features not only for study but also for different purposes.

5.3 Students' Daily use of the Smartphone

There is no time limit for smartphone usage and there is no information available to say how much time is excess use of this device. To find out this debating issue, the following graph will help us to find out the time-frequency of the use of smartphones in the case of university students' in Bangladesh.

Table 3: Daily use of the smartphone by the Students

Time	Frequency	Percentage	Cumulative Percent
Less than 30 minutes	4	.9	.9
Above 30 minutes to 1 hour	24	5.5	6.4
Above 1 hour to 1.5 hour	44	10.0	16.4
Above 1.5 hours to 2 hours	62	14.2	30.6
Above 2 hours to 2.5 hours	63	14.4	45.0
Above 2.5 hours to 3 hours	63	14.4	59.4
Above 3 hours to 3.5 hours	36	8.2	67.6
Above 3.5 hours to 4 hours	39	8.9	76.5
Above 4 hours to 4.5 hours	29	6.6	83.1
Above 4.5 hours to 5 hours	14	3.2	86.3
Above 5 hours	60	13.7	100.0
Total	438	100.0	



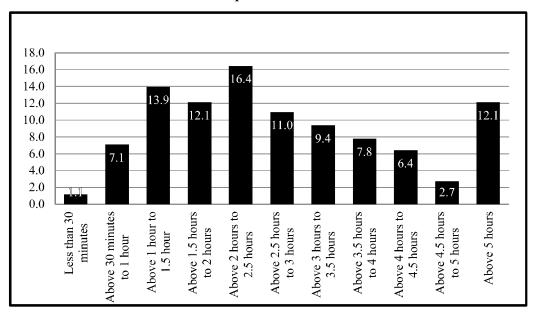
Table 4: Statistics of daily use of smartphone

N Valid	438
Mean	6.2785
Median	5.8492a
Mode	5.00b
Sum	2750.00

- a. Calculated from grouped data.
- b. Multiple modes exist. The smallest value is shown

The above two tables show the widespread daily use of the smartphone by the students and its statistical calculation. Among the 438 students, almost 15 percent students used smartphone above 2 hours to 3 hours in a single day. Only 0.9 percent of students use less than 30 minutes in a day. On the other hand, almost 14 percent of students use smartphones above 5 hours in a day. Through the statistical analysis, this table highlights that with mean 6.2785 average number of daily use of the smartphone by the student is above 3 hours to 3.5 hours, precisely 3 hours and 9 minutes. This is very shocking news for higher education in Bangladesh that over 3 hours are spent on the smartphone.

5.4 Statistics of excess time of Smartphone use



Graph 1: Opinions of Excess use of smartphone



Here, 16.4% of students think over 2 hours to 2.5 hours of smartphone usage as the excess use of smartphones and only 1.1% of students believe less than 30 minutes of smartphone usage as the extra use of the smartphone. Surprisingly, 12.1% of students think above 5 hours of smartphone usage as the excess use of smartphones which is alarming. From this analysis, here, it can be set a standard that in the case of University students in Bangladesh, more than 2.5 hours of use of smartphones can be considered as excessive use of the smartphone.

Table 5: Statistics of excess use of Smartphone

Excess time for using the phone		
N	Valid	438
	Missing	0
Mean		5.9909
Median		5.5500a
Mode		5.00
Sum		2624.00

a. Calculated from grouped data.

The above chart and statistical calculation table shows the opinion of excess use time of smartphones. A large number of students with a cumulative percentage of 49.4, claims that above 2.5 hours to 5 hours is extra use time of smartphone. A tiny group of people just 1.1% claim less than 30 minutes use of the smartphone as excess use. Most of the students, almost 17 percent, believe that above 2 hours to 2.5 hours is extra use time of smartphones. The 2nd significant number of students nearly 14% consider above 1 hour to 1.5-hour use of the smartphone as excess use. Here, a mean of 5.99 is situated in 2.5 hours to 3 hours, which indicates that excessive use of Smartphone time is over 130 minutes or 2 hours and 10 minutes in the context of Bangladesh.

5.5 Reasons for Excess Use of Smartphone

Table 6: Statistics of excess use of smartphone

Reason for excess use of smartphone		esponses	Percentage of Cases	
iteason for excess use of smartphone	N	Percentage	1 creemage of cases	
Unlimited but paid Wi-Fi	163	18.6%	37.3%	
Social Needs	250	28.5%	57.2%	
Self-Addiction	167	19.0%	38.2%	
Free Wi-Fi	106	12.1%	24.3%	



Reason for excess use of smartphone		esponses	Percentage of Cases
reason for excess use of smartphone	N	Percentage	1 creemage of cases
Study Purpose	7	0.8%	1.6%
Motivation by others	50	5.7%	11.4%
Force to use it	11	1.3%	2.5%
Others	17	1.9%	3.9%

Table 6 shows the reasons for which students use a smartphone. A social need like Facebooking & Instagram and other social needs is the prime (57.2%) need for using a smartphone. The second primary reason is self-addiction, as frequently using it becomes habituated to use. And the 3rd most crucial reason is the availability of Wi-Fi with a fixed amount of monthly payment or free unlimited usage facilities. Unfortunately, it is the fact that only 1.6% of students use smartphones for study purposes. This finding shows that smartphone is mostly used for social media and other purposes, not for the education or to acquire knowledge.

5.6 Apps frequently used by the Students

Table 7: Frequent Apps used by the Students

Apps Used				Percentage of Cases
		N	Percentage	refeemage of cases
	Facebook	405	22.6%	92.5%
	YouTube	352	19.7%	80.4%
	Dictionary	310	17.3%	70.8%
	News Reading	139	7.8%	31.7%
	Games Apps	161	9.0%	36.8%
	WhatsApp	130	7.3%	29.7%
Multiple Apps	Imo	151	8.4%	34.5%
	Viber	54	3.0%	12.3%
	Google	8	0.4%	1.8%
	Instagram	13	0.7%	3.0%
	Gmail	4	0.2%	0.9%
	Messenger	13	0.7%	3.0%
	Others	51	2.8%	11.6%

Table 7 shows the different types of apps that are used by university students in Bangladesh. In this study, Facebook tops the list with 92.5%; then university students most frequently use YouTube with a percentage of 80.4, and the third Dictionary 70.8%. Surprisingly,the apps used for the study is so small than the expectations.



5.7 Time spend in Apps of Smartphone

Table 8: Time Statistics of using apps in Smartphone

Apps Name	Min	Max	Mean	Std. Deviation	Mean×30	Minutes (Before Decimal)	After Decimal	After Decimal×60	Total time used (Minutes)
Facebook	1.00	11.00	3.6484	2.24468	109.452	109	0.452	27.12	27.12
YouTube	1.00	11.00	3.1758	2.11211	95.274	95	0.274	16.44	16.44
Playing games	1.00	11.00	1.6575	1.49341	49.725	49	0.725	43.5	43.5
Reading News	1.00	11.00	1.6553	1.09601	49.659	49	0.659	39.54	39.54
Watching Video	1.00	11.00	2.4315	1.82247	72.945	72	0.945	56.7	56.7
Hearing Song	1.00	11.00	2.1096	1.76201	63.288	63	0.288	17.28	17.28
Surfing Internet	1.00	11.00	2.4726	1.99609	74.178	74	0.178	10.68	10.68
Talking in Phone	1.00	10.00	1.9863	1.40928	59.589	59	0.589	35.34	35.34
Using Study Apps	1.00	11.00	2.1461	1.76195	64.383	65	0.383	22.98	22.98
Total						637.79			

Table 8 shows how much time is consumed by different apps. In this case, Facebook holds the top position where a student expends 109.452 minutes to use Facebook. YouTube, surfing the internet, watching the video, and using study apps has 2nd,3rd,4th, and 5th position respectively with 95.27, 74.11,72.57, and 65.22 minutes. The total estimated time used in the smartphone is 637.79 minutes or more than 10 hours 37 minutes daily. It is surprising that,on an average, a student spends 10 hours 37 minutes on the phone. So students must be aware of the use of smartphones and be attentive to their study.

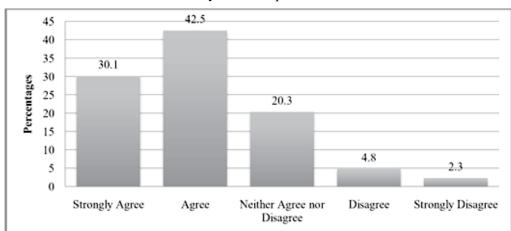
5.8 Negative Effects of Smartphone on Study

Table 9: Smartphones' Negative impact on the study

Measurement	Frequency	Percentage	Cumulative Percent
Yes	342	78.1	78.1
No	37	8.4	86.5
May be	55	12.6	99.1
No comment	4	.9	100.0
Total	438	100.0	

From the above table, 78.1% of students believe that smartphone has a negative effect on the study, whereas only 8.4% of students disagree with this matter. On the other hand, just 0.9% leave without any comment, but 12.6% are in confusion about the negative effect of a smartphone.





5.9 Concentration Problem in Study for Smartphones

Graph 2: Study Concentration Problems for Smartphone

This graph shows the overall concentration problems in the study caused by using a smartphone. The calculation shows that 42.5% of students agree with the perception that smartphone causes the problem of concentration on research. And 30.1% of students strongly agree with it. Just 4.8% of students believe smartphone causes no concentration problem. Among 438 students, 20.3% have no opinion about its positivity or negativity.

5.10 Studies Negative Impact Level for Smartphones

Table 10: Level of Negative Impact on Study

Negativity Level	Frequency	Percentage	Cumulative Percent
0 to 10%	34	7.8	7.8
11% to 20%	55	12.6	20.3
21% to 30%	89	20.3	40.6
31% to 40%	89	20.3	61.0
41% to 50%	71	16.2	77.2
51% to 60%	34	7.8	84.9
61% to 70%	25	5.7	90.6
71% to 80%	26	5.9	96.6
81% to 90%	10	2.3	98.9
91% to 100%	5	1.1	100.0
Total	438	100.0	



Here, 40.6% of students think the negative effect of using a smartphone is 21%-40% on their study, and 1.1% of students believe that the use of smartphones almost collapses their study.

6. Conclusion and Recommendations

University students strongly rely on their smartphones for acquiring information and communication. From the above analysis, it is already proved that students are addicted to the use of the smartphone. Smartphone has inevitably become a necessity in university students' lives, but excessive use of smartphone is adversely affecting their studies in university as they can't concentrate well to the lessons. The reason for using a smartphone is not only for study but also to maintain social needs like communication in social media and to watch online videos on YouTube and other social networks. In case of passing the time in Smartphone, Facebook is on top of the list with a value of 92.5% among different types of apps; then second YouTube 80.4%, third Dictionary the students use 70.8%. It is noticeable that students are using this device in most of the time for fun,not for study purposes. Though it's not possible to calculate the exact use time of smartphone, time spent in separate apps shows that a smartphone kills around 10 hours 37 minutes in a day of a student. Though it's challenging to find the exact time, it can be guessed that students are wasting a lot of time in unproductive jobs through a smartphone.

Though the primary purpose of the smartphone is to make students up to date with modern technology. Around three fourth of the students believe that smartphone has adverse effects on the study and the number of students who disagree with this statement is very poor. It's now clear that excessive use of smartphone is killing their valuable time and they also become addicted to this device. It ultimately leads to less concentration on the study. These findings will help students, parents, and the government to think about the ways for controlling the overuse of smartphones and losing attention from the higher study. This study recommends the following measures to minimise the problems of smartphone overuse:

Students need to be made aware of the value of time and importance of their career so that they use smartphone wisely, students should concentrate on study-related apps rather than social apps like Facebook, YouTube, Messenger etc, parents must positively motivate students to use the smartphone for useful ways and, responsible authorities, Governments, and social organisations should arrange different seminar and conferences about the harmful impacts of Smartphone



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Socio-demographic Factors Influencing Job Satisfaction: Does Statistical Analysis Make any Difference?

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Abstract: The study aims to identify the different factors associated with the job satisfaction of the employees in the different private commercial banks of Bangladesh. The study also examines the differences of association of the factors using different statistical analysis. The research method of the study is descriptive correlative study. The independent variables are different socio-demographic variables. Employees (N=590), Nature of the bank, age, marital position, and length of tenure of the employees are significantly correlated with job satisfaction in both the statistical analysis (chi-square and correlation) and for these variables null hypothesis is accepted. The study also reveals that gender is statistically insignificant with job satisfaction in both the analysis. So, alternative hypothesis is accepted. But in case of salary and academic level, the study finds important dissimilarities in the chi-square test along with correlation analysis. Therefore, null hypothesis is rejected. The results may be significant for the authorities of banking sector in Bangladesh. The implications, limitations and future research directions of the study are also discussed.

Keywords: Socio-demographic variables, Job satisfaction, Private commercial banks, and Bangladesh

1. Introduction

Bank is a significant and influential unit of national and global economy through global trade, finance and economic planning, agriculture and other allied actions of the nation such as pension, insurance, education loan, public health promotion and protection (Sharma & Joshi, 2016). Banks are more essential industry for economic development (Akram, Hashim, & Akram, 2015) and are profit maximizing units (Secchi, 2011) of a country. The Bangladeshi banking sector has a remarkable rate of growth over the past decades. Now days, there are sixty-five banks are operating in Bangladesh and generating enormous employment opportunities for the nation (Bangladesh Bank, 2018).

Certainly, private commercial banks (PCBs) are the highest growth sector in Bangladesh (Bangladesh Bank, 2018) and about 80,965 employees are working in the different levels of PCBs of Bangladesh (Sarker, 2020). In Bangladesh, banks contribute highly to the

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economic development (Rahman, Gupta, & Huq, 2012) and PCBs are the largest sector of domestic savings and suppliers of working capital to trade, exchange, production and agriculture. In a bank, creating and maintaining customer satisfaction is a key matter of assessing the success (Hamidi & Safareyeh, 2018). Satisfied employees not only create and maintain customer satisfaction (Hong, Choi, & Chae, 2020) but also ensure sound environment which is most prerequisite for organizational growth and advancement (Ali, Lei, & Wei, 2018). Contrary, unsatisfied employees cannot deliver on time service (Jacob, 2012); leave the job or go to work late or produce low quality service (Wilkinson, 1992); fall in emotional fatigue (Hobfoll, Halbesleben, Neveu, & Westman, 2018).

Satisfied employees are particularly important in-service sector due to its distinct characteristics of intangibility, inseparability, heterogeneity and perishability (Koc, 2006). Employees are treated as a strategic factor of acquiring competitive advantage (Huselid, 2003). Recent service sector is personified by competition, change, quality, creativity, technology (Eldor & Harpaz, 2016) and workforce diversity across the world (Gahlawat, Phogat, & Kundu, 2019). Consequently, requirements for highly competitive employees are growing (Eldor & Harpaz, 2016). High need for skilled employees has altered the organizational affinity (Islam & Tariq, 2018) and employees are positive to help and carry out their work carefully (Islam, Khan, Khawaja, & Ahmad, 2017). Therefore, concern for job satisfaction is rising (Islam, Ahmed, & Ali, 2019).

In a bank, employees are main factors to offer high quality service (Bravo, Matute, & Pina, 2016) and enhance the level of service quality (Kaya, Koc, & Topeu, 2010). To make success and achieve banks' goals, satisfaction of the employees must be taken into consideration (Saner & Eyupoglu, 2015). Satisfaction of the employees will lead to higher productivity, participation and commitment, and lower turnover and absenteeism in the banks (Kord & Tamimi, 2012). Thus, it is crucial to identify the factors which are correlated with job satisfaction in the PCBs of Bangladesh. Therefore, it is an important area of research to identify the association between socio-demographic factors and job satisfaction. There is an understandable gap in this area in Bangladesh. Hence, this paper tries to address the gap. Therefore, the study examines the following research questions:

Research Question1: What is the level of impact of socio demographic variables on job satisfaction of the employees in the PCBs of Bangladesh?

Research Question2: What are the differences of impact of socio demographic variables on job satisfaction by using different statistical analysis?



2. Literature Review

Satisfaction is a form of work-related influence that is based on cognitive assessment and concerns different facets of one's work and one's affective response towards the job as a whole (Pepe, Addimando, Dagdukee, & Veronese, 2019). Satisfaction is 'a pleasurable or positive emotional state resulting from the appraisal of one's job' (Locke, 1976); 'people's feelings about the rewards they have received on the job' (Lawler, 2000); 'the extent to which people like their jobs' (Spector, 2000); 'cognitive and affective reactions to the differential perceptions of what an employee wants to receive compared to what he or she actually receives' (Weiss, 2002); 'a set of favorable or unfavorable feelings and emotions with which employees view their work' (Davis & Newstrom, 2014); 'a collection of feelings that an individual holds toward his or her job' (Robbins & Judge, 2019).

Satisfied employees can work more hours with better proficiency (Sohail & Delin, 2013; Tabassum & Rahman, 2020); are closely correlated with organizational success and performance (Gozukzra & Colakoglu, 2016); feel comfortable and contribute optimistically (Ali et al, 2018); are less inclined to leave jobs (Balabanova, Efendiew, Ehrnrooth, & Koveshnikov, 2016) and tend to possess less turnover intentions (Forster-Heinzer, Holtsch, Rohr-Mentele, & Eberle, 2016); more involvement with their organization (Ahmad, Islam, & Saleem, 2018); devote, achieve self-efficacy and a positive impact upon health and psychological wellbeing (Wright & Bonett, 2007); have a positive relationship with staff retention (Sabbagha, De S., Ledimo, & Martins, 2018). Higher level of satisfaction shows higher level of job worthy (Jaiswal, 2019) and productivity (George & Zakkariya, 2015); influences the growth, performance and collaboration (Shrivastava & Purang, 2009). Job satisfaction increases employee job involvement, organizational commitment, and higher performance (Kim, 2005) and reduce frequent absence, lack of discipline, and high turnover (Leslie & Stinchcomb, 2013). Job satisfaction develops employee loyalty (De Gieter & Hofmans, 2015) and personal relationships (Blau, 1964). It is the important measures of employees' experiences, orientation, and commitment (Anleu & Mack, 2014); indicator of work behaviors' like organizational citizenship (Organ & Ryan, 1995), absenteeism (Wegge, Schmidt, Parkes, & Dick, 2007) and turnover (Saari & Judge, 2004).

Available studies found that job satisfaction has been studied empirically in the past 20 years in the context of banking sector (Belias, Koustelions, Sdrolias, and Aspridis, 2015). Kaya et al. (2010) reported that there were positive relationships between HRM activities and job satisfaction in Turkish banks. Sowmya and Panchanatham (2011) discovered that there was an association between pay and promotion with job satisfaction of banking sector employees in Chennai, India. Jacob (2012) showed that most of the women in the



banks of India were experiencing moderate level of stress which affects job satisfaction. Belias, Koustelions, Sdrolias, and Koutiva (2013) revealed that gender, age, and tenure were significantly associated with job satisfaction of the employees of banks in Greece. Faroque, Islam, Rashid, and Murtaza (2014) uncovered that age and tenure had significant influence on job satisfaction in the Bangladeshi banks. Kaur (2015) reported that supervision, collaboration, work distribution, and employee recognition had influence on job satisfaction in the Indian banks. Bozionelos (2016) revealed that deep acting towards customers and coworkers was favorably correlated with job satisfaction. Chadi and Hetschko (2017) found that there was no significantly positive impact of job changes on job satisfaction.

Similarly, Al-Abdullat and Dababneh (2018) examined the positive impact of organizational culture on knowledge management by examining the mediation effect of job satisfaction on the Jordanian banking sector. The job satisfaction at banks in Jordan is still diffident. Bastida, Marimon, and Carreras (2018) uncovered that HRM practices had effect on employee job satisfaction of service organizations. Faroque, Rahman, and Rahman (2019) concluded that marital status and education were strongly associated with job satisfaction. Perugini and Viadisavijevic (2019) conducted a study on gender inequality and the gender-job satisfaction discrepancy in Europe. Results showed that there was an association disclosure to more gender equal settings in the early stages of life and lesser gender gaps in job satisfaction. Hsiao, Ma (Jintao), Lloyd, and Reid (2019) accomplished research to analyze the relationship between gender, perceived ethnic, diversity levels within workplace and work-related outcomes at an individual level of the hospitality industry in Taiwan. Results uncovered that gender moderated the relationship between perceived diversity and job satisfaction, affective commitment and the correlation between job satisfaction and quit intention.

Very recently, Khan, Anjam, Faiz, Khan, and Khan (2020) conducted a study to evaluate the role of transformational leadership in developing job satisfaction of the banking employees in the UAE. Results uncovered that transformational leadership style notably influences the employees' job satisfaction. Iqbal, Khan, and Ahmed (2020) examined the association between perceived organizational politics and alternative job offering higher pay with turnover of the employees of Bank Alfalah in Karachi, Pakistan. It is observed that organizational politics is a stronger aspect to change turnover intention into decision. Bhardwaj, Mishra, and Jain (2020) accomplished research aimed to show employee satisfaction with respect to their position in different commercial banks of India. The findings disclosed that the most of the banking employees are satisfied with working culture. Cherif (2020) conducted a research to examine the role of HRM and employee



job satisfaction to assess the organizational commitment of banking sector in Saudi Arabia. Results disclosed the positive association between the HRM and job satisfaction.

Prior studies show that various factors influence job satisfaction of bank employees in different countries. However, in this study we particularly focus on socio-demographic factors influencing job satisfaction of employees in the private commercial banks (PCBs) of Bangladesh context.

2.1 Hypotheses Development:

Thus, it is vital to discover the factors that are interrelated with job satisfaction of the employees in the PCBs of Bangladesh. Based on the above discussion regarding the relationship between socio-demographic factors and job satisfaction, the current study contemplates the following hypotheses for the study:

 H_{0l} : There is a significant correlation between socio-demographic variables and job satisfaction of the employees in the PCBs of Bangladesh.

 H_{02} : There is no difference in the significance of socio-demographic variables and job satisfaction in the chi-square test and correlation analysis.

3. Research Methods

This study is based on the data collected from employees working in the PCBs of Bangladesh. It involves 590 employees of the 30 PCBs of Bangladesh. Data on selected socio-demographic variables and job satisfaction were collected from the PCBs' employees located in the northern part of Bangladesh. The Minnesota Satisfaction Questionnaire (Weiss, Dawis, England, & Lofquist, 1967) was used for data collection regarding job satisfaction (please find the appendix for the complete questionnaire). With the promise to maintain the respondents' anonymity in the questionnaire since personal identification was recorded during the data collection. This study used the self-administered questionnaire method. A total of 1000 questionnaires were distributed and 750 were recovered. Excluding incomplete and content contradictory questionnaires, 590 valid questionnaires were retained. In this study, we follow quantitative research.

The respondents were the employees of mid level, junior and entry level of the 25 conventional commercial banks and 5 Islamic commercial banks in Bangladesh. We were assured that the study would keep the privacy of the respondents, and the observed results will only be used for academic/research purpose. The respondents were chosen through convenient sampling technique (Field, 2009). To accomplish the objectives frequency distribution, chi-square test, binary logistic regression, and zero order correlation were



used. Socio-demographic variables were obtained from the prior published research papers. The respondents were asked to give the opinion on their socio-demographic variables along with different aspects of job satisfaction on a 5-point Likert scale ranging from 5 (strongly agree) to 1 (strongly disagree). In chi-square test categorical variables were used. Additionally, non-categorical variables were used in correlation analysis. The analyses of the data were made using the statistical software SPSS-23.0 version.

4. Results

4.1 Statistics

In this study, the mean age of the respondents is 31.50 year; it is between 31 and 32 years. The modal age of the respondents is 32 years and the minimum and maximum age is 24 and 61 years respectively. Statistically it is shown that the median age of the respondents is 31 years. The statistical analysis reveals that the modal age of the respondents is 32 years in the selected PCBs of Bangladesh. The mean salary of the respondents is found Tk.34,803.00. The modal and median salary of the respondent is Tk.30,000.00 and Tk.32,000.00 respectively. The study reports that the minimum and maximum salary of the respondents is Tk. 18,000.00 and Tk.1,25,000.00 per month respectively in the selected PCBs of Bangladesh. Additionally, the study shows the mean length of tenure is 4.68 years; it is in between 4 and 5 years. The modal length of tenure of the respondents is 2 years and the median length of tenure is 3 years.

Table 1: Simple statistics of the sample PCBs of Bangladesh (N = 590)

Variables	Mean	Median	Mode	Skewness	Kurtosis	Minimum	Maximum
Age (Years)	31.50	31	32	1.615	4.288	25	62
Salary (Tk.)	34803	32000	30000	1.948	5.092	18000	125000
Tenure (Years)	4.68	3	2	2.301	7.455	1	29

Source: Field Study, 2020

4.2 Descriptive Statistics

The results of descriptive statistics demonstrated in Table 2 where the frequency distribution with percentage of the selected socio-demographic variables is shown. In Table 2, we can observe that there are 18.66% respondents from Islamic commercial banks and 81.34% respondents from conventional commercial banks. There are 84.56% respondents are male while 15.44% respondents are female. 47.80% respondents' age is below 31 years while age 31 years and more is 52.20%. Maximum respondents (71.17%) are married while only 28.83% are single. Only 35.75% respondents hold MBA and



higher degrees while most of the respondents hold Bachelor and Master degrees (64.25%). In this study, 68.46% respondents' salary is under Tk. 36,000.00 while salary Tk. 36,000.00 and over is 31.54%. 71.55% respondents' length of tenure is less than 6 years while 29.45% respondents' length of tenure is 6 years and above.

Table 2: Frequency distribution of socio-demographic factors of the employees (N=590)

Variables	Frequency	Percentage	Cumulative %
Bank Type			
Islamic	110	18.65	18.65
Traditional	480	81.35	100
Gender			
Male	499	84.56	84.56
Female	91	15.44	100
Age Level			
≤31 years	323	52.20	52.80
>31 years	267	47.80	100
Marital Position			
Married	421	71.17	71.17
Unmarried	169	28.83	100
Academic Level			
Bachelors and Masters	379	64.25	64.25
MBA and Higher Degrees	211	35.75	100
Monthly Salary			
≤Tk. 36000	415	68.46	68.46
>Tk. 36000	175	31.54	100
Tenure			
≤ 6 years	463	78.50	78.50
> 6 years	127	21.50	100

Source: Field Study, 2020

4.3 Chi-square Test

The Chi-square test results are demonstrated in Table 3 where the selected socio-demographic variables along with job satisfaction of the employees in the PCBs of Bangladesh are reported. The ρ values of nature of bank, gender, age, marital position, academic level, monthly salary and length of tenure are 0.009, 0.199, 0.002, 0.008, 0.022, 0.144, and 0.059 respectively.



Table 3: Correlation of socio-demographic variables and job satisfaction of the employees in the selected PCBs of Bangladesh

Variables	Satisfa	action	Total	$x^2 cal$ and
Variables	Yes	No		p Value
Bank Type				
Islamic	105	5	110	5.747
Traditional	413	67	480	0.009
Total	518	72	590	
Gender				
Male	442	57	499	1.016
Female	76	15	91	0.199
Total	518	72	590	
Age Level				
≤31 years	271	52	323	8.567
>31 years	247	20	267	0.002
Total	518	72	590	
Marital Position				
Married	378	43	421	6.805
Unmarried	140	29	169	0.008
Total	518	72	590	
Academic Level				
Bachelors and Masters	342	37	379	4.689
MBA and Higher Degrees	176	35	211	0.022
Total	518	72	590	
Monthly Salary				
≤Tk. 36000	361	54	415	1.438
>Tk. 36000	157	18	175	0.144
Total	518	72	590	
Tenure				
≤6 years	402	61	463	2.832
>6 years	116	11	127	0.059
Total	518	72	590	

Source: Field Study, 2020



4.4 Binary Logistic Regression

The findings of binary logistic regression analysis are represented in Table 4 which contains the estimate of binary logistic regression coefficient (β), standard error of estimates {S.E.(β)}, p value and odds ratio with 95% confidence interval (C.I.) that are calculated for each of the categorical variable. Again, it is found that -2Log likelihood is 422.263, Cox and Snell R square is 0.262, Nagelkerke R square is 0.494. It implies that there are 26.20% (according to the value of Cox and Snell R square) and 49.40% (according to the value of Nagelkerke R square) variations in job satisfaction are explained by the nominated socio-demographic variables.

Table 4: Binary logistic regression analysis of job satisfaction with selected variables (1= job satisfaction)

Explanatory	Coefficient	S. E. of Estimates	p	Relative Risk	95% C. I. for {EXP(β)}		
variables	s(β)	$\{S. E. (\beta)\}$	Value	{EXP(β)}	Lower	Upper	
Nature of the Bank							
Islamic [ref.]				1.000			
Conventional	0.252	0.336	0.452	1.287	0.667	2.484	
Gender							
Male [ref.]				1.000			
Female	-0.213	0.332	0.521	0.808	0.422	1.548	
Age Level							
≤31 years [ref.]				1.000			
>31 years	0.619	0.367	0.091	1.856	0.905	3.808	
Marital Position							
Married [ref.]				1.000			
Unmarried	-0.334	0.296	0.258	0.716	0.401	1.278	
AcademicLevel							
Bachelors & Masters[ref.]				1.000			
MBA and Higher Degrees	-0.561	0.263	0.033	0.571	0.341	0.956	
Monthly Salary							
≤Tk. 36000 [ref.]				1.000			
>Tk. 36000	-0.005	0.372	0.990	0.995	0.480	2.062	
Tenure							
≤6 years [ref.]				1.000			
>6 years	0.008	0.461		1.008	0.408	2.489	

-2 Log likelihood = 422.263 Cox & Snell R square = 0.262 Nagelkerke R square = 0.494

Source: Field Study, 2020



4.5 Zero Order Correlation

The Table 5 depicts the results of zero order correlation coefficients of socio-demographic variables and job satisfaction of the employees in the selected PCBs of Bangladesh. The ρ values of nature of bank, gender, age, marital position, academic level, monthly salary and length of tenure are 0.006, 0.314, 0.002, 0.009, 0.746, 0.053, and 0.007 respectively.

Table 5: Zero order correlation matrix of socio-demographic and job satisfaction of the employees in the PCBs of Bangladesh (N = 590)

	1	3,000 111 11.		2	_	/		
	1	2	3	4	5	6	7	Y
1. Bank type	1							
2. Gender	027	1						
	.510							
3. Age level	078	165(**)	1					
	.058	.000						
4. Marital position	.136(**)	.093(*)	450(**)	1				
	.001	.024	.000					
5. Education level	.056	104(*)	005	002	1			
	.175	.012	.911	.964				
6. Monthly salary	085(*)	082(*)	.659(**)	291(**)	.200(**)	1		
	.039	.048	.000	.000	.000			
7. Tenure	112(**)	112(**)	.862(**)	392(**)	012	.703(**)	1	
	.006	.006	.000	.000	.762	.000		
Y	.112(**)	.042	129(**)	.107(**)	.013	080(*)	111(**)	1
	.006	.314	.002	.009	.746	.053	.007	

^{**} Correlation is significant at the 0.01 level (2-tailed)

Source: Field Study, 2020

5. Discussions

It is revealed that nature of bank is the key component which has a significant correlation with job satisfaction in the chi-square test and correlation analysis. Therefore, null hypothesis is accepted. Binary logistic regression shows that the employees of the conventional commercial banks are more satisfied than employees of Islamic banks. The result is similar with correlation analysis as correlation analysis shows the positive relationship between nature of the banks and job satisfaction. There are 11.2% positive relationships between nature of the banks and job satisfaction.

^{*} Correlation is significant at the 0.05 level (2-tailed)



It is also observed that statistically gender has no significant impact on job satisfaction in the selected PCBs of Bangladesh and it is insignificant in both the analyses. Thus, alternative hypothesis is accepted. Additionally, it is reported that gender is statistically insignificant with job satisfaction in the earlier studies (Faroque, Ferdausy, & Rahman, 2020; Faroque et al., 2019; Madan & Srivastava, 2015). But some studies found a significant positive correlation between gender and job satisfaction in the context of banking sector (George & Zakkariya, 2015; Olorunsola, 2012). The results of the current study also unveiled that female employees are more satisfied than male employees in the PCBs of Bangladesh. This result is consistent with the previous studies (Clark, 1997; Clark, Oswald, & Warr, 1996). Conversely, some authors disclosed that the male employees have higher job satisfaction than female (Khan, Ramzan, & Butt, 2013).

In this study, employees' age is statistically significantly correlated with job satisfaction in both the analyses and, therefore, null hypothesis is accepted. It is argued that age can be a strong factor of job satisfaction (Faroque et al., 2014; Khan et al., 2013) while no significant impact of age on job satisfaction is reported by other authors (Antonaki & Trivellas, 2014; Rahman, Karan, & Arif, 2014; Kaya et al., 2010). In binary logistic regression and correlation analysis, it is uncovered that there is a negative relationship between age and job satisfaction. It is indicating that old aged employees are less satisfied. Available studies have also found an inverse relationship between age and job satisfaction (Jacob, 2012; Kamal & Sengupta, 2008).

This study discloses that marital position of the employees is significantly correlated with job satisfaction in the selected PCBs of Bangladesh in both the analyses. Thus, null hypothesis is accepted for this factor. This result is consistent with the previous studies (Faroque et al., 2019; Bader, Hashim, & Zaharim, 2013). But Madan and Srivastava (2015) have claimed no relationship between marital position and job satisfaction in the context of banks. The result of binary logistic regression discloses that married employees are more satisfied than unmarried employees. The result of the correlation analysis supports this finding.

Similarly, this study exhibits that academic level of the employees has a significant relationship with job satisfaction in the chi-square test. Interestingly, correlation analysis shows an insignificant relationship between academic level and job satisfaction. Therefore, in this situation, hypothesis H2 is rejected. However, available studies found a positive relationship between academic level and job satisfaction in the context of banking sector (Bader et al., 2013; Kamal & Sengupta, 2008). This result is inconsistent with other studies (Antonaki & Trivellas, 2014; Jegan & Gnanadhas, 2011). The result of the binary logistic regression shows that the employees who hold MBA and higher



degrees are more satisfied. A large number of studies also reported that educated employees are highly satisfied in the context of banks (Karan & Rahman, 2014; Bader et al., 2013; Kamal & Sengupta, 2008).

Additionally, this study reports that statistically salary is insignificant with job satisfaction in the chi-square test, but significant in correlation analysis. Thus, for monthly salary, hypothesis H2 is rejected. But the earlier literature shows that monthly salary has a significant correlation with job satisfaction in the context of various banks (Al-Abdullat & Dababneh, 2018; Ahmed & Uddin, 2012). Interestingly, Mondal, Faroque, Rahman, and Hossian (2012) find an insignificant relationship between monthly salary and job satisfaction. The result of correlation analysis exhibits that the monthly salary is negatively correlated with job satisfaction. It specifies that job satisfaction will decrease with increasing monthly salary. The result is also alike with the result of binary logistic regression.

Lastly, the result of the current study discloses that the length of tenure is significantly correlated with job satisfaction of the employees in both the analyses and, thus, null hypothesis is accepted. This result is consistent with other findings (Bader et al., 2013; Jegan & Gnanadhas, 2011). Nonetheless, length of tenure was insignificant to the other historical studies in the context of various banks (Madan & Srivastava, 2015; Antonaki, & Trivellas, 2014). Both analyses show the inverse relationship between the length of tenure and job satisfaction and indicating that highly experienced employees are less satisfied than lower experienced ones. However, other studies clarified that length of tenure has highly positive correlation with job satisfaction in the context of different banks (George & Zakkariya, 2015; Jegan & Gnanadhas, 2011).

Table 6: Summary of the significance level of the socio-demographic variables and job satisfaction in the selected PCBs of Bangladesh

Factors		Correlation	Correlation in other studies			
	Correlation analysis	Chi-s	quare	Significant	Insignificant	
		Pearson	Logistic model			
Bank nature	Positive strongly significant	Significant	Conventional bank (HS)	Data are not available	Data are not available	
Gender	Insignificant	Insignificant	Female (HS)	George & Zakkariya, 2015; Belias et al., 2013; Olorunsola, 2012	Faroque et al., 2019; Madan & Srivastava, 2015; Antonaki & Trivellas, 2014	



Factors		Correlation		Correlation in other studies			
	Correlation analysis	Chi-s	square	Significant	Insignificant		
		Pearson	Logistic model				
Age	Negative strongly significant	Strongly significant	Below 30 years (HS)	George & Zakkariya, 2015; Belias et al., 2013; Khan et al., 2013	Antonaki & Trivellas, 2014; Kaya et al., 2010; Crossman & Abou-Zaki, 2003		
Marital status	Positive strongly significant	Strongly significant	Married (HS)	Faroque et al., 2019; Bader et al., 2013	Madan & Srivastava, 2015		
Education	Insignificant	Significant	MBA and others Degree (HS)	Bader et al., 2013; Kamal & Sengupta, 2008	Antonaki & Trivellas, 2014; Sohail & Delin, 2013; Jegan & Gnanadhas, 2011		
Monthly salary	Negative significant	Insignificant	Below Tk. 35000 (HS)	Al-Abdullat & Dababneh, 2018; Ahmed & Uddin, 2012	Mondal et al., 2012		
Length of service	Negative strongly significant	Strongly significant	Below 5 years (HS)	George & Zakkariya, 2015; Belias et al., 2013; Bader et al., 2013	Madan & Srivastava, 2015; Antonaki & Trivellas, 2014; Crossman & Abou-Zaki, 2003		

Note: HS- high satisfaction Source: Field Study, 2020

6. Implications for Management

The study shows an important phenomenon that by using same data the results would be varied through different statistical analysis. The study reveals different results regarding the relationship between the socio-demographic factors and job satisfaction by applying different statistical tools though same data are used. Thus, the study is important for scholars, researchers, students, HR managers, and authorities of the banks. The study suggests that to increase job satisfaction of the



employees the authorities of the PCBs should reduce long office hours and rigid leave policies. They should also raise the salary and other benefits to increase the job satisfaction of the employees in the PCBs of Bangladesh. It is further recommended that the authorities should offer funds to the employees to study banking related programs and provide training on regular basis. Therefore, this study suggests positive implications for all the stakeholders in the PCBs of Bangladesh.

7. Conclusions and Scope of Further Research:

A very specific sector (only bank) and area (maximum data were collected from northern part of Bangladesh) were the important limitations of the study. Another vital limitation was using the convenience samples that might reduce the acceptance of the findings. Additionally, this study only focuses on a small portion of PCBs of Bangladesh. Most of the data were gathered from the entry and junior level employees. The suitability of the data was not tested which was another limitation of the study. This study considers only some socio-demographic variables that influence job satisfaction whereas other important variables were ignored.

To address the limitations, the future research should concentrate on the whole banking sector covering all geographic regions of Bangladesh. Secondly, upcoming study may consider the simple random sampling technique for data collection which may improve the acceptance of the findings. Thirdly, data collection from all levels of employees may produce diverse results. Finally, use of structural equation modeling (SEM) may generate more reliable findings regarding the construct validity of the tools used.

The conclusions are made in three ways. Firstly, it is recognized that the employees in the PCBs are suffering from long working hours, rigid leaves policies, and indefinite responsibilities and accountabilities. Therefore, the authorities should take different measures, such as, introduce flexible working hours, lessen financial responsibility and accountability at every level, reduce work load, employ more skilled and experienced workers, add advanced technology, introduce ATM and other related services everywhere, ensure sound performance appraisal and promotion, increase recognition, appreciation and collaboration, and transparent reward system to enhance the job satisfaction of employees. Secondly, the study discloses similar results of some socio-demographic variables such as nature of the bank, gender, age, marital position and length of tenure in the chi-square test as well as correlation analysis while dissimilarities are reported in the variables like academic level and monthly salary in both the analyses. Finally, the study concludes that in case of



measuring correlation between the variables, correlation analysis is more reliable than only using chi-square test.

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Appendix:

The Minnesota Satisfaction Questionnaire

On my present job, this is how I feel about	5	4	3	2	1
			ر		1
Many of our rules and procedures need to be streamlined	5	4	3	2	1
I like the people I work with	5	4	3	2	1
I find I have to work harder at my job because of the incompetence o people I work with	5	4	3	2	1
I like doing the things I do at work	5	4	3	2	1
I have too many duties and responsibilities	5	4	3	2	1
I know what is expected of me at work	5	4	3	2	1
I know how to measure the quality of my work	5	4	3	2	1
The people I work with cooperate as a team	5	4	3	2	1
•	5	4	3	2	1
	5	4	3	2	1
I would consider leaving my job for another with better pay	5	4	3	2	1
I would consider leaving my job for another with greater opportunities for advancement	5	4	3	2	1
All employees have an equal opportunity to further their education	5	4	3	2	1
I feel my job has value to the community	5	4	3	2	1
There are other job skills I would like to learn	5	4	3	2	1
I can rely on my supervisor	5	4	3	2	1
I often feel that I do not know what is going on with the organization	5	4	3	2	1
I feel I can go to management if my supervisor doesn't listen	5	4	3	2	1
I feel I am being paid a fair amount for the work I do	5	4	3	2	1
I am not satisfied with the benefits I receive	5	4	3	2	1
I do not feel that the work I do is appreciated	5	4	3	2	1
I would like to see employee recognition and appreciation by	5	4	3	2	1
management and my fellow employees	5	4	3	2	1
There are few rewards for those who work here	5	4	3	2	1
As it plans for the future, my department or agency asks for my ideas I have the opportunity to give input on decisions affecting my work	5	4	3	2	1
	I like the people I work with I find I have to work harder at my job because of the incompetence o people I work with I like doing the things I do at work I have too many duties and responsibilities I know what is expected of me at work I know how to measure the quality of my work The people I work with cooperate as a team I have a safe workplace I would not consider leaving my job I would consider leaving my job for another with better pay I would consider leaving my job for another with greater opportunities for advancement All employees have an equal opportunity to further their education I feel my job has value to the community There are other job skills I would like to learn I can rely on my supervisor I often feel that I do not know what is going on with the organization I feel I can go to management if my supervisor doesn't listen I feel I am being paid a fair amount for the work I do I am not satisfied with the benefits I receive I do not feel that the work I do is appreciated I would like to see employee recognition and appreciation by management and my fellow employees There are few rewards for those who work here As it plans for the future, my department or agency asks for my ideas	I like the people I work with I find I have to work harder at my job because of the incompetence o people I work with I like doing the things I do at work I have too many duties and responsibilities I know what is expected of me at work I know how to measure the quality of my work The people I work with cooperate as a team I have a safe workplace I would not consider leaving my job I would consider leaving my job for another with better pay I would consider leaving my job for another with greater opportunities for advancement All employees have an equal opportunity to further their education I feel my job has value to the community There are other job skills I would like to learn I can rely on my supervisor I often feel that I do not know what is going on with the organization I feel I can go to management if my supervisor doesn't listen I feel I am being paid a fair amount for the work I do I am not satisfied with the benefits I receive I do not feel that the work I do is appreciated I would like to see employee recognition and appreciation by management and my fellow employees There are few rewards for those who work here As it plans for the future, my department or agency asks for my ideas	I like the people I work with I find I have to work harder at my job because of the incompetence opeople I work with I like doing the things I do at work I have too many duties and responsibilities I know what is expected of me at work I know how to measure the quality of my work The people I work with cooperate as a team I have a safe workplace I would not consider leaving my job I would consider leaving my job for another with better pay I would consider leaving my job for another with greater opportunities for advancement All employees have an equal opportunity to further their education I feel my job has value to the community There are other job skills I would like to learn I can rely on my supervisor I often feel that I do not know what is going on with the organization I feel I can go to management if my supervisor doesn't listen I feel I am being paid a fair amount for the work I do I am not satisfied with the benefits I receive I do not feel that the work I do is appreciated I would like to see employee recognition and appreciation by management and my fellow employees As it plans for the future, my department or agency asks for my ideas 5 4 4 5 4 5 4 5 4 5 4 5 5 4 5 5 4 5 7 5 7 5 5 7 6 5 8 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	I like the people I work with I find I have to work harder at my job because of the incompetence opeople I work with I like doing the things I do at work I have too many duties and responsibilities I know what is expected of me at work I know how to measure the quality of my work I have a safe workplace I would not consider leaving my job I would consider leaving my job for another with better pay I would consider leaving my job for another with greater opportunities for advancement All employees have an equal opportunity to further their education I feel my job has value to the community There are other job skills I would like to learn I can rely on my supervisor I often feel that I do not know what is going on with the organization I feel I can go to management if my supervisor doesn't listen I am not satisfied with the benefits I receive I do not feel that the work I do is appreciated I would like to see employee recognition and appreciation by management and my fellow employees As it plans for the future, my department or agency asks for my ideas 4 3 A 3 A 4 3 A 5 A 6 4 3 A 7 A 7 A 8 A 8 A 8 A 9 A 9 A 9 A 9 A 9	I like the people I work with I find I have to work harder at my job because of the incompetence opeople I work with I like doing the things I do at work I like doing the things I do at work I have too many duties and responsibilities I know what is expected of me at work I know how to measure the quality of my work I have a safe workplace I would not consider leaving my job I would consider leaving my job for another with better pay I would consider leaving my job for another with greater opportunities for advancement All employees have an equal opportunity to further their education I feel my job has value to the community There are other job skills I would like to learn I can rely on my supervisor I often feel that I do not know what is going on with the organization I feel I can go to management if my supervisor doesn't listen I am not satisfied with the benefits I receive I do not feel that the work I do is appreciated I would like to see employee recognition and appreciation by There are few rewards for those who work here As it plans for the future, my department or agency asks for my ideas 5 4 3 2 As it plans for the future, my department or agency asks for my ideas

Source: Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1967). *Manual for the Minnesota Satisfaction Questionnaire*. The University of Minnesota Press.

Demographic Information:

- 1. Gender : i) Male ii) Female
- 2. Age: i) less than 31 years ii) 31 years iii) more than 31 years
- 3. Education: i) Bachelors & Masters ii) MBA & Higher degrees
- 4. Marital status: i) Single ii) Married
- 5. Bank nature: i) Islamic ii) Conventional
- 6. Monthly salary: i) less than 36000 tk ii) 36000 tk iii) more than 36000 tk
- 7. Tenure: : i) less than 6 years ii) 6 years iii) more than 6 years



Factors Influencing Business Success of Women Entrepreneurs: Empirical Evidence from Bangladesh

Bankim Chandra Sarker

ABSTRACT:

Women entrepreneurs in Bangladesh have gained significant attention in recent years. A key area for which they are gaining much attention is their business success. The purpose of this paper is to examine the key factors influencing women's business success in Bangladesh. This study uses data collected via a well-structured questionnaire from 100 women entrepreneurs in Bangladesh for analysis using frequency table and multiple regression model. The findings of this study reveal that internal motivation, financial support, managerial skill, innovation and creativity, social ties, government assistance and environmental support take paramount importance while women entrepreneurs want to have their business success. The study will provide the policymakers and business practitioners with valuable insights for promoting women entrepreneurship in Bangladesh. Finally, implications and areas for future research are discussed.

Keywords: Women entrepreneurs, business success, socio-economic development and Bangladesh.

1. Introduction

Women's contribution to entrepreneurial activities has recently gained significant attention because of economic and social concerns, government support and initiatives and increased education and awareness (Amrita et al., 2018). Entrepreneurship is widely accepted as an important driver of economic growth, productivity, innovation and employment generation. It is seen that economies with high participation of women entrepreneurial activities are more resilient to financial crises and experience less economic slowdowns (Global Entrepreneurship Research Association 2017, 29).

In Bangladesh, women constitute roughly half of the population. So, the development processes of the country can be accelerated ensuring their active participation. Given the economic and social contribution made by the entrepreneurial programs, it is significant to understand the factors that lead to the success of women-owned businesses. An understanding of these factors may result in measures that could reduce the failure of these businesses.



Women entrepreneurs in Bangladesh represent a group of women who have broken away from the beaten track and started finding out new ways of participation in economic activities. More and more women are expressing their interest in entrepreneurial activities and launching micro and small scale industries in the country that can contribute to the economic development of the country (Begum, 2001). Women-owned enterprises not only contribute to overall economic, political and social development of the country but also to women's liberation and empowerment to acquire their own goals and ambitions (Roomi and Harrison, 2010).

Most entrepreneurship research conducted on individual basis focused on male entrepreneurs. The findings of earlier studies reveal that there is no important distinction between men and women entrepreneurs (Carter, 2000; Carter and Cannon, 1992). Findings of other research studies show that women entrepreneurs differ from that of men in terms of characteristics, motivation, entrepreneurial competencies and the constraints they face. Furthermore, studies on women entrepreneurship are normally been conducted in developed countries (Welter et al., 2006; Cetindamar et al., 2012) and very little research conducted in developing countries (Javadian and Singh, 2012). So, conducting a study on women entrepreneurship is of much importance. The purpose of this paper is to examine the key factors that influence the business success of women entrepreneurs in Bangladesh.

The remainder of this study is structured as follows. Section 2 explains the literature review of this research. Section 3 presents the research methodology. Section 4 presents the results of data analysis using frequency tables and multiple regression model. Section 5 presents the findings of this paper and their implications. Section 6 concludes by showing the limitations of the study and suggesting future research direction.

2. Literature Review and Conceptual Model

The concept of women entrepreneurship is widely welcomed today. But it is realized by analyzing history that women's involvement in business world was not welcomed with priority (Gay, 2016). Women entrepreneurs are seen to face different problems and challenges while initiating and flourishing their businesses. And these have effects on their business performance or success (OECD, 1997 and 2004). Besides, little attention has been given to women entrepreneurs due to patriarchy (OECD, 2004). It is also revealed from the earlier studies that entrepreneurship theories, researches, policies and programs seem to be men focused and neglect the concept of women entrepreneurship (OECD, 2004). There are not much attempts made to conduct a comprehensive research study to examine the key factors influencing women's business success in Bangladesh.

In Bangladesh, women entrepreneurs are engaged in various areas of business like retailing, education, health care, handicraft, beauty parlors, block printing and boutiques, bakery, fast



food, doll making, tailoring, fabrics paint, interior decoration, and non-traditional initiatives including computer training centers, leather goods making, and fish culture (Rahman et al.,2020). In rural areas, they are engaged in cattle and poultry rearing, rice husking, spice making, imitation ornament trading, pickle making, and other micro-businesses. Most of these women fulfill the essential requirements of being entrepreneurs. But majority of women in Bangladesh are underutilized and women entrepreneurs own only 10% of the total businesses; whereas in developed countries women entrepreneurs own more than 30% of all businesses (Parvin et al.,2012). There are many stories of the business success of women entrepreneurs who can dominate in the business world through their continuous struggles and battles. Thus, it is of paramount importance to identify the factors that influence women entrepreneurs' business success in Bangladesh.

Women entrepreneurs and entrepreneurship were defined by the researchers in different ways. Chowdhury (2017) defines an entrepreneur as a person who can form a business to produce something new in the society with the creativity and initiative. Women who initiate and lead a business enterprise and grow through experiencing innovation, risk taking, coordination and leadership are women entrepreneurs (Kumar and Bhuvaneswari, 2016). A woman who faces all the risks in order to fulfill her needs and achieve financial independence is a woman entrepreneur (Nagarajan, 2016; Anjum, et al., 2012).

A key area for which women entrepreneurs are gaining much attention is their business success. An entrepreneur can be considered successful when he/she can sustain in the industry for the long term and flourish his/her operations of business amid risks and challenges. McKay (2001) shows that firms owned by women succeed mostly and manage to expand more rapidly than those owned by men. Paige and Littrell (2002) define success as intrinsic criteria including freedom and independence, controlling a person's own future, and being one's own boss. On the other hand, extrinsic outcomes include increased financial returns, personal income, and wealth. Masuo et al., (2001) denote that business success is commonly considered in terms of economic or financial measures including return on assets, sales, profits, employees and survival rates.

Most of the women initiate their own businesses to ensure additional flexibility and life balance in managing their traditional responsibilities as wife and primary caretaker of children (Nguyen, 2005).

A study conducted by (Alam et al., 2011) show that family support, strong social network and internal motivation influence positively and significantly to the success of women entrepreneurs in the small business. Brush and Hisrich (1991) identify that key factors toward business success include previous experience in the field, financial skills, idea generation, market opportunity and motivation. Successful women entrepreneurs most importantly have: family support (Schlosser 2001; Winn 2004); family support and social



networking (Kodithuwakku and Perera, 2003) government support (Sandberg, 2003); business background of their respective families rather than education for their career in business (Amarasiri, 2002).

Internal motivation is also an important factor that can contribute to success in business. Cuba et al. (1983) looked at the management practices of successful women business owners. They found that the more successful female business owners also were the ones willing or able to delegate most of the routine business activities to subordinates. Women entrepreneurs require proper support from the family and society to succeed in their venture. The important support that they get from family and friends and close people as well-wishers can contribute to the success of business (Brindley, 2005).

Financial independence and decision making, market and informational network, availability of a start-up capital, knowledge and skills, and responsibility towards children are also intervening factors to develop women entrepreneurship in a developing country like Bangladesh (Rashid and Nuseibeh, 2009). A study conducted by Deb et al.,(2012) found that factors behind the success of women entrepreneurs in Bangladesh are individual determination, psychological support, economical support, society's support, self-dependent, market opportunity, developed infrastructure and environmental support.

Innovation and the creation of something new are regarded as important factors leading to women-owned business success (Zapalska, 1997). Nawaz (2009) also denotes that innovativeness and risk taking behavior, government support, capital availability, knowledge and access to information technology, entrepreneurial training, and business experience are critical success factors of women entrepreneurs. The study conducted by (Agarwal et al.,2020) found that the development of entrepreneurial learning and competencies influenced by personal, social and environmental factors can lead women social entrepreneurs' success.

Ahmed (1981) suggested that entrepreneurial success be the combination of some psychological and economic variables. Factors of paramount importance to business success are good managerial skills, access to financing, personal qualities, and satisfactory government support (Yusuf, 1995). Sharabi and Harpaz (2013) opine that the government has a significant contribution to creating a positive momentum and changing the economic scenario of both men and women. Mohsin and Lei (2020) added that a supportive socio economic setting for women entrepreneurs can be initiated by the Government. The government of Bangladesh has undertaken different efforts to ensure equality in terms of gender, family and community development. So, there are equal chances for both genders to embrace entrepreneurship. Khondkar (1992) opines that entrepreneurship is the most important factor for economic development of a country. Kantor (1999) added that the increase of women prominence in



entrepreneurship has positive contribution to the country's GDP and Gross National Income (GNI). Kerta (1993) says that statistically, more than 30% of the contributions of the country's GDP, comes from women that are self-employed especially in micro and small sized enterprises.

As Bangladesh embraces digitization, women can reap the benefits through proper usage of modern information communication technology. The information and communication technology (ICT) makes it possible to create home based operations, inspire more women towards entrepreneurship with fewer resources, keep invisible or anonymous while doing business, foster an entrepreneurial personality, and creates a way to improve more than just one business (Martin and Wright, 2005). Women's involvement in entrepreneurship creates employment opportunities and ensures the overall level of socio-economic development. Kantor (1999) opines that many women support themselves and their families through the income they receive from their entrepreneurial activities. Based on the above literature review, the following hypothesis and conceptual model were proposed by the author:

H₁: There is impact of critical success factors on the women's business success in Bangladesh.

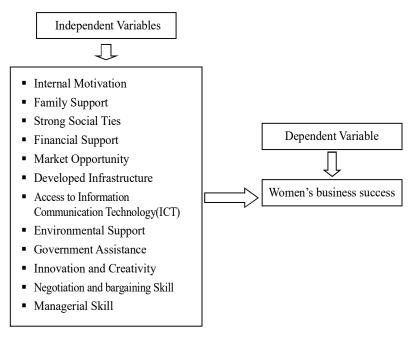


Figure- I: Factors influencing business success of women entrepreneurs in Bangladesh (Source: Author's Constructed)



3. Research Methodology

- **3.1 Nature of the study:** This study is a descriptive study where quantitative data were collected to examine the factors that influence the business success of women entrepreneurs in Bangladesh.
- **3.2 Research Sample:** Convenience sampling technique was followed to conduct the study. It is the only viable sampling method to gather information from a specific group(s) of people though it may restrict the generalization of the findings (Sekaran, 2000). Determining the sample size is complex and involves various considerations. Considering the resource constraints, 100 respondents were selected. The three major divisions namely Dhaka, Chittagong and Barishal represented Bangladesh in this study. The participants were chosen based on the information gathered from the Bangladesh Women Chamber of Commerce and Industry (BWCCI). The targeted respondents were the women entrepreneurs of Bangladesh.
- **3.3. Data collection:** For the study, data were collected from both the primary and secondary sources. Primary data were collected through survey method under which the personal interviewing technique was employed. Personal interview survey is a good technique of gathering more meaningful and deeper information (Explorable, 2018); besides it results in higher response rate and collection of detailed information (Statistical Training Unit, 2010). A self-administered questionnaire consisting of two segments was designed. Segment A began with general attempts querying respondent's background information, demographic information. In segment B, the items contained information regarding the factors leading to their business success in Bangladesh. The participants were requested to respond in anonymity to encourage their responses. Secondary data were collected from the sources like documents (journals, newspaper, and magazine) and internet. 5-point Likert scale was used for the research and data analysis purposes.
- **3.4 Model specification:** The regression model was as follows:

BSW= D+
$$\beta$$
1GA + β 2ES + β 3ST + β 4FS + β 5FIS+ β 6 MS+ β 7 MO + β 8IC + β 9DI+ β 10 IM+ β 11 ICT + β 12NB+ei

Where,

BSW = Business Success of women entrepreneurs in Bangladesh

D = Multiple Regression Constant

MO=Market Opportunity IC=Innovation and Creativity, DI=Developed Infrastructure, IM=Internal Motivation



AGA=Government Assistance

ES= Environmental Support,

ST=Social Ties

FS=Family Support

FIS=Financial Support

MS=Managerial Skill

ICT=Access to Information and Communication Technology

NB=Negotiation and Bargaining Skill

ei = Error term

4. Data Analysis and result

Data were analyzed by using frequency tables and multiple regression as described below:

4.1 Results of frequency table

The survey was conducted with some demographic variables shown in the following table:

Table-I: Demographic profile of the sample

Variables/Dimensions	Frequency	Percentage	Variables/Dimensions	Frequency	Percentage
Age			HSC	30	30.0%
18-25 Year	5	5.0%	SSC	31	31.0%
26-30 year	12	12.0%	Class Eight	5	5.0%
31-40 Year	45	45.0%	Primary (class five)	4	4.0%
41-50 Year	32	32.0%	No Formal Education	4	4.0%
51 and Above	6	6.0%	Nature of Ownership		
Marital Status			Sole Proprietorship	59	59.0%
Married	60	60.0%	Partnership	21	21.0%
Unmarried	23	23.0%	Co-operative	17	17.0%
Divorced	4	4.0%	Other	3	3.0%
Widow	9	9.0%	Type of Business		
Separated	4	4.0%	Services	40	40.0%
Educational level			Trading	30	30.0%
Post Graduation	6	6.0%	Manufacturing	24	24.0%
Graduation	20	20.0%	Other	6	6.0%

An analysis of respondents' profile (Table: II) indicates that most of the respondents (45.0%) are aged between 31-40 year old. Marital status of women in Bangladesh is also an important factor influencing their socio-economic life. In case of marital status, most of the respondents are married. Most of the women interviewed have education (31%)



-SSC, 30% -HSC, 20% -Graduates). It indicates that educated women are becoming more interested in business activities. Furthermore, most of the participants (59.0%) conducted sole proprietorship business. So, sole proprietorship business is still popular among the Bangladeshi women for the specific nature of this business. Lastly, most of the participants (40%) are involved in service sector.

4.2 Results of Multiple Regression

Main Purpose: The purpose of this analysis is to measure the relative influence of each independent variable on the dependent variable. Multiple regression model has the special abilities to handle relatively small sample sizes (Chin et al., 2003). The relative significance of each of the independent variable on the dependent variable can be measured from the associated coefficient.

Goodness of fit:

Table II: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.656ª	.431	.352	.17629	1.882

a. Predictors: (Constant), Government Assistance, Environmental Support, Social Ties, Family Support, Financial Support, Managerial Skill, Market Opportunity, Innovation and Creativity, Developed Infrastructure, Internal Motivation, Access to ICT, Negotiation and Bargaining

b. Dependent Variable: Women's business Success

Results

Here, the value of correlation coefficient, R = 0.656. So, the study found a high degree of positive correlation among the independent and dependent variables. The value of coefficient of multiple determination, R2 = 0.431 or 43%. 43% variation in the dependent variables can be explained by the regression model. The value of adjusted R2 = 0.352 or 35%. Adjusted R2 suggested that, addition of the other independent variables do not make a contribution in explaining the variation in the dependent variable. The Durbin-Watson statistic is always between 0 and 4. A value of 2 means that there is no autocorrelation in the sample. Here, the value is 1.882 which is close to 2. Hence, autocorrelation does not exist among independent variables or multicollinearity is unlikely a problem.



Standardized Coefficients:

Table III: Coefficients^a

		Unstanda Coeffic		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	2.879	.492		5.855	.000
	Government Assistance	078	.033	215	-2.359	*.021
	Environmental Support	.065	.030	.224	2.186	*.032
	Social Ties	076	.031	227	-2.452	*.016
	Family Support	007	.025	029	289	.773
	Financial Support	107	.032	395	-3.364	*.001
	Managerial Skill	.134	.046	.307	2.931	*.004
	Market Opportunity	.030	.045	.093	.676	.501
	Innovation and Creativity	091	.034	314	-2.691	*.009
	Developed Infrastructure	.052	.048	.103	1.081	.283
	Internal Motivation	.265	.048	.489	5.555	*.000
	Access to ICT	.117	.197	.152	.596	.552
	Negotiation and Bargaining	041	.180	057	230	.819

a. Dependent Variable: Women's business success

Regression Equation: Women's business Success in Bangladesh = (2.879) + (-.215) (Governmental Assistance)+ (.224) (Environmental Support)+ (-.227) (Social Ties)+ (-.029) (Family Support)+ (-.395) (Financial Support)+ (.307) (Managerial Skill)+ (.093) (Market Opportunity)+ (-.314) (Innovation and Creativity)+ (.103) (Developed Infrastructure)+ (.489) (Internal Motivation) + (.152) (Access to ICT)+ (-.057) (Negotiation and Bargaining).

Result of hypothesis:

The probability value of internal motivation (0.000), financial support (0.001), managerial skill (0.004),innovation and creativity (0.009) and social ties (0.016), government assistance (0.021), and environmental support (0.032) < 0.05, which indicates the support of the hypothesis (H1) (there is impact of the critical success factors on women's business success in Bangladesh).



Testing the overall significance:

Table IV: ANOVA^a

Mode	1	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.046	12	.171	5.487	$.000^{b}$
	Residual	2.704	87	.031		
	Total	4.750	99			

a. Dependent Variable: Women's business success

b. Predictors: (Constant), Government Assistance, Environmental Support, Social Ties, Family Support, Financial Support, Managerial Skill, Market Opportunity, Innovation and Creativity, Developed Infrastructure, Internal Motivation, Access to ICT, Negotiation and Bargaining

The statistical significance of the R2 value is calculated through the value of F statistics. The value of F statistics, in this study, is calculated at 0.05 significance level and the F value has been found to be 5.487 which is highly significant at 0.000 level.

5. Discussion of result and research implication

5.1 Discussion

The analysis confirmed that there is impact of critical success factors on women's business success in Bangladesh (H1). The finding suggests that internal motivation, financial support, managerial skill, innovation and creativity, social ties, government assistance and environmental support are important factors to the business success of women entrepreneurs in Bangladesh. These variables are significant at 5% level. The study found internal motivation as the most influential variable (here, standardized beta coefficient denoted by Coef. = .489) followed by financial support (Coef. = -.395); managerial skill (Coef. = .307); Innovation and creativity (Coef. = -.314); Social Ties (Coef. = -.227); government assistance (Coef.= -.215) and environmental support (Coef=.224). The finding of the study is consistent with some previous studies. Alam et al.,(2011) and McClelland et al.,(2005) found internal motivation and social ties have significant impact on business success. Innovation and creativity was found out an important variable (Zapalska, 1997); financial support (Deb et al., 2012);governmental support and environmental factor (Gupta and Mirchandani, 2018).

5.2 Implication

The finding of this study reveals that internal motivation, financial support, managerial skill, innovation and creativity, social ties, government assistance and environmental



support are significant factors for women entrepreneurs' business success in Bangladesh. Future practitioners and researchers can therefore benefit from the outcomes of this research by understanding the impact of key success factors on the women's business success. By understanding the factors that influence the success or performance of women entrepreneurs in Bangladesh, women entrepreneurs can extend their business operations nationally and globally.

The profile of the sample indicates that most of the participants are middle-aged, married, educated, involved in services and involved with sole proprietorship business. In Bangladesh perspective, marital status of women is still an important factor influencing women's economic involvement. Besides, educated women are showing much interest in business activities. Furthermore, the popularity of sole proprietorship business is still evident in Bangladeshi. Service sector dominates over the others because of its specific nature and advantages it provides. Future practitioners and researchers can also benefit from this demographic profile of the sample. This study also makes contributions to the existing literature. It adds to the current literature on women entrepreneurship by combining success factors of business in a single framework.

6. Conclusion and future research direction

Development of women entrepreneurship can lead to greater economic autonomy and gender balance, increase women self-esteem and confidence, ensure greater say in business decision making in the family, in the community and thus empower them economically and socially. Women entrepreneurs can prove their worth - when they get enough opportunities. Many women in Bangladesh have already showed and proved their skills, capabilities and excelled in different entrepreneurial activities. Though the paths to become successful as entrepreneurs are not easy, it is suggested that the more inclusion of Bangladeshi women in entrepreneurial activities be pursued. It is a promising fact for our country that more educated women are showing their interest in being entrepreneurs who can drive the economic development and stability. The findings of the study provide a strong support for hypothesized relationship connecting business success of women in Bangladesh and key success factors behind it. The study reveals that business success of women entrepreneurs in Bangladesh is dependent on various factors. Among them, internal motivation, financial support, managerial skill, innovation and creativity, social ties, government assistance and environmental support are more important. So, the women entrepreneurs should have these aspects.

The research findings can provide a thorough understanding about the variables that affect the success of women entrepreneurs in Bangladesh. The study had a few



limitations. The research was conducted on women entrepreneurs of Dhaka, Chittagong and Barishal, Bangladesh. Hence, the results of this paper may raise concerns about the generalization of the findings. A future direction of research is to conduct study on this area with a vast sample and large region to get a comprehensive scenario. Moreover, future studies may be conducted on an in-depth analysis of cross-country comparisons for promoting women entrepreneurship in Bangladesh.

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Effect of Networking on Performance of Small and Medium Enterprises (SMEs) in Khulna City: Does Entrepreneurial Orientation Matter?

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ABSTRACT

This study advances our understanding of the performance of Small and Medium Enterprises (SMEs) from the perspective of networking theory. Drawing on the theory, this study sets hypotheses to examine the relationship between networking and performance of SMEs. Along with examining relationships, this study also investigates whether entrepreneurial orientation moderates the hypothesized relationships. To actualize the objectives, this study selected causal research design. A closed ended structured questionnaire was used to collect data from entrepreneurs involved in SMEs located in Khulna City, Bangladesh through a survey which later was used for testing hypotheses applying hierarchical regression models. The results show that strength of ties, trust & confidence, relational capability, and cooperation have positive and statistically significant relationships with SMEs' performance but information sharing has negative relations. This study has not identified any evidence in favor of the influence of entrepreneurial orientation as moderator.

Keywords: Networking, SMEs Performance, Entrepreneurial Orientation, Relational Capability, Strength of Tie and Trust & Confidence.

Introduction

Small and medium enterprise (SME) is the fastest growing sector of the current economy that includes all areas of business like manufacturing, mining, wholesaling, retailing, and service. It has been recognized that SMEs play a significant role for the development of the economy creating employment opportunities (Scuotto et al., 2017). This contribution carries more importance for those countries where the population is high and many are unemployed. They are expected to provide tremendous support in facilitating rebuilding national economies after the recession (Soininen et al., 2012). Today in the competitive era it is quite difficult for SMEs to cope with competition without maintaining strong networks. The importance of networking for SMEs has already been recognized by scholars (Cova, Mazet, & Salle, 1994; Partanen et al., 2008; Tikkanen, 1998). When firms tend to build networks, they should concentrate on continuous interactions with customers, suppliers, competitors and other stakeholders. Along with interactions, SMEs

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should update important parties providing necessary information timely for establishing sustainable networks for a longer period of time. Long term relationships among other organizations and people are the preconditions for a good network (Farnco, 2018).

When a new venture is launched, it tends to survive and for surviving, it must generate more awareness among customers and suppliers to continue operations smoothly. To sustain in future, networking is a must because the more awareness among customers means the higher possibility of business success and performance. Eventually, from the family to the corporate level, the significance of networking cannot be underestimated because it contributes to making firms successful (Anwar et al., 2018). Networking has a favorable contribution to a firm's performance because it provides valid knowledge and information and helps to achieve credibility in the customer's mind which contributes to building long term relationships with customers. In addition, the network provides the assurance of new idea generation by exchanging ideas, experience and information with others. Through the utilization of networking entrepreneurs get acquainted with updated knowledge and skills that in turn plays roles in accelerating performance.

A substantial number of studies have already been conducted focusing on networking and performance. Some studies exhibit how firms can utilize networking for allocation of resources for excellence in business (Terziovski, 2003). The intention was to gain an understanding of networking capabilities for accessing into the operation of the international market & knowing the activities of international market operation. Another study explores how network & networking activities contribute to marketing decision making (Aodheen, 1999). Ferdous et al. (2017) investigated how to enhance innovativeness in business processes through the utilization of networking. On other hand, MacGregor (2004) focuses on the ways organizational and environmental factors are influenced by utilization of networking. The conducted by Harris et al. (2012) explains how networking activities can impact business growth and how it creates value to its customer and supplier. It reveals from the extant studies that most scholars concentrate on the influence of networking on positive outcomes such as performance, value creation, and innovation ignoring inclusion of moderators or mediator which is important for exploring relationships between social variables. Besides, there is hardly any study that has been conducted focusing on developing countries as those studies are based on the context of developed countries. And this is why there is a deficiency of such studies in the context of developing countries like Bangladesh. To address the gap, this study focuses on the relationships between networking and performance of SMEs and the role entrepreneurial orientation as moderator in this relationship in the context of Bangladesh. Specific research questions are:



- a. Is there any relationship between networking and firm performance?
- b. Does entrepreneurial orientation moderate the relationships?

RESEARCH METHODOLOGY

Research design is a technique that deals with procedures necessary for obtaining information and processing them structurally to solve study problems. It is vital to select appropriate design from exploratory, descriptive and causal to actualize objectives. This study has been conducted using causal design as the intention is to examine the relationship between networking and firm performance.

Population & Sampling Procedure

Population

For this study, the population includes small and medium enterprises (SMEs). There are many SMEs in Khulna city and from them this study investigates firms involved in the manufacturing and service industry. This study covers firms like furniture, restaurants, groceries, bakeries, and clothing stores.

Samples size

Sample size has been determined following the guideline of Malhotra & Dash (2004) who suggested that there should be at least four or five times as many sample sizes as there are variables. According to the suggestion, this study selected 150 respondents from manufacturing and service based SMEs located in Khulna city.

SamplingTechnique

According to the nature of this study, non probability quota sampling was used to collect data from respondents. Quota sampling was used in data collection with the intention of ensuring representation of all areas of Khulna city. This is why the survey was conducted in various areas of Khulna city such as Dakbangla, Nirala, Moylapota , Sonadanga , Satrasta , Gollamari, Rupsa , Bosupara, Shibari and KDA Avenue. Respondents were entrepreneurs involved in businesses in different areas and locations in Khulna city.

Data Collection

Primary data were collected from surveys using close ended structured questionnaires from the entrepreneurs involved in service and manufacturing based SMEs. The first part of questionnaire consists of questions designed to obtain demographic data such as age, sex, education level, and the second part is designed to collect business information like organization types, age of business, and number of employers. And the third part is designed to capture perceptions on networking and performance of SMEs.



Dependent and Independent Variables

In this study SMEs performance is a dependent variable which is measured using five statements which were formatted relating to the five point likert scale. On the other hand, five constructs have been selected reviewing existing literature on networking which are: strength of tie, relational capability, trust & confidence, information sharing and cooperation. Apart from this, entrepreneurial orientation has been selected as the moderator of the study. All the constructs were measured using statements which scored on a five point likert scale.

Control Variables

There are some variables not included in theory but they affect dependent variables like explanatory variables and this is why they are included in models for greater explanatory power. In line with these requirements, this study includes age, education of respondents, type of Firms surveyed, and number of employees.

Analysis Technique

Hierarchical regression analysis was applied to determine the relationship between firm's performance and SMEs networking and the moderating effect of entrepreneurial orientation. Descriptive statistical techniques such as mean, correlations were also used.

Questionnaire Design

The questionnaire was designed following close ended questions to get information about the phenomena. Questions were structured in nature which enabled respondents to express perceptions useful for actualization of research objectives. Questionnaire was finalized pursing previous literature and all the questions were simple & easily understandable for the respondents.

Reliability Test

Questionnaires do not emerge as a ready form; rather they need to be created or developed to capture perceptions of respondents on the constructs used for measuring the key variables (Oppenheim, 1972). The first step is to assess whether the questionnaire has a strong content validity. Content validity is the process of establishing a questionnaire by asking an expert in the field to assess whether his or her opinion is in fact measuring the research objective (Cavusgil, 2005). For completion of this study first 30 questions were developed focusing on variables to actualize the objectives set for the study and a survey was conducted on 15 respondents of SMEs form different areas of Khulna city for identifying the factors affecting firm performance. Then the collected data were used for initial calculation of cronbach alpha for reliability check using SPSS. In the first steps, analysis showed that reliability of all constructs was too poor (below 0.60) except firm performance. The alpha of firm performance was 0 .769. Then from the rest of the five



constructs, some of the questions were changed and modified based on the direction of Cronbach's score. Also some questions were omitted considering their inconsistencies with other questions. For example two questions were omitted namely "we can deliver the product within ordered time" and "we can find market need through good integration" that were initially set for measuring strength of tie. In the same way questions developed under constructs such as 'relational capability', trust & confidence, and cooperation were modified. Then the modified questionnaire was used to conduct another survey where 20 respondents were interviewed. The reliability scores of all constructs were found good and in that way a questionnaire was finalized.

THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Theoretical framework is a gathering of concepts that supports the study. It's a guideline for researchers to measure the relationships. Based on the context of study, the theoretical framework will be completed following theory.

Network and Networking

Network is all about building relation or interaction with an individual or organizations to enhance a firm's performance. So, a network can be described "as the relationship between an organization management committee and employees with customers and suppliers as well competitors and government agencies, distributor, banker, families, or any other party that enables smooth business activities (Zain, 2006). According to Street & Cameron (2007) networks can be considered an important business opportunity which assists business with a higher profitability. On the other hand, networking is a systematic process of connecting together with a unique goal and exchanging information or ideas with others and a cooperation through idea generation which leads to mutually beneficial relationships (Smith, 1997).

Networks Theory

Network theory recommends that the capability of owners to get inserted into resources in a cost-effective way through networking that can affect the progress of business ventures (Schulze, 2003). Networking works as the strength of any organization where a firm, an institution or individuals can easily interact with customers or others which means an organizational relational capability greatly lies on its best utilization of networking. In addition, an investigation shows that networking by cooperation can facilitate the movement of economies in small firms (Julien, 1993). Therefore, utilization of networks can potentially decrease a firm's risk of failure and increase its chances of attaining success. So, to decrease the riskiness of failure information sharing is mandatory (Watson, 2007). Network theory involves an organized process of relations between entrepreneurs and others which helps to measure the value of the small business sector (Dyer & Singh, 1998).



Personal networking is all about the demonstration of a good relationship with a person that can lead to financial support, business information, and social contracts. It consists of all people with whom a person or an entrepreneur has direct relations including partners, suppliers, customers, venture capitalists, and other creditors, distributors, trade associations (Dubini & Aldrich, 1991). So, personal networking is an interactive tool to convince & attract customers by an individual idea, skills, and ability. It is the interaction or relationship between two or more persons. This intends to share information which mainly depends upon how people make interactions with others. To maintain a good relationship a person has to focus on building good relational capability with others, strengthening the ties with others, and ensuring trust & cooperation. When those elements can be ensured by a person then it will be possible to interact easily with others. Among the dimensions of personal networking the strength of ties, relational capability, ensure trust & confidence, idea generations, referrals is used as a tool to enhance SMEs performance.

Strength of Tie

Strength of tie is a requirement for construction of networks which support business performance (Dubini & Aldrich, 1991). Performance of firms largely depends on how they interact with their customers, suppliers, distributors and so on. When an individual or entrepreneur closely monitors customers' demands and cooperates with them according to needs then it can be easy to build up a strong tie with customers which are a crucial strategy to sustain in long run competition. Also strength of tie is primarily concerned with sharing or linkage of information between two or more actors (Granovetter, 1973). The linkage between two entrepreneurs is either weak or strong (Rindfleisch & Moorman, 2001) but when strength of ties are strong firm performance will increase & when strength of ties are weak firms performance is likely to drop as well. Generally, ties with families and friends are considered strong (Granovetter, 1982) because an exchange of information has occurred within relationships. Moreover, a good relationship with relatives is more effective in terms of reducing labor costs because family and friends relatively take fewer wages than market wages and are more predictable. Through the strength of ties, firms can enter strategic alliances with competitors to gain access to external resources, share risks and cost quality & complementary skills (Hagedoom, 1993). Above discussion and arguments lead to draw the following hypothesis:

H₁: There is a positive relationship between strength of tie and SMEs performance.

Relational Capability

Relational capabilities help to enhance new knowledge and competencies that in turn contribute to enhanced performance (Hakansson, 1987). Entrepreneurs tend to keep close interaction, intense & frequent relation with customers to ensure their involvement in



business operations for greater performance. Moreover, firms in high competitive markets tend to develop effective communication processes to acquire more information from various sources that demand good relational capabilities. In addition to building a good relationship with customers, entrepreneurs must be aware of the market demand and to supply necessary products or services to meet the demands. Previous studies confirm that a high degree of relationship embedded in networks enhances the level of access and transfer of fine-grained information (Gulti, 1999). A good relationship means good interaction with clients and better communication contributes to enhancing performance.

H₂: There is a positive relation between relational capability and firm's performance.

Trust & Confidence

Building trust is a crucial element to ensure a strong performance. Trust works as a capital of business because it may exist after a certain period of time when a good relationship is developed. Without achieving trust an idea of networks seems to promise less efficiency (Eberl, 2004). Through achieving trust, firms can easily retain loyal customers. To achieve trust, entrepreneurs have to spend time with family, relatives, suppliers, customers, government bodies which helps to develop trust in a network of relationships. When trust exists, the relationship tends to be close and diverse, and then customers can know more closely about individuals and achieve more faith to buy things. It is also a component of business dealing for example when building trust with material suppliers provides easy access to martial supplies even during shortages & takes a very lower cost than others even if they provide credit which helps to supply product in the market timely. So, trust might be a strategic competitive tool which works as a safeguard and controlling mechanisms for better networking and at times it helps to bring organizational performance (Lyles, 1998). So, the discussion concludes with the following hypothesis.

H₃: There is a positive relationship between trust & confidence and Performance of SMEs.

Information Sharing

Information sharing is a process of exchanging and delivering information with others. Through information sharing firms can make customers more aware about attributes existing and new products or services timely. It is one of the effective ways of keeping customers and stakeholders updated. Internal communication is part of the network capability through which employers know how they perform in markets (Walteret et al., 2006). When customers get new information they feel more curious to buy new products or services. Information sharing is an effective way of acquisition, integration, utilization and evaluation of new knowledge which particularly depends on the interactions with stakeholders. A greater interaction demonstrates that a firm can acquire relevant information



that in turn facilitates enhanced performance of ventures in markets (Chetty & Eriksson, 2002). This discussion inspires us to hypothesize the following statement.

H_a: There is a positive relation between information sharing and firm performance.

Cooperation

Through cooperation a firms actively help to its customer and thus others are motivated which will lead to performance (Bonner, 2005). Cooperation helps because the argument is if a firm actively engages in seeking out partners, information, and resources with an appropriate relation development with customers then the firm will have a greater chance of opportunities that will lead to enhanced is sales by properly investigate the customer problem. Through making cooptation with other employers a best teamwork can be ensured which helps to bring more dynamic and innovative in production process. By this way more quality products can be insured which helps to attract customers and increase sales. Cooperation facilitates the ways of open discussion where new ideas can be generated to enhance productivity. Co-operation has a greater contribution to SMEs' performance if it can manage properly. Form this Information hypothesis 5 can be stated.

H5: There is a positive relation between cooperation and firm's performance

Entrepreneurial orientation is a kind of behavior displayed by entrepreneurs when involved in business operations in markets. It is the combination of some unique traits such as innovativeness, risk taking, proactiveness. According to Lumpkin and Dess (1996), "innovativeness, risk taking, proactiveness, autonomy and competitive aggressiveness may be present when a firm engages in a new entry. In contrast, successful new entry may also be achieved when only some of these factors are operating to the extent that each of these dimensions is useful for predicting the nature of success of a new undertaking". When entrepreneurs have such an orientation, it will guide them in developing new ideas, taking risk of new investment and thinking before competitors. All of the activities are essential for SMEs for successful and continuous sustainability and ultimately better performance in markets. Therefore, it can be hypothesized that the relationship between networking and firm performance will be expiated when SMEs have entrepreneurial orientation.

H6: Entrepreneurial orientation moderates the relationship between networking and firm performance positively.

ANALYSIS

Descriptive Statistics

Descriptive statistics and correlations for all variables are provided in Table 1. The average age level of respondents is 39.12 years. We find low levels of correlation



between variables. Firm performance has correlations with variables used for measuring networking such as strength of tie, information sharing, trust, relational capability and cooperation and they are statistically significant (p<.05).

Regression Statistics

We applied multivariate regression models built on ordinary least square (OLS). We conducted several tests to be assured of the quality of data and to check all the assumptions of OLS regression (Hair et al., 2006). At first, outliers are detected pursuing the technique recommended by Hair et al. (2006) for multivariate data. Breusch-Pagan tests were applied to check whether the data suffer for heteroskedasticity and the results show that distributions do not have constant variance (Model 1: χ 2= 30.92, p <.05; Model 2: χ 2= 81.27, p <.05; Model 3: χ 2= 80.31, p <.05; Model 4: χ 2= 55.52, p<.05). Therefore, robust regression has been run to address this inconsistency so the models do not suffer for the heteroskedasticity problem. All the individual variance inflation factors (VIF) are below 1.50 and the critical value of 10 so it is concluded that data are not distorted by multicollinearity (Neter, Wasserman, Kutner1985). All variables were mean centered prior to the formation of interaction terms, as recommended by Aiken and West (1991).

Table 1: Descriptive Statistics

	Mean	SD	Age	Gender	Education	Org_type	Age of operation	Number of Employees	Firm_Perf	Streght_Tie	Trust	Info_Sharing	Relations	Cooperation	Ent_Orient
Age	39.12	10.80	1												
Gender	1.05	.22	154	1											
Education	3.08	1.15	001	068	1										
Org_type	1.73	.45	074	.012	.082	1									
Age of operation	2.73	1.01	.347**	143	.133	014	1								
Number of Employees	1.29	.48	.070	021	.234**	216**	.228**	1							
Firm_Performance	4.00	.60	.061	.071	.158	058	028	.046	1						
Streght_Tie	3.97	.76	.054	.112	.061	037	096	048	.725**	1					
Trust	3.94	.65	.063	.076	.131	073	003	014	.727**	.597**	1				
Info_Sharing	3.58	.75	039	.107	007	.009	026	.040	.097	.105	.163*	1			
Relation	3.85	.65	.088	001	.141	019	.009	.022	.623**	.555**	.451**	.073	1		
Cooperation	3.82	.77	.087	.090	.010	.004	030	.025	.419**	.288**	.286**	.159	.465**	1	
Ent_Orientation	3.74	.48	.125	.016	.006	.054	066	056	.312**	.284**	.243**	.125	.361**	.689**	1



Table 2: Regression Statistics

Variables	Model 1	Model 2	Model 3	Model 4
Control Variables				
Age	.005	001	0005	.001
	(.004)	(.002)	(.002)	(.002)
Gender	.237	010	018	.001
	(.136)	(.065)	(.068)	(.076)
Education	.094	.024	.024	.03
	(.058)	(.028)	(.028)	(.026)
Organization Type	092	009	005	.0006
	(.097)	(.061)	(.063)	(.065)
Age of Operation	044	003	005	.015
	(.067)	(.030)	(.031)	(.028)
Number of Employees	.001	.066	.062	.05
	(.107)	(.06)	(.058)	(.05)
Main Variables				
Strength of Tie		.281**	.285**	.241**
		(.102)	(.102)	(.105)
Trust & Confidence		.370**	.37**	.308**
		(.120)	(.119)	(.113)
Information Sharing		320	032	044
_		(.046)	(.046)	(.043)
Relational Capability		.172	.172	.18*
		(.094)	(.095)	(.09)
Cooperation		.019*	.026 *	.022*
		(.010)	(.013)	(.011)
Moderator				
Entrepreneurial orientation			067	367*
			(.09)	(.171)
Interaction Variables				
Strength of Tie and Entrepreneurial				.052
Orientation				(.193)
Trust& Confidence and				.132
Entrepreneurial Orientation				(.245)
Information Sharing and				003
Entrepreneurial Orientation				(.085)
Relational Capability and				496*
Entrepreneurial Orientation				(.198)
Cooperation and Entrepreneurial				.031
Orientation				(.019)
F – Ratio	1.15	14.30	13.33	20.96
\mathbb{R}^2	.046	.718	.719	.753
R ² Change				
Observations	150	150	150	150
**p<.01, *p<05				

^{**}p<.01, *p<05



Result of Hypothesis 1

The first hypothesis is concerned with strength of tie. It was hypothesized there is a positive relation between Strength of tie and firms performance. When examined with other variables in a regression model, it reveals that strength of tie contributes to explain the variance in performance of firms positively ($\beta = .281$, p<.05; Model 2). Therefore, this hypothesis is supported by the sample used for this study. This result signifies that firm performance is likely to be increased when strength of tie is present.

Results of Hypothesis 2

The second hypothesis was set to predict the positive connection of relational capability with performance of firms. When examined with other variables used in this study, the results show that relational capacity is capable of explaining the variation in performance of business firms positively ($\beta = .18$, p<.05; Model 4). The hypothesis is supported by the samples of this study and the result signifies that relational capacity has positive and statistically significant relationship with performance of SMEs.

Result of Hypothesis 3

The third hypothesis is concerned with trust & confidence. It was hypothesized there is a positive relation between trust & confidence and firms performance. When examined with other variables in a regression model, it reveals that trust & confidence contributes to explain the variance in performance of firms positively ($\beta = .32$, p<.05; Model 1, 2). Therefore, this hypothesis is supported by the sample used for this study. This result signifies that firm performance is likely to be increased when trust & confidence is present.

Result of Hypothesis 4

The fourth hypothesis is concerned with information sharing. It was hypothesized there is a positive relation between information sharing and firms performance. When examined with other variables in a regression model, it reveals that information sharing is capable of explaining the variance of performance of firms positively (β = .32, p >05; Model 1, 2). Therefore, this hypothesis is not supported by the sample used for this study. This result signifies that firm performance is not likely to be increased when information will be shared with others particularly the competitors.

Result of Hypothesis 5

The fifth hypothesis is concerned with cooperation. It was hypothesized there is a positive relation between cooperation and firms performance. When examined with other variables in a regression model, it reveals that cooperation contributes to explain the variance in performance of firms positively ($\beta = 026$, p<.05; Model 2). Therefore, this hypothesis is supported by the sample used for this study. This result signifies that firm



performance is likely to be increased when SMEs maintain cooperative relationships with stakeholders.

Result of Hypothesis 6

The sixth hypothesis was set to examine the effect of entrepreneurial orientation as moderator on the relationship between networking and performance of SMEs. When examined with other variables in a regression model, it shows that entrepreneurial orientation does not modify the relationship of strength of tie, information sharing, trust & confidence, and cooperation with performance of SMEs except relational capability. Although relational capability has positive and statistically significant relationship with SMEs performance, surprisingly when entrepreneurial orientation is present, it shows negative relationship ($\beta = -.496$, p<.05, Model 4). It signifies that SMEs with entrepreneurial orientation should not emphasize on making relationships with stakeholders like customers, competitors, suppliers for enhancing performance.

Summary of hypotheses results

Hypotheses	Statements	Decis	ions
H^1	There is a positive relationship between strength of tie and SMEs performance	Accepted	
H^2	There is a positive relation between relational capability and firm's performance.	Accepted	
H^3	There is a positive relationship between trust & confidence and Performance of SMEs.	Accepted	
H^4	There is a positive relation between information sharing and firm performance.		Rejected
H ⁵	There is a positive relation between cooperation and firm's performance	Accepted	
H^6	Entrepreneurial orientation moderates the relationship between networking and firm performance positively.		Rejected

DISCUSSION AND CONCLUSION

The study has been conducted as an attempt to investigate how networking contributes SMEs performance in Khulna city. Five hypotheses were developed and a regression model was used to test hypotheses. Evidence supports acceptance of four



hypotheses related with strength of tie, relational capability, trust & confidence and cooperation) and their relations are statistically significant (p<.05). In contrast, information sharing was found negatively related with SMEs performance. The results signify that when a firm has good tie with customers, it is easier for them to collect necessary information about their needs and wants that can be used for design of future product and services and also for devising market strategies. Therefore, SMEs should maintain close connection with customers and other stakeholders which will ensure better performance. It is also identified that trust & confidence has a positive and statistically significant relationship with firm performance which is in line with the previous study (Kenny & Fahy, 2015). The findings suggest that entrepreneurs should concentrate more on building trustworthy relationships with customers and stakeholders. Another component of networking is relational capability which is found statistically significant with firm performance and this result is also consistent with the finding of previous study (Turson et al, 2016). These findings signify that SMEs should emphasize on achieving competencies on making relations with customers and other stakeholders that in turn create positive impact on performance. To sustain in competition entrepreneurs have to maintain a good relation with customers, suppliers, distributors, and creditors because it helps to retain more customers which ensure better performance. The study finding suggests that good relations with family and friends facilitate starting a new venture by taking financial and other assistance. A good relation with customers, suppliers, employees, and business associates, will establish a good reputation for business which may work as a branding and promote business activity. This study also shows that information sharing has a negative relationship with a firm's performance. Previous studies also identified that information sharing has a negative relationship with firm performance (Kenny & Fahy, 2015). It is said that information is power that can be used for formulating policies and strategies for future operations. It may be dangerous for SMEs if valuable information is leaked and grabbed by competitors who may misuse them. Finally, the study result shows that cooperation has positively related with performance and this relation is statistically significant. This finding suggests that entrepreneurs should emphasize greater importance on cooperation because it is useful for more interaction which improves teamwork in organization. Teamwork brings more dynamism and innovative thinking that ultimately plays positive roles for better firm's performance. Working together leads to a significant reduction in the time and cost associated with developing new product designs (Fujimoto & Clark, 1990). A cooperative behavior also contributes to increasing the passion & enthusiasm to do jobs which enhance the opportunity of performance. In addition,



cooperation actively leads to significant improvement of research and development productivity (Henderson & Cockburn, 1994). So, SMEs should show greater emphasis on cooperation to enhance firms' performance.

The findings have revealed that trust & confidence, strength of tie, relational capability and cooperation contributes to a firm's performance which is very important for SMEs. The results are useful for managers and entrepreneurs for formulating strategies with the intention of enhancing firm performance. It is often a puzzle for entrepreneurs particularly who are new on which issues should be given priority for raising firm performance. This study has identified some areas which are expected to contribute to enhancing firm performance. Besides, these findings can be used by training institutes to make fledgling entrepreneurs regarding the priory in operations for greater performance.

Although a great stride was made to make this work free from limitations, it was not possible like other works. This study results should be viewed considering the limitations. This study has been conducted collecting data only from Khulna region and the number of samples is not large enough for representativeness thus the findings will be difficult to be generalized. Data were collected using a survey from a point of time thus it is cross-sectional in nature which is not appropriate for causal study. Longitudinal data is necessary for proving causality.

This study was only conducted based on the survey of manufacturing and service firm's owners in Khulna city. Future research may include data collection from across countries to test and further to validate the proposed model. Besides, to authenticate the causality, research should be designed collecting data from more than one point of time. Besides, random sampling techniques should be applied to remove biases from the sample.

Networking is an emerging concept in the SMEs sector nowadays. Networking is important because without proper networking it would be challenging for SMEs to cope with competition. When a firm tends to perform well, it must ensure a good linkage through networking. SMEs can benefit from multiple ways of establishing networks with stakeholders including customers, suppliers and competitors. Through networking entrepreneurs can easily improve their product quality, service quality, pricing strategy and can be aware about the weakness where to improve. Moreover it is an instrument to explore competitive advantages in the market. Taking the importance into consideration, this study focuses on how networking contributes to improving the performance of SMEs rigorously. Although this study suffers from some limitations, the findings are useful for development of SMEs in Bangladesh.



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Access to the Network of Commercial Bank's Microfinance: a Study on Street Traders in Barishal District

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Abstract

Access to the well functioning financial system has been promoted as a strong means to accelerate the economic growth and also to reduce income inequality especially in a resource-constrained developing nation like Bangladesh. This study tries to unearth any specific problems in accessing the financial system, specially the commercial bank's microfinance, by street traders in Bangladesh. The data is collected through a questionnaire nationally representative street traders surveyed as in 2018. The data shows that 29% of the street traders has received microfinance or micro investment from commercial banks including Islamic banks and 56% has received finance from different informal institutions like NGOs, somobay somity, microfinance institutions, and informal lenders. Surprisingly, it is found only 2% of the traders has started their business by taking loan through the banking channel although arranging desired capital is the biggest challenge for 74% of the traders wanting to expand their business. The access to finance is expected to be determined by the likelihood of loan or credit approval factors that affect the access to commercial bank's microfinance or micro investment. The findings expose that the access to microfinance from banking channel is largely affected by the factors like legal base of the business, insufficient collateral, poor credit history and small amount of loan requests and that led the bankers not to deliver financial supports to small business entrepreneurs. But some credit approval factors in the banking channel are creating barriers to the access of bank's credit hindering our small traders to run their business. The study recommends that the government and the regulatory bodies should take the pragmatic steps so that the street traders can easily get the micro finance facility from the formal banking channel.

Keywords: Small traders, Commercial Bank, Microfinance, Character, Capital

1.0 Introduction

Accelerating economic growth, eradicating poverty and reducing income inequality with regional disparity are the overarching goals of the present development epitome in Bangladesh. Although Bangladesh's development strategies recognize that economic development with income equality in Bangladesh will not be achieved if the all walks of people especially the marginal poor people and other socially disadvantaged classes can not reach to the financial services. Over the past 15 years the economy of Bangladesh has been experienced at an average six percent GDP growth (Helal et al.2013) and per capita income has been also increased rapidly although income inequality, measured by Gini

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Coefficient, has also risen substantially over the four decades (Matin et al. 2015). Access to the well functioning financial system can be a strong tool to reduce income inequality & poverty. Under the formal financial system commercial banks emphasize to provide credit to the industry & service sector. But a large number of street traders are out of the bank's credit network. Here street traders means the trader sells products beside the road or footpath, traders carrying products in vehicles, or sell goods in local bazaar in rural areas. They face challenges in access to the formal financial sector due to the lack of collateral or security or legal base of their business. In most of the time they manage fund from their relatives or neighbors or even from other traders. When they do not manage fund from them they go to the different types of NGOs due to the inaccessibility to the formal financial sector. NGOs charge high interest rate and quick payment of installment amount after giving loan compared to the commercial bank. To pay their regular installment, the loan takers has to receive another loan form them. So the street traders do not come out form their loan cycle. That's why street traders couldn't upgrade their position. But If we think about the development of street traders, we need to find out the barriers to access to the credit facilities from the formal banking channel. Our neighboring country India has launched a scheme under the Ministry of Housing & Urban Affairs targeting the Street traders socio-economic situation. The main aim of this program is to economically empower the street traders so that they can contribute to their family welfare as well as economic development. The scheme intends to facilitate collateral-free working capital loans of up to INR10,000/- of one-year tenure, to approximately 50 lakh street traders, to help resume their businesses in the urban areas, including surrounding peri-urban/rural areas.

The objective of this study was to investigate that which factors influence on the loan approval by the bank to the street traders. To conduct this experiment appropriately, primary data has been collected from the local street traders of Barishal district where 251 participants responded cooperatively. To get the mathematical measurement of the survey, this study uses SPSS application where findings indicate that legal basement & capital of the business, characteristics of the entrepreneur, capacity to pay the loan as well as collateral to receive the loan, all these variables have significant impact over the livelihood of loan approval by the commercial banks to the street traders.

2.0 Background and Rationale of the study

The government of Bangladesh has designed a major national planning documents, the Vision 2041, to become a developed country and the per capita income will be over \$12,500 in base prices within 2041(Bangladesh progress and development 2019). But an



overall economic development of the country is not achievable by overlooking a large portion of the population out of the financial services.

To reach the footstep of a developed country government immediately need to accelerate economic activities with reducing income inequality as well as regional disparity. They should create productive employment and investment in manufacturing and organized service sectors where unquestionably street traders who are the self entrepreneurs could be a potential vehicle to reach the target. Right now, around 2.5 lakh street traders run their business on the Dhaka cities' public sidewalks which has increased from 90,000 in 2005 (Husain et al. 2015).

Due to showing of cost effective and comparatively low cost advantages in nature, street traders are very labor intensive with relatively low cost intensity. So, here is the potentiality to create huge employment opportunity for our 2.6 million unemployed people plus utilize our indigenous resources effectively. The street traders will also help our nation to accelerate a spontaneous regional and local development by linking them with the more organized urban sectors. It will help to achieve fair and equitable distribution of wealth by the regional dispersion of economic activities.

But in the developing countries, limited access of financial support is considered a key block to private sector growth where Bangladesh is also not out of that situation. Lots of potential ventures frequently loss their willing power and speed owing to absent of sufficient capital. Though banks are shouting about financing, the real pictures are totally different. In most of the cases getting loan from the bank is a day dream, especially when it is small enterprise or startup. Documentations create huge barrier especially for the illiterate entrepreneurs. Because of vast rules, regulations, & requirements, maximum traders go to the NGO for loan which is very easy to manage but expensive to bear compare to bank loan. Security could be appeared as a major concern to both parties because transparency, accountability and credibility are missing in here. Lack of legal monitoring system and administrative surveillance are also making the process more insecure. But if they get financial supports and advice from banks or other government financial institutions it could be far better and sustainable financing options for their trading. So, this study tries to find out the financing problems of the street traders related to the banking channel.

3.0 Literature review:

Street trading or in other word informal business contribute significantly to the Gross Domestic Product (GDP) of developing countries (Bhowmik, 2005). Trading has been



done informally on the streets and this action act as a survival strategy for the urban or rural poor to avoid hunger by generating small income (Fonchingong, 2005). The street vending business is one of the important incomes and employment generation sources of the urban poor population and it caters goods and services to the poor people at reasonable price. Street traders play an essential and conducive role to the local communities as well as economy by procuring diversified products & items including the various food items and sell them in the street. Their daily necessary items & commodities are not only cheaper compare to the well established market but also convenient so that the middle and lower class people purchase their required things from their convenient places. The number of street traders are growing in Barishal metropolitan area day by day due to the increasing population in the city. Poverty, migration from rural area, low education, exorbitant supply of labor and large family size are the major driving forces of carrying out this business (Husain et al. 2015). In some cases, traders get their business from their successor or sometimes people start business when they do not find any job or business after completing education. They commence vending business although there are a lot of difficulties in their business because it does not require high skills and the capital involved is low (Bhowmik 2005). Personal fund is the single most essential source of financing for the vending business (Husain et al. 2015). On the other hand, selling personal assets and borrowing from cooperative society are the two other major sources of financing to inaugurate the business in the absence of formal credit facilities for these poor street traders (Husain et al.2015). Due to the lack of formal financing many informal street vending are started with loans from social capital which is considered friends and family members (Canagarajah & Sethuraman, 2001). To operate the business and meet up the day to day expense traders need working capital for their business but with the passage of time they witness constant cash-flow problems which have a ripple issue on their ability to carry out their businesses productively and maintain adequate levels of stock (Willemse 2011). It is also found that both lack of business security and problems in the supply of raw materials are two major problems of street trading (Muzaffaret al. 2009).

Street trading are becoming the source of income, employment to millions of people regarding the development of Bangladesh (Sayma Suraiya 2014). Although they gain very limited resources which often force them to lend at high risk (Rahman and Junayed 2017), but they provide entrepreneurial opportunity for the poverty-stricken and marginalised people having problem to start up business and also it accelerates the scope of competition of retail shops in the trading sector (Bromley 2000). Street traders play an crucial socio-economic role in the fulfillment of food and nutritional requirements of city dwellers at reasonable prices to the lower and middle income people (Khairuzzaman et



al. 2014). The various research mentioned above covered different dimensions of street vending business. Based on the literature reviewed it was inferred by the researcher that the several studies focused on the activities and performance, socio-economic condition of street traders. However, the area of access to finance by the street traders remains under researched in the context of Bangladesh. Therefore, this study attempts to reduce the research gap by investigating which factors are responsible for creating the barrier to access to formal finance.

Now a days, the street traders consider as a self-employed person in the informal economy and their numbers are increasing day by day although they face lots of complexities to run their business. There is no clear definition of informal economy so it is hard to ascertain the range of activities of informal economy and to chalk out suitable measures to control it (Dewar, 2005). It associates with many uncertainty plus managing finance is one of the biggest challenges among all because it is not so easy for every business owner or entrepreneur to ensure money from self-funding. Consequently, every now and then they have to knock at the different formal or informal financial institutions but reality is that only few traders able to reach the credit network of formal institutions .That's why, I have conducted a study to know and evaluate the funding problem of street traders.

4.0 Objectives of the study:

The main objective of this study is to find out the barriers to accessing formal finance for street traders in Barishal city. In order to achieve this objective the following specific objectives from the street traders viewpoint can be posed:

- To explore the socio-economic condition of street traders in Barishal city.
- To analyze the various financing problems confronted by the street traders to accessing formal channels.
- To assess the modes of risks associated with their business.

5.0 Methodology:

The research is based on primary data collected from the qualitative survey by questioning the small traders in the different parts of Barishal City. A simple random sample technique is followed to collect the data from the street traders of Barishal city. A total of 300 questionnaires were distributed through the students of Finance and Banking, University of Barishal where 251 respondents responded from different areas of the city. The participants were both male and female. To collect data from the traders, direct personal investigation and structured interviews involving a set of predetermined questions as well as sophisticated techniques of audio recording have been applied which ensures the



greater depth and accurate collection of data from the respondent. The questionnaire was divided into two sections: 1) Demographic information 2) Loan approval or disapproval factors. For closed ended questionnaire, multiple-choice questions were used where the respondents choose one option among several possible options.

The dependent variable of the study was assessed with the loan approval or disapproval decision and the independent variables are the factors that affect the loan loan approval or disapproval decision. Here, the independent variables are measured by asking the questions regarding the Character, Capacity, Collateral Condition, and Capital of the traders.

The collected data were coded, processed and analyzed by using MS word, MS Excel and SPSS 16.0 simple statistical techniques like frequency distribution along with percentage were obtained to check for data entry errors and descriptive statistics, mean and standard deviation were also obtained from the frequency analysis.

6.0 Theoretical Framework:

6.1 Street traders and its definition:

Street trader is a person who offers goods and services for sale to the public without having a permanent built-up structure but with a temporary static structure or mobile stall or carrying by head. Street traders offer different products and services that can be stationary and occupy space on the pavements or other public/private areas, or can be mobile, and move from place to place carrying their wares on push carts or in cycles or baskets on their heads, or could sell their wares in moving buses (Ahmed, Bhowmik 2005).

6.2 Barriers to Accessing Bank's Credit Network:

Every working day, bank receive huge amount of loan requests but all are not accepted. Poor credit worthiness is its one of the main reasons. Because before granting any loan application, bank usually evaluates applicant's credit worthiness very carefully. Credit worthiness, the name sounds pretty self-explanatory- lenders are describing how worthy you are of credit. More specifically it is an assessment that determines the possibility a borrower may default on his debt obligations. It considers some factors like borrower's previous repayment history, credit score, profitability, available assets etc. and usually bank measures these things on the basis of the following factors:

- I. Character
- II. Capacity
- III. Collateral
- IV. Condition
- V. Capital



These five factors are frequently called 5C's in the banking world and the 5C's of credit method of evaluating a borrower incorporates both qualitative and quantitative measures. These aspects assist lenders to identify the borrower's ability plus potentiality as well as also help borrower to determine his/her position and required improve points.

In Barishal, the southeast part of Bangladesh, people are operating different kinds of trading activities which are creating huge employment opportunities for our vast number of unemployed people. But, running business is not so easy. It associates with many uncertainty plus managing finance is one of the biggest challenges among all because it is not so easy for every business owner or entrepreneur to ensure money from self-funding.

7.0 Data Analysis:

This study covers 251 small traders of Barishal district where 24% vegetable sellers, 7% tea sellers, 19% fruit sellers, 14% fish sellers and 36% were other kinds of business operators including cloth, utensils, & toys sellers and tried to measure their credit worthiness on the basis of 5C's. We have made a questionnaire including 24 questions which some of these questions are their character related, some of these are related to their capital, condition, collateral or capacity to get loan. Now let's see the outcomes of the assessment.

7.1 Character

The first C, sometimes called credit history, refers to a borrower's reputation or track record for repaying debts. Generally this information appears on the credit reports of borrower which contain detailed information about how much an applicant has borrowed in the past and whether he has repaid his loans on time. These reports also contain information on collection accounts, judgments, liens and bankruptcies, and they retain most information. In addition, character also means the types and duration of business along with borrower's age, education qualification, honesty, sincerity and loyalty. These all things play significant role on the probability of loan approved by credit officer. In our questionnaire, there were some questions about the character of the owner. By those questions, we tried to know the business consciousness of the traders. According to our survey report, in Barishal district 41% traders have been running their business from 1-3 years that means most of the traders are newly established. 30% traders have 4 to 8 year experience. Besides we have also seen that 15% of total traders have 9 to 12 years and only 15 % have more than 12 year experience. This statistic indirectly indicates that the small business in Barishal is not more sustainable in the long ran. Owners loss their intentness after a certain period of time because of some particular reasons like



deficiency of capital, low profit, high expenditure, competitive market, lack of proper business knowledge and education etc.. We have also asked to the respective traders about their previous loan experience which represent that only 45% of total traders took loan whose 98% were male and 2% were female. In contrast, among the all loan takers 29 % got loan from bank, 56% took from NGO and rest of the traders managed from other sources like Money Lenders, friend and relatives etc.. In spite of high interest rate most of the traders are going for non-bank or other sources because they think that taking loan from bank is very complex and time consuming. Furthermore about 45 % business holders do not know the process of getting loan at all. After talking about their loan repayment history we had found that among the all borrowers, 63% had been able to repay loans within given time but 37% become failed due to their poor sales and profit against their expense. We have also identified that only 43% traders provide tax regularly and 51% have trade license. Most of the traders excused that collecting tread lisence is lengthy, complex and expensive process.

7.2. Capacity

Capacity measures borrower's ability to repay a loan by comparing income against debts and assessing the borrower's debt-to-income ratio. Additionally, it also measures the profitability and the capability of a firm to earn profit in future by discussing about capital structure and total asset including monthly revenue, cost, profit and demand and supply of the commodity. In our questionnaire, we included some questions to judge the real capacity of the street traders of Barishal City where vegetable seller had the second higher total debt indicating 67% but had the lowest total debt to income ratio among our five categories. On the contrary, tea sellers and fish sellers had higher debt income ratio consecutively 83% and 76% because of their higher debt against their monthly income. Other sellers had 68% and fruit sellers had the second lowest debt to income ratio means only 67.3%. So, as a result of lower debt in terms of income, default risk of vegetable and fruit sellers are considerably very low. Quite the opposite, tea seller and fish seller have to pay large portion of their income for repaying their loan that was collected from bank or other sources. So, consequently their default risk is very high. In this regard, lenders want to provide loan to vegetable and fruit seller rather than tea and fish sellers in terms of their capacity. If we look at their total assets, we have found it healthy. More than 73% traders are containing total assets above 30000 taka and 55% traders are generating sales revenue above 20 thousand. On the contrary their 78%'s family expenditure is between 5 to 15 thousands and 36% traders have other sources of income. This scenario indicates that the ability to accept and repay loan by small traders are good.



7.3. Capital

Capital means the amount of asset invested by the business owner. Lenders also consider any capital that the borrower puts toward a potential investment. A large contribution by the borrower decreases the chance of default. Though the traders have comparatively low capital than micro enterprise and partnership, they don't need too much capital because they don't have much fixed asset. In our questionnaires, there were some questions related to the capital information of traders which indicate that 65% traders is holding more than tk.30,000 capital and only 11% continuing their business with 5,000-10,000 taka, 6% confined into 11,000 to 15,000 taka, 9% holding 16,000 to 20,000 taka and other 9% carrying out their business with 21,000-30,000 taka. We also asked about their initial sources of finance where 57% traders replied to personal fund, 31% managed fund from friends and family and only 2% took loan from bank and rest of the traders arranged fund from other sources. Many traders said they are confronted with capital problem. Owe to insufficient money in their hand they couldn't operate their business as they wanted and when we asked them about expending business, 74% said they want to expend their business in the upcoming year but arranging desired capital is the biggest challenge for them. And in this regard getting loan from bank is the first choice to most of the traders of Barishal district because other sources are competitively more expensive.

7.4. Collateral

Collateral, a significant phenomenon from the lenders perspective to receive the loan, means the amount of fixed assets that can be mortgaged against the loan. Collateral assist a borrower to secure his loan amount. It gives the lender assurance that if the borrower defaults on the loan, the lender can response the collateral. In Barishal, interviewers found 11% traders containing 5,000-10,000 taka fixed asset, 10% containing 11,000-15,000 taka, 12% with 16,000-20,000 taka, another 14% said 21,000 to 30,000 taka and rest of the 53% have more than 30,000 taka fixed asset. Beside these, We have also found 63% traders were willing to keep less than 75% collateral against their asset; 25% traders were able to keep 80% collateral, 9% said 90% and only 3% were found with 100% collateral against their asset. This statistical picture is showing that traders are little bit conservative on the subject of collateral, because they think their fixed asset is not sufficient enough to keep very satisfactory collateral against their desired loan amount. Their previous loan experiences were also proving the same reason as about 36% traders were rejected in several times due to insufficient collateral. We asked the traders who took loan about their capacity to keep collateral that was demanded by the bank or non-bank institution. They said that the demanding collateral by the lenders was so high than our capacity. They think the lenders should decrease the collateral requirement for



small business. The traders also raise the question that if they have enough collateral to get loan then why they deny the demand by bank.

7.5. Conditions

whether a loan is the urgency of the borrower, the bank must have to look out for its own interests and determine whether the borrower will have the ability to pay back the money. This means that there will be a series of conditions that a loan applicant must meet in order to be granted this source of financing and the conditions of the loan, like interest rate and amount of principal, number and length of installment, influence the lender's aspiration to finance the borrower. The term also discusses about how a borrower intends to use the money. When a loan is being granted, regardless of the type, each financial institution is allowed to establish its own set of conditions. These will depend upon the bank's own risk policy, as well as upon the amount being borrowed and its purpose.

This study asked the traders who took loans in the past from bank, non-bank or other institutions about the interest rate which they had to pay against the loan amounts. The study finds that 42% traders who took loan from the bank responded that they had to pay 6% to 10% and 35% traders responded to 11% to 15% interest rate against their loan amount. On the other hand, 62% non-bank loan takers said that they had to pay between 10% to 20% interest rate and 6% had to pay more than 20% interest rate. This picture tells that taking loan from non-bank organization is much expensive than bank. It creates big problem for borrowers especially like small business holders. Since their profit is not well enough to run their family, there such high interest rate brings extra pressure on their necks. We also asked them about their monthly installment amount and here 61% informed that they paid between 1,000 to 5,000 taka, 26% paid between 6,000 to 10,000 taka and another 13% paid between 11,000 to 20,000 taka. Notable thing is that the traders who borrowed more than 50,000 taka paid more 5,000 taka for monthly installment. Traders who have taken loan from banking channel paid monthly installment whereas loans have taken from other than banking channel paid the daily installment. This study asked all traders about their preferred payment methods and the findings were that 53% of the respondents said they like monthly payment because it keep less pressure on them and they can use the installment's portions as working capital in their day to day activities up to end of the month. On the contrary, 40% said they like weakly and 5% like daily system because they think money in hand is not secure. They could expend it at any moments. So, early repaying system is good for them. 2% traders also responded to yearly system. On the other hand, most of the traders took loan for expanding their business, insuring working capital and purchasing fixed assets although some traders also took for repaying previous loan/ account payable.



8.0 Findings of the Study:

- i. It has found that among the 45% of the small traders who have taken loan from various sources 98% were male and 2% were female. In addition, among the all loan takers 29 % got loan from bank, 56% took from NGO and rest of the traders managed from other sources like Money Lenders, friend and relatives etc..
- ii. According to our survey report, in Barishal district 41% traders have been running their business from 1-3 years that means most of the traders are newly established. This statistic indirectly indicates that the small business in Barishal is not more sustainable in the long run.
- iii. This study also identified that only 43% traders have updated tax certificate and 51% have trade license both the certificates are mandatory for loan approval from the banking channel.
- iv. Among the small traders, vegetable sellers had the second highest total debt indicating 67% but had the lowest total debt to income ratio among our five categories. On the contrary, tea sellers and fish sellers had higher debt income ratio consecutively 83% and 76% because of their higher debt against their monthly income. So, as a result of lower debt in terms of income, default risk of vegetable and fruit sellers are considerably very low but the default risk for tea sellers is very high.
- v. For starting the trading business, 57% traders started their business by using their personal fund, 31% managed fund from friends and family and only 2% took loan from bank and rest of the traders arranged fund from other sources. And also 74% of the traders who want to expand their business in the upcoming year prefer bank for getting loan as a first choice in the Barishal district because they consider other sources are competitively more expensive.
- vi. This study reveals that 36% traders who had approached to the bank for loan purposes were rejected in several times due to insufficient collateral. Beside these, We have also found according to the requirement of collateral for loan, 63% traders were willing to keep less than 75% collateral against their fixed asset; 25% traders were able to keep 80% collateral, 9% said 90% and only 3% were found with 100% collateral against their fixed asset. Traders also said that the demanding collateral by the bank was so high than their capacity.
- vii. This study finds that 53% of the traders prefer monthly loan payment because they can use the installment's portions as working capital in their day to day activities up to end of the month while 40% respondents said they like weakly and 5% like daily system and only 2% traders also responded to yearly system.



9.0. Conclusion:

Despite the sizeable development of banking sector in Bangladesh and also the government's endeavor to increase financial access by all segments of people, a significant portion of street traders did not access to formal finance in all over the country. So, this study tries to find out the constraints in access to finance from banking channel faced by the street traders in Barishal area.

It shows that only the 29 % small traders get loan from banking channel, 56% take from NGO and rest of the traders managed from other sources like Money Lenders, friend and relatives etc.. This study observes that in case of loan payment the character and capacity of the traders in Barishal city are roughly good because 63% had been able to repay loans within given time and 43% traders have updated tax certificate as well as 51% have trade license both the certificates are mandatory for loan approval from the banking channel. On the contrary, it is also appearing that most of the ventures are continuing with both insufficient capital and collateral while many of them are dreaming to expand their business within next one year. This study reveals that 36% traders who had approached to the bank for loan purposes were rejected in several times due to insufficient collateral although 74% of the traders who want to expand their business in the upcoming year prefer bank loan as a first choice in the Barishal district because they consider other sources are competitively more expensive. But if they don't get loan with low interest rate and easy condition, many of them may be diverted from their business.

Although Bangladesh bank and government are continuously searching the financial inclusion in all segments of people, in reality, a large number of street level traders can not reach to the commercial bank loan's network due to high collateral requirement of the bank and condition regarding the trade license & tax certificate of traders. So it is high time to rethink this collateral and other conditional requirement for loan approval for the small traders so that the traders can easily access to the banking system. Situation is also demanding rapid innovation in lending methodology that could reduce the risk of lenders in loan approvals in the ways that does not increase the additional burdensome requirements of small traders.

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