

MARKETING SECULARISM FOR BUILDING A RELIGIOUS ZEALOTS FREE PEACEFUL WORLD

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ABSTRACT

The main purpose of this article is to find out the scope of marketing secularism as the new religious ideology for building a peaceful world to protect the religious zealots, conflicts, violence, and the cold war. This is a descriptive design of research where four independent variables have been identified against a dependent variable by analyzing secondary data. The population is the first class citizen of Bangladesh, a sample of 400 respondents has been selected by using the justified technique of non-random sampling method. A linear regression analysis has been conducted on the scale data used by IBM made SPSS software to examine the relationship between the independent and dependent variables to fit a conceptual model. By analyzing the research findings, it is observed that there is a strong correlation between the independent variables and dependent variable which is $R^2 = 76$. On the other hand, the conceptual model has been fit, the P values of the independent variables are at the significant level, the hypothesis has been accepted, and the model has been restricted. The government of all countries should undertake social marketing program to educate the country people about the emotional and functional benefits of secularism respecting all religions in building a peaceful country as well as the world. Social marketing of secularism (respecting all religions as the core product) will help all governments of the world to keep the world peace from religious zealots and conflicts. This research is an original and empirical research.

Keywords – Marketing, Product, Secularism, Religious zealots, Freedom, Peaceful world.

INTRODUCTION

“**Marketing** is the activity, set of **institutions, and processes** for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and **society at large**” (AMA, 2013). In analysing this latest definition of marketing, each and every temple, mosque, church, pagoda including other religious institutions are comparable with setting institutions by individual religion marketer or their representatives. Under the specific process, all these institutions are

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exchanging offerings (emotional and functional benefits of religions) that have value for society at large. This synonym shows that all kinds of religious institutions is marketing social products (religions that have benefits). In the classic 1969 article, “Broadening the Concept of Marketing,” (Kotler, & Levy, 1969) considered the applicability of marketing concepts to the problem of promoting social causes. In the social marketing field, the product can be a behavior, a belief or an idea that you want to promote (Donovan & Henley, 2010). In fact, religion means one kind of beliefs and behavior that is offered to the society to influence the behavioral changes of people.

It is the generalized truth that effective social marketing communication can change the people’s perceptions, beliefs, attitudes, even culture. Therefore, each and every religion can be a product to convince people by effective communication to change his or her belief and behavior for building a peaceful world. Social marketing is a process that applies marketing principles and techniques to create, communicate, and deliver value in order to influence target audience behaviors that benefit society (public health, safety, the environment, and communities) as well as the target audience’ (Kotler & Lee, 2008). According to this definition of social marketing, religion marketing is basically social marketing for behavioral changes of the society.

In the concept of secularism marketing, all religious culture based groups of people are the target markets of the world and the value is the benefits of religions. Because it has some benefits to the society to control the religious zealots. In this connection, proper social marketing communication for disseminating religions and the new ideology of secularism in the people’s mind can control their behavior to keep the society in peace. In effect, there are religious zealots among the different religious communities for different beliefs about the creature, even among the Islamic, Hindu, Christian, Buddhist countries. For examples, the conflicts between India and Pakistan, Israel and Palestine, the religious conflicts between Buddhist and Rohingya in Myanmar, Afghanistan and America, Iran and Africa, and religion based civil war in Pakistan (Shih & Sunny), Christian vs. other communities in America, Hindu & Muslim riots in Uttar Pradesh, India, Indonesia, Bangladesh are well known.

In this context, secularism can be a new religion product in the religious market to establish peace among the different religious communities and

countries. Because the new religion idea ‘secularism’ has the core and common benefits of all religions. In this new ideology, all men are equal and created by the same God, the objectives of all religions are establishing peace in the world. All religions believe that people should be mankind, honest, and show respect to the God. In fact, respecting art and praying process may not be the same, but all people pray to the same creator. “God can be realized through all paths. All religions are true. The important thing is to reach the roof. You can reach it by stone stairs or by bamboo steps or by a rope. You can also climb up by bamboo pole” (Ramakrishna, 1836-1886).

In analyzing the quote of Sri-Ramakrishna, it is observed that all religions are the paths for realizing the God. Therefore, secularism can be a new way of realizing the God to remove the religious zealots from the world. In this context, this article has identified four independent variables that affect the religious zealot free peaceful world. This article has tried to measure the impact of marketing secularism (a new way of realizing God) including all religions, politics-free religions, freedom of choosing religions and free competition in building a peaceful world.

LITERATURE REVIEW

1. Religions as the Products

In any marketing process, there should have a product. A product is anything that can be offered to a market to satisfy a need. It includes physical objects, services, persons, places, organizations, and ideas. The other names of a product would be the offer, value package, or benefit bundle (Kotler, 1982). According to this definition, each and every religion is a product because it is an offer, and it has a bundle of benefits for the society. “Each religion has helped mankind. Paganism increased in man the light of beauty, the largeness and height of his life, his aim at a many-sided perfection; Christianity gave him some vision of divine love and charity; Buddhism has shown him a noble way to be wiser, gentler, purer, Judaism and Islam how to be religiously faithful in action and zealously devoted to God; Hinduism has opened to him the largest and most profound spiritual possibilities. “We must be bright and cheerful. Long faces do not make a religion. Religion should be the most joyful thing in the world because it is the best.”(Vivekananda, 1993). At the societal level, higher religious involvement is related to increased levels of education (Gruber, 2005), increases in civic involvement

(Graaf, et al., 2006), higher levels of cooperation (Norenzayan and Shariff 2008; Shariff and Norenzayan 2007), lower crime rates (Baier & Wright 2001; Johnson et al. 2000), lower divorce rates, higher marital satisfaction and better child adjustment (Ma-honey et al.2001; for a review, see (Sherkat & Ellison 1999).

At the individual level, many studies have shown that religion is linked to various measures of physical health, such as lower rates of coronary disease, emphysema and cirrhosis (Comstock & Partridge, 1972), Hummer et al.1999; Idler & Kasl 1997; Koenig1997; Larson et al., 1997; Litwin 2007; Plante & Sherman, 2001; Seybold & Hill 2001) Researchers investigating a wide array of psychological disorders—such as depression—have generally found religious involvement to be related to better mental health as well (Hackney & Sanders, 2003; Kendler et al. 2003; Larson et al.1992; Smith et al., 2003). lower blood pressure (Larson et al., 1989), and longer life expectancy (George et al., 2002)

Each and every product can satisfy a need of people in terms of interest to know the God and His creature, and the prize in eternity world after death. In the social marketing field, the product can be a behavior, a belief or an idea that you want to promote (Donovan, & Henley, 2010). A model of relations market structure first appears in Adam Smith's *The Wealth of Nations* (1979 [1776]). Smith treats churches as firms participating in a market for religion. In this connection, all religious organizations of the world like temple, mosque, church, and pagoda are the social marketing institutes. The PLC had two major contributions. First, the process of innovation is an eternal quest for identifying the “new curves”. Second, the new curve identified may not be singular, this is true for all products, and this paper takes the stand that the concept and dimensions of the PLC can also be applied to religion (Prasad, 2005). In analyzing this statement about product life cycle (PLC), all religion have PLC, The Hinduism is the first launching religion product to satisfy the people's need to know about the creature and end of their life and the last destination. All religions have the introduction to the specific geographical area; it has a growth stage, maturity stage, and decline stage. Therefore, marketing strategies can be applied at the different stages of religion product. All religions have a core product, tangible, and augmented product. In fact, the core products of all religions are the same. Here is a scope of marketing secularism. But

tangible (logo, brand name, style of prayer, features, quality) and augmented product are the causes of world conflicts.

2. Secularism as the New Religious Ideology

“Secularism is a new idea of religion, a religion that is understood. It has no mysteries, no mumblings, no priests, no ceremonies, no falsehoods, no miracles, and no persecutions (Ingersoll, n.d.). According to this definition of secularism, it is found that it is one kind of new religion where no mysteries, priests, religious rules, falsehoods, no miracles. So it is the truth, and truth is the other name of religion. Learned people of any country demand this type of religion in society for keeping the country in peace. “Secularism must be applied everywhere because that is how everyone will be to live in peace with each other (Manuel Valls, n.d.). Marketing secularism will be able to educate the nation how to live with each other with a common belief in different communities. “Religion and faith are very personal matters. So far as the government is concerned, there is only one holy book, which is the constitution (Modi, n.d.). This statement indicates the urgency of a new ideology and a secularist state to keep the different communities in peace. He also said that the Constitution is the holy book to control and serve the nation. “Secularism is not indifferent to alternative religious systems, but as a religious ideology, it is opposed to any other religious systems. It is, therefore, a closed system (Harvey Cox, n.d.). The Professor said that secularism is a system which can close the different religious communities under a unified system. “More are the names of God and infinite are the forms through which He may be approached. In whatever name and form you worship Him, through them, you will realize Him” (Ramakrishna, 1836-1886). In analyzing this quote, it is observed that the core benefits or product are the same of all religions; any kind of worship can be helpful to realize the God. The name, logo, style of prayer, quality of religion may differ, these parts of tangible religion product and which one religion product is produced and launched in the market by the God only are the major causes of religious zealots and worldwide conflicts. By analyzing the above-mentioned literature, it is found that secularism can be a new ideology marketing for a peaceful world.

3. Religion Marketing Competition

Marketing started with the first human beings. Using the first Bible story as an example (but this was not the beginning of human beings),

we see Eve convincing Adam to eat the forbidden apple. But Eve was not the first marketer. It was the snake that convinced her to market to Adam (Kotler, 2016). In this connection, the idea is the basis of all kinds of products around us. In the ancient world, the person who invented idea as the solution to a problem or satisfying a need was the marketer. So, it is observed that idea marketing started before launching any religions. And religion campaigning were the ideas about the creature and God by the great men launched in the different geographical area of the world to satisfy the need for knowing the creature and God. The first launching religion is the Hinduism as a product (bundle of emotional and functional benefits). Hinduism is the mother of all religions (Sivananda, 1997). It is the basic version of religion products in the world religious market. For example, a large number of points of parity can be examined between Sanatan and Islam relations. In Hinduism, there is no restriction in launching new religious thought by great men. For example, Shree Chaitanya, Swami Ramakrishna, Swami Vivekananda, Swami Pranabananda, Baba Loknath, Anukul Thakur etc.

Therefore, a modified Hindu religion may be launched in future. In marketing competition, any new product or modification of existing product may be launched in the same market (a group of people) for offering superior value to build the peaceful world. Marketing techniques have been adapted to religious goals since the beginning of the 19th century. But with the rise of the secularization movements in the post-modern era, its application becomes vital to guaranty the survival of religions notably in the Christian case. Islam is facing the same difficulties, such as the decrease of mosque attendance, the decrease of religious commitment, xenophobia and Islam phobia (Sahlaoui & Bouslama, 2016). Similarly, Christian and Hindu religions are also facing the decrease of temple attendance, converting Hindu into Muslim, Christian, and Bauddha, decreasing religious commitment. Effective social marketing strategy can solve these problems.

This effort will help the people for becoming ethical and mankind for a peaceful world. The relationship between marketing and religion has been discussed in the literature since the late 1950s (Culliton, 1959). Since then, extensive studies have been done to examine the influence of marketing on religion (Busenitz *et al.*, 1990). In this relation, once upon a time, there is no Muslim in the Indian subcontinent. In the view point of marketing, some marketing representatives like Hazrat Shahajalal,

Khanjahan Ali, who came in India for social marketing to disseminate Islam. In effect now the rate of Muslim in the Indian subcontinent is around 14.2% (WIKIPIDIA, 2018). It is the example of marketing influence. In this context, Hindu religion could not undertake any competitive social marketing strategy to keep the market share in the global perspective. (Usjinier & Stolz, 2014) state that in religious product policy marketers could focus on expectations such as salvation of eternal life or enjoyment of celestial happiness. The term marketing was first mentioned in the ecclesiastic sphere by Jay Benson Hamilton, in his paper *Empty Churches and How to Fill Them* (Hamilton, 1879). Ever since 1879, he presented the problems within churches and ways to counter them through marketing judgment. Strâmbu-Dima notices an increased use of the term marketing in the religious sphere, to the detriment of the terms promotion and advertising in the latter part of the twentieth century (Strâmbu-Dima, 2008). “The Bible is one of the greatest marketing texts of the world” (Stevens et al., 2006, p.144).

A 2004 study called *Faith Online*, by the Pew Research Center, found that almost two-thirds of Internet users had used the computer for religious or spiritual purposes (Hoover et al., 2004). Maximum countries of the world are multi-cultural especially based on different religions. Each and every religion is performing social marketing knowingly or unknowingly for disseminating the religion worldwide. The fundamentalists of the individual community want to disseminate only one religion in the world than those of competition. Religion, in promoting outlandish beliefs and costly rituals, increases in-group trust but also may increase mistrust and conflict with out-groups (Atran, & Ginges 2012). The author has said that religions are promoting peculiar beliefs and it increase conflict with out-group. Religious thoughts reduce rates of cheating and increase altruistic behavior among anonymous strangers (Norenzayan & Shariff, 2008). The author said here that any religious thoughts teach the people to be ethical and mankind for others. In this context, marketing secularism will reduce the religious zealots and increase the rate of the acceptance of all religions similarly as the core product of all religions is the same.

In the world marketing competition, there are four major competitors with different religion product like Hindu, Muslim, Christian, and Buddha. More or less these marketing rivals are competing with each other by unfair means like militancy and terrorism for Islamic states,

direct criticism by unfair means by attacking other's religious sentiments and depriving the general people's rights of the communal feeling in different countries. These are the major causes of the conflicted world. In fact, the main objectives of all religions are keeping the world in peace. Therefore, state control in creating and maintaining a peaceful competitive environment for all religion marketers similarly will increase the rate of mankind and secularism marketing will help the people to respect the other's religions in reducing the rate of conflict and religious zealots.

4. Freedom of Choosing Religions

People born in a religious culture, and they are habituated by the family culture. Naturally, they do not evaluate the alternative religion products to choose the best one. On the other hand, most of the governments use religious identity for getting public political services. But in the concept of secularism marketing, the religious market should be free from any restriction in choosing any religion or freedom or any thought. The United Nations Commission on Human Rights appointed further to resolution 1986/20 a –Special Rapporteur on religious intolerance|. In 2000, the Commission on Human Rights decided to change the mandate title to –Special Rapporteur on freedom of religion or belief|, which was subsequently endorsed by ECOSOC decision 2000/261 and welcomed by General Assembly resolution 55/97. On 18 June 2010, the Human Rights Council adopted resolution 14/11 which, inter alia, extended the mandate of the Special Rapporteur for a further period of three years. (UNCHR, 2010). Article 18 distinguishes the freedom of thought, conscience, religion or belief from the freedom to manifest religion or belief. It does not permit any limitations whatsoever on the freedom of thought and conscience or on the freedom to have or adopt a religion or belief of one's choice. These freedoms are protected unconditionally, as is the right of everyone to hold opinions without interference in Article 19.1.

In accordance with articles 18.2 and 17, no one can be compelled to reveal his thoughts or adherence to a religion or belief (Forty-Eight Session, 1993). In the United States, the U.S. Congress passed the International Religious Freedom Act (IRFA) in 1998 during the second term of the Clinton Administration. It is observed the United Nations Commission on Human Rights made a resolution to ensure freedom of choosing any religions or any thought for the people of the world. This

political environmental change has offered a new opportunity to disseminate secularism by using social marketing strategy to keep the world in peace. Because, in the secularist ideology, consider the core product of all religion products are the same and human rights to believe any ideology to realize the God.

5. Religions, Politics, and Conflicts

Samuel Huntington (1993; 1997), borrowing partly on an idea put forward by British-American historian, Bernard Lewis (1990), became the most prominent voice claiming that religious and cultural identities would be the main driver of international conflict in the new world order following the end of the Cold War. Huntington argued that Conflict lines on the international scene, he maintains, are primarily those between the Muslim and the non-Muslim world, which have shaped the history of conflict for centuries (Huntington, 1993, 1997b).

In analyzing this statement, it is found that the author said, religious identity and culture is the main causes of world conflict. It effect, after 9/11, the world has been divided into two major part, Muslim and non-Muslim world. These zealots are gradually turning the world into a battle war, in fact, religions are always after peace. But why religions are failing to keep the world in peace?

Galtung (1969) argues that religion is often the source of ‘cultural violence’, a form of violence that is used to legitimize other forms of violence. The political organizations are trying to use the violence to achieve political objectives. Scholars with expertise on the Indian subcontinent (among them: Talbot 2007; Bhatt 2001; Mayall & Srinivasan, 2009; Waseem, 2010) argue for more nuanced readings of the apparent inter- and intra-state religious conflicts affecting India and Pakistan. These scholars said that religious conflicts are politically affecting the different state of India and the relationship between India and Pakistan. Why India and Pakistan are ever rivals? Why has India been divided into Pakistan and India? Of course, religious nationalism is the basis of generating two countries.

Outside the Muslim world, religiously driven political conflicts likewise pivot on the regulation of gender, sexuality, and the family (Friedland, 2002). The author said here, the fresh Muslim world; there is no problem to regulate gender, sexuality, and family but like India to regulate birth

control two types of provisions have been introduced in considering the values of the Muslim religion. Because birth control is not permissible as per the Holy Quran. In effect, Hindu argues that the population growth rate is higher of the Muslim than the Hindu, thus they will be a majority to win the political power of India. (Greg, 1997) notes that the Religious organizations helped many countries to draft the new constitutions. In countries like Benin, Congo, Togo, and DRC, religious leaders were asked to be speakers of parliament. In this connection, the basic four principles of the Constitution of Bangladesh has been changed two times in considering Muslim sentiments and political gain.

According to Merton (1968), during the last two decades religion has again come to the forefront of socio-economic and political life of many countries. Hansen (2002) notes that in Kenya, the church has played a significant role in the politics of the country. Much of the interest sparked by the relationship between religion and American politics in the 1990s stems from the confrontations generated by the rise of the religious right and the broad-based mobilization of white evangelical Protestants on behalf of the Republican Party. However, other religious groupings were also active in politics, and some in support of liberal causes and the Democratic Party (Green, 1990). The concept of a “clash of civilizations” was put forward by Samuel Huntington, professor of government at Harvard University, in a seminal essay in 1993. He argued that in the modern post-Cold War world, clashes and conflicts would be between the world’s different cultures. The cultures he identified were Western, Confucian, Japanese, Muslim, Hindu, Slavic-Orthodox, Latin American, and possibly African (Huntington, 1993).

In analyzing the above-mentioned literature, it is found that most of the countries are more or less facing religious conflicts in terms of amendments of constitution, making different law in considering different religious culture, religion-based nationalism, capturing all world by a specific religion, dividing Muslim world and non-Muslim world, the cold war between India and Pakistan, are the major causes of conflicts and violence.

In fact, the main objectives of all religions are the same only to build a peaceful world. But how is it possible? Yes, only proper marketing of all religions can build a peaceful world. Because no religion is permitted, religious zealots. An effective social marketing program of secularism

by each country can be able to build religious zealots free peaceful world.

CONCEPTUAL FRAME OF THE RESEARCH

On the basis of literature review in relation to the research problem, a conceptual model has been developed with four independent variables and a dependent variable as follows;

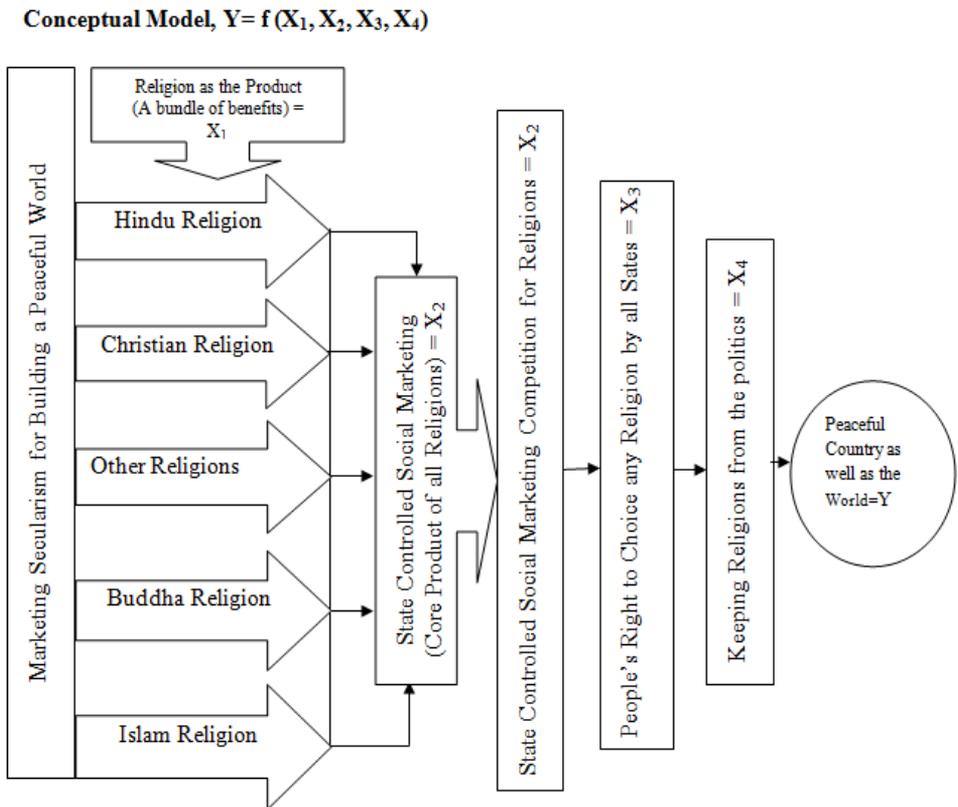
Y = Marketing Secularism for Building a Peaceful World (MSPW)

X₁ = Considering all Religions as the Products' Benefits (CRPB)

X₂ = State Controlled Social Marketing Competition for Religions (SCSM)

X₃ = People's right in choosing any Religion in all States (PRRS)

X₄ = Keeping All Religions from politics (KARP)



OBJECTIVE OF THE RESEARCH

The main purpose of this article is to find out the scope of marketing secularism as the new religious ideology for building a peaceful world to protect the religious zealots, conflicts, violence, and the cold war. The main objectives of all religions are to keep the world in peace. But religious zealots and using religions in politics are the major causes of religious conflicts and violence. In this context, secularism (respecting all religions similarly and ensuring religious freedom) can be a new way for the peaceful world.

METHODOLOGY OF THE RESEARCH

Research Problem: The research problem is religious zealots and conflicts are the major causes of a conflicted world without proper marketing of secularism.

Nature of Research: This is a descriptive design of research where four independent variables have been identified against a dependent variable by analyzing secondary data.

Hypothesis:

Ho: There is a significant relationship between practicing secularism and religious zealot free peaceful world. [Accepted]

Ha: There is no significant relationship between practicing secularism and religious zealot free peaceful world.

Population and Sampling: The population is the first class citizen (graduates, post graduates) of Bangladesh; a sample of 400 respondents have been selected by using the justified technique of non-random sampling method.

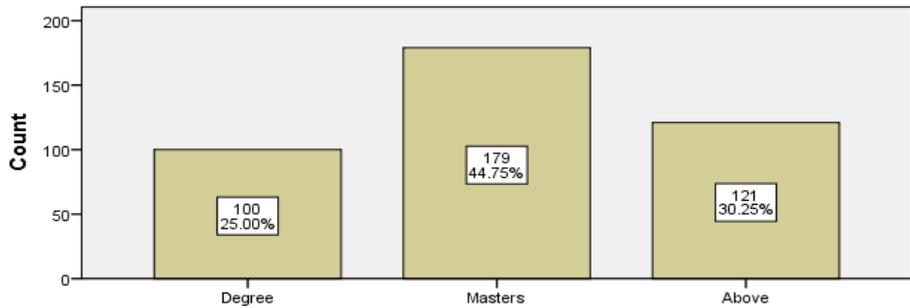
Questionnaire: A structured questionnaire has been used to collect primary data.

Types of Data & Source of Data: The authors have personally collected the data by face to face interview method from the first class citizens of Bangladesh.

Data Analysis: Graphs and a linear regression analysis have been conducted by IBM made SPSS software to examine the relationship between the independent and dependent variable to fit a conceptual model.

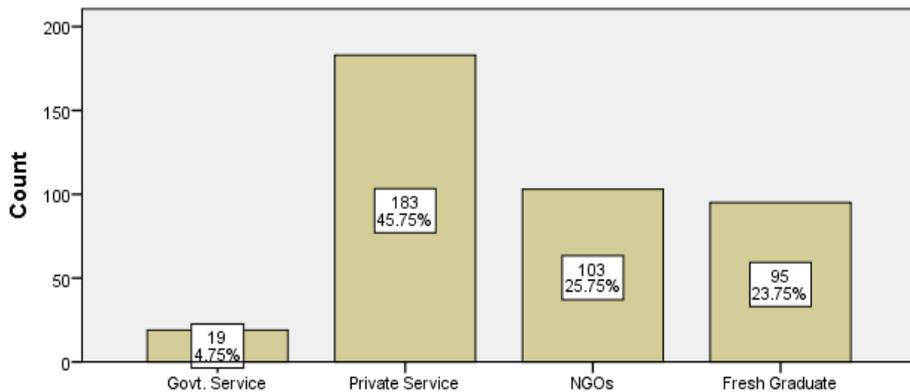
RESULT OF THE RESEARCH

The graph 1. shows that 25% sample respondents are graduate, 44.75% sample respondents are master degree holder, and 30.25% respondents are above master degree. The table also shows that all the respondents were having minimum graduation degree.



Graph 1 : Level of Education of the Sample Respondents

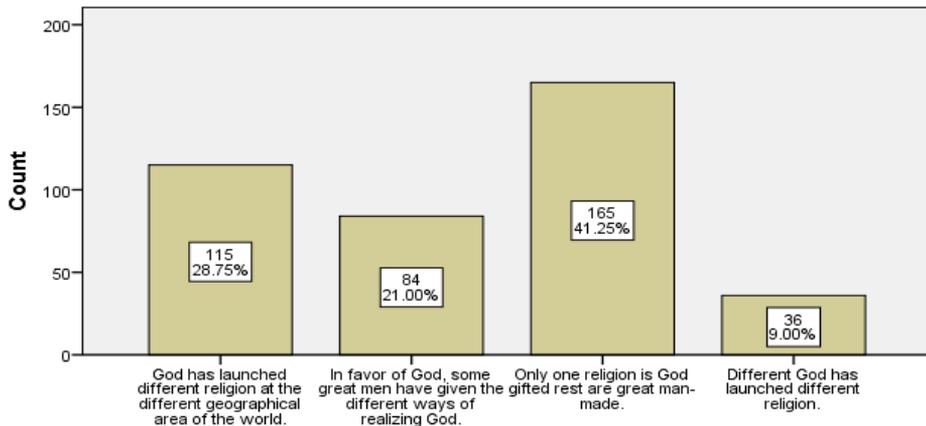
The graph 2. shows that the 4.75% sample respondents are the government service holder, 45.75% respondents are the private service holder, 25.75% sample respondents are the service holder of some NGOs, and 23.75% sample respondents are fresh graduates. The following table also shows that most of the sample respondents are the service holders.



Graph 2 : Profession of the Sample Respondents

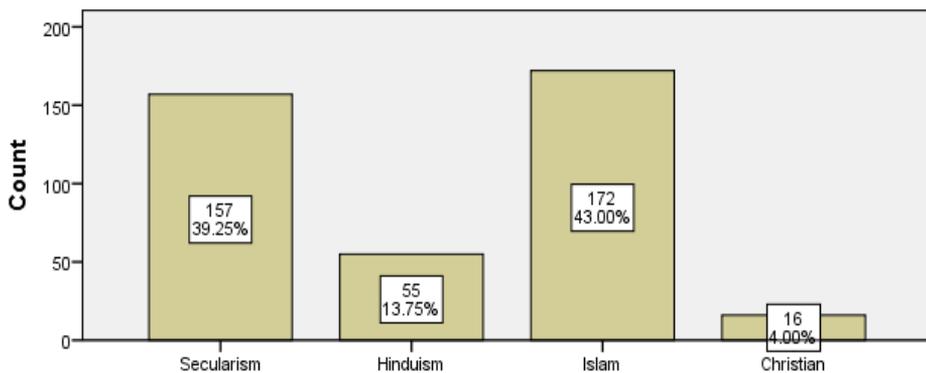
The graph 3 shows that 28.75% sample respondents feel that the God has launched different religion at the different geographical areas of the

world. The 21% sample respondents think that some great men in favor of the God have given the different ways of realizing the God. The 41.25 % respondents feel that only one religion is the God gifted and rest are great men made, and, the rest 9% sample respondents think that the different God has launched different religion.



Graph 3 : Reasons for Launching Different Religions

The graph 4 shows that 39.25% of sample respondents believe that secularism is the best way for keeping the world in peace. The 13.75% respondents think that Hinduism is the best way of building a peaceful world. The 43% sample respondents think that Islam is the only one religion that can keep the world in peace. On the other hand, only 4.00% sample respondent feel that Christianity may keep the world in peace.



Graph 4 : Best Religion for Keeping the World Peace

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	X4 = Keeping All Religions from politics (KARP), X1= Considering all Religions as the Products' Benefits (CRPB), X3= People's right in choosing any Religion in all States (PRRS), X2= State Controlled Social Marketing Competition for Religions (SCSM) ^b		Enter

a. Dependent Variable: Y = Building a Religious Zealot Free Peaceful World (MSPW)

b. All requested variables entered.

Model: A regression model has been developed for the purpose of this study. A total of 4 independent variables were included in the unrestricted model and finally, using the stepwise regression method, 4 independent variables were found to be significant in the restricted model.

The restricted Model is as follows:

$$Y_{MSPW} = a + b_1 CRPB + b_2 SCSSM + b_3 PRRS + b_4 KARP \dots\dots\dots$$

Y = Marketing Secularism for Building a Religious Zealot Free Peaceful World (MSPW)

X₁= Considering all Religions as the Products' Benefits (CRPB)

X₂= State Controlled Social Marketing Competition for Religions (SCSM)

X₃= People's right in choosing any Religion in all States (PRRS)

X₄ = Keeping All Religions from politics (KARP)

Model Summary

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.872 ^a	.761	.758	6.25340

- a. Predictors: (Constant),
 X4 = Keeping All Religions from politics (KARP),
 X1= Considering all Religions as the Products' Benefits (CRPB),
 X3= People's right in choosing any Religion in all States (PRRS),
 X2= State Controlled Social Marketing Competition for Religions (SCSM)

As per the above model summary, we see that the relationship between Dependent and Independent variables is strong (R=.872). Above table shows that dependent variable is 43 percent influenced by the independent variables that are included in the model. (Adjusted R Square = .758)

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48540.815	4	12135.204	310.323	.000 _b
	Residual	15250.957	390	39.105		
	Total	63791.772	394			

- a. Dependent Variable: Y = Marketing Secularism for Building a Religious Zealot Free Peaceful World (MSPW)
- b. Predictors: (Constant),
 X4 = Keeping Religions from politics (KARP),
 X1= Considering all Religions as the Products' Benefits (CRPB),
 X3= People's right in choosing any Religion in all Sates (PRRS),
 X2= State Controlled Social Marketing Competition for Religions (SCSM)

The ANOVA procedure tests the null hypothesis that all the β (regression coefficient) -values are zero against the alternative that at least one β (regression coefficient) is not zero. That is.

$$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = \dots = \beta_k = 0$$

H_a: At least one β is not zero.

In the above ANOVA table, it can be seen that the null hypothesis is rejected (Since the Calculated value of $F >$ Table value of F). In this case, we can conclude that the equation is statistically significant.

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	7.382	1.932		3.822	.000
X1= Considering all Religions as the Products' Benefits (CRPB)	.337	.041	.406	8.279	.000
X2= State Controlled Social Marketing Competition for Religions (SCSM)	-.228	.051	-.258	-4.500	.000
X3= People's right in choosing any Religion in all Sates (PRRS)	.473	.044	.531	10.753	.000
X4 = Keeping All Religions from politics (KARP)	.358	.042	.335	8.628	.000

a. Dependent Variable: Y = Marketing Secularism for Building a Peaceful World (MSPW)

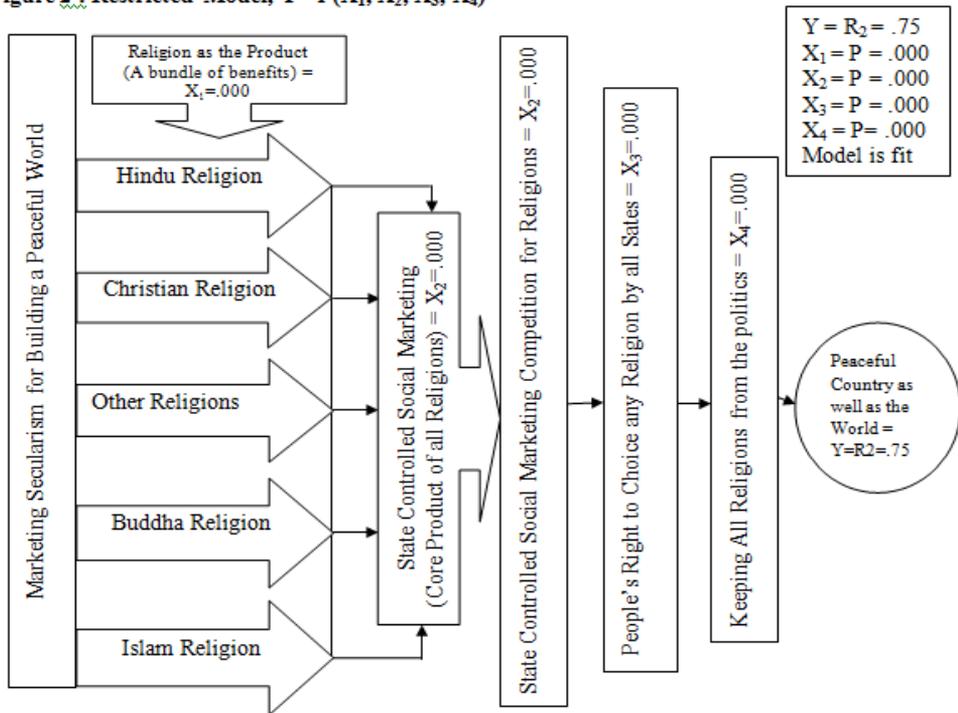
$\beta_1 = .33$, i.e., 100% change in building a peaceful world leads to 33% change the dependent variable.

$\beta_2 = -.22$, i.e., 100% change in building a peaceful world leads to -22% change the dependent variable.

$\beta_3 = .47$, i.e., 100% change in building a peaceful world leads to 47 % change the dependent variable.

$\beta_4 = 35$, i.e., 100% change in building a peaceful world leads to 35 % change in the dependent variable.

Figure 2 : Restricted Model, $Y = f(X_1, X_2, X_3, X_4)$



RECOMMENDATIONS

1. The independent variable X_1 is observed to influence 33% of the religious zealot free peaceful world. Therefore, the people of a country should practice secularism (respecting all religions) to ensure a religious zealot, and violence-free peaceful country as well as the world.
2. The independent variable X_2 is observed to influence the state-controlled social marketing for confirming secularism by -22%. In fact, the sample respondents did not understand properly in

answering this question. Because it should have a positive effect in building a religious zealot free peaceful world.

3. The independent variable X_3 is observed to be influenced by 47 % by the people's right in choosing a religion for ensuring secularism in society. Therefore, a state should ensure the religious freedom in choosing their religious beliefs in building a religious zealot free peaceful world.
4. The independent variable X_4 is also observed to be influenced 35% by using religions in politics on building a religious zealot free peaceful world. So all countries of the world should keep all religions from the politics for ensuring secularism for a religious zealot free peaceful world.
5. The conceptual model has been fit and restricted. Therefore, each and every country can promote secularism where all religions will remain together for making a harmonious relationship in building a religious zealot free peaceful country as well as the world.

CONCLUSION

This research has proved that secularism is a new ideology for keeping peace among the various competitive religions throughout the world. Each and every religion is comparable to a product in a marketing system. Because each religion has some benefits in the society to bring about behavioral changes of a human. In the literature review, it is observed that there is a marketing competition to attract the maximum human toward the self-religion by using the benefits of religions, effective marketing communication tools etc. Sometimes, this competitive attitude in converting others in the self-religion is creating religious conflicts among the various religions in a country like Myanmar, Hindu, and Muslim in India, Shrilanka, Pakistan etc. It is also found in the literature review that secularism as the new ideology in these countries is working to keep the society from the religious zealots. Because, this ideology believes the freedom of choosing religions and respecting all religions as they are involved to keep the society in peace. In fact, using religion in politics in some countries are the major reason of religious conflicts. The regression analysis has examined that a religious zealot free peaceful society depends on state-controlled secularism as the social marketing activities, considering religions as the products in society, freedom of choosing religions, and controlling of

using religions in politics. Therefore, each and every country should market secularism to ensure freedom of choosing a religion, communicating the benefits of all religions on how they can build a religious zealot free peaceful world.

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APPENDIX-1

Questionnaire

Questionnaire for Studying on

MARKETING SECULARISM FOR BUILDING A RELIGIOUS ZEALOTS FREE PEACEFUL WORLD

“Please note that the information collected through this questionnaire is confidential and will be used for research purpose only.”

Profile of the Respondent

1. Name of your religion :	<input type="text"/>
2. levels of education: Degree Masters Above (Please tick mark√):	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3. Profession: 1. Govt. Service 2. Private Service 3.NGOs 4. Fresh Student	

Question no. 1:

How would you consider the reason for launching different religions in the world?
[Please check your preference by using the circle on the appropriate option]

Answer:

1. God has launched different religion at the different geographical area of the world.
2. In favor of God, some great men have given the different ways of realizing God.
3. Only one religion is God gifted rest are great man-made.
4. Different God has launched different religion.

The question no. 2

Which religion is the best way of keeping the world in peace?

Answer:

1. Secularism
2. Hinduism
3. Islam
4. Christian.
5. Buddha

Question no. 3

Do you think that there is a relationship between the benefits of all religions including secularism (considering all religions are different ways of realizing God) and building a peaceful world?

Answer: [Please circle the degree of relationship in the following 11 point measurement scale.]

No relationship 0 – 10 – 20 – 30 – 40 – 50 – 60 – 70 – 80 – 90 – 100 Strong relationship

The question no. 4

Do you think that there is a relationship between states' controlled formal social marketing competition to disseminate all religions similarly in all countries and building a peaceful world?

Answer: [Please circle the degree of relationship in the following 11 point measurement scale]

No relationship 0 – 10 – 20 – 30 – 40 – 50 – 60 – 70 – 80 – 90 – 100 Strong relationship

Question no. 5

Do you think that there is a relationship between freedom of choosing any religion as per the human rights and building a peaceful world?

Answer: [Please circle the degree of relationship in the following 11 point measurement scale]

No relationship 0 – 10 – 20 – 30 – 40 – 50 – 60 – 70 – 80 – 90 – 100 Strong relationship

The question no. 6

How would you think that there is a relationship between religious free politics and a peaceful State as well as the world?

Answer: [Please circle the degree of relationship in the following 11 point measurement scale]

No relationship 0 – 10 – 20 – 30 – 40 – 50 – 60 – 70 – 80 – 90 – 100 Strong relationship

RANKING OF SERVICE MIX ELEMENTS AND RELATIONSHIP BETWEEN SERVICE MIX AND CUSTOMER SATISFACTION: CASE ON MODERN MULTIPLEXES IN DHAKA CITY.

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ABSTRACT

This research study investigates the importance of different elements/attributes of service mix and the role of service mix on customer satisfaction in the theatrical industry especially in the deluxe/ modern multiplex movie theatres of Dhaka city. This study is based upon the empirical findings of a quantitative research where primary data is collected by surveying a structured questionnaire. Most attributes play significant role in the visitors' buying decision process but demographic variables (e.g. gender, age, marital status, occupation) do not have any impact on the importance of elements of service mix during visitors' buying behaviour in the modern multiplex movie theatres of Dhaka city. The study indicates that service mix strongly contributes to develop visitor satisfaction. The study extends a direction for new researchers and concludes with suggestions for further research and suggests managers in theatrical industry of Bangladesh to focus on developing all key attributes as these play significant role in the visitors' buying behavior.

Key words: Service elements, visitor/customer satisfaction, movie theatre, theatrical industry.

INTRODUCTION

The economic environment is changing rapidly and this is heavily driven by consumers. For a customer-driven organization, in depth knowledge and understanding of consumer behavior and the factors that influence the consumers' buying decision process has become a valuable source of competitive advantage (Kaze, 2010). Marketers have high interests in the evaluation criteria consumers use and in the importance that the consumers put in each evaluation criteria/attributes/features relative to their products with a view to develop service offerings that excel on these features/attributes (Hawkins & Mothersbaugh, 2010). Managing a service firm is more complex than managing a physical goods firm and hence marketers need to understand the dynamics of customer feedback to the different levels of service performance (Mittal & Baker, 1998). Digital cinema and electronic theater technologies have clear benefits to

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entertain the people. Consumers' buying behaviors in the theatrical industry are always influenced by some factors which lead them to select a particular movie theatre. Marketing practices of a movie theatre should be very much focused on the consumer behavior of the target audience so that firm can posit the right service offering(s) in the target market segment.

LITERATURE REVIEW

Understanding the consumer behavior is fundamental to the development of effective marketing strategies. Whenever customers make a final judgement of value they do not follow simple and single evaluation process and an individual customer follows different evaluation process at different situations where consumers' evaluation processes are cognitively oriented and largely on conscious and rational basis consumers form product judgement (Kotler, 1996). Consumer buys any product to receive some benefits and consumer sees each product as bundle of attributes with varying capabilities of desired benefits and satisfying the needs (Kotler, 1996). All product attributes are not equally important for all consumers and importance varies within the same individual over time (e.g. Kotler, 1996; Hawkins & Mothersbaugh, 2010) and the evaluation criteria differ in type, number and importance (Hawkins et al., 1989; Hawkins & Mothersbaugh, 2010). They gave the most priority to that attribute which deliver desired benefits. Each attribute carries a utility function for the consumer and the consumer's product satisfaction varies with different levels of each attribute (Kotler, 1996).

Consumers use several factors in order to make any purchase decision. The study (e.g. Hawkins et al., 1989; Hawkins & Mothersbaugh, 2010) suggested that the several features, attributes or dimensions which consumers use in response to specific problem is known as evaluation criteria and the attributes or evaluation criteria that a consumer uses in a decision making process may vary from tangible (e.g. cost, performance) to intangible (e.g. style, taste, prestige etc.). Mullins & Walker (2013) suggested that there are four types of attributes or evaluation criteria. These are cost attributes (e.g. price, operating costs, installation cost, trade-in-allowance, likely resale value); performance attributes (e.g. durability, quality, construction, dependability, functional performance, efficiency, safety); social attributes (e.g. brand reputation, brand

personality, status image, popularity with friends, popularity with family members, design, style, fashion); availability attributes (e.g. carried by local stores, credit terms, quality of service available from local dealers, delivery time). The study (e.g. Kotler, 1996; Kotler & Keller, 2009; Kotler et al., 2009; Kotler et al., 2011; Kotler & Keller, 2012) suggested that consumer buying behaviour is influenced by four major types of factors. These are cultural (culture, sub-culture and social class); social (reference groups, family and roles and statuses); personal (age, life style, occupation, economic circumstances, personality, self concept); and psychological (motivation, perception, learning, beliefs and attitudes) and gender, age, occupation and marital status are considered to be key factors that influence consumer's buying behavior. A movie theatre, movie palace or cinema is a commercially operated venue which is catered to the general public. Modern multiplexes are equipped with state-of-art projection, sound with unparalleled comfort, deluxe amenities including reserved seating, expanded leg room, in-theatre dinning & service of alcoholic beverages (Jimmy & Condon, 2013). Past studies (e.g. Kotler & Schelf, 1997; Garbarino and Johnson, 2001; Voss & Cova, 2006; cited by Boerner et al., 2011) on customer experience in the theatrical industry were mainly focused on expected product (e.g. ticket purchase, box office personal) or the augmented product (e.g. discount at nearby restaurants); perception of quality (e.g. production, acting, play, message); actors, theatre facilities, locations, ticket price, current performance, technical quality (quality of the core service), functional quality (manner in which the service is delivered). The study suggested that visitors of look for different attributes from a modern multiplex/movie theatre. These are sound effect & picture quality, food quality, interior decoration of theatre, ticket & food price, information availability, promotional offers, location, service at box office & theatre, hall environment, cleanliness, and service customization. These factors always influence on consumer buying behavior.

The study (e.g. Mullins & Walker, 2013; Kotler, 1996; Kotler & Keller, 2009; Kotler et al., 2011; Kotler & Keller, 2009) suggested that the marketing mix is a set of controllable marketing variables/tools that the organization blends in order to produce the response it wants in the target market and to build customer relationship and it consists of everything that the firm can do to influence the demand for its product. In growing service industry greater service value creates satisfied and

loyal customers which in turn develops healthy service profits and growth and by providing quality service consistently a service oriented organization can differentiate itself from its competitors (Kotler et al., 2011). The study (e.g. Deming, 1986; cited by Chen, 2009) has pointed out that a customer evaluates the quality of a product or service on the basis of certain important quality attributes, where an attribute is defined as a descriptive feature of a product which is involved with its purchase or consumption (Keller, 1999). Service comprises of a complex bundle of explicit and implicit attributes (e.g. Berry, Zeithaml, and Parasuraman, 1990). Oliver (1980) defined customer satisfaction as the feeling or attitude of a customer towards a product or service after its consumption or use and is generally defined as the full meeting of one's prior expectations. When buyers are offered with the products that meet their needs, desires of buyers then they are in general believed to be satisfied (Helgesen, 2006). As services are generally defined by some core attributes and hence quality of the service is measured by the quality of the service attributes. The study (e.g. Mayer et al., 2009; Cronin et al, 2000; Cronin & Taylor, 1992; Zeithaml et al., 1996) suggested that customer satisfaction is the antecedent of both customers' behavioural intentions and their behaviour. The study (e.g. Fornell, 1992; Fornell et al., 1996; Chen, 2009; Mittal & Gera, 2012) suggested that service quality (or quality of attributes) is the antecedent of customer satisfaction. By providing quality service consistently a service oriented organization can differentiate itself from its competitors (Kotler et al., 2011). Hence our hypotheses are as follows:

H1: There is an impact of gender, age, marital status, occupation on the importance of attributes of service mix during visitors' buying behaviour in the theatrical industry (modern multiplexes).

H2: There is a positive relationship between service mix and visitor satisfaction in the theatrical industry (modern multiplexes).

RESEARCH CONTEXT AND RATIONALE

Consumer attitudes and behaviors are fundamental, long-lasting and likely to continue to be disruptive (Currie & Rowley, 2010). Total theatre attendance has declined significantly and the effects of television upon theatre attendance may be very serious (Luther, 1949). Theater attendance is slowly eroding. Twenty years back there were close to

26,000 movie screens and now it is approximately 19,000 in U.S. and Canada and revenue has dropped due to a series of recessions and economic slowdowns, the changing nature of the film industry, the rise of new technology and the growth of digital and mobile media consumption (e.g. Ramsey, 2012; Cited by Ladd 2012). As economic constraints are growing marketers in the theatrical industry need to be very much focused on the efforts towards customer orientation which may help to achieve their long-run mission by increasing attendance levels and profitability (Boerner et al., 2011).

Despite the critical role of different features/attributes on consumers' buying behavior and the role of elements of service mix on customer satisfaction, it has been observed that the most studies were focused on consumer goods only and little attention has been devoted to identify importance of key attributes on consumers' decision making process and to verify the role of service mix on customer satisfaction in the entertainment or theatrical industry. The empirical studies in the movie industry are still in scarce (Boerner et al., 2011) and have focused mainly on movie making and movie scheduling dimensions (Gil & Hartmann, 2007). The research on customer satisfaction in the theatrical industry is very much limited (Boerner et al., 2011). In the context of theatrical industry of Bangladesh, to the best of our knowledge no study has been made to identify the importance of different elements of service mix to select a movie theatre and to verify the role of service mix (overall service attributes) on developing customer satisfaction. Hence the purpose of this study is to address this gap.

METHODOLOGY

Research Problem: As the study regarding consumer behaviour and relationship between service mix and customer satisfaction in the context of Bangladesh Market is not available in academic literature and hence the purpose of the study is to fill in this gap of literature by identifying the impact of different demographic variables on the importance of elements of service mix and by measuring relationship between service mix and customer satisfaction in the context of theatrical industry of Bangladesh. The literature review points out that importance of evaluation criteria/service attributes depends on demographic variables and overall service mix has positive association with customer satisfaction. In order to verify the impacts, visitors' opinions are

obtained from modern multiplex movie theatres of Dhaka city for statistical analysis to use descriptive statistics, MANOVA and correlation analysis.

Nature of the Study: A quantitative research is carried out as the study is empirical in nature where research approach is deductive, research style is descriptive and the objectives are to measure the impact of demographic variables (e.g. gender, age, marital status and occupation) on elements/attributes of service mix and to measure the causal relationship between variables like service mix and customer satisfaction as per hypotheses developed.

Research Questions: The research questions of this study were as follows:

- Is there any impact of gender, age, marital status, occupation on the importance of elements/attributes of service mix during visitors' buying behaviour in the theatrical industry (modern multiplex movie theatre)?
- Is there any impact of service mix on customer satisfaction in the theatrical industry of Bangladesh?

Research Hypotheses: The hypotheses of this study are formulated for empirically testing of the impact of demographic variables like gender, age, marital status and occupation on elements/attributes of service mix and to measure the causal relationship between variables like service mix and customer satisfaction. The hypotheses of the study were as follows (see: literature review):

- Is there any impact of gender, age, marital status, occupation on the importance of elements/attributes of service mix during visitors' buying behaviour in the theatrical industry (modern multiplex movie theatre)?

H₁₀: There is no impact of gender, age, marital status, and occupation on the importance of elements/attributes of service mix during visitors' buying behaviour in the theatrical industry (modern multiplex movie theatres).

H_{1a}: There is an impact of gender, age, marital status, and occupation on the importance of elements/attributes of service

mix during visitors' buying behaviour in the theatrical industry (modern multiplex movie theatres).

- Is there any impact of service mix on customer satisfaction in the theatrical industry of Bangladesh?

H2₀: Service mix is negatively related with customer satisfaction.

H2_a: Service mix is positively related with customer satisfaction.

Sampling Plan:

Sample structure: Target population of this study was all visitors of modern deluxe movie theatres of Dhaka city. Sampling frame was adequate in size but not structured. The sampling unit includes individual visitor who visits modern multiplex movie theatres of Dhaka city.

Sampling technique: Convenience type non-probability sampling technique is considered to select the respondents from the sampling frame as this technique is considered to approach the most accessible members of the population of interest and relatively inexpensive and less time consuming.

Sample size: Sample size should be at least ten times the number of variables and larger samples are necessary for conclusive research such as descriptive surveys, and to use sophisticated data analysis data for the study were gathered from a sample of 200 visitors and were chosen mainly from modern multiplex/deluxe movie theatres of Dhaka city. Hence the sample size is 200.

Questionnaire Design and Measures: Questionnaire was designed in a way so that respondents can clearly and accurately answer the questions and coding and transfer of replies to computer files for analysis is easier. It is designed by taking elements of service mix (service attributes) based on the review of literature. Multi-item measure and five points Likert-style rating scale anchored by 'Mostly disagree' (i.e., value 1) and 'Mostly agree' (i.e., value 5) have been chosen to operationalize all variables. A five-item scale has been chosen to capture visitors' opinions about the importance of different elements of service mix of modern multiplex movie theatres.

Questionnaire Administering Method & Data Analysis: This explanatory research to measure the impact of demographic variables

like gender, age, marital status and occupation on elements of service mix and to measure the causal relationship between variables like service mix and customer satisfaction. One set of structured questionnaires is used to obtain opinions of the respondents which were pretested before the field work. Respondents were given necessary explanation during the course of interview and encouraged them to answer accurately to increase validity of the information. Data was analysed by using SPSS to measure the impacts of independent variables on dependent variables as per the research objective.

Limitation: One limitation of this study is that as convenience type non-probability sampling technique was considered hence this study might suffer from some respondent bias caused by self selection and or construction of the sampling frame. The study also focused on established relationships based on findings from the previous studies in the context of the Western markets. Another limitation of this study is the context of the study. The respondents were selected from the visitors of deluxe movie theatres of Dhaka city only. Therefore, findings of this study might not be directly generalised to other institutional environments of Bangladesh beyond movie theatres/theatrical industry.

OBJECTIVES

The specific objectives of this study are as follows:

- To identify the key elements/attributes of service mix those affect the visitors' buying behaviour to select a modern multiplex movie theatre (cinema hall).
- To examine whether gender, age, marital status, occupation have any impact on the importance of elements of service mix of a modern multiplex movie theatre or not.
- To verify whether the service mix (i.e., overall service attributes) of modern multiplex movie theatres has impact on developing visitor satisfaction or not.

RESULTS AND DISCUSSIONS

To examine the importance of different attributes to select a movie theatre, the respondents were asked to indicate on five point scale, the degree of importance attached to the elements/attributes of service mix.

To determine the degree of importance of different attributes/elements of service mix in the selection of a movie theatre, the mean values of descriptive statistics are considered.

Table-1 provides the mean values of different evaluation criteria/attributes visitors use to select a movie theatre. It shows that sound effect & picture quality (mean 4.81); hall environment (mean 4.79) and cleanliness (mean 4.71) are the three most important attributes in the visitors' movie theatre selection process.

Impact of Demographic Variables on Elements of Service Mix

To verify the impact of demographic variables (e.g. gender, age, marital status, occupation) statistical method MANOVA (Multivariate Analysis of variance) is used.

Checking the multivariate normality and outliers by multiple regression: Normality and Outliers can be checked by inspecting the Mahalanobis distances that are produced by the multiple regression programs (Pallant, 2007). Critical chi-square value for evaluating Mahalanobis distance is 31.264 if number of independent variable is 11 (NIST, 2018). Residual statistics tables (*see: table-2 to table-5*) maximum value in this data file is 41.867 which exceeds the critical value. To check whether these outliers have any undue influence on the results for this model as a whole the value of Cook's Distance is checked. According to Tabachnick and Fidell (2007; cited by Pallant, 2007) cases with values larger than 1 are a potential problem. In this study, the maximum values of Cook's Distance are 0.044, 0.075, 0.045 and 0.072 (*see: table-2 to table-5*) which are lower than 1 suggesting no major problems.

Table-6 shows the mean values of different attributes/evaluation criteria according to gender. The degree of importance of attributes does not vary greatly with gender. But the study indicates that females put comparatively more importance than males on some attributes like interior decoration (mean for female 4.66; for male 4.61), ticket & food price (mean for female 4.54; for male 4.48), information availability (mean for female 4.47; for male 4.38), convenient location (mean for female 4.52; for male 4.44), service at box office and theatre (mean for female 4.54; for male 4.44) & hall environment (mean for female 4.82; for male 4.76) and males put comparatively more importance than female males on some attributes like sound effect & picture quality

(mean for male 4.84; for female 4.79) and food quality (mean for male 4.60; for female 4.56). Least importance is given to promotional offers by both male and females (mean for male 4.19; for female 4.21). If significance level of WILKS' Lambda at the Multivariate Tests of MANOVA is less than 0.05 then there exists significant difference among groups (Pallant, 2007). If we look at the Multivariate Tests of MANOVA (*see: Table-7*), value of WILKS' Lambda 0.953 and its associated significance level is 0.589. This is greater than 0.05; therefore, there is not statistically significant differences between males and females in terms of preferences of different elements of service mix.

Age-wise mean values for different attributes are shown in Table-8. It reveals from the study that visitors belonging to the aged (45+) are more concerned about the attributes. Mature (30-45) group put comparatively less importance on some attributes like food quality (mean 4.41), information availability (mean 4.26), and convenient location (mean 4.29). Visitors belonging to young (below 18) group give more importance on both sound effect and picture quality ($\mu= 4.75$) and hall environment ($\mu= 4.75$) followed by cleanliness ($\mu= 4.69$), food quality ($\mu= 4.60$) and interior decoration of theatre ($\mu= 4.58$). Visitors belonging to adult (18-29) group give more importance on sound effect and picture quality ($\mu= 4.87$) followed by hall environment ($\mu= 4.78$), cleanliness ($\mu= 4.68$), interior decoration of theatre ($\mu= 4.66$) and food quality ($\mu= 4.59$). Least importance is given to promotional offers by all age groups (mean for young 4.31; for adult 4.20; for mature 3.88 and for aged 4.45). If we look at the Multivariate Tests of MANOVA (*see: Table-9*), value of WILKS' Lambda 0.846 and its associated significance level is 0.518. This is greater than 0.05; therefore, there is not statistically significant differences between different age groups in terms of preferences of different elements of service mix.

Table-10 shows the degree of importance given to the various attributes by visitors belonging to different marital-status categories. It shows that sound effect & picture quality (mean for married 4.81; for unmarried 4.81), hall environment (mean for married 4.87; for unmarried 4.74) and cleanliness (mean for married 4.71; for unmarried 4.70) are three key attributes for both married and unmarried visitors. The study indicates that unmarried visitors put comparatively more importance than married visitors on some attributes like food quality (mean for married 4.51; for unmarried 4.62), interior decoration (mean for married 4.59; for

unmarried 4.65), ticket & food price (mean for married 4.45; for unmarried 4.54), information availability (mean for married 4.35; for unmarried 4.46), convenient location (mean for married 4.35; for unmarried 4.55) and married visitors put comparatively more importance than unmarried visitors on service at box office and theatre (mean for married 4.53; for unmarried 4.46). Least importance is given to promotional offers by both married and unmarried visitors (mean for married 4.05; for unmarried 4.28). If we look at the Multivariate Tests of MANOVA (see: Table-11), value of WILKS' Lambda 0.894 and its associated significance level is 0.484. This is greater than 0.05; therefore, the impact of marital status on elements of service mix is not statistically significant.

Table-12 shows the mean values of different attributes/evaluation criteria according to occupation. Students give more importance on sound effect and picture quality ($\mu = 4.79$) followed by hall environment ($\mu = 4.70$), cleanliness ($\mu = 4.70$), food quality ($\mu = 4.64$) and interior decoration of theatre ($\mu = 4.61$). Job holders give more importance on hall environment ($\mu = 4.88$) followed by sound effect and picture quality ($\mu = 4.87$), interior decoration of theatre ($\mu = 4.73$) cleanliness ($\mu = 4.69$), ticket & food price ($\mu = 4.60$). Business persons give more importance on both sound effect and picture quality ($\mu = 4.89$) and hall environment ($\mu = 4.89$) followed by cleanliness ($\mu = 4.67$), interior decoration of theatre ($\mu = 4.63$), food quality ($\mu = 4.48$). Housewives put more importance on both hall environment ($\mu = 4.78$) and cleanliness ($\mu = 4.78$), followed by sound effect and picture quality ($\mu = 4.61$). Least importance is given to promotional offers by all occupation groups (mean for student 4.31; for job holder 4.15; for business person 4.00 and for housewife 3.94). If we look at the Multivariate Tests of MANOVA (see: Table-13), value of WILKS' Lambda 0.935 and its associated significance level is 0.593. This is greater than 0.05; therefore, the impact of occupation on elements of service mix is not statistically significant.

Relationship between Service Mix and Customer Satisfaction

Finally, the direction of the relationship between the service mix (overall service attributes) and customer satisfaction has been tested with the help of bivariate correlation method, where the values of Pearson's r were calculated to assess the strength of the relationship between service attributes and visitor satisfaction. Significance level (sig value) was

taken into consideration to measure the level of statistical significance level. In order to interpret the relationship we followed the guidelines suggested by Cohen (1988, cited by Pallant, 2007) as- significance is small if $r = 0.10$ to 0.29 ; significance is medium if $r = 0.30$ to 0.49 and significance is large if $r = 0.50$ to 1.0 .

From the Correlation matrix (*see: Table 15*), the correlation between service mix (overall service attributes) and customer satisfaction was $r = .738$. The significance levels reported above for all cases were Sig. = .000. Sample size is large ($N=200$). Hence, with strong confidence it can be mentioned that the above mentioned correlation are statistically significant, based on the evidence of Z-distribution.

CONCLUSION

The primary contribution of this study was to identify the key attributes that affect the visitors' buying behaviour to select a movie theatre; to examine whether gender, age, marital status, occupation have any impact on the importance of attributes/elements of service mix or not, and to verify that service mix (overall service attributes) has impact on developing visitor satisfaction. Based on the findings the following conclusions are drawn:

1. Degree of importance of all chosen attributes is high but the study suggests that sound effect & picture quality (mean 4.81); hall environment (mean 4.79) and cleanliness (mean 4.71) are the three most important elements of service mix in the visitors' movie theatre selection process. Least importance is given to promotional offers.
2. Degree of importance of different elements of service mix does not vary significantly with gender, age, marital status and occupation. But the study shows that visitors belonging to the aged (45+) group are more concerned about the attributes of service offerings to select a deluxe movie theatre.
3. The study provides strong support for the hypothesized positive relationship between service mix (i.e., overall service attributes) of modern multiplex movie theatres and visitor satisfaction in the context of Dhaka city.

A key implication of this study is that marketers in the theatrical industry of Bangladesh may drive competitive advantage from others imbued with desired level of service attributes. There is a strong evidence to suggest that service mix has a strong positive and direct influence on visitor satisfaction. Managers of the movie theatres could use this as a guideline for developing marketing strategies and are suggested to focus on developing all key service attributes to develop visitor satisfaction. Marketers need to identify the relative preferences of consumers/visitors towards different elements/attributes of service mix and by providing the service features and benefits that fulfil a need or solve a problem; managers of the movie theatres can create more value for the customers.

At present, there are no studies investigating the importance of elements/attributes of service mix and role of service mix on developing customer satisfaction in the entertainment/theatrical industry of Bangladesh. Therefore, more research is required in other settings with different purchase categories, degrees of purchase involvement, and sample populations in order to verify and generalise the findings of this study and to determine other factors, if any. In conclusion, this study could lead to further research on theatrical industry in the Bangladesh context.

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APPENDIX

Table-1: Mean Values of Different Attributes

	N	Minimum	Maximum	Mean	Std. Deviation
Sound Effect & Picture Quality	200	3	5	4.81	.426
Food Quality	200	1	5	4.58	.683
Interior Decoration of Theatre	200	3	5	4.63	.514
Ticket & Food Price	200	2	5	4.51	.626
Information Availability	200	2	5	4.42	.668
Promotional Offers	200	1	5	4.20	.802
Convenient Location	200	2	5	4.48	.649
Service at Box Office & Theatre	200	2	6	4.49	.601
Hall Environment	200	3	6	4.79	.487
Cleanliness	200	3	6	4.71	.547
Service Customization	200	1	5	4.29	.817
Valid N (listwise)	200				

Table-2: Residuals Statistics-(Using Gender)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.21	1.88	1.48	.109	200
Std. Predicted Value	-2.518	3.689	.000	1.000	200
Standard Error of Predicted Value	.057	.233	.115	.043	200
Adjusted Predicted Value	1.16	1.85	1.48	.114	200
Residual	-.698	.728	.000	.489	200
Std. Residual	-1.387	1.447	.000	.972	200
Stud. Residual	-1.443	1.503	.000	1.002	200

Deleted Residual	-.755	.837	.000	.520	200
Stud. Deleted Residual	-1.447	1.508	.001	1.003	200
Mahal. Distance	1.583	41.867	10.945	8.638	200
Cook's Distance	.001	.044	.005	.006	200
Centered Leverage Value	.008	.210	.055	.043	200

Dependent Variable: Gender

Table-3: Residuals Statistics-(Using Age)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.45	2.48	2.09	.162	200
Std. Predicted Value	-3.967	2.409	.000	1.000	200
Standard Error of Predicted Value	.106	.431	.213	.080	200
Adjusted Predicted Value	1.50	2.50	2.09	.173	200
Residual	-1.340	2.269	.000	.902	200
Std. Residual	-1.444	2.444	.000	.972	200
Stud. Residual	-1.519	2.557	.002	1.002	200
Deleted Residual	-1.497	2.483	.003	.960	200
Stud. Deleted Residual	-1.524	2.596	.003	1.006	200
Mahal. Distance	1.583	41.867	10.945	8.638	200
Cook's Distance	.000	.075	.005	.010	200
Centered Leverage Value	.008	.210	.055	.043	200

a Dependent. Variable: Age

Table-4: Residuals Statistics-(Using Marital Status)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.91	1.82	1.40	.137	200
Std. Predicted Value	-3.517	3.068	.000	1.000	200
Standard Error of Predicted Value	.058	.235	.116	.044	200
Adjusted Predicted Value	.90	1.89	1.39	.146	200
Residual	-.771	1.652	.000	.491	200
Std. Residual	-1.526	3.268	.000	.972	200
Stud. Residual	-1.641	3.309	.001	1.002	200
Deleted Residual	-.893	1.694	.000	.523	200
Stud. Deleted Residual	-1.649	3.401	.002	1.006	200
Mahal. Distance	1.583	41.867	10.945	8.638	200
Cook's Distance	.000	.048	.005	.007	200
Centered Leverage Value	.008	.210	.055	.043	200

a. Dependent Variable: Marital Status

Table-5: Residuals Statistics-(Using Occupation)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.88	2.84	1.92	.277	200
Std. Predicted Value	-3.762	3.320	.000	1.000	200
Standard Error of Predicted Value	.127	.517	.256	.096	200
Adjusted Predicted Value	.86	2.86	1.92	.295	200
Residual	-1.463	3.240	.000	1.083	200
Std. Residual	-1.313	2.907	.000	.972	200
Stud. Residual	-1.482	2.986	.001	1.004	200
Deleted Residual	-1.864	3.434	.003	1.157	200
Stud. Deleted Residual	-1.487	3.051	.004	1.011	200
Mahal. Distance	1.583	41.867	10.945	8.638	200
Cook's Distance	.000	.072	.006	.010	200
Centered Leverage Value	.008	.210	.055	.043	200

a. Dependent Variable: Occupation

Table-6: Gender-wise Mean Values of Different Attributes

Gender		Sound Effect & Picture Quality	Food Quality	Interior Decoration of Theatre	Ticket & Food Price	Information Availability	Promotional Offers	Convenient Location	Service at Box Office & Theatre	Hall Environment	Cleanliness	Service Customization
Males	Mean	4.84	4.60	4.61	4.48	4.38	4.19	4.44	4.44	4.76	4.71	4.25
	Std. Deviation	.421	.744	.547	.682	.687	.789	.636	.572	.566	.569	.821
	N	104	104	104	104	104	104	104	104	104	104	104
Females	Mean	4.79	4.56	4.66	4.54	4.47	4.21	4.52	4.54	4.82	4.70	4.32
	Std. Deviation	.433	.612	.477	.560	.648	.820	.665	.631	.384	.526	.814
	N	96	96	96	96	96	96	96	96	96	96	96
Total	Mean	4.81	4.58	4.63	4.51	4.42	4.20	4.48	4.49	4.79	4.71	4.29
	Std. Deviation	.426	.683	.514	.626	.668	.802	.649	.601	.487	.547	.817
	N	200	200	200	200	200	200	200	200	200	200	200

Table-7: Multivariate Tests^b (Using Gender)

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.995	3420.520 ^a	11.000	188.000	.000	.995
	Wilks' Lambda	.005	3420.520 ^a	11.000	188.000	.000	.995
	Hotelling's Trace	200.137	3420.520 ^a	11.000	188.000	.000	.995
	Roy's Largest Root	200.137	3420.520 ^a	11.000	188.000	.000	.995
Gender	Pillai's Trace	.047	.852 ^a	11.000	188.000	.589	.047
	Wilks' Lambda	.953	.852 ^a	11.000	188.000	.589	.047
	Hotelling's Trace	.050	.852 ^a	11.000	188.000	.589	.047
	Roy's Largest Root	.050	.852 ^a	11.000	188.000	.589	.047

a. Exact statistic

b. Design: Intercept + Gender

Table-10: Marital Status-wise Mean Values of Different Attributes

Marital Status		Sound Effect & Picture Quality	Food Quality	Interior Decoration of Theatre	Ticket & Food Price	Information Availability	Promotional Offers	Convenient Location	Service at Box Office & Theatre	Hall Environment	Cleanliness	Service Customization
Unmarried	Mean	4.81	4.62	4.65	4.54	4.46	4.28	4.55	4.46	4.74	4.70	4.33
	Std. Deviation	.431	.684	.528	.618	.657	.750	.630	.617	.541	.586	.786
	N	123	123	123	123	123	123	123	123	123	123	123
Married	Mean	4.81	4.51	4.59	4.45	4.35	4.05	4.35	4.53	4.87	4.71	4.20
	Std. Deviation	.425	.685	.496	.643	.688	.868	.668	.577	.380	.487	.870
	N	75	75	75	75	75	75	75	75	75	75	75
Single (divorced/widowed)	Mean	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.50
	Std. Deviation	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.707
	N	2	2	2	2	2	2	2	2	2	2	2
Total	Mean	4.81	4.58	4.63	4.51	4.42	4.20	4.48	4.49	4.79	4.71	4.29
	Std. Deviation	.426	.683	.514	.626	.668	.802	.649	.601	.487	.547	.817
	N	200	200	200	200	200	200	200	200	200	200	200

Table-9: Multivariate Tests (Using Age)

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.993	2545.458 ^a	11.000	186.000	.000	.993
	Wilks' Lambda	.007	2545.458 ^a	11.000	186.000	.000	.993
	Hotelling's Trace	150.538	2545.458 ^a	11.000	186.000	.000	.993
	Roy's Largest Root	150.538	2545.458 ^a	11.000	186.000	.000	.993
Age	Pillai's Trace	.162	.974	33.000	564.000	.511	.054
	Wilks' Lambda	.846	.970	33.000	548.694	.518	.054
	Hotelling's Trace	.173	.966	33.000	554.000	.524	.054
	Roy's Largest Root	.084	1.440 ^a	11.000	188.000	.158	.078

a. Exact statistic

b. The statistic is an upper bound on F that yields a lower bound on the significance level.

c. Design: Intercept + Age

Table-11: Multivariate Tests^b (Using Marital Status)

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.948	307.520 ^a	11.000	187.000	.000	.948
	Wilks' Lambda	.052	307.520 ^a	11.000	187.000	.000	.948
	Hotelling's Trace	18.089	307.520 ^a	11.000	187.000	.000	.948
	Roy's Largest Root	18.089	307.520 ^a	11.000	187.000	.000	.948
MStatus	Pillai's Trace	.108	.976	22.000	376.000	.494	.054
	Wilks' Lambda	.894	.984 ^a	22.000	374.000	.484	.055
	Hotelling's Trace	.117	.993	22.000	372.000	.473	.055
	Roy's Largest Root	.100	1.706 ^a	11.000	188.000	.075	.091

a. Exact statistic

b. The statistic is an upper bound on F that yields a lower bound on the significance level.

c. Design: Intercept + MStatus

Table-12: Occupation-wise Mean Values of Different Attributes

Occupation		Sound Effect & Picture Quality	Food Quality	Interior Decoration of Theatre	Ticket & Food Price	Information Availability	Promotional Offers	Convenient Location	Service at Box Office & Theatre	Hall Environment	Clean lines	Service Customization
Student	Mean	4.79	4.64	4.61	4.49	4.47	4.31	4.58	4.51	4.70	4.70	4.39
	Std. Deviation	.455	.616	.551	.647	.647	.712	.592	.561	.580	.598	.744
	N	97	97	97	97	97	97	97	97	97	97	97
Job holder	Mean	4.87	4.58	4.73	4.60	4.46	4.15	4.46	4.50	4.88	4.69	4.27
	Std. Deviation	.345	.637	.448	.534	.670	.916	.670	.642	.323	.544	.910
	N	52	52	52	52	52	52	52	52	52	52	52
Business Person	Mean	4.89	4.48	4.63	4.41	4.22	4.00	4.26	4.44	4.89	4.67	4.07
	Std. Deviation	.320	1.051	.492	.747	.801	.920	.764	.698	.424	.480	.917
	N	27	27	27	27	27	27	27	27	27	27	27
Housewife	Mean	4.61	4.28	4.44	4.44	4.28	3.94	4.28	4.44	4.78	4.78	4.06
	Std. Deviation	.608	.461	.511	.616	.575	.725	.669	.616	.428	.428	.802
	N	18	18	18	18	18	18	18	18	18	18	18
Unemployed	Mean	5.00	5.00	4.67	4.67	4.67	4.60	4.67	4.50	5.00	4.83	4.33
	Std. Deviation	.000	.000	.516	.516	.516	.548	.516	.548	.000	.408	.516
	N	6	6	6	6	6	6	6	6	6	6	6
Total	Mean	4.81	4.58	4.63	4.51	4.42	4.20	4.48	4.49	4.79	4.71	4.29
	Std. Deviation	.426	.683	.514	.626	.668	.802	.649	.601	.487	.547	.817
	N	200	200	200	200	200	200	200	200	200	200	200

Table-13: Multivariate Tests^b (Using Occupation)

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.989	1498.892 ^a	11.000	185.000	.000	.989
	Wilks' Lambda	.011	1498.892 ^a	11.000	185.000	.000	.989
	Hotelling's Trace	89.123	1498.892 ^a	11.000	185.000	.000	.989
	Roy's Largest Root	89.123	1498.892 ^a	11.000	185.000	.000	.989
OCPN	Pillai's Trace	.208	.936	44.000	752.000	.592	.052
	Wilks' Lambda	.806	.935	44.000	709.718	.593	.052
	Hotelling's Trace	.224	.935	44.000	734.000	.594	.053
	Roy's Largest Root	.110	1.885 ^a	11.000	188.000	.044	.099

a. Exact statistic

b. The statistic is an upper bound on F that yields a lower bound on the significance level.

c. Design: Intercept + OCPN

Table-14: Descriptive Statistics of Service Mix & Customer Satisfaction

	N	Minimum	Maximum	Mean	Std. Deviation
Service Mix	200	1	5	3.71	.867
Customer Satisfaction	200	1	5	3.67	.808
Valid N (listwise)	200				

Table-15: Correlation Matrix between Service Mix & Customer Satisfaction

		Service Mix	Customer Satisfaction
Service Mix	Pearson Correlation	1	.738**
	Sig. (2-tailed)		.000
	N	200	200
Customer Satisfaction	Pearson Correlation	.738**	1
	Sig. (2-tailed)	.000	
	N	200	200

** . Correlation is significant at the 0.01 level (2-tailed).

CAPITAL STRUCTURE OF ACQUIRER COMPANIES AND ITS IMPACT ON PROFITABILITY: AN INDIAN STUDY

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ABSTRACT

The objective of the paper is to find the relationship between the capital structure of acquirer companies and their profitability spreading over pre and post merger period in Indian scenario. The success of a merger (or acquisition) depends a lot on the amount of pay off in the form of purchase consideration and its mode of financing the merger. The relationship between debt-equity and ROCE of the acquirer companies has been determined during 2000 to 2017. However, all the mergers that could take place between 2005 and 2014 have been considered to enable to assess the above relationship covering pre and post merger period. After initial data rationalisation, Granger Causality Test has been applied to confirm whether determination of independent and dependent variables are in accordance with domain knowledge. The panel unit root test was conducted to verify whether the data series is free from unit root and eligible to fit for a regression equation with the help of Estimated Generalised Least Square method. The paired t-test was conducted on pre and post merger financial performances of sub-sample of high debt growth companies and low debt growth companies. The analysis lead to the conclusion that debt-equity ratio inversely affects the return of acquirer companies. The significance of the study is to let the company know that the mergers or acquisitions may not be advocated if it has to assume huge amount of debt in the process of financing the merger.

Key word: Capital Structure, Merger & Acquisition, ROCE, Estimated Generalised Least Square, Paired t test, Ganger Causality Test, Hausman test, JEL Code: G32, G3

INTRODUCTION

A firm initially adopts a particular capital structure on the basis of economic prudence among the alternatives for financing available. The company may remain passive regarding decision on capital structure or may creep into long term targeted capital structure. However, at the time of expansion, may be organic or inorganic, a firm would have to take conscious decision on capital structure. In case of merger & acquisition, the acquirer is to arrange financing the same. There may be different

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forms of financing the purchase consideration of a merger. Basically, the purchase consideration of merger may be in the form of equity shares, preference shares or debentures and cash. To issue debenture and pay cash by resorting to borrowings which eventually increase debt-equity ratio. On the contrary, the issuance of equity shares of acquirer company and or paying cash by liquidating short term or long term investments would not adversely affect debt-equity ratio.

This paper is focussed on capital structure of acquirer companies. Theoretically, mergers and acquisitions are advocated for creating synergies. It is assumed a lot of value creation may be possible through M&A activities. However, the statutory provisions regarding M&A was not favourable before liberalization. There were very few cases of merger and acquisitions even at the initial phases of liberalisation. The major regulation implementing the philosophy of liberalisation on M&A was framed with SEBI (Substantial Acquisition of Shares and Takeover) Regulation, 1997. Thereafter the SEBI Regulation has undergone changes in several times and finally, with many modifications in the Finance Act, 2006, the provisions came into force. Later on, New Takeover Code on M&A was framed in 2011. With the assumed advantages and regulatory support, there was a spurt in M&A activities in India. According to Grant Thornton Annual Deal Tracker, there were 614 M&A deals in 2013-14, 762 M&A deals in 2014-15, 569 deals in 2015-16 and 411 M&A deals in 2016-17 in India.

There were huge number of failures in mergers and acquisition all over the world including India. According to a report (McKinsey, 2005)] on performance of Merger & Acquisition, 70% of mergers did not achieve revenue synergy, 40% of the M&A could not achieve cost synergy they targeted for. Further, (Agarwal & Jaffe, 2000) observed that over 35% companies could not achieve positive return in 2-3 years after mergers in Indian context. The reasons of failure in mergers vary from overvaluation of the deal of the mergers to cultural incompatibility between two merged entities, from behavioural biasness to macro environment. As the decision of merger also involves the decision on financing the merger affecting capital structure, the success also depends on financing. The capital structure decision is related to risk and return for the company. In this context, the paper is to find the relationship between capital structure and profitability of acquirer companies in Indian context.

REVIEW OF LITERATURE

The study on capital structure and its relation with profitability is an age old issue. Long ago (Modigliani-Millar, 1962) observed that due to tax shield on account of interest payment, shareholders' income and value of the firms increase along with debt level. However, there are so many papers which observe otherwise. (Fama & French, 2002) did not support tax-shield theory in their paper. In the context of (Ghana, Abor, 2005) observed positive relation between long-term debt and profitability. In the context of China, (Chen & Strange, 2006) conducted a study of over nine hundred firms in 2013 and observed negative relationship between debt and profitability. There are some studies in Indian context. (Mishra, 2011) studied the relationship between capital structure and after tax profitability of manufacturing companies in respect of PSU firms. He observed inverse relationship between leverage and profitability. (Majumdar & Sen, 2010) observed similar result in respect of all companies in his sample. (Khasnobis, Guha & Bhaduri, 2002) considered 697 companies during the period 1990-1998 to observe negative relationship between debt and profitability. (Majumdar & Chibber, 1999) in their research observed negative relationship between level of debt and financial performances of the firm.

There are several papers regarding impact of Merger & Acquisitions on corporate performances. Some papers examined short term return of post-merger performances as where some return examined long term return of post-merger performances. Mostly the short term analysis examined the market oriented return through change in share price of acquirer companies (and also acquired companies). On the contrary, long term analysis examined the change in post-merger profitability. (Duppatti and Locke, 2015) examined stock market reactions of the shareholders' towards the cross border mergers and acquisitions of Indian corporate. The researchers studied short term as well as long term operating and market performances of the Indian acquiring companies. They found significant positive changes on different performance parameters like sales, dividends and profit after tax in the post-acquisition period compared to the pre-acquisition period. The post-acquisition market performance was also significantly different from pre-acquisition operating performance indicating synergies and growth to the Indian corporate resulting from cross border mergers and acquisitions. (Srivastava, 2012) investigated the role of brand equity on mergers and

acquisition in the pharmaceutical industry, emphasizing the various strategies and the benefits incurred by mergers & acquisitions in this sector. With the study of two major merger & acquisitions cases viz. Daiichi-Ranbaxy and the Pfizer-Wyeth, the author observed that though the strategy of high price tag for higher brand equity, offered quick returns, access to new markets or a stronger position in current markets, the decisions were more emotional rather than rational. Thus, he suggested that managers should be more rational while taking decisions on mergers or acquisition of companies with high brand equity values. In a study (Chang and Tsai, 2013) examined the long-run performance of firms acquiring privately held US target companies. The authors found that acquirers of privately held target companies in general suffered negatively in long-run stock performance. Though the acquirers had superior stock performance prior to merger & acquisitions, the investors might have over-extrapolated the prior good performance and that reversed the long-run abnormal stock returns of acquiring firms. (Barai and Mohanty, 2014) made a study on the effect of industry relatedness on short run and long run performance of Indian mergers & acquisitions. Considering mergers and acquisitions distinctly; they found that while related acquisitions create value, non-related acquisitions destroyed it. In case of mergers they found both related and unrelated mergers created value for Indian firms. In a paper (Rani et. al. 2015) investigated the impact of mergers and acquisitions on long run corporate performance of the acquiring firm. The authors found that Indian acquirers performed financially better after cases of mergers & acquisitions. The profitability of acquiring firm was increased due to better utilization of firm assets.

There are success and failure in mergers. Among many other, one probable reason behind success or failure may be the choice of financing. However, there are very few research papers e.g. (Asquith et.al., 1990) on impact of mode of financing on post-merger profitability of the firms. (Asquith, Bruner & Mullins 1990) observed market reactions of a merger are affected by forms of financing a merger. However, their findings are relevant for equity financing and cash financing. They found negative impact in post-merger return with equity financing. On the contrary, cash financing of merger could yield positive return after mergers.

In this context, the primary objective of the paper is to find the relationship between debt-equity ratio and profitability over a long period of time around merger. There is a secondary objective as well.

The secondary objective is to find out whether debt financing has any negative impact on post merger performances of the acquirer companies.

METHODOLOGY

One possible cause of failure in merger is total amount of purchase consideration in comparison to its valuation. The capital structure affects corporate profitability. Thus, mode of financing the merger may also be one reason behind affecting profitability and also failure in merger. This study makes an attempt to find out relationship between capital structure as proxied by debt-equity ratio with post merger profitability of acquirer company.

Thus, the research question of the study is to ascertain whether change in financing a merger through debt could lead to change corporate profitability. To have proceeded through two ways (a) To determine the trend of profitability on capital structure (b) To compare pre and post merger financial performances in two separate cases when there is high growth in debt and when there is low growth (or many be negative growth) in debt. On the basis of above discussion, let us state the two hypotheses.

Hypothesis A

H_{0A} = There is no trend (zero slope) of regression equation of profitability on capital structure

H_{1A} = There is trend of regression equation of profitability on capital structure of acquirer companies

Hypothesis B

For companies with high growth in debt ---

H_{0BG} = There is no significant change in profitability during pre & post merger period of acquirer companies

H_{1BG} = There is significant change in profitability during pre & post merger period of acquirer companies

For companies with decline in growth in debt ---

H_{0BD} = There is no significant change in profitability during pre & post merger period of acquirer companies

H_{1BD} = There is significant change in profitability during pre & post merger period of acquirer companies

The study refers to empirical investigation of quantitative properties and their relationship from past data of capital structure and profitability of acquirer companies. From the past numerical data, an attempt would be made to develop a mathematical expression to establish a relationship between capital structure and profitability of acquirer companies. Thus, in one word, this study falls under category of quantitative research.

The study is related to all Indian companies. However, only BSE 500 companies have been considered because of two reasons --- (a) authenticity of data and (b) availability of data. The period of study has been determined around the time of introduction of statutory framework facilitating merger (and acquisition) during era of economic liberation. All mergers and acquisitions that took place during the calendar year 2005 to 2014 has been considered. During this period, there were all together 2334 mergers as per the Capitaline data base, 2017.

The financial data of concerned companies has been considered pre and post mergers as far as available. For the purpose, the financial data of those companies for the year ended 2000 to 2017 has been taken into account. Some companies are involved in serial mergers and data was not available for all the years for all companies. The total number of acquirer companies were 897 in the financial year ended 2016 and 692 for the financial year ended 2000. In the population, total firm year (data point) is 17026. The debt-equity ratio has been considered as proxy of capital structure. To understand the performance of the firm, return on equity (ROE) and return on capital employed (ROCE) has been considered. The ROE indicates how efficiently a company shareholders' fund. On the other hand, ROCE refers to profit before interest and tax to its total capital employed. The ROCE indicates how efficiently total capital (total assets) has been employed by the acquirer company.

Firstly, three stages of data elimination process have been undertaken by identifying out layer for debt equity ratio (1% top), ROCE (1% top and 1% bottom) and ROE (1% top and 1% bottom). Thus, the top 5% of extreme data have been ignored. The data of all the years for the concerned companies are not available. The data of 2017 is not available for most of the companies when collected and thus data of 2017 of any

companies have not been considered. Only the yearly data has been considered in the data set. However, some companies changed their accounting period during the period of study. In those cases, more than one data point was available in a year for company. In the final data set, only one data point per company per year (firm ear) has been considered. Some data points have been avoided due to data inconsistency and supposedly unreal data. Finally, there were 12548 firm year in the data set.

We have conducted descriptive analysis to understand the nature of the unbalanced panel data. The panel unit root test has been applied to ascertain that there is no unit root in the data series and regression on the basis of least square method is applicable in the data set. The granger causality test has confirmed dependant variable and independent variable and that was in consistent with the domain knowledge. The fixed effect model and random effect model has been applied to examine whether there is any significant relationship between dependant variable and independent variable. Finally with the help of Hausman Test, the final regression equation has been selected. MS Excel and Eviews 6 has been utilised to have the statistical analysis done.

To understand the impact of capital structure (debt- equity ratio) on ROE and ROCE more closely, the purposive samples has been taken from the total data set. A sub-sample of top and bottom thirty acquirer companies with highest and lowest growth in debt has been considered from the data set. Further, panel data analysis under Estimated Generalised Least Square Method has been applied on balanced data set to examine whether the explanatory power of the sub-set has increased or not. Different performance parameters, such as total debt, net sales, profit after tax, PAT, EPS, ROCE, RONW of sub-sample of acquirer companies has been considered for pre and post merger period. The five year period in pre- merger and five year period in post merger has been considered to understand the post merger changes in the performance parameters. The paired- t test for testing the significance of the changes in performance parameters in the post merger period has been conducted.

The Model

The introduction of debt in capital structure affects the overall return so also relative return of the company.

$$ROCE=f(DE); ROCE= c(1)+ c(2)*DE$$

ROCE would indicate whether the debt has leveraged the operational income positively of the acquirer companies

$$ROE = f(DE); ROE= c(1) + c(2)*DE$$

ROE would indicate whether the debt could utilise the tax shield and lower cost to magnify intrinsic valuation of company.

In the panel data set, there would be i number of companies and t number of period

$$ROCE = c(1) + c(2) * DE_{(i,t)}$$

$$ROE = c(1) + c(2) * DE_{(i,t)}$$

[$c(1)$, $c(2)$ are constant]

The analysis of impact of debt-equity ratio on profitability of firms is the super set of analysis of impact of debt-equity ratio on profitability of acquirer firms. However, for the acquirer companies, there may be some other factors. Firstly, the mergers may be inspired by the tax shield that could be availed out of accumulated loss of acquiring company. Thus, rate of change of after tax operational profit and rate of change of ROE would be different than rate of change of ROCE. Secondly, the merger requires financing. The acquirer companies hardly maintain enough retained earnings to fully finance the merger. In most of the cases, the acquirer companies assume fresh debt to finance merger. The cost of such fresh debt may not be exactly the same of long term debt already exist in the balance sheet. The change of average cost of debt would affect ROE. Thirdly, the acquisition may create a structural change in financials of the company and would be impacting ROCE and ROE.

The above factors are to be considers on samples. For closer look, a sub set is to be created with high rate of positive growth in debt from the above population. We have not considered any other variables except DE to examine whether the explanatory power of the sub-sample has increased over the explanatory power of sample in our study.

Limitations: The paper covers only BSE 500 companies and that too for a period of 2005 to 2014. To have more robust result, more companies were required to be considered in different time period. Further, the

impact of global financial crisis in 2008 and thereafter on the data has not been neutralised in this study.

RESULT & FINDINGS

Descriptive Statistics: From the descriptive statistics, the nature of the basic variable could be understood to proceed to the next steps. There are 12548 firm years in the modified data set spanning over 2000 to 2016. The mean DE ratio is 0.94. There are some debt free companies and maximum debt-equity ratio in the data set is 12.8. The mean of ROCE and ROE is 13.6% and 12% respectively. Further, it is evident that the maximum and minimum value of ROCE is higher than those of ROE. On a long term time series data set, if ROE is always less than ROCE then prima facie the decision of mode of financing the merger may be questioned. In other words, the debt financing may be questioned.

[Insert TABLE-I]

From TABLE-I, it is observed that, Jarque-Bera test statistics are significant implying rejection of null hypothesis of normality of data series. However, the data series is fairly large and may follow Gauss-Markov assumptions. Thus, statistical procedure applied on normal distribution may also be applied here.

The panel data may suffer from unit root problem. Now, through panel unit root test, the stationarity of data series may be tested. The data was considered at level and the equation would have individual intercept and linear trend. The lag length would be automatically selected under Schwarz method. The band width would be automatically selected under Newey-West method of Barlett Kernel. The stationarity of data has been examined both through common unit root process and individual unit root process. The 't' test as suggested by Levin, Lin & Chu would examine stationarity under common unit root process. On the other hand, to examine individual unit root Im, Pesaran and Shin W-Stat, Fisher Chi-square as suggested in Augmented Dickey Fuller and Philip Perron method has been conducted.

[Insert TABLE-II]

It has been observed that in all cases 't' statistics, chi-square and W-Stat of respective measurement is statistically significant and thus null

hypothesis may be rejected. So, the data series may be considered as stationary. Thus, regression analysis on the basis of EGLS method may be possible on panel data. Under panel regression, fixed effect model and random effect model is to be applied in this paper.

The management utilises leverage to have positive impact on ROCE and ROE. It is to be verified whether in reality DE precedes ROCE and ROE or not. For the purpose, the Granger Causality Test could be undertaken. On the basis of the result, the dependant and independent variable could be confirmed.

[Insert - TABLE-III]

From Table –III, it is observed the null hypothesis that DE does not Granger Cause ROCE has been rejected at 5% level. So, DE is independent variable and ROCE is dependant variable. In other cases, null hypothesis is accepted. However, it is to be noted that, ROE and DE does not Granger Cause each other

[Insert TABLE-IV]

From the two way fixed effect model of the panel data, it is observed from the F-statistic that the model is statistically significant for the data set. The adjusted R-squared shows, that the independent variable DE explains 46% changes in ROCE. The relation between DE and ROCE are also statistically significant. DE negatively affects ROCE. For this data set of acquirer companies, +1% change in debt-equity ratio causes - 0.93% changes in return on capital employed. Let us fit (employ) random effect model of cross section data.

The panel dataset is unbalanced one, so two way random effect model cannot be tested. In this paper cross section random effect has been considered. Under panel estimation of Generalised Least Square Method (EGLS) Swamy & Arora (1972) estimation of components variance has been assumed. White period standard error method is applied with no GLS weight.

[Insert- TABLE-V]

The model is statistically significant. Though DE affects the ROCE negatively, the model only explains even less than 1% of variation of the

variable. To examine the adequacy of random effect model, Hausman Test has been applied.

[Insert TABLE-VI]

The chi-square of cross section random effect is not statistically significant at 5% level. The null hypothesis of existence of random effect in data set can not be rejected. Thus random effect model may not be applicable for the data set. Thus, the two-way fixed effected model is applicable for the population. A sub-sample of 26 acquirer companies has been considered. These companies have been selected from the sample on the basis of high positive growth in debt over the period.

[Insert TABLE-VII]

The model is statistically significant according to probability of F – statistics. It is observed that 45% of variation is explained by DE. The probability of t statistics is less than 5% implying that co-efficient of DE is statistically significant at 5% level. Thus, the results of this model uphold the observation of earlier model. Further, co-efficient of DE here is -3.651% implying 1% change in DE changes -3.651% changes in ROCE. Thus, it shows that DE in the companies with high growth rate in debt is more impactful towards ROCE. Now, the panel data analysis would be conducted on sub-sample of acquirer companies whose debt changes would be at bottom of the sample.

[Insert TABLE-VIII]

The model of DE and ROCE of debt growth at the bottom of the sample is adequate (being p value is significant). The model explains ROCE by 60%. However, the co-efficient of DE is not statistically significant at 10% level. Thus it may be concluded that the acquirer companies which have decreased debt level during the period of study is not inversely related to ROCE. The paired t test between pre and post merger data would help to understand whether there is any significant change in the data or not.

[Insert TABLE-IX]

From Table IX, it is observed that companies whose rate of positive change of debt is high has got some positive changes in their post merger

performance. In post merger period their net sales, net profit, EPS have significantly increased. On contrary, ROCE and RONW of the companies have decreased and that are significant at 10% level. There are some significant increase in interest payment and tax payment of the companies in post merger period. The study found no significant change in D- E ratio in post merger period. Thus, we may say that though there is some significant increase in debt, there might have some increase in equity also for which there was no significant change in D-E ratio. Moreover, there might have some inefficient investment of the additional funds for which in spite of the increase of sales and profits return figures (ROCE, RONW) have been decreased.

[Insert TABLE – X]

In case of companies with negative debt changes, it has been observed that in most of the performance parameters, except net sales and PAT, there is no significant change in post merger performance. The study found some significant increase in net sales and in net profit of the companies in post merger period and that might have been occurred for changes in size of the companies due to merger. Another interesting finding is that though the companies significantly decreased their debt amount, it has got no significant change in their D- E ratio.

DISCUSSION & RECOMMENDATIONS

In descriptive analysis, it is observed that ROCE is greater than ROE. It implies that the debt could not lead to increase in shareholders' value for acquirer companies. Interestingly, DE does not granger cause ROE. It is possible that many acquirer companies have accumulated loss in their balance sheet and to avail tax shield out of it, the accumulated loss may be the motivation for the acquirer. Another possibility is that fresh debt taken by acquirer to finance acquisition or afterwards may have different (may be higher) interest rate. From the panel data analysis, it is observed that DE negatively affects the ROCE of acquirer companies. It implies that the capital structure of acquirer companies does not follow trade off theory and Modigliani Millar Hypothesis. Rather, the debt-equity ratio partially follows Pecking order theory in suggesting that retained earnings and fresh issuance of equity is preferred for acquirer companies. The financing an acquisition with debt may not be advocated in general. However, pecking order theory prefers the debt least but

never prohibits taking debt in totality. To observe the relation between DE and ROCE more closely, further analysis is required to be done. For this purpose, a sub-sample brought from the sample data set on the basis of growth rate of debt of the companies during the study period. Top and bottom companies on the basis of growth of debt from the dataset were selected to examine contrasting impact of debt on ROCE. It is observed that, DE has more impact on ROCE in case of companies with high debt growth rate.

The paired t test indicates two set of results. One result is for the top companies in growth of debt and another is for top companies in respect of decrease in debt. As the sample companies in first case are selected on the basis of high growth in debt, it is observed that the amount of debt and consequent interest has increased in post merger. It has been noted that in spite of increase of amount of debt, debt equity has not changed significantly. It implies that the fresh equity shares may have been issued on merger. The result shows that the net sales of acquirer companies have increased post-merger as expected. The tax, PAT and EPS also increased post-merger accordingly. However, ROCE of positive high debt change companies has decreased post in merger. It may be because of the fact that increases in debt and equity is less than proportionate increase in EBIT. Further the decrease in ROE level has also been statistically significant indicating more than proportionate increase in shareholders' equity than the increase in PAT. On the other hand, the statistic of top acquirer companies who has reduced the level of debt has also been considered pre and post merger. The amount of debt and debt-equity ratio has not changed significantly. Many of these companies did not borrow too much to finance merger. During the period of study many of these firms finally become debt free in the period. The sales of such companies has increased in post merger period. However, there is no significant change in interest, tax and EPS. More importantly, ROCE and ROE has not changed significantly post merger period. Thus, it has been observed that the increased debt has affected the profitability of acquired companies adversely.

CONCLUSION

The objective of the paper is to examine the relationship between capital structure and corporate profitability of acquirer companies in India during liberalised period. In this paper debt-equity ratio and ROCE has

been considered as proxy of capital structure and corporate performance respectively. Firstly, the descriptive analysis of a large data set demonstrates that ROCE is greater than ROE for the acquirer firms even in the long run. It suggests that the debt-equity ratio may not lead to increase in corporate return for acquirer companies. Secondly, it is observed that the debt-equity ratio may Granger Cause ROCE. Thirdly, the relation between capital structure and intrinsic value of shareholders' return of all acquiring companies during 2000 to 2016 has been ascertained with the help of fixed effect model on panel data applying least square method. It is observed in the panel data analysis that DE is inversely related to ROCE. Fourthly, an analysis of paired t test has been conducted on the data of top and bottom companies on the basis of growth in debt to ascertain whether there was any significant change in DE, ROCE and ROE during pre & post merger period. It has been observed that in case of companies with high growth rate in debt, ROCE and ROE has declined in post merger period. On the other hand, in case of acquirer companies with low change in debt-equity ratio, statistically significant decline in ROCE and RONW has not been noticed. On the basis of above discussion, it may be concluded that, the debt–equity ratio is inversely related to return of the acquirer company in the era of liberalization in Indian context.

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Appendix **Descriptive Statistics**

Parametres	DE	ROCE	ROE
Mean	0.940987	13.57365	12.06180
Median	0.600000	11.56500	9.700000
Maximum	12.79000	67.39000	55.90000
Minimum	0.000000	-7.760000	-19.28000
Skewness	3.379405	1.349064	0.839761
Kurtosis	20.63872	5.550536	3.672610
Jarque-Bera	186550.0	7207.328	1711.338
Probability	0.000000	0.000000	0.000000
Observations	12548	12548	12548

TABLE-I

Panel unit root test: Summary

Series: DE :: Sample: 2000 – 2016				
Newey-West bandwidth selection using Bartlett kernel				
Method	Statistic	Prob.**	Cross Sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-6518.95	0.0000	954	10416
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-1461.51	0.0000	939	10385
ADF - Fisher Chi-square	3520.83	0.0000	939	10385
PP - Fisher Chi-square	2992.43	0.0000	939	10894

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

TABLE-II
Pairwise Granger Causality Tests
Sample2000-2016 :: Lags:2

Null Hypothesis:	Obs	F-Statistic	Prob.
ROCE does not Granger Cause DE	10313	15.5710	2.E-07
DE does not Granger Cause ROCE		4.27197	0.0140
ROE does not Granger Cause DE	10313	19.1280	5.E-09
DE does not Granger Cause ROE		24.8862	2.E-11
ROE does not Granger Cause ROCE	10313	9.88952	5.E-05
ROCE does not Granger Cause ROE		74.0959	1.E-32

TABLE-III

Method: Panel Least Squares

Dependent Variable: ROCE; Sample: 2000 - 2016; Periods included: 17; Cross-sections included: 1134; Total panel (unbalanced) observations: 12548

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	14.44426	0.112744	128.1158	0.0000
DE	-0.925211	0.091218	-10.14287	0.0000
Effects Specification				
Cross-section fixed (dummy variables); Period fixed (dummy variables)				

R-squared	0.510490	Mean dependent var	13.57365
Adjusted R-squared	0.461097	S.D. dependent var	11.15443
F-statistic	10.33521	Akaike info criterion	7.130575
Prob(F-statistic)	0.000000	Durbin-Watson stat	0.942061

TABLE-IV

Panel EGLS (Cross-section random effects)

Dependent Variable: ROCE; Sample: 2000 - 2016;
Periods included: 17; Cross-sections included: 1134
Total panel (unbalanced) observations: 12548
[Swamy and Arora estimator of component variances;
White period standard errors & covariance (d.f. corrected)]

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	13.46184	0.297736	45.21401	0.0000
DE	-0.836603	0.110991	-7.537608	0.0000
Weighted Statistics				
R-squared	0.007311	F-statistic		92.39818
Adjusted R-squared	0.007232	Prob(F-statistic)		0.000000
S.E. of regression	8.425242	Durbin-Watson stat		0.833066

TABLE-V

Correlated Random Effects - Hausman Test

Test of cross-section random effects (Summary)

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.164819	1	0.0752

TABLE-VI

Method: Panel Least Squares

Dependent Variable: ROCE
Sample: 2003-2015; Periods included: 13; Cross-sections: 26
Total panel (balanced) observations: 338

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	17.16722	1.118670	15.34610	0.0000

DE	-3.651887	1.675194	-2.179979	0.0300
Effects Specification				
Cross-section fixed (dummy variables)				
Period fixed (dummy variables)				
R-squared	0.513336	Mean dependent var	15.65436	
Adjusted R-squared	0.451486	S.D. dependent var	21.77999	
Prob(F-statistic)	0.000000	Akaike info criterion	8.507485	
Durbin-Watson stat				0.844788

TABLE-VII

Method: Panel Least Squares

Dependent Variable: ROCE; Sample: 2000 2015; Periods: 16

Cross-sections: 28; Total panel (balanced) observations: 448

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	17.53297	0.785867	22.31036	0.0000
DE	-0.085209	0.103595	-0.822519	0.4113
Effects Specification				
Cross-section fixed (dummy variables)				
Period fixed (dummy variables)				
R-squared	0.633516	Mean dependent var	17.41309	
Adjusted R-squared	0.594509	S.D. dependent var	25.66834	
F-statistic	16.24113	Akaike info criterion	8.518786	
Probability	0.000000	Durbin-Watson stat	0.597355	

TABLE-VIII

Pre- and Post- Merger Performance on Different Parameters of High Debt Changes Companies

Parameter	Position	Mean Value	Increase/ Decrease	t-value	Sig. level
Total Debt	Pre-merger	121.485	106.8924 (Increase)	1.4586	0.0783*
	Post-merger	228.3774			
Net Sales	Pre-merger	333.1728	558.6001 (increase)	2.6984	0.0060***
	Post-merger	891.7729			
Net Profit	Pre-merger	41.63643	84.42408 (increase)	1.9780	0.0293**
	Post-merger	126.0605			
Interest Payment	Pre-merger	10.24381	8.868241 (increase)	1.8700	0.0364**
	Post-	19.11206			

	merger				
Tax payment	Pre-merger	8.819019	32.25974 (increase)	1.5568	0.0658*
	Post-merger	41.07876			
D- E Ratio	Pre-merger	.462037	-.0503518 (decrease)	- 0.3111	0.3791
	Post-merger	.4116852			
ROCE	Pre-merger	20.28402	-6.19074 (decrease)	- 1.3873	0.0886*
	Post-merger	14.09328			
RONW	Pre-merger	23.82363	-10.21578 (decrease)	- 1.4529	0.0791*
	Post-merger	13.60785			
EPS	Pre-merger	3.988432	2.632661	2.3804	0.0125**
	Post-merger	6.621093			

*** indicates significant at 1% level; ** indicates significant at 5% level; * indicates significant at 10% level.

TABLE-IX

Pre- and Post- Merger Performance on Different Parameters of Low Debt Changes Companies

Parameter	Position	Mean Value	Increase/ Decrease	t-value	Sig. level
Total Debt	Pre-merger	190.9736	4.61804 (increase)	0.0678	0.4733
	Post-merger	195.5916			
Net Sales	Pre-merger	447.1805	554.0521 (increase)	2.7653	0.0055***
	Post-merger	1001.233			
Net Profit	Pre-merger	23.30775	67.19455 (increase)	1.5594	0.0663*
	Post-merger	90.5023			
Interest Payment	Pre-merger	19.48192	-.5518752 (decrease)	- 0.0789	0.4689
	Post-merger	18.93004			

Tax payment	Pre-merger	12.28125	21.39406 (increase)	1.1738	0.1262
	Post-merger	33.67531			
D- E Ratio	Pre-merger	1.345667	-.3886111 (decrease)	- 0.5773	0.2847
	Post-merger	.9570556			
ROCE	Pre-merger	16.95658	4.375444 (increase)	0.9929	0.1656
	Post-merger	21.33203			
RONW	Pre-merger	14.8285	2.168667 (increase)	0.4683	0.3220
	Post-merger	16.99717			
EPS	Pre-merger	9.814514	4.550271 (increase)	1.2758	0.1074
	Post-merger	14.36478			

*** indicates significant at 1% level; ** indicates significant at 5% level; * indicates significant at 10% level.

TABLE - X

MONEY LAUNDERING AND TERRORISM FINANCING IN BANGLADESH

Rehnuma Afrin Khan¹

Dr. Md. Mamunur Rashid²

ABSTRACT

The aim of this study is to examine and investigate the compliance of the principle of Bangladesh Financial Intelligence Unit (BFIU) to the International Standards of combating money laundering and terrorism financing. The study also examines the effectiveness in dealing with prevention of money laundering and terrorism finance which is based on the 40 Financial Action Task Force recommendations. Examining these aims is important to the compliance of the International Standards. This study is a survey in the form of questionnaires completed by 100 respondents, where the respondents asked dichotomous yes or no question; yes answer for agreeing and no for disagreeing. In this paper yes/no focuses on general attitude measurement, easily understood and quick to complete. Yes/no generates data suitable for non-parametric statistical analysis. To assess the effectiveness, over 15 questions were provided to the respondents to acquire data. Secondary data is also analyzed for decision-making regarding informal money flow in Bangladesh. Both primary and secondary data show that detection of money laundering and terrorism of financial are difficult and suspicious due to the lacking of using advancement of technology. This paper tells about BFIU's analysis about money laundering and terrorism financing. This paper can be a guideline to prevent money laundering and financial terrorism in Bangladesh as well as also in the globe.

Keyword: Money laundering; Terrorism in Finance; International Law; Informal Money; Transaction.

INTRODUCTION

A money laundering and terrorism financing across the world is the white colour crime and buzzword. The Financial Action Task Force (FATF) has provided 40 recommendations for identifying, combating and controlling money laundering activities for both locally and internationally. In compliance with recommendation 26, each country have to establish a Financial Intelligence Unit (FIU) to serve as a national centre for gathering, analyzing and disseminating suspicious transactions related to money laundering and terrorism finance. The international community is undergoing rapid economic, social and political development.

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The use of modern technology has facilitated transportation and communications, and has made the world a very small village. These developments can bring about positive output as well as some technological shortcomings in the world. It influences the financial system exposing to abuse from organized criminals (Dumitrache & Modiga, 2011). One of the major abuses of the world financial system is money laundering and terrorism finance. The concept of money laundering regulations goes back to aged times and is intertwined with the development of money and banking. Money laundering is first seen with individuals hiding wealth from the state to ignore taxation or confiscation or a combination of both (Stancu & Rece, 2009). Money laundering is the processing of these criminal offences to hide their illegal origin. This process is of critical importance, as it enables the criminal to enjoy these profits without jeopardizing their source (Cindori, 2013). Since July 1989, the Financial Action Task Force (FATF) develops and promotes policies to protect the global financial system against money laundering and terrorism financing (Bunchuk, 2017). In 2013, FATF has announced the risk assessment rules of country's money laundering and terrorism financing. The anti-money laundering research has begun to take shape, with so many years' development of theory and practice work on of Anti Money Laundering (AML) and countering the Financing of Terrorism (CTF) directed by FATF (Cindori, 2007). Thus, this paper focuses on anti-money laundering and terrorism financing (Aliu et.al. 2017) in Bangladesh to prevent money laundering problem through Bangladesh Financial Intelligence Unit (BFIU). The economy of Bangladesh is hampered due to the money laundering. Here, limited risk is involved of being caught in Bangladesh. The availability of multiple opportunities for personal encashment without the risk of being exposed is another cause of money laundering. Accordingly, money laundering and terrorism financing are crucial problems in the globe as well as Bangladesh. Therefore, anti-money laundering and terrorism financing have been considered studying in this paper. From this paper people can understand about the curse of money laundering and its bad effects in the economy of Bangladesh.

REVIEW OF LITERATURE

Money launderers can offer the benefits of the online payment systems and the virtual world via data mining (Zdanowicz,2004) in terms of

facilitating the crime of money laundering for the anonymity, the speed of transactions, anytime, anywhere, the virtual platforms (Dumitrache & Modiga, 2011). Money Laundering is relatively a crucial problem in the world. Hence, there is a scope for discovering new methods based on experiences of jurisdictions which have implemented their own anti-money laundering framework. This is important from the perspective of financial sector in general and securities markets (Stancu & Race, 2009). Money laundering is the process of transforming the profits of crime and corruption into apparently "**legitimate**" assets. In a number of legal and regulatory systems, however, the term money laundering has become conflated with other forms of financial and business crime, and is sometimes used more generally to include misuse of the financial system (involving things such as securities, digital currencies, credit cards, and traditional currency), including terrorism financing and evasion of international sanctions . Most anti-money laundering laws openly conflate money laundering (which is concerned with *source* of funds) with terrorism financing (which is concerned with *destination* of funds) when regulating the financial system (Masciandara, 1999). BFIU, the central agency of Bangladesh, is concerned for following analyzing: Suspicious Transaction Reports (STR), Suspicious Activity Report (SAR), Cash Transaction Report (CTR) and information related to money laundering (ML) and terrorism financing (TF) (Baaziz & Labidi, 2016). The BFIU is also empowered to supervise the activities of the Reporting Organizations (ROs) and carry out on-site supervision. BFIU accomplishes both the functions of national analysis center and regulatory and supervisory activities (Ionescu & Power, 2011). The main objective of BFIU is to establish an effective system for prevention of money laundering, combating financial of terrorism and proliferation financing of weapons of mass destruction. BFIU can include being able to respond to requests made on the basis of non-conviction-based confiscation proceedings and connected provisional measures, unless this is inconsistent with fundamental principles of their domestic law. Bangladesh can be taken provisional measures for property of corresponding value is key deficiencies. The threat of money laundering is the crucial problem in the financial system. Also, the absence of weak legislation is responsible for money laundering (Cindori, 2013). Hence, both money laundering and financial terrorism can be open for criminals and money launders. Even, sometimes government itself is involved to do this to win political rivals. National Board of Revenue (NBR) never bothered to unearth launder money. Tax evasion caused money

laundering. Thus, they can lie about where money and assets come from in order to evade tax. People can also increase their profit by money laundering (Cindori, 2007) and financial terrorism. Illegal businessmen want to show black money appear with white money (Shah, 2007). They can send their money to foreign country to invest in that country (Aliu et.al. 2017). Parallel economy of crime imperils the economic well-being of many states and the unavoidable connection of black markets and capital transaction. The states and international organizations have largely failed to anticipate the evolution of Transnational Organized Crime (TOC) from a localized problem into a strategic threat to governments, societies and economies. Articulating a clear and brief understanding of money laundering practices, it explains the investigative and legislative processes that are essential in detecting and complicating this illegal and dangerous activity in money laundering. The volume and variety of global money laundering objections have faced by investigators and prosecutors seem infinite. Criminals and money launderers will continue to set new technologies, weak AML/CFT jurisdictions, financial secrecy jurisdictions, greedy and naive victims, and underground value transfer systems. By developing the global network of FIUs and their system of information gathering, BFIU can face the challenge of financial crime and diverse scenario of the money laundering and terrorist financing and can fulfill all the objects of its own. Finally, Bangladesh can provide Money laundering & Prevention Act, (MLPA) 2012 to protect informal money transaction.

METHODOLOGY

Money laundering is a big threat in Bangladesh economy. People are becoming engaged in this crime rapidly because of easy excess in this crime as well as less change to be trapped in Bangladesh perspectives also. In descriptive research paper along with some mathematical analysis can give a proper picture of the condition of money laundering and BFIU's analysis to prevent money laundering and terrorism financing in Bangladesh. Thus, descriptive research is considered in this paper to find out the overall interest of insight about money laundering and terrorism of financing in order to make policy of anti-money laundering and its degree of compliance and to make a sound understanding about money laundering and its effects on economic and more. This study is a survey in the form of questionnaires completed by 100 respondents, where the respondents' asked dichotomous yes or no

question; yes answer for agreeing and no for disagreeing. In this paper yes/no focuses on general attitude measurement, easily understood and quick to complete. Yes/no generates data suitable for non-parametric statistical analysis. To assess the effectiveness, 15 questions were provided to the 100 respondents to acquire data regarding money laundering and financial terrorism. These 100 respondents are gathered by different fields, among them most of the people are service holders in banks, some of the respondents are businessmen and some are from other professions. The researchers asked the questions by mail and by personal visits. Thus, following two types of data are used to complete this paper. All the questions are qualitative questions. They are:

- i) Primary Data: A set of questionnaire was used as the primary data collection technique with a sample size of 100.
- ii) Secondary Data: The secondary data was collected from a number of previously published Journals on related topics and several references books and articles.

Primary data are analysis in percentage and tabular form for decision-making and secondary data are analysis using excel software for bar chart, pie char and t-Test for decision-making.

OBJECTIVES

The main objective of this paper is to gain insight about money laundering and terrorism financing in order to make policy of anti-money laundering and its degree of compliance. The specific objectives of this paper are to make a

- i. Sound understanding about money laundering and its effects on economic and social consequences;
- ii. Highlight the major reasons behind money laundering; illustrate the stages of money laundering;
- iii. Describe the work procedure of BFIU about money laundering;
- iv. Find the policies and work procedure of FATF and observe the recommendations.

RESULTS AND DISCUSSIONS

According to the opinion of respondents from 1st survey question, financial institutions are regulated in anti-money laundering matters, in this regard 63 respondents agreed and 37 respondents disagreed. Next

2nd survey question was regarding the Anti-money laundering/countering the financing of terrorism (AML) compliance program is approved by board or a senior committee , in this regard also 84 respondents agreed and 16 respondents disagreed. Such as total 15 questions’ opinion from 100 respondents are shown in below:

Table 1: Response of Questionnaire at a glance

Criteria in Question	Frequency		Remarks
	Yes	No	
Financial Institution has money laundering matters	63	37	
Compliance program is approved by senior committee	84	16	Highest yes response
Chief anti-money laundering compliance officer	64	36	
Legal and regulatory Compliance program	20	80	Lowest yes response
Written policy documenting	68	32	
Prohibiting accounts with shell banks	68	32	
Internal audit function	77	23	
Policies & practices applied to all products	52	48	
Employee training program	76	24	
Identify suspicious transaction by employee training program	77	23	
Collect and maintain the transaction report	77	23	
Implementation of system	39	61	
Know the law of money laundering	73	27	
Company need to take more attention	81	19	
Government needs more involvement	73	27	

The analysis shows that money laundering is a concern topic for every organization. Every person of every institution is concerned about it. These are determining the impact of money laundering activities despite the improvements. In law enforcement inquiries of organized criminal activity, it is frequently the connections made through financial transaction records that allow hidden assets to be situated and that

establish the unity of the criminals and the criminal organization involved. When criminal funds are derived from robbery, extortion, embezzlement or fraud, a money laundering investigation is often the only way to identify the stolen funds and restore them to the victims. In Bangladesh, BFIU is also working in this respect. BFIU is trying its level best by giving rules, regulations, and standard and by monitoring all banks and non-bank institutions activities. Here, BFIU accepts information and data from a number of sources, such as reports including CTR and STR.

Suspicious Transaction Report (STR)/ Suspicious Activity Report (SAR): The provision of section 16(1) of the Anti-Terrorism Act. (ATA)-2009 of Bangladesh is obliged to submit STR/SAR to BFIU. In FY 2015-16, bank, financial institution, insurer, capital market intermediaries and money remitter submitted a total of 1687 STRs to BFIU through online are shown in fig.1. Figure 1 shows that suspicious transactions are remarkably increasing every year. In 2012-13 it was only 400 whereas it increased to 325% in 2015-2016.

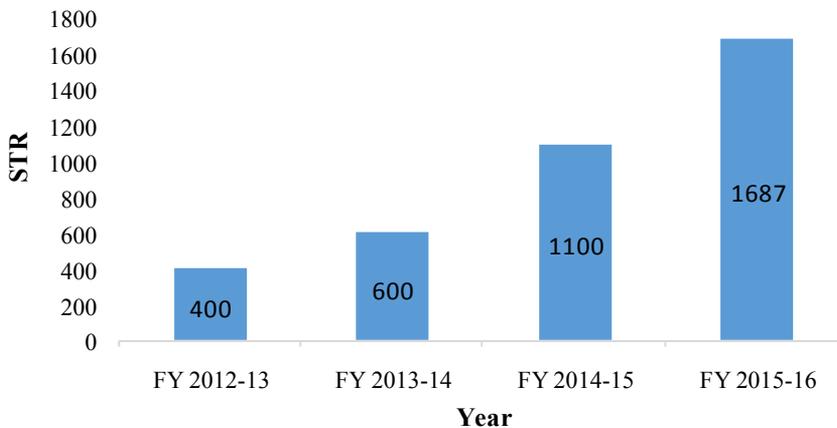


Figure 1: Suspicious Transaction Report; Source: BFIU Annual Report 2015-2016 [<https://www.bb.org.bd/bfiu/>]

Bangladesh Bank, other Government and non-government banks need to take proper action before opening any transaction, need proper inquiry about customer. Banks are the largest part of our economy. At the same time the banking sector bears the highest risk of money laundering and terrorism financing due to its wide range of products, services and networks. For this reason, banks are considered as the primary and main reporting organizations and 92% of the STRs/SARs are received from

banking sector. In FY 2015-16, BFIU received 1547 out of 1687 STRs/SARs, which were 91.7% of the total STRs/SARs from different banks, 5.33% by money remitters and 2.25% financial institutions. All are shown in following

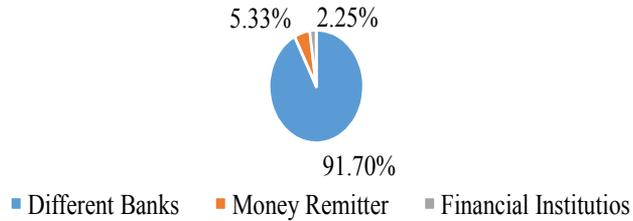


Figure 2: Reporting organization wise trend of STR/SAR in FY 2015-16; Source: BFIU Annual Report 2015-2016

Complaints Received by BFIU: BFIU glances into the complaints relating to Money Laundering and Terrorism Finance (ML & TF) offences accepted from individuals and various organizations. In FY 2015-16, BFIU accepted 209 complaints from different sources including Anti-Corruption Commission (ACC) and Criminal Investigation Department (CID) of Bangladesh. Figure-3 shows that different organizations received money laundering complaints. From the fig.3, in 2016 the complaints numbers were 209, which were 388 in 2015 and 268 in 2014. The complaints were increased 45% from 2014 to 2015 but from 2015 to 2016 it decreased 46%. These data shows a good sign for the economy in Bangladesh.

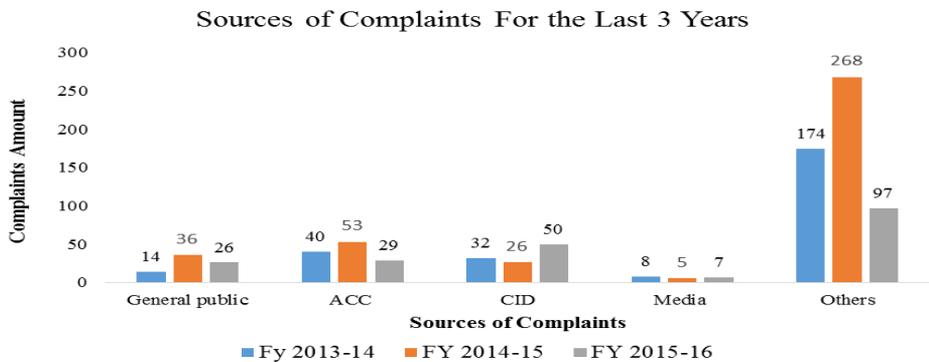


Figure 3: Sources of complaints for the last 3 years; Source: BFIU Annual Report 2015-2016

The data in fig.3 of the 2014-2015 and 2015-2016 are considered for t-Test

Table 3: t-Test: Two-Sample Assuming Unequal Variances

	2014-15	2015-16
Mean	77.6	41.8
Variance	11630.3	1184.7
Observations	5	5
Hypothesized Mean Difference	0	
Df	5	
t Stat	0.707145	
P(T<=t) one-tail	0.255531	alpha(0.05)
t Critical one-tail	2.015048	
P(T<=t) two-tail	0.511062	alpha(0.05)
t Critical two-tail	2.570582	

The above table 4 shows that t stat value is 0.707 which is less than 2.571; again the P value is 0.511 which is greater than alpha 0.05. According to the result of above analysis Bangladesh needs to follow the strategy of 2016. The third round mutual evaluation from **System Check Inspections have been done by** BFIU in 56 Bank branches in the financial year 2015-2016. As a result there is no branch got ‘strong’ rating, but the 28 branches rating are ‘fair’ and 24 branches rating are ‘marginal’, and among them only 3 branches rating are satisfactory and only one bank’s rating is unsatisfactory. They are shown in following fig.4.



Figure 4: AML rating on banks; Source: BFIU Annual Report 2015-2016

System Check Inspection of NBFIs: The BFIU system check inspection result of the FY 2015-16 publishes that 77.8% of the non-bank financial institutions (NBFI) head offices got ‘Fair’ rating and 22.2% got ‘marginal’ rating, a total of 70% of the NBFI branches got ‘fair’ rating and 30% got ‘marginal’, but no branches got ‘satisfactory’ as shown in fig. 5.

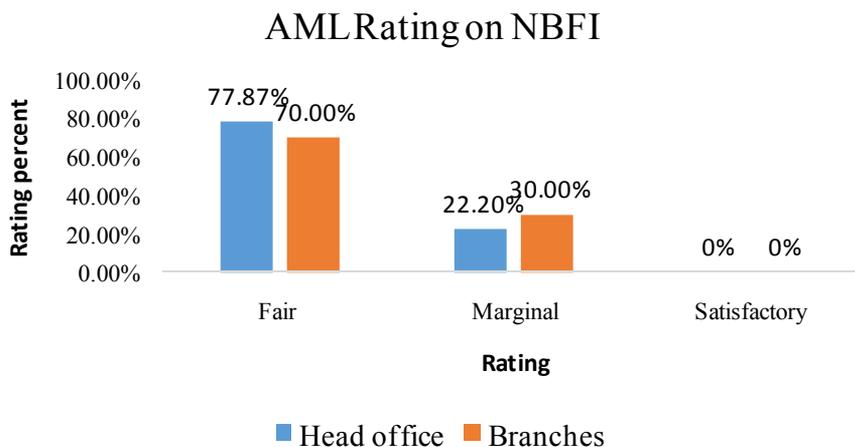


Figure 5: AML rating on NBFI; Source: BFIU Annual Report 2015-2016

From the above all scenario of the money laundering are shown most vulnerable for without a usable profit, hence the criminal activity can be ceased to continue. However, it cannot be possible to stop money laundering without full global cooperation. BFIU is following the 40 recommendations of FATF but all the works are not working properly. FATF recommendations are perfectly enough to control and prevent money laundering and terrorism of financing in Bangladesh. From the above study, it is clear that Government of Bangladesh, Bangladesh Bank, BFIU, APG and FATF are working together to prevent money laundering and terrorism of finance (**Katsios, 2016**).

RECOMMENDATIONS

The findings of the study have practical implications for Bangladesh, as well as any member country of the United Nations (UN):

- i. All respondents have agreed and gave positive/yes response to almost all criteria, except two criteria, which are regulatory compliance program and know the law of money laundering. Thus, above two criteria can be created awareness including impose and compliance in the society.
- ii. Analysis of secondary data has shown that FY2016 has got good protection in money laundering. Thus, Bangladesh has to follow the strategy of FY2016 and implement advanced technology to protect money laundering and terrorism of finance.
- iii. Money laundering is mostly occurred in commercial Banks compared to others financial institutions. Thus Bangladesh Bank has to introduce more vigilance and technology to protect money laundering and financial terrorism.
- iv. Artificial intelligence method and approach can combat money laundering and terrorism finance. Control processes for prevention of money laundering can be established using cloud technology and mobile intelligence.
- v. Moreover, FATF and BFIU can fix adaptation to establish coordination, laws, regulations, information and communication technology and inducement to protect money laundering and terrorism of finance both locally and globally.

CONCLUSION

This paper has studied money laundering and terrorism financing in Bangladesh to make awareness of anti-money laundering and its degree of compliance. Moreover, in this paper has focused on money laundering and its effects on economic and social consequences and highlighted the major reasons behind money laundering. BFIU has introduced the detection of money laundering and terrorism of financial related advancement of technology with compliance of FATF recommendations since 2016. Therefore, BFIU/Bangladesh can protect efficiently and effectively money laundering and financial terrorism.

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FACTORS AFFECTING INDIVIDUAL INVESTOR BEHAVIOR: EMPIRICAL EVIDENCE FROM MUTUAL FUND INVESTORS IN DHAKA CITY

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ABSTRACT

This empirical study attempts to identify the factors that affect mutual fund buying behavior of individual investors in Dhaka city. The mutual fund industry in Bangladesh is growing and people are becoming increasingly aware and interested in mutual funds. In this context, it is important to understand what influences the investors to choose mutual funds. It is based on a sample of 103 respondents chosen through random sampling technique. Primary data were collected through a structured questionnaire using a 5-point Likert scale during October 2017 – December 2017. The methodology for the study involves exploratory factor analysis technique that includes principal component analysis, KMO measure of sampling adequacy, Bartlett's test of sphericity and varimax rotation method to extract the factors. Results extracted two underlying factors of importance that investors consider significant while investing in mutual funds, namely intrinsic features of the fund and income features of the fund. Intrinsic features include reputation of the fund manager, diversification of scheme, simplicity of investment, growth prospectus, brand name, entry and exit load, scheme risk and asset quality. Income features include return performance and tax benefit to the investor. The findings from this study contribute to existing literature on mutual fund buying behavior in Bangladesh and provide an understanding of the decisions made by the investors. Mutual fund companies and fund managers in Bangladesh could use the findings of the study when designing various schemes for investors.

Keywords: Mutual funds, Investor behavior, Factor Analysis.

JEL Codes:G23, G41

INTRODUCTION

Mutual funds first emerged in the Netherlands in the 18th century and eventually expanded into Switzerland, Scotland and United States in the 19th century (Sharma & Agrawal, 2015). Mutual funds offer an investor a platform to participate in the capital market with professional fund management service irrespective of the amount invested (Arathy et al., 2015). It allows investors with limited funds to diversify their

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investments in a portfolio of securities (Madura, 2015). Mishkin and Eakins (2015) identify mutual funds as a key financial intermediary that pools the resources of many small investors by selling them shares in the fund and using the proceeds to buy securities. Thus, mutual funds act as a gateway to invest in big companies otherwise inaccessible to ordinary investors with small investments (Arathy et al., 2015). Garg and Singal (2016) state that a mutual fund is the most suitable investment for general investors as it offers the opportunity to invest in a diversified, professionally managed basket of securities at a relatively lower cost while making investing simple, accessible, and affordable. It is an indirect form of investment in the capital market that has the advantages of diversification, professional management, low-cost investment, liquidity and tax benefit (Chawla, 2014). The objective is to provide better returns to the investor by minimizing the risk associated with capital markets. The first mutual fund in Bangladesh was launched by the state-owned investment agency Investment Corporation of Bangladesh (ICB) in 1980 (ICB Annual Report, 2017). Since then, the market value of mutual funds has increased from approximately Tk. 7.5 million in 1980 to more than Tk. 280 billion in 2017 (Biplob, 2017). So, it could be said that more and more investors are choosing mutual funds and this presents a tremendous opportunity.

The future of mutual funds is really encouraging due to an ever-increasing variety of products to satisfy almost every investment objective; rising disposable income due to increase in salaries; increase in penetration of financial products in rural areas; improving financial literacy; stress on financial inclusion and increase in promotional efforts by the companies. However, growth in mutual fund industry has not been paralleled by a similar effort in research on its purchase and selection (Gupta & Chander, 2012). In fact, most of the research is focused on mutual fund performance and its two determinants, return and risk (Capon et al., 1996). In this context, identifying and understanding the factors that influence individual investors to purchase mutual funds demands attention.

Behavioral finance is considered an emerging field that combines the understanding of behavioral and cognitive psychology with financial decision-making process (Vijaya, 2014). This field merges the concepts of financial economics and cognitive psychology to construct a more detailed model of human behavior in financial markets

(Shanmugasundaram, 2011). Investment behavior is critical to an investor's future and that decision is dependent on many factors (Ansari & Moid, 2013). Researches by Shefrin (2000), Shleifer (2000), Wärneryd (2001) have found that investor behavior depends on internal and external factors. Lewellen et al. (1977) determine that age, sex, income, and education affect investor preferences for capital gains, dividend yield, and overall return. Barnewall (1987) finds that individual investor behavior can be predicted by lifestyle characteristics, risk-aversion, control orientation, and occupation. Warren et al. (1990) and Rajarajan (2000) predict that individual investment choices (e.g., stocks, bonds, real estate) are based on lifestyle and demographic attributes. Chaubey and Dimri (2009) found that investor behavior is associated with demographic factors such as age, gender, marital status, occupation, and income. Jagongo and Mutswenje (2014) found that reputation of the firm, firm's status in the industry, expected corporate earnings, profit, and condition of the statement, past performance, price per share, feeling on the economy and expected dividend are the factors that influence individual investor behavior. Research findings by Hussein (2007) show that expected corporate earnings, get rich quickly, stock marketability, past performance of the firm's stock, government holdings, and the creation of the organized financial markets are factors that investors consider. Similar results were found by Bennet et al. (2011), who found that dividend, get rich quick strategy, the influence of other successful investors and investor awareness programs act as factors for investor behavior. Dimitrios (2007) states that individual investors rely more on newspapers/media and noise in the market when making their investment decisions, while professional investors rely more on fundamental and technical analysis.

In this context, the objective of this paper is to identify the factors that influence the buying behavior of mutual fund investors in Dhaka city. The study sheds light on the reasons that prompt individual investors to invest in mutual funds using factor analysis method.

LITERATURE REVIEW

1. Defining Mutual Funds

U.S. Securities and Exchange Commission (2018) defines mutual fund as a company that pools money from many investors and invests the money in securities such as stocks, bonds, and short-term debt. Biplob

(2017) defines mutual fund as a financial intermediary that collects money from many investors and invests the money in stocks, bonds, short-term money-market instruments, other securities or assets, or some combination of these investments depending upon the objectives and need of the investors. The combined holdings of the mutual fund are known as its portfolio. It is an investment vehicle that creates an opportunity for average small investors to take advantage of investing in a professionally managed diversified pool of securities and offers liquidity, convenience and tax considerations (Biplob, 2017; Fidelity Investments, 2018). Mishkin and Eakins (2015) state that mutual funds offer liquidity intermediation, denomination intermediation, diversification, cost advantages and managerial expertise. According to Kaur et al. (2013), stock market investments require a great deal of time and expertise to analyze a company and involves high transaction cost. They state that as investment in one company is always risky, the best alternative to overcome the complexities of the stock market is to hand over the job to professional fund managers. The professional fund managers, acting on the behalf of mutual funds, manage investor's money for their benefit in return for a management fee.

Sankaran (2004) states that mutual fund industry will continue to grow and will be propelled in the right direction because of the investor friendly financial markets. Increasing competition with increased growth will lead to more products in the market (Jain & Rawal, 2012). Mukherjee and Roy (2011) state that mutual funds are popular because of their ability to ensure a higher return and lower risk to individual investors with a small investable fund than they themselves can achieve by investing in the stock market. They claim that mutual funds are unique; because they help small investors to enjoy the gains from stock market at a lower risk. Mutual funds are dynamic financial institutions, which play a crucial role in the economy by accumulating savings and investing them in the capital market thus creating the link between savings and capital market (Awunyo-Vitor et al., 2015).

2. Factors Affecting Mutual Fund Investor Behavior

Investors behave in irrational ways for fear of loss, no matter the amount of research and study they do. They behave differently due to various factors (Jagongo & Mutswenje, 2014). Researchers across the globe have conducted studies on the factors that affect mutual fund investor behavior. For example, Parihar et al. (2009) found that the demographic

variables such as age, gender, income show strong association with the investor's attitude towards mutual funds. They also pointed out that return followed by liquidity, flexibility, affordability and transparency are the influential factors to make investment in mutual funds by the investor. However, the authors did not find evidence of education having any impact on the investors. On the contrary, Subramanya and Murthy(2013) found that along with age, gender and income; education, and occupation significantly influenced investor behavior towards mutual funds. Studies by Singh and Vanita (2002) and Sikidar and Singh (1996) found that tax exemption significantly affected investor behavior. Singh (2012) found that although gender, income and qualification affect investor behavior; age and occupation did not show any impact on investor preference. Singh also found that liquidity and return potential of the fund were considered as attractive attributes to the investors. Along similar lines, Sharma et al. (2012) found that safety and liquidity are the factors that influence the choice of mutual fund by investors. Cook and Hebner (1993) found that front-end and back-end load fees and the level of diversification are attributes that investors factor into fund selection. In addition, Capon et al. (1996) found that apart from past mutual fund returns and risk level, several other factors were found to be relevant, namely, amount of sales charge, management fees and reputation of fund manager.

Among the various researches conducted on mutual fund investor preference and behavior, results show that intrinsic qualities of the product, portfolio management record and brand image (Rajeshwari & Moorthy, 2002; Ranganathan, 2006); growth aspects of the scheme (Singh &Chander, 2003); flexible investment facilities (Ranganathan, 2006); and reputation of fund managers (Sharma, 2006) are some of the mutual fund attributes that influence investors in fund selection. (Gupta and Chander, 2012) conducted a comparative analysis of retail and non-retail mutual fund investor behavior. The authors defined retail mutual fund investor as “any investor who has invested in any of the mutual fund schemes and whose individual investment in mutual fund portfolio at the time of study is less than Rs 600 thousand” whereas non-retail investor of the fund is defined as “in addition to high net worth individuals, including firms or companies, with the only stipulation whose investment amount should be higher than Rs 600 thousand at the time of study”. They concluded that performance and asset profile are more important to nonretail investors while extrinsic attributes are more

important to retail investors. Parimalakanthi and Kumar (2015a) found that investment behavior for mutual funds have strong association with gender, age, urban residence, marital status, education, occupation, family type, family size and wealth. To illustrate, results show that men within the ages of 31-35 years showed greater interest in mutual fund investment. Similarly, professionals with nuclear family are more inclined towards investing in mutual funds. In another study by the same authors, they state that investors, before making investment, search for various investment options followed by seeking intermediaries' advice and prefer to invest based on transaction cost (Parimalakanthi and Kumar, 2015b). In a different study, Bailey et al. (2011) examined the effect of behavioral biases on the mutual fund choices of a large sample of U.S. discount brokerage investors and reported that behaviorally-biased investors typically make poor decisions about fund style and expenses, trading frequency, and timing, resulting in poor performance. Amiri and Gil-Lafuente (2016) studied the factors affecting mutual fund investor behavior in Iran, Malaysia, Turkey and US. The authors identified that two factors – preliminary disclosure (advertisement, valuation, net asset value) and fringe benefits have significant effect on selection of mutual funds. Some studies found that tax benefits, high return, price and capital appreciation, liquidity, diversification, rating, net asset value, risk and brand image influence the final mutual fund purchase decision of the investor (Arathy et al., 2015; Gangwar & Singh, 2017).

Chawla (2014) based his study on 431 respondents using convenience sampling to understand the mutual fund buying behavior of individual investors. He identified that two factors are considered important by investors, credibility and miscellaneous features of the fund. The latter is considered important by younger, unmarried people and includes variables such as entry and exit load, add-ons provided by the funds, lock-in period of the closed-ended funds and tax benefits. He suggested that the study may be replicated with most respondents from middle income and lower category belonging to different cities of India. Further, a considerable proportion of respondents should be from 50-plus age group, as mutual funds are perceived to be less risky, and older people tend to be risk averse. Sharma (2015) found similar results, where she showed that investors invest in mutual funds for good returns, safety, and tax benefits. Cashman et al. (2012) conducted a study on mutual fund investor behavior by examining gross flows. The authors conclude that

the investors evaluate and respond to mutual fund performance while investing. To understand the factors influencing investor behavior, Nagy and Obenberger (1994) developed a questionnaire that included 34 factors such as expected corporate earnings, diversification needs, feelings for firm's products and services, past performance of stocks, past performance of their own portfolio, stock broker recommendations etc. Their findings suggested that although investors employ diverse criteria when choosing for investment, classical wealth-maximization criteria are also important to investors. Contemporary concerns such as local and international operations, environmental track record and the firm's ethical posture appear to be given only brief consideration. In a study by Chandra and Kumar (2011), the authors find that psychological axes such as prudence and precautionous attitude, conservatism, under confidence, informational asymmetry, and financial addiction drive investment decision. Garg and Singal (2016) identified that tax benefit, liquidity, regular return, less expensive, risk diversion and professional management of funds are the reasons that influence people to invest in mutual funds.

Jagongo and Mutswenje (2014) state that the most important factors that influence individual investment behavior are the reputation of the firm, firm's status in the industry, expected corporate earnings, profit, and condition of the statement, past performance, price per share, feeling on the economy and expected dividend. This is in accordance with Jain and Rawal (2012), who found that entry exit loads, the reputation of the fund, type of fund, sponsor expertise, brand name, fringe benefits, net asset value and past performance are the factors that prompt individual behavior. However, Kaur et al. (2013) found factors that are different from other literature. This may be because the authors explored the reasons for investors' choosing mutual funds over the stock market. They found that investors select mutual funds because they lack sufficient knowledge and expertise in the stock market and they consider stock market investment as risky endeavors. Additionally, the study found that investor perception toward mutual fund is positive – they prefer to invest in a mutual fund because it offers diversification, less risk, high return, withdrawal and exit facility, and professional management. This is similar to the study of Mittal and Gupta (2008), where the authors examined the awareness of the investors about mutual funds and various factors affecting the investment decision in the mutual funds. The study revealed that mutual funds had a comparative

advantage over other options due to high return, safety, liquidity, and convenience with moderate volatility. Joshi (2013) found that tax benefit, constant return, portfolio diversification, low risk, liquidity and better returns are the motivation behind investors' preferring mutual funds. This is in accordance with the results of Neelima and Rao (2016) who found that fund performance, brand name, withdrawal facilities, tax benefits and fund manager reputation are important considerations to investors of mutual funds. Mishra (2015) explored the important aspects of mutual funds affecting the perception of investors and examined the difference of perception of large and small investors based on explored factors. Results showed important factors regarding the perception of investors about mutual funds are investment, return, and future, respectively. In terms of differences of perception, findings indicate that small investors are favorable to tax returns and investments whereas large investors are more favorable to future and return.

Sanesh and Greeshma (2016) examined the key features of mutual fund products influencing the fund selection behavior of investors. Results show that past fund performance, fund reputation and brand name, scheme expense ratio, and scheme portfolio, withdrawal facility, and ratings are highly considered by investors in choosing mutual funds. Lenard et al. (2003) empirically investigated investors' attitudes toward mutual funds. The results indicate that the decision to switch funds within a fund family is affected by investor's attitude towards risk, current asset allocation, investment losses, investment mix, capital base of the fund age, initial fund performance, investment mix, fund and portfolio diversification. Walia and Kiran (2009) studied investor risk and return perception towards mutual funds. The study examined investor's perception towards risk involved in mutual funds, return from mutual funds in comparison to other financial avenues, transparency and disclosure practices. The authors found that majority of individual investors do not consider mutual funds as a highly risky investment. They also reported that significant relationship of interdependence exists between income level of investors and their perception of investment returns from mutual funds investment. Sharma (2012) examined the factors essential for securing investor penetration of mutual funds. The author grouped the results into three categories. The first category relates to the scheme/fund related attributes. This includes safety of money invested in mutual funds, a favorable credit rating of fund/scheme by

reputed credit agencies, the full disclosure of all relevant information and regular updates on every trading day. The second category is related with the monetary benefits provided by fund/schemes in the form of capital appreciation, liquidity, ROI (return on investment), early bird incentives, fringe benefits and relaxation in charges (expense ratio, entry load, and exit load). The last category relates to the sponsor related attributes. This includes reputation of the sponsor, sponsor's expertise, promptness in service and retaliation of investor's grievances. Sharma (2015) explored the objectives to invest in mutual fund schemes by retail investors and types of mutual fund schemes in which they like to invest. The author concluded that investors invest in mutual funds for good return, safety, and tax benefits. To achieve these objectives, they prefer growth schemes and balanced schemes.

In the context of Bangladesh, Begum and Rahman (2016) conducted a study in Dhaka city to analyze investor preference towards mutual funds and the factors that affect investor attitude. Results showed that demographic factors such as gender, income, and savings have a significant influence on the investor's attitude towards mutual funds investment. Results from factor analysis extrapolated three factors that affect investor behavior. These factors included attributes such as liquidity, diversification, affordability, transaction cost, credit rating, the reputation of the sponsor, return, risk, tax benefit, and transparency.

METHODOLOGY

Nature of Research

The study is descriptive in nature and adopts quantitative analysis methods using empirical data.

Population, Sampling Technique and Sample Size

The study was conducted on the mutual fund investors in Dhaka city. So, the population for the study is all the mutual fund investors in Dhaka city. For sample selection, a list of investors was prepared with the help of intermediaries and different brokerage houses in Dhaka. The sample was chosen randomly from the prepared list, subject to the availability and willingness of the respondents. Initially, questionnaires were sent to 115 respondents. However, for some of the respondents, certain questions were left blank. Such questions were omitted from the analysis

and the sample size was reduced accordingly. Finally, a sample of 103 useable responses was obtained.

Type and Source of Data

Data used in this study are primary in nature; collected through an online survey from the respondents participating in the study. Responses were collected during October 2017 - December 2017. Secondary data (previous literature and websites) have been used to gather a greater understanding of mutual funds and mutual fund buying behavior.

Questionnaire Development and Data Collection

To understand the attributes and variables that affect mutual fund buying behavior, relevant literature on the subject was reviewed; followed by unstructured interviews with investors of mutual funds. Based on these interviews and literature review, 10 attributes were identified that are considered important by investors in the mutual fund buying decision. A structured questionnaire was then prepared using these variables. The questionnaire comprised a 5-point Likert scale (Likert, 1972), where 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree and 5 = strongly agree. Aside from investment behavior related questions, demographic information of the respondents were also collected.

Data Analysis Technique and Statistical Tools

To identify the factors under the construct of the study, exploratory factor analysis (EFA) method was applied. EFA has been used in this study as a data reduction technique. EFA reduces many variables (tests, scales, items, persons and so on) to a smaller number of presumed underlying hypothetical entities called factors (Fruchter, 1967). The primary objective of factor analysis is data reduction and substantive interpretation (Field, 2005). It tries to simplify relationships that exist among a set of seemingly unrelated variables by detecting common dimensions or factors that link together while providing insight into the underlying structures of the data (Dillion & Goldstein, 1984).

The authors adopted principal component analysis to extract the factors influencing the preferences for choosing mutual funds. Principal component analysis is used to extract various components or factors, which is found to be satisfactory when the study is exploratory in nature and the objective is data summarization (Hair et al., 2007). It can explain

more variance than the loadings obtained from any other method of factoring. Factor analysis diagnostics such as Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy and Bartlett’s test of sphericity have also been applied. The number of principal components to be retained in the study has been decided based on Kaiser (1958) criterion of Eigen value greater than 1. Factor rotation becomes necessary for a clearer description of the factor structure and orthogonal rotation produces uncorrelated factors. Out of several methods of orthogonal rotation, the Varimax rotation procedure has been used which maximizes dispersion of loadings within factors and tries to load a smaller number of variables highly onto each factor (Kinnear & Gray, 2004). Communalities have also been stated and generally accepted communalities range from 0.4 to 0.8 (Hair et al., 2007). The study used the criterion of factor loadings greater than the absolute value of 0.5 (Stevens, 1992). A reliability test using Cronbach’s alpha was conducted on the importance of 10 attributes measured on an interval scale. The value of Cronbach’s alpha was found to be 0.907, which is quite high.

OBJECTIVE OF THE STUDY

The general objective of the study is to understand the mutual fund buying behavior of individual investors and specific objective is to extract the various factors that investors consider important while buying mutual funds.

RESULTS AND ANALYSIS

Table 1 presents the demographic profile of the respondents.

Table 1. Demographic Profile of the Respondents

Variable	Description	Number (Percentage)
Gender	Female	7(6.8)
	Male	96(93.2)
Educational Qualification	SSC	3(2.9)
	HSC	9(8.7)
	Graduate	60(58.3)
	Post Graduate and above	31(30.1)
Profession	Business Owner	21(20.4)
	Civil Service	5(4.9)
	Private Sector	26(25.2)
	Student	17(16.5)
	Self Employed	34(33)

Investment Experience	<3 years	18(17.5)
	3-5 years	26(25.2)
	5>years	59(57.3)
Risk Preference	High Risk / High Return	37(35.9)
	Low Risk /Low return	20(19.4)
	Low Risk/ High Return	46(44.7)
Investment Frequency	Regular/Daily	66(64.1)
	Monthly	23(22.3)
	Once in Six Months	3(2.9)
	Once in a year	5(4.9)
	Very Rare	6(5.8)

Source: Authors' findings

It is clear from Table 1 that 93.2 percent respondents are male, 58.3 percent are graduate, 25.2percent are working in the private sector, 57.3 percent are investing more for than 5 years, 44.7 percent prefer low risk with high returns, and 64.1 percent are regular investors.

Table 2 presents the descriptive statistics of the study. The table shows the mean values and standard deviations of the variables. The simplicity of investment, reputation of fund manager and diversification of schemes have greater mean values, implying that most respondents have given higher weight on these factors, whereas few considered return performance as highly important.

Table 2.Descriptive Statistics

Variables	Mean	Standard Deviation	Number of Observations
Return Performance	2.83	0.88	103
Scheme Risk	3.80	1.25	103
Tax Benefits	3.00	1.03	103
Entry and Exit Loads	3.70	1.18	103
Growth Prospects	3.63	1.11	103
Diversification of Scheme	3.81	1.18	103
Simplicity of Investment	3.95	1.26	103
Asset Quality	3.31	0.96	103
Brand Name	3.76	1.04	103
Reputation of Fund Manager	3.83	1.18	103

Source: Authors' findings

Table 3 presents the results of KMO measure of sample adequacy and Bartlett’s Test of Sphericity. Kaiser-Meyer-Olkin (KMO) measure varies between 0 and 1, and values closer to 1 are considered better. It indicates that the patterns of correlations are relatively compact, thus factor analysis should yield distinct and reliable results. Kaiser (1974) recommends values greater than 0.5 as acceptable. Results show an acceptable KMO value of 0.873. Bartlett’s Test of Sphericity tests the null hypothesis that the correlation matrix is an identity matrix. Here, the overall correlation is significant at 0.00 level indicating that factor analysis is the appropriate approach for this study.

Table 3. KMO and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.873
Bartlett's Test of Sphericity	Approx. Chi-Square	640.638
	Df	45
	Sig.	0

Source: Authors’ findings

The Cronbach alpha is the most widely used index for determining internal consistency (Kerlinger & Lee, 1999). Nunnally (1978) suggested that Cronbach’s Alpha should be more than 0.6. Table 4 shows the alpha value of 0.907 for the entire questionnaire. The high alpha value confirms the homogeneity of the items comprising the questionnaire and indicates an acceptable level of reliability.

Table 4. Reliability Test

Cronbach's Alpha	No of Items
0.907	103

Source: Authors’ findings

The principal component analysis (PCA) was carried out using SPSS to explore the underlying factors associated with the 10 variables. Table 5 shows that 68.249 percent of the variance can be explained by component 1 and 2.

Table 5. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.609	56.094	56.094	5.609	56.094	56.094	5.219	52.187	52.187
2	1.215	12.155	68.249	1.215	12.155	68.249	1.606	16.062	68.249
3	0.809	8.089	76.338						
4	0.556	5.558	81.895						
5	0.439	4.390	86.285						
6	0.404	4.036	90.321						
7	0.362	3.616	93.938						
8	0.281	2.813	96.750						
9	0.184	1.841	98.591						
10	0.141	1.409	100.000						

Extraction Method: Principal Component Analysis.

Source: Authors' findings

Figure 1 presents scree plot, which is used to extract the number of factors. It can be seen from the figure that two components/factors have been extracted (eigenvalue > 1).

Figure 1. Scree Plot

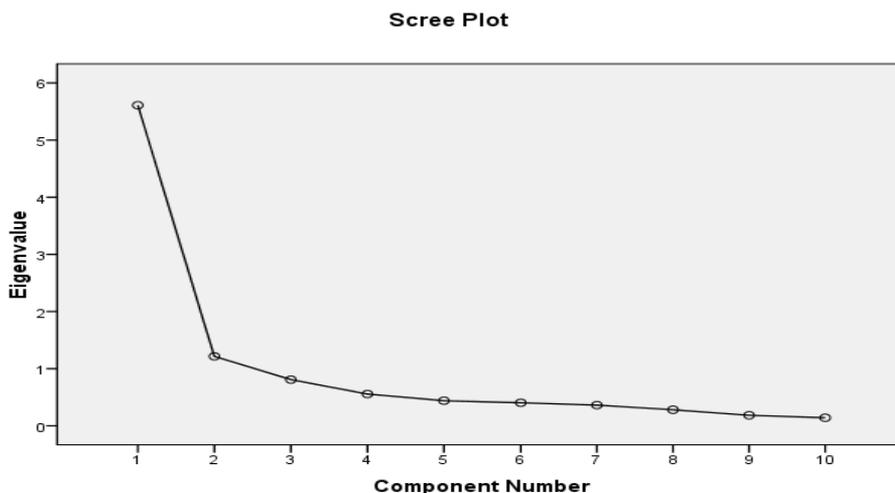


Table 6 presents the communalities. Community is the extent to which an item correlates with all other items. If communalities for a variable is low (<0.4), it means that the variable struggled to load on any factor. Results show that all the variables have communalities more than 0.04. It implies that all the variables are significantly loaded on the factors.

Table 6. Communalities

Name of the Variables	Initial	Extraction
Return Performance	1.000	0.710
Scheme Risk	1.000	0.654
Tax Benefits	1.000	0.577

Entry and Exit Loads	1.000	0.664
Growth Prospects	1.000	0.707
Diversification of Scheme	1.000	0.752
Simplicity of Investment	1.000	0.711
Asset Quality	1.000	0.560
Brand Name	1.000	0.688
Reputation of Fund Manager	1.000	0.800
Extraction Method: Principal Component Analysis.		

Source: Authors' findings

Table 7. Component Matrix^a

Name of the Variables	Component	
	1	2
Reputation of Fund Manager	0.886	
Diversification of Scheme	0.859	
Simplicity of Investment	0.841	
Growth Prospects	0.834	
Brand Name	0.823	
Entry and Exit Loads	0.803	
Scheme Risk	0.795	
Asset Quality	0.704	
Return Performance	0.318	0.780
Tax Benefits	0.362	0.668
Extraction Method: Principal Component Analysis.		
a. 2 components extracted.		

Source: Authors' findings

Table 8. Rotated Component Matrix^a

Name of the Variables	Component	
	1	2
Reputation of Fund Manager	0.882	
Diversification of Scheme	0.856	
Simplicity of Investment	0.828	
Growth Prospects	0.820	
Brand Name	0.817	
Entry and Exit Loads	0.808	
Scheme Risk	0.804	

Asset Quality	0.597	
Return Performance		0.839
Tax Benefits		0.746
Extraction Method: Principal Component Analysis.		
Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

Source: Authors' findings

Table 7 and 8 show the results of the component matrix and rotated component matrix, respectively. Results show the variables have been clustered under two factors (Component 1 and Component 2) that are considered important by the investors and influence their buying behavior.

The first factor comprised eight variables—reputation of the fund manager, diversification of scheme, simplicity of investment, growth prospects, brand name, entry and exit loads, scheme risk and asset quality. This factor was named as ‘intrinsic features’ and explained 56.094 percent of the variations. The second factor contained two variables—return performance and tax benefits to investors. This factor was named as ‘income features’ and accounted for 12.155 percent of the variations.

RECOMMENDATION

The findings of the study have direct strategy implications for fund managers in mutual fund companies. Mutual funds, which compete to attract investor capital, can expect investors to look for reputed fund managers, high return performance, diversification in the schemes offered. The fund that offers reputed fund managers, brand name, high return, and diversification is expected to be attractive to potential investors. Findings show that the investors of mutual funds are mostly male, graduate, working in the private sector and with a preference for low risk with high returns. So, fund managers can design their schemes and promotions in a way that is attractive to this demography and include the two factors that the study has found to be significant. That is, when making scheme decisions, fund managers should design schemes that offer reputation, brand name, diversification, simplicity, growth

prospectus, entry and exit loads, good asset quality and return performance to prospective investors.

CONCLUSION

Findings from the study show that reputation of the fund manager, return performance and low risk with high returns are the important considerations for investors in a mutual fund. The study shows that investors have high expectations from the fund managers, whom they expect to generate a high return with minimum possible risk. This is contradictory to the theory of 'high return is associated with high risk' (Chawla, 2014). The results are similar to many researchers who have conducted studies in different periods and in different markets, which shows that reputation of fund managers and return performance are important considerations for investment by mutual fund investors.

The study indicates that two factors are considered important by investors while investing in mutual funds in the construct of this study. These, in order of importance, are intrinsic features of the fund and income features of the fund.

Mutual funds are becoming popular investment vehicle because of their affordability to common investors, professional management services, and tax benefits. In this context, the results of the study could be beneficial to mutual fund companies in Bangladesh, which are still in growth stage but have ample opportunity to flourish. The study presents important findings for mutual fund companies, such as it shows that reputation of the fund manager, diversification, brand name, entry, and exit loads, return performance etc. are considered as important attributes to investors while decision making. So mutual fund companies can take the findings into consideration when designing the funds to attract potential investors.

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IMPLEMENTATION OF HEALTH & SAFETY PROVISIONS OF BANGLADESH LABOR ACT-2006: A CASE STUDY OF RMG SECTOR IN DHAKA DIVISION

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ABSTRACT

The present study is aimed at identifying and comparing the present condition of the health and safety environment in a garment company with the relevant laws. The nature of this study is exclusively a case study where only qualitative data were used. Personal observation and interview schedule were used to conduct the survey. Respondents were selected randomly as the sample from different 80 companies of Dhaka Division covers workers, concerned departmental executives, supervisors and managers of the garment company. The study has used a closed ended 5-scale-questionnaire to measure the implementation of health & safety provisions as per labor law in RMG sector. The collected data is analyzed by SPSS software. It has been revealed from the present study that the sample organization moderately follow all the provisions regarding health, hygiene and safety of workers as per the Bangladesh Labor Act 2006. The study found out that the organization ensures the prescribed space for every worker in a work-room; there is emergency exit and fire exit; all the dangerous machineries are securely fenced; the company thoroughly examines every part of cranes and other lifting machinery regularly, which may cause accident; the company follows the schedule to examine every hoist and lift thoroughly by competent person; the latrines, washrooms, dust beans and spittoons are moderately clean at all times. The study also found that, the sector has some limitations in order to ensuring the sound health and safety in the work place. Finally, on the basis of the limitations, some recommendations have been provided in order to improve the health, hygiene and safety at the work place.

Key Words: Labor Laws; RMG Sector; Garments Industry; Bangladesh.

INTRODUCTION

The current population of Bangladesh is 166,276,145 based on the latest United Nations estimates. Bangladesh population is equivalent to 2.18% of the total world population. Bangladesh ranks number 8 in the list of countries (and dependencies) by population (Worldometer, 2018). The

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economy of Bangladesh is significantly dependent on agriculture. However, readymade garments (RMG) sector of Bangladesh has raised as the biggest earner of foreign currency. This sector contributes significantly to the GDP. Readymade garments (RMG) of Bangladesh is powered by young, urbanizing, workers, where most of them are women. Bangladesh is clearly ahead of other South Asian suppliers in terms of capacity of the ready-made garments industry.

Various types of garments are manufactured in Bangladesh. These ready-made garments are classified into two broad categories, where one is woven products and another one is knitted products. Woven products includes Shirts, Pants and Trousers. On the other hand, knitted products include T-Shirts, Polo Shirts, Undergarments, Socks, Stockings and Sweaters. Woven garments still dominates the export earnings of the country. From BGMEA website it's seen that, day by day knitted items production is increasing in considerable rate and now about 40% export earnings has been achieved from knitted products.

It is being observed that right from the beginning this sector moved with inadequate policies and programs which have been recognized in different incidents. Once most of the garments factories were running without conforming to the application of existing factory laws. Absence of proper monitoring and lack of proper labor laws were responsible for the working condition of that time. As time passed this industry become matured enough to compete in the world market. The Labor Act 2006 has the ability to improve overall health, hygiene and safety condition of garments worker and staff in work place. This Law, among other issues, deals with the workers' interests including the provisions regarding their health and hygiene, safety and security and special provisions regarding health and safety.

The Labor Act 2006 and the subsequent rules of 2015 provides the provision of compulsory prior permission from the Chief Inspector of Factories & Establishments regarding the implementation of health, hygiene, safety and security in an organization. However, absence or negligence of the concerned authority in this sector made these provisions of law ineffective. Without going into the in-depth inquiry any one can observe the frequent violation of Acts in our industrial sectors. Keeping this in mind this paper analyses the health & safety conditions in light of the application of labor laws in private sector

garments factories of Bangladesh, especially in Dhaka Division where the first garments factories were established. The scope of the study covers the application of Health & Safety provisions as per Bangladesh Labor Act-2006 and the subsequent Rule concerning provisions of health and hygiene, safety and security, special provision of health & safety at the work place in RMG sector of Bangladesh.

LITERATURE REVIEW

Traditionally Bangladesh is known for its textiles and garments sector. Initially, the textile sector was import based; however, the country was famous for Muslin. After the liberation, Bangladesh adopted policy for import substitution industrialization to replace imports on the textile and clothing sectors, particularly RMG sectors along with other potential sectors.

The ready-made garment (RMG) industry is a strategic sector for Bangladesh. In FY2013-14, it provided 4.2 million direct jobs, 16 percent of GDP, and more than 75 percent of foreign exchange earnings. Over the past two decades, Bangladesh has built a strong reputation centered on price advantage via low-cost labor and investment incentives; production capacity, and satisfactory quality levels, especially in value and mid-market price point segments (BKMEA, 2018).

The RMG business in Bangladesh started in the late 70s with merely a casual & cursory effort. The first consignment of knitwear export was made in 1973 while the first shipment of woven was made in 1977. In 1981-82 the contribution of woven garments to total exports was about 1.10% only whereas the then agro-based economy received much of her foreign earnings from Jute & Jute products famously known as the Golden Fiber. But with the passage of time, transformation from agrarian to manufacturing economy has made tremendous progress in poverty alleviation, employment generations, industrial growth and economic diversification -thanks solely to labor intensive RMG sector. Since MFA phase out in 2004 the growth of Bangladesh knitwear has escalated rapidly as statistically supported export volume adduces adequate proof to it despite its somewhat cluttered and shoddy start with absence of rudimentary plans and evolutionary industrial mechanism. In fact, from fiscal year 2007-08 Bangladesh knitwear continues to capture lion's

share in national exports (39.93% in FY 2013-14) what was slightly 7.64% in the two decades back, thereby slanting the economy towards knit garments (BKMEA, 2018).

The RMG industry contributed significantly through creation of physical infrastructure which is demonstrated by 4222 RMG units along with the development of human capital as around 4 million workforce are directly involved in this industry. It has also contributed tremendously through empowering women as almost 90 percent of its labor force is female which ranked the highest in South East Asia. In terms of core economic consideration RMG holds almost 14.07 percent of the GDP of Bangladesh as well as 81 percent of the total export earnings (Research Gate, 2016).

The export-oriented Knitwear industry is the top-leading exporting sector in Bangladesh in terms of export. Its contribution in creating employment opportunities for female workers without high educational background in the formal sector is exceptional! The industry has a great contribution in poverty reduction by providing entry-level workers with a great scale of employment opportunities and earnings higher than the national poverty line. Such a dynamic development of the industry entails great diversity in efficiency, even in comparison with the garment industry of other developing countries. The Knitwear industry of Bangladesh has global competitiveness in terms of product quality & price through industrial upgrading in terms of usage of latest machineries and vertical integration and industrial agglomeration.

The readymade garments industry acts as a catalyst for the development of Bangladesh. The "Made in Bangladesh" tag has also brought glory for the country, making it a prestigious brand across the globe. Bangladesh, which was once termed by cynics a "bottomless basket" has now become a "basket full of wonders." The country with its limited resources has been maintaining 6% annual average GDP growth rate and has brought about remarkable social and human development (BGMEA, 2011).

After the independence in 1971, Bangladesh was one of poorest country in the world. No major industries were developed in Bangladesh, when it was known as East Pakistan, due to discriminatory attitude and policies of the government of the then West Pakistan. So, rebuilding the war-

ravaged country with limited resources appeared to be the biggest challenge.

The industry that has been making crucial contribution to rebuilding the country and its economy is none other than the readymade garment (RMG) industry which is now the single biggest export earner for Bangladesh. The sector accounts for 81% of total export earnings of the country (BGMEA, 2011).

About 4 million people work in Bangladesh's garment industry, making it the world's second-largest apparel exporter after China. Some earn as little as \$38 a month, conditions Pope Francis has compared to "slave labor". Duty-free access offered by western countries and low wages have helped turn Bangladesh's garment exports into a \$19 billion-a-year industry, with 60 percent of clothes going to Europe (Reuters, 2013).

According to Bangladesh Institute of Labour Studies (Bils) at least 1,841 workers have been killed in different types of accidents including building collapse and fire in the readymade garment industry in the last 12 years, More than 9,595 garment workers have been injured in the incidents, many of whom have lost their ability to work. Many of the injured and their families did not get compensation (Daily Star, 2014).

Compliance with health and safety standards is an important issue. Worker safety is very important in readymade garment (RMG) industry. Especially in Bangladesh, garment industry is always suffering several devastating accidents. Fire is a common problem in readymade garment industry. Bangladesh has more than 4,500 RMG factories that employed more than four million workers. The reason behind this readymade industry concentration in Bangladesh is cheap labor cost. But the worker safety issue is very poorly maintained here due to inadequate follow-up. Bangladesh is the second largest apparel exporter in the world, after China. The market share of Bangladesh, in the \$503 billion global garment items is 5.1 percent, according to data from the International Trade Statistics of the World Bank in 2014. China's market share is 38.6 percent and Vietnam and India share 3.7 percent. However, China has been losing its market share mainly due to higher cost of production and shortage of skilled workforce in China. Bangladesh is one of the major beneficiary countries of shifting work orders from China (Daily Star, 2016). Several institutions played important role to start RMG

industry in Bangladesh. One such institution was the Trading Corporation of Bangladesh (TCB). After independence, the government of Bangladesh, because of its socialist policy, established the TCB, a state trading agency. The TCB was entrusted with the responsibility of carrying out export-import activities on behalf of the state. In the mid-seventies, TCB took the initiative to export shirts tailored in Dhaka to East European countries under counter-trade arrangements. With this initiative of TCB, capacity building in Bangladesh started in the mid-seventies. The TCB was the first exporter of RMG under barter system. But in volume and value it was very small. The RMG industry as hundred percent export-oriented industry saw its beginning in the late seventies. Due to the shift in state level macro-economic policy, market economy was allowed to play its roles. As a result, private entrepreneurs got increased in participating in the industrialization process of the country. In general, backward and forward integration creates value-addition and new employment usually, it is good for the firms and also for the industry, if managed efficiently. The debates are going about the feasibility of backward integration of the RMG industry in Bangladesh. The future of RMG industry is fraught with uncertainty is the much talked about phasing out of MFA.

Now, the garment factory workers have been getting a paltry sixty US cents per day, whereas the factory owners are getting richer day by day. They are building ultra-modern houses in the smarter areas of the city and their children go to Europe and America for higher education. The garment workers have to work 10 to 12 hours a day, seven days a week, but are paid no overtime (Elyus Rahman, 2006). The garment workers demonstrated for an adjustment to the minimum wage, safe working condition, weekly holiday and an end to harassment. Very often, the workers were sacked without reasonable ground and notice or compensation as per the provisions of labor law. For this very reason the spontaneous, unprecedented protest was observed.

One of the prominent daily English newspaper, reported that the majority of garment factories do not yet comply with many wage and workplace health & safety standards specified in the tripartite agreement of 2006 (New Age, 2009). The book named 'The Readymade Garment Industry of Bangladesh' discusses the importance of RMG industry in the national economy and notes, the RMG industry has become so important that the future of the economy of Bangladesh is greatly

dependent on this single sector. Any slowdown in this sector will slow down the economic progress of Bangladesh. He analyses the strength and weakness of RMG industry of Bangladesh and suggests how to ensure its better future in the context of changing global apparel market. He explains why the problems caused by the phasing out of MFA will continue to be a matter of great concern. He argues that the industry would survive and be able to thrive in the post-MFA era if appropriate strategies on capacity building through backward and forward linkages, cost reduction, market diversification, product differentiation, infrastructural development, reduction of lead time etc. are implemented. To substantiate his position, he draws insights from the experience of many countries. However, issue of labor unrest in this sector has not been discussed (Siddiqui, 2004).

According to a report, Bangladesh experienced relatively high economic growth over the past two decades, mainly due to garment exports. The country accounted for 4.8 per cent of global apparel exports in 2011, compared with only 0.6 per cent in 1990. Recent accidents have brought the issue of occupational health and safety risks in the Bangladeshi garment sector to world attention, including a factory fire in November 2012 that killed 117 workers and the collapse of a building housing several RMG manufacturers in April 2013 that killed 1,129 workers – the latter being one of the worst industrial disasters on record. Although the government has taken some concrete action in the past six months to address health and safety issues, poor conditions remain a challenge in many factories across the country, especially those in the RMG sector (ILO, 2013).

Key Variables are: Discussion with 1600 workers to know and analyze the attitude and beliefs of workers towards labor management relations and labor rights. Our research theme is Health & Safety Provisions as per Labor Law Implementation in RMG Sector of Bangladesh and our key variables are practices of health and hygiene, safety and security, special provision of health & safety.

METHODOLOGY OF THE STUDY

Research problem: The Garments industries of Bangladesh are not properly implementing the provisions of Bangladesh Labor Act 2006.

Nature of research: Basically this is descriptive research in nature.

Questionnaire development: The questionnaire is designed in such a manner so that the garments workers can express their opinions without any prejudice and bias finding the obstacles as to safety net in consonance with ILO Conventions and standards. The findings of the mixed approach will be categorized systematically and the common findings will be offered as recommendation to amend the current labor law in the country.

Population: Garments workers in Bangladesh

Sampling

The researcher has adopted the survey type of research in which a sample from the target population will be used for the study. In total, a sample of 50 elements has to be selected from a targeted population. Details of the sample are as follows:

- a. The sample is 1600 workers (20 from each garments factory; total 80 companies).
- b. The study has adopted a multistage stratified sampling method to select elements.

Types of Data: Both qualitative and quantitative data have been used.

Data Collection Tools and Techniques

The major research techniques employed are as follows:

A structured questionnaire has been used to collect data. Face to face interview method has been used in this research. A structured questionnaire has to be developed and is used as the survey tool for the study. Most of the questionnaire was the closed-ended type. Finally, all the collected data was put in a SPSS software to get the output.

Source of Data

Source of data is mainly face to face interview of the garments worker and various journals and BGMEA website. A secondary research was also conducted in the study. Sources in secondary research include previous research reports, newspapers etc.

Data Analysis As the author is opting for a survey based research report, plan includes analysis of survey data, getting the mean & standard deviation using SPSS software.

OBJECTIVES OF THE STUDY

The main objective of this study is to explore the implementation of health & safety provisions as per Labor Act in RMG sector of Bangladesh, particularly in Dhaka Division.

The specific objectives are;

1. To observe the condition of cleanliness, ventilation & temperature, dust & fume, artificial humidification in the factory.
2. To follow the steps taken for overcrowding, lighting, pure drinking water in the factory.
3. To assess the general cleanliness of the latrines, urinals, dustbins & spittoons in the factory.
4. To observe the safety condition of building & machinery in the organization.
5. To identify the health & hygiene measures taken by organization.

RESULTS/FINDING

Health and Hygiene Provision

Section#51 to 60 under Chapter-V of Bangladesh Labor Act 2006 and the subsequent rules have laid down detailed provisions regarding workers' health & hygiene. The applications of the above major provisions in studied garments factories are discussed below (Table 1).

Table 1. Response Regarding Health & Hygiene Provision of Labor Law

SL	Parameters	Rating	
		Mean	Std Deviation
1	The dirt & refuge moves daily from the floor, benches in the work.	3.83	1.241

2	The floors of the work room cleaned once in a week by washing.	3.47	1.283
3	In case of wet floor, effective drainage system is provided.	3.61	1.185
4	The inside walls, partitions, all ceilings, or tops of the rooms, staircase and passages are painted & varnished at least once in every 3 years.	3.75	1.235
5	There are adequate provisions for circulation of fresh air in the every work room.	3.75	1.175
6	There is reasonable temperature in the workroom.	3.71	1.147
7	You can freely move in the workroom.	3.83	1.241
8	At least 9.5 cubic meters space is allotted for every worker.	3.29	.956
9	Effective measures has taken for disposal of wastes & effluents.	3.44	1.612
10	Proper lighting (natural & artificial) in the workplace.	3.56	1.673
11	Adequate measure for protection from glare & shadow of light or reflection from any polished surface.	3.19	1.458
12	Proper arrangements for pure drinking water in the workplace.	3.62	1.687
13	The water container is marked “Drinking Water” legibly & kept cooling provision.	3.40	1.582
14	Sufficient number of separate male & female toilets & washrooms are available for the workers.	3.62	1.721
15	All the toilets are adequately lighted & ventilated with continuous water supply.	3.43	1.611
16	The cleanliness of the toilets & washrooms are maintained with suitable detergent & disinfectants.	3.93	.742
17	Sufficient number of dustbin & spittoon are available in the convenient places in a clean & hygienic condition.	3.93	.798
18	An easily noticeable notice containing spittoon & dustbin use provision and the	3.46	.875

	fact that contravention thereof is a punishable offence is posted in different suitable places.		
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The response shows that ‘the dirt and refuse moved daily from the floors, benches in the workroom, staircases and passes daily is maintained regularly (3.83). The floors are regularly cleaned once in a week (3.47). However, the inside walls, partitions etc. are also kept cleaned in every garments (3.61). The results indicate that the fresh air circulation arrangement is enough at the work place (3.75) in most of the garments. And the temperature is comfortable for the worker (3.71). The respondents feel that free movement in the work place is up to the legal standard (3.83). The work station space is at least 9.5 cubic meters is allotted for every worker is insufficient (3.29).

Study found that effective measures has been taken for disposal of wastes & effluents is average (3.44). Lighting condition is at the good level (3.56). The measures for protection from glare and shadow of artificial lighting is somewhat average standard (3.19). The results show that the proper arrangement for drinking water is up to the legal standard (3.62). ‘Drinking water’ is marked and a well condition of the facility for keeping drinking water cool in summer is observed by the workers of the study (3.40). The results also show that the number of latrines and urinals adequately lighted & ventilated with continuous water supply at the work place are sufficient (3.43) and the latrines and urinals are kept cleaned regularly in most of the garments (3.93). Separate washrooms for male and female workers are perceived to be adequate (3.62).

Study identified a very sufficient placement of the spittoons at the proper places and their regular cleaning (3.93). An easily noticeable notice containing spittoon & dustbin use provision and the fact that contravention thereof is a punishable offence is posted in different suitable places are available (3.46). From the above discussions it is very clear that health and hygiene applications of the labor law act are being practiced in the garments.

Safety and Security Provision

Section#61 to 78A under Chapter-VI of Bangladesh Labor Act 2006 and the subsequent rules have laid down detailed provisions regarding workers’ safety & security. The applications of the major provisions of

safety and security in studied garment factories are discussed below (Table 2).

Table 2. Response Regarding Safety Provision of Labor Law

SL	Parameters	Rating	
		Mean	Std Deviation
19	Safety condition of the building & machinery.	4.14	.825
20	Adequate number of fire exits in the workplace.	4.06	.892
21	Fire exits are marked FIRE in red letters.	3.84	1.226
22	Adequate arrangements of fire alarming.	3.83	1.264
23	Adequate numbers of fire-fighting equipment.	3.84	1.272
24	Workers are trained to use the fire-fighting equipment.	3.55	1.152
25	Every part of electric generator, transmission & any other dangerous machinery is fenced securely.	3.48	1.178
26	Only adult trained person work with machinery in motion.	3.44	1.213
27	Striking gear & devices is used for cutting off power supply of running machinery in any emergency.	3.22	1.026
28	Young person (over 14 but below 18 years) works in cranes & other lifting machinery.	2.40	1.104
29	Cranes & other lifting machinery are thoroughly examined by a competent person at least once in every twelve months.	2.88	1.441
30	Hoists & lifts are thoroughly examined by a competent person at least once in every six months.	3.00	1.415
31	Effective measures are maintained in respect of every revolving vessel, cage, basket, fly-wheel, pulley disk or similar appliance driven by power so that their prescribed speed does not exceed.	2.93	1.367

32	The workers require to take excessive weight	1.52	1.013
33	Protection of eyes has taken properly in case of risk of injury from particles thrown off in the course of manufacturing process or from the exposure to excessive heat or light.	3.24	1.671
34	Precautionary measures have taken against dangerous fumes, inflammable gas or dust etc.	3.43	1.620
35	Workers are using personal safety equipment.	3.87	1.241

The results show that the safety condition of the building & machinery is good (4.14). An adequate number of fire exits are there at the work place (4.06). The fire exits are properly marked in red color (3.84). However, the respondents feel that there is a sufficient arrangement of fire alarming in the garments (3.83) and the firefighting equipment are adequate in numbers (3.84) and the workers are also trained in handling firefighting equipment (3.55).

The study results also show that every part of electric generator, transmission & any other dangerous machinery is fenced securely (3.48). Only the adult-trained person work with machinery in motion in garments (3.44). But sometimes the young persons are engaged in the dangerous machines (2.40). Striking gear & devices is used for cutting off power supply of running machinery in any emergency (3.22). Cranes & other lifting machinery are thoroughly examined by a competent person at least once in every twelve months (2.88); & hoists & lifts are thoroughly examined by a competent person at least once in every six months are maintained properly (3.00). Effective measures are maintained in respect of every revolving vessel, cage, basket, fly-wheel, pulley disk or similar appliance driven by power so that their prescribed speed does not exceed (2.93). Moreover, the garments hardly provide certificates to young people regarding fitness for working in the garments. Law provides that no person in the garments should be allowed to lift, carry or move any load so heavy as to be likely to cause him injury. Most of the garments properly maintained this law. The results show that workers are not allowed to take excessive weight (1.52).

The study results observed that protection of eyes has taken properly in case of risk of injury from particles thrown off in the course of manufacturing process or from the exposure to excessive heat or light (3.24). Precautionary measures have taken against dangerous fumes, inflammable gas or dust etc (3.43). Workers are using personal safety equipment (3.87). It is very clear that safety training and awareness development is least emphasized in garments sector of Bangladesh.

Health & Safety Special Provisions

Section 79 to 88 under Chapter-VII of Bangladesh Labor Act 2006 and the subsequent rules have laid down detailed issues regarding workers' health & safety special provisions. The applications of the above provisions in studied garments sectors are discussed below.

Table 3. Response Regarding Health, Hygiene & Safety Special Provisions of Labor Law

SL	Parameters	Rating	
		Mean	Std Deviation
36	Workers are being provided regular medical examination in case of dangerous operation.	3.88	1.248
37	Any notice has given regarding use of any corrosive chemicals & the precautions of their use.	3.51	1.103
38	Employer gives the notice of accident to the Inspector within following 2 days from accident.	3.52	1.062
39	Register is maintained for any accident.	3.50	1.154
40	Notice to certain dangerous occurrences have been informed to Inspector.	3.39	1.071
41	Notice to certain diseases have been informed to Inspector & necessary treatment is arranged for suffering worker by employer.	3.45	1.140
42	Registered medical practitioner provides the information to Inspector in certain diseases.	3.78	.866
43	The person who is appointed to hold any enquiry in case of accident or disease, has	3.23	.977

	exercised power for impartial investigation report.		
44	An inspector may take the sample of any substance if he thinks that the substance is likely to cause bodily injury or harm to the workers.	3.70	.744
45	The employer provides the require appliances for dividing, sealing & marking the samples to the Inspector.	3.41	1.072
46	Powers of Inspector in case of certain dangers are used properly.	3.54	1.178
47	Condition of building & machinery.	3.34	1.692
48	Any damage of building & machinery is rectified in past 5 years.	3.29	1.355
49	Women or adolescent worker is working in dangerous operation.	2.20	1.170
50	Any measures has taken for securing the safety of the workers.	4.00	1.299

The results show that workers are being provided regular medical examination in case of dangerous operation (3.88). Notice has been given regarding use of any corrosive chemicals & the precautions of their use (3.51). Employer gives the notice of accident to the Inspector within following 2 days from accident (3.52) & register is maintained for any accident (3.50).

The results show that notice to certain dangerous occurrences (3.39) & notice to certain diseases has been taken informed to Inspector & necessary treatment is arranged for suffering worker by employer (3.45). The person who is appointed to hold any enquiry in case of accident or disease, has exercised power for impartial investigation report (3.23). An inspector may take the sample of any substance if he thinks that the substance is likely to cause bodily injury or harm to the workers (3.70), & the employer provides the require appliances for dividing, sealing & marking the samples to the Inspector (3.41). Powers of Inspector in case of certain dangers are used properly (3.54). The results also show that the condition of building & machinery is in good & running condition (3.34). Any damage of building & machinery is rectified in past 5 years (3.29). Women or adolescent worker is working in dangerous operation in a nominal range (2.20). However, measures have been taken for

securing the safety of the workers measured very well (4.00). The application of health & safety special provisions gives an overall picture in the garments sector of Bangladesh. Most of the provisions are perceived by the respondents are found to be an average.

RECOMMENDATIONS

1. Management should find out a sound way of disposing waste materials without hampering the environment.
2. Management should try to ensure more hygienic work environment, because workers are the core element of production.
3. Company should ensure that workers are getting proper treatment from the medical team.
4. BGMEA can arrange training of the workers which will increase the productivity of new workers & ensures the safety working environment.
5. The employers should provide saline & pure drinking water during the office time. It will increase the productivity of the workers.
6. Latrines should be kept clean and washed regularly, because the unclean and unhygienic latrines may cause fatal diseases.
7. Factories should have effective fire distinguisher and separate and adequate space for entrance and exit of the workers. All factories must have to design an intense fire fighting drill program in regular interval.
8. RMG industries should ensure health, safety and standard work environment for the employees. In this case, organizations should provide proper ventilation, sufficient light and air.
9. Finally, it can be recommended that, besides the sample organizations, the concerned stakeholders and regulatory body of the garment organization (including Government of the People's Republic of Bangladesh) should be sincere to improve the overall health and safety environment of the garment industry in Bangladesh.

CONCLUSION

The study of the application of the health & safety provisions as per Labor Law Act 2006 in the RMG sector of Bangladesh shows that some

provisions such as Health and Hygiene, general cleanliness, maintenance of building & machinery, drinking water, sanitary, use of PPE, safety and security, fire drill, precaution from fire accidents are fairly applied in the work place in garments. But some provisions such as special provision regarding health & safety are not properly implemented in the work place in garments.

A strong health and safety program of any industrial establishment can assure safety and sound health of its employees. It can be concluded from the present study that the sample organizations moderately follow all the provisions regarding health, hygiene and safety of workers as per the Bangladesh Labor Act 2006 amended in 2013. So, the above recommendations should be followed by the sample organization. Not only the sample garment organization but also the concerned stake holders and regulatory body (including Government of Bangladesh) should be sincere to improve the overall health and safety environment of the garment industry in Bangladesh. If it is possible to improve the health and safety environment of the garment organization, the overall productivity, performance of the workers as well as the organizations could be improved which will contribute to the economic development of Bangladesh.

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APPENDIX

Appendix-1

Questionnaire for Measurement the Level of Proper Implementation of Labor Law in Terms of Health & Safety Issues in RMG Sector of Dhaka Division.

Following statements describe the workplace environment as per the factory laws. For each statement please tick one number the come closest reflecting your opinion about it (Scale 1 is Strongly Disagree to 5 Strongly Agree).

Please feel free to fill the questionnaire. This is prepared to fulfill academic research purpose only. These information would not be disclosed anywhere.

Name: _____; Designation: _____

Department: _____; Company: _____

Academic Qualification: _____; Age: _____ years

Sex: a) Male; b) Female Date: _____

1. Response Regarding Health & Hygiene Provision of Labor Law

SL	Questions	Scales				
		5	4	3	2	1
1	The dirt & refuse moves daily from the floor, benches in the work.	5	4	3	2	1
2	The floors of the work room cleaned once in a week by washing.	5	4	3	2	1

3	In case of wet floor, effective drainage system is provided.	5	4	3	2	1
4	The inside walls, partitions, all ceilings, or tops of the rooms, staircase and passages are printed & varnished at least once in every 3 years.	5	4	3	2	1
5	There are adequate provisions for circulation of fresh air in the every work room.	5	4	3	2	1
6	There is reasonable temperature in the workroom.	5	4	3	2	1
7	You can freely move in the workroom.	5	4	3	2	1
8	At least 9.5 cubic meters space is allotted for every worker.	5	4	3	2	1
9	Effective measures has taken for disposal of wastes & effluents.	5	4	3	2	1
10	Proper lighting (natural & artificial) in the workplace.	5	4	3	2	1
11	Adequate measure for protection from glare & shadow of light or reflection from any polished surface.	5	4	3	2	1
12	Proper arrangements for pure drinking water in the workplace.	5	4	3	2	1
13	The water container is marked “Drinking Water” legibly & kept cooling provision.	5	4	3	2	1
14	Sufficient number of separate male & female toilets & washrooms are available for the workers.	5	4	3	2	1
15	All the toilets are adequately lighted & ventilated with continuous water supply.	5	4	3	2	1
16	The cleanliness of the toilets & washrooms are maintained with suitable detergent & disinfectants.	5	4	3	2	1
17	Sufficient number of dustbin & spittoon are available in the convenient places in a clean & hygienic condition.	5	4	3	2	1
18	An easily noticeable notice containing spittoon & dustbin use provision and the fact that contravention thereof is a punishable offence is posted in different	5	4	3	2	1

	suitable places.					
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2. Response Regarding Safety Provision of Labor Law

SL	Questions	Scales				
		5	4	3	2	1
19	Safety condition of the building & machinery.	5	4	3	2	1
20	Adequate number of fire exits in the workplace.	5	4	3	2	1
21	Fire exits are marked FIRE in red letters.	5	4	3	2	1
22	Adequate arrangements of fire alarming.	5	4	3	2	1
23	Adequate numbers of fire-fighting equipment.	5	4	3	2	1
24	Workers are trained to use the fire-fighting equipment.	5	4	3	2	1
25	Every part of electric generator, transmission & any other dangerous machinery is fenced securely.	5	4	3	2	1
26	Only adult trained person work with machinery in motion.	5	4	3	2	1
27	Striking gear & devices is used for cutting off power supply of running machinery in any emergency.	5	4	3	2	1
28	Young person (over 14 but below 18 years) works in cranes & other lifting machinery.	5	4	3	2	1
29	Cranes & other lifting machinery are thoroughly examined by a competent person at least once in every twelve months.	5	4	3	2	1
30	Hoists & lifts are thoroughly examined by a competent person at least once in every six months.	5	4	3	2	1
31	Effective measures are maintained in respect of every revolving vessel, cage, basket, fly-wheel, pulley disk or similar appliance driven by power so that their prescribed speed does not exceed.	5	4	3	2	1
32	The workers require to take excessive weight	5	4	3	2	1

33	Protection of eyes has taken properly in case of risk of injury from particles thrown off in the course of manufacturing process or from the exposure to excessive heat or light.	5	4	3	2	1
34	Precautionary measures have taken against dangerous fumes, inflammable gas or dust etc.	5	4	3	2	1
35	Workers are using personal safety equipment.	5	4	3	2	1

3. Response Regarding Health, Hygiene & Safety Special Provisions of Labor Law

SL	Questions	Scales				
		5	4	3	2	1
36	Workers are being provided regular medical examination in case of dangerous operation.	5	4	3	2	1
37	Any notice has given regarding use of any corrosive chemicals & the precautions of their use.	5	4	3	2	1
38	Employer gives the notice of accident to the Inspector within following 2 days from accident.	5	4	3	2	1
39	Register is maintained for any accident.	5	4	3	2	1
40	Notice to certain dangerous occurrences have been informed to Inspector.	5	4	3	2	1
41	Notice to certain diseases have been informed to Inspector & necessary treatment is arranged for suffering worker by employer.	5	4	3	2	1
42	Registered medical practitioner provides the information to Inspector in certain diseases.	5	4	3	2	1
43	The person who is appointed to hold any enquiry in case of accident or disease, has exercised power for impartial investigation report.	5	4	3	2	1
44	An inspector may take the sample of any substance if he thinks that the substance is	5	4	3	2	1

	likely to cause bodily injury or harm to the workers.					
45	The employer provides the require appliances for dividing, sealing & marking the samples to the Inspector.	5	4	3	2	1
46	Powers of Inspector in case of certain dangers are used properly.	5	4	3	2	1
47	Condition of building & machinery.	5	4	3	2	1
48	Any damage of building & machinery is rectified in past 5 years.	5	4	3	2	1
49	Women or adolescent worker is working in dangerous operation.	5	4	3	2	1
50	Any measures has taken for securing the safety of the workers.	5	4	3	2	1

Appendix-2

List of Sample RMG Companies in Dhaka Division

I have worked on total 1600 samples from 80 companies (20 sample from each company); out of which few name of the RMG companies are listed below;

SL	Company	Location	Employee Strength
1	Greenland Garments Ltd	Dhaka City	5,700
2	Epyllion Knitwear Ltd		2,000
3	Anika Apparels Ltd		1,200
4	Dekko Knitwear Ltd		2,000
5	Tulip Fashions Ltd		1,000
6	Kaniz Garments Ltd		2,800
7	Bitopi Nisomi Ltd		350
8	J K Fashions		650
9	Mohammadi Garments Ltd		2,400
10	Renessa Group		2,400
11	Renessa Fashions		1,000
12	Envoy Garments Ltd		1,400
13	Evince Garments Ltd		1,000
14	Dragon Group		2,000
15	Givensee Group		6,400
16	Ananta Garments Ltd		3,100

17	Samar Fashions Ltd		950
18	Rose Intimates Ltd		2,050
19	MTM Garments Ltd		1,050
20	AB Mart Fashion Wear Ltd	Tongi & Ashulia	
21	Yagi Bangladesh Garments Ltd		1,800
22	Ananta Garments Ltd		4,000
23	Ananta Sportswear Ltd		4,000
24	Apex Spinning & Knitting Mills Ltd	Gazipur	5,000
25	Fashion Suits & Trousers Ltd		3,000
26	Alif Group		7,800
27	Square Fashions Ltd		10,000
28	Square Denims Ltd		4,000
29	Colombia Garments Ltd		2,200
30	Sparrow Apparels Ltd		4,500
31	Alim Knit BD Ltd		3,000
32	Manali Jeans Ltd		2,000
33	Dalas Fashions Ltd		1,500
34	Interlope		1,200
35	West-Line Fashion (Pvt.) Limited		2,000
36	KK Fashion and Design Limited		1,500
37	Liz Fashion Industry Ltd		2,000
38	Lida Textile & Dyeing Ltd		1,500
39	South China Group		2,400
40	Actor Sporting Limited		2,000
41	Banga Fashions Ltd		2,000
42	MK Fashions Ltd		1,500
43	Fountain Garments Manufacturing Ltd		3,200
44	Unity Fabric Industries Ltd		1,400
45	Libas Textiles Ltd		4,000
46	Fresh Knitwear Ltd		2,900
47	Renaissance Apparels Ltd		2,700
48	West Industrial Park Ltd		7,000
49	Dip Knitwear Ltd		1,100
50	Tex Europ (BD) Ltd		4,900
51	Rose Sweater Ltd	1,350	
52	Rose Sweater Ltd (Unit-2)	2,050	
53	Tex Earth Ltd	1,050	

54	Anlima Textile		300
55	Madinaple Fashion Ltd		1,550
56	Epyllion Style Ltd		2,600
57	Epyllion Knittex Ltd		5,300
58	Universal Menswear Ltd	Adamjee EPZ	4,000
59	Ananta Apparels Ltd		2,250
60	Babylon	Narayangonj	5,000
61	NRN Knit Ltd		2,400
62	Hop Yick (Bangladesh) Limited		2,500
63	Hop Lun Apparel Limited		2,000
64	Aristocrate Ltd		1,500
65	Parade Internationl		1,200
66	Comp Tex Bangladesh Ltd		4,400
67	Robintex Bangladesh Ltd		3,800
68	Kuan Tong Apparels Ltd		4,000
69	Ibrahim knit Ltd		2,200
70	Modele Fabrics Ltd		3,000
71	Modele Fashions Ltd		2,000
72	Fakir Apparel Ltd		2,800
73	Fakir Textile Ltd		2,200
74	KC Apparels Ltd		1,700
75	KC Print Ltd		5,500
76	Knit Concern Ltd		6,500
77	RK Fashions Ltd		3,000
78	SB Fashions Ltd		2,000
79	SB Apparels Ltd		1,500
80	KC Print Ltd (Unit-2)		2,200

IMPACT OF DEVELOPMENT PROGRAM ON EMPLOYEE PERFORMANCE: A STUDY ON HUMAN RESOURCE PROFESSIONALS.

Shaikh Sajibur Rahman ¹

ABSTRACT

Main Objective of this study is to investigate the effectiveness of employee development program at work place. There is a question to the management why they invest on employee development program and what is the outcome of the development program. This descriptive study was designed by a survey questionnaire for the employees who have completed a development program and working in human resource division in different organizations. This study reveals that development programs have enhanced the employees job related skills and facilitated their decision making capacity, which has helped them to manage and control their work and subordinates in a better way than before. It also increases the possibility of career goal attainment and personnel development in the concern area. The outcome of the research can be used for investment decision on development program for the employees.

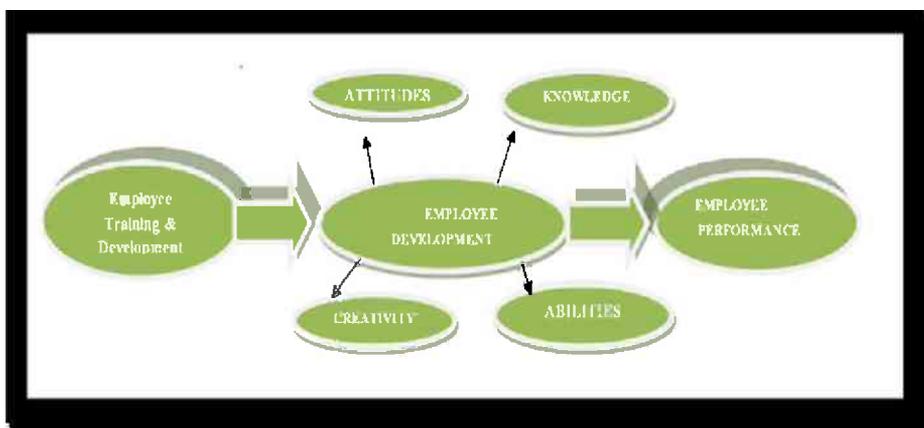
Keywords: Development Program, Employee Performance, Retention and Turnover.

INTRODUCTION

The trends in Human Resource Management practices throughout the world are changing dynamically. Nowadays, employers are more concerned about employee's retention and controlled employees' turnover than cost cut off. The need of employee's retention has encouraged the employers to pay attention towards employee's development through training in order to keep them motivated. The core purpose of involvement in development program is to improve employee's performance resulting in enhanced organization's performance. Development programs in the corporate world are considered as a necessity rather than a luxury. It is more like an investment of the individual in self-development. Edwin B. Flippo intense that training is not a choice for anyone. The trends in Human Resource Management practices throughout the world are changing dynamically. Nowadays, employers are more concerned about employee's retention and controlled employees' turnover than cost cut off. The need of employee's retention has encouraged the employers to pay attention towards employee's development through training in order

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to keep them motivated. The core purpose of involvement in training and employee's motivation is to improve employee's performance resulting in enhanced organization's performance. Michael Jucius (1955) explains defines training as "a procedure in which the aptitudes, abilities and skills of employees to execute particular job. Edwin B. Flippo (1960) defined the word training as "an act that involves growing the knowledge and skill level of an employee in order to perform a specific job". Dale S. Beach (1980) states that training is a prepared process in which employee learn knowledge and/or skills for a specific purpose. According to Dubashi, P.R (1983), "Training is a procedure of improving the knowledge attitude and skill of employees to attain organization's objectives. It is merely through a systematic course of training in which essential professional knowledge is conveyed, skills are developed and attitudes adjusted to the work situation". Stephen P. Robins and David A. Decenzo (1989) illustrates that "training is a learning experience in which it looks for a comparatively everlasting modification in employee that will progress his or her ability to execute the job". Noe. Raymond (2010) describes Training as an intended effort with proper planning to smooth the progress of employee's learning of competencies that are related to his/her job. Employees are major assets of any organization. The active role they play towards a company's success cannot be underestimated. As a result, equipping these unique assets through effective training becomes imperative in order to maximize the job performance. Also, position them to take on the challenges of the today's competitive business climate. Although extensive research has been conducted in the area of Human Research Management, the same cannot be said on employee development especially as it concerns developing countries.



Relationship between Development program and employee performance.

Generally, the purpose of the research is to conduct a descriptive study on the impact of development programs on organizational performance. The research specifically examines the employee development program within various industries. Moreover the study provides discussions made by other authors regarding employee development. This study will clarify the level of understanding of the employees on their own performance. Also, it will help to improve and develop internal human resource management guideline and develop necessary policies. This sort of study helps in further organizational decision making that will go for an investment on employee development program and how will it be beneficial.

LITERATURE REVIEW

Training and Development basically deals with the acquisition of understanding, knowhow, techniques and practices. In fact, training and development is one of the imperatives of human resource management as it can improve performance at individual, collegial and organizational levels. As the process of ‘increasing one’s capacity to take action, organizations are now increasingly becoming particular with organizational learning and therefore collective development. Organizational learning, on the other hand, refers to the “efficient procedure to process, interpret and respond to both internal and external information of a predominantly explicit nature. According to Easterby-Smith (1999), the emergence of the concept of organizational learning is central on the hitherto idea that prior advocacies of learning are tended to its commercial significance and are lacking of empirical information on learning processes.

Study of (Jalal & Abu Bakr, 2010) the effect of training technical programs on efficiency of workers in the Palestinian financial market. The study found that the technical training leads to stability in the work, and increases the efficiency of workers in the Palestinian financial market. Study of (Tarawneh, 2009) the obligation to apply the stages of training and its impact in the field of performance of employees, the study found that the existence of an obligation to apply the stages of training with an effect of this commitment on the performance of employees, the researcher provided some recommendations as, the need

to take into account the diversity of training programs and encouraging employees to comply with all phases of training. Strategically, organizational learning, which makes use of training and development as one of the several responses, deals with the acquisition of understanding, know-how, techniques and practices. These intellectual intangibles can be translated into an organizational resource through the people that acquire, infer and utilize such towards the achievement of the organization-wide training and development (Armstrong, 2006). Training and development are planned learning experiences which teach employees how to perform current and future jobs more effectively. Sims (2002) emphasizes that training focuses on present jobs while development prepares employees for possible future jobs. Basically, the objective of training and development is to contribute to the organization's overall goal.

Study by (Mia, Ali, and others, 2009), measuring the impact of training on the performance of workers: An Empirical Study of the Directorate of Education in Al Buraimi Governorate in the Sultanate of Oman. Results of the study, showed an impact of training on the performance of teachers, and it increased their productivity. The researchers recommended giving more attention to the quality of the training programs offered to teachers.

Closing the skills gap is now a critical area of human resource development for organizations to continuously penetrate the market. Skills gap basically threatens the productivity and competitiveness both in organizational and operational levels. This requires that human resource management professionals should start the cultivation of the workforce from the recruitment period. However, this is not easy considering that there are specific works which require customization of skills and that not all newly hired employees acquire social skills aside from the basic skills. In responding to the challenges of the skills gap and skills deficiency, HR professionals have to develop programs that will address the problem (Sims, 2006). Building the organization hence is an imperative for the existence and survival of modern organizations. Consistently, companies are investing on their internal customers or employees thus taking advantage of the human capital management. Sense of ownership is also important, requiring HR professionals to develop strategies that will ensure superior knowledge, skills and experience to settle within the workforce. Learning activities shall put

skills enhancement and development assignments at its core as well as empowerment and career development. This is lifelong learning which guide the organizations particularly human resource department to make an ongoing investment with organizational members and help them build their competencies (Sims, 2006).

The purposes of learning from the employee perspective are basically to acquire skills and knowledge to do the job and to gain promotion and advance career. In facilitating career changes, training and development also caters for the personal and professional developments of the employees. Learning can be defined as knowledge obtained by self-directed study, experience, or both; the art of acquiring knowledge, skills, competencies, attitudes, and ideas retained and used; or a change of behavior through experience (Maycunich 2000). Senge(1990) believes that learning has little to do with taking in information; rather it is a process that enhances capacity. Learning is about building the capacity to create that which one previously could not create. Regardless of individual differences and whether a trainee is learning a new skill of acquiring knowledge of a given topic, the person should be given opportunity to practice what is being taught.

Practice is also essential after the individual has been successfully trained (Sims 1990). There are two aspects of practice – active practice and over learning. Active learning allows the trainees to perform the task repeatedly or use the knowledge being learned. Over learning occurs when trainees are given the opportunity to practice far beyond the point where the task becomes ‘second nature’ and is said to be ‘over learned’. The fifth and most important of all which will give life to other four is application because training is useless unless learning can be applied. Thereby, training and development is beneficial not just for the organization itself but also to the individual employees. On the one hand, training and development leads to improved profitability and/or more positive attitudes toward profit orientation, improves the job knowledge and skills at all levels of the organization, improves the morale of the workforce and helps the employees identify with organizational goals (Sims, 1990). On the other, training and development benefits individual employees through helping them make better decisions and effective problem solving, assisting in encouraging and achieving self-development and self-confidence, helping an employee a person handle stress, tension, frustration, and conflict, increasing job satisfaction and

recognition and moving the person toward personal goals while improving interaction skills (Sims, 1990).

THEORETICAL FRAMEWORK

Human resource management is the way organizations manage their staff and help them to develop (McCourt & Eldridge 2003, 2) in order to be able to execute organizations' missions and goals successfully. Human resource development is the integration of individual, career and organization development roles in order to achieve maximum productivity, quality, opportunity and fulfillment of organizations members as they work to accomplish the goals of the organization (Pace, Smith & Mills 1991, 6).

Training is a type of activity which is planned, systematic and it results in enhanced level of skill, knowledge and competency that are necessary to perform work effectively (Gordon 1992). Development is a broad ongoing multi-faceted set of activities (training activities among them) aimed at bringing someone or an organization up to another threshold of performance, often to perform some job or a new role in the future (McNamara 2008).

Employee performance is defined as the outcome or contribution of employees to make them attain goals (Herbert, John & Lee 2000) while performance may be used to define what an organization has accomplished with respect to the process, results, relevance and success Uganda National Development Program (1995). Afshan et al. (2012) define performance as the achievement of specific tasks measured against predetermined or identified standards of accuracy, completeness, cost and speed. Employee performance can be manifested in improvement in production, easiness in using the new technology, highly motivated workers.

The objective of this section is to develop a framework for analysis. This section is divided into three parts. The first part deals with concept of existing development programs, its Implementation on the human resources of Bangladesh. The second part of this chapter deals with analytical framework. The analytical framework comprises of a dependent variable and nine independent variables. Development Program has been taken here as dependent variable while seven areas

such as skill, knowledge, ability, decision making power, promotion, department, work environment were taken as independent variable. The research design provides a framework to the researcher to navigate the journey in the field and finally execute the study. The nature of the problem to be studied and research questions to be answered which are the guiding pillars to decide what approach and strategy would be employed to pursue a research. Therefore, training helps employees to improve their work performance in order to ensure the standard and quality of work required by the organization to achieve both organizational and individuals predetermined objectives. But there is a need to measure the impact of development program on employee performance as because development program associated with cost. So this is becoming a research need to evaluate the impact of development program on employee performance.

METHODOLOGY

The study is involved in evaluating the impact of the development programs on employee performance. There is a poor trend in Bangladesh that they don't want to invest on employee development program as because of no impact assessment of development program. it affects the decision to invest in development program, that's why it needs to assess the impact of development program on employee performance. It is expected that the study will inform many organizations to increase productivity; there is the need to have and retain well trained and motivated employees. It is also to help develop and maintain a quality work life, which will provide an opportunity for employee's job satisfaction and self-actualization through development program. Finally, it is to aid management to introduce modern schemes for training and development, to be able to meet the challenges of change in the future.

It is a descriptive research to assess the impact of development program on employee performance. This research aims to study Impact of Development Programs on Employee Performance. Data was collected through structured questionnaire, telephone call, and personal interview. Data is collected from former participants of PGDHRM, Bangladesh Institute of Management, who have been working in different organizations in Bangladesh. As it is a core training & research institute, it has a world class training environment.

With the theoretical understanding some focused group participants are interviewed with in-depth questions to know their level of understanding of importance of training on performance. The participants of this survey responded some close ended questions. This was followed by some formal and informal discussions. At last, some in-depth research on previous studies and understanding the change in trend through analysis will help this study to come to a conclusion.

Sampling:

Sampling: For the convenience, former PGDHRM participant was chosen who are also working on human resource divisions. The training culture is same for all the departments of BIM.

Sample Size: The sample size for the study is 50 with representation of the management and front line employees concerned.

Source of Information: Both primary and secondary data will be used to reach a convincing result;

- A. Primary Data: Primary data was collected through Structured Questionnaire, Personal Interview, Telephone communication and other digital communication media such as e-mail.
- B. Secondary Data: Secondary data will be collected from in-depth interview with random participants and record review.

Data Processing Method: Collected data are coded and verified via network and telecommunication system. Moreover data is processed by making consistency checking with the help of computer and relevant knowledge on the subject as well as the knowledge and application of statistical tools. Some manual techniques have been applied during the collection of opinion through the survey.

Source of Data: Source of data is mainly collected from the survey questionnaire filled up by the former students of BIM. Sources in secondary data include previous research reports, newspapers etc.

Data Collection Tools and Techniques: Primary and secondary data were collected in the study. The initial visit to the selected institutions are therefore be to introduce himself, familiarize himself with those institutions as well as to seek their consent for the study. This study has used both primary and secondary data collection techniques.

OBJECTIVE OF THE STUDY

Major objective: The primary objective of this study is to investigate how effective is employee development program is at work place. In employee training and development literature, human resource is the greatest source of the improvement of a business. Likewise, it is necessary to study the current practices of development programs that are supposed to contribute to the enhancement of the employees' skills and organizational performance.

Specific objectives:

- a. To evaluate the impact and influence of development programs on actual performance of an employee.
- b. To measure the differences in employee's level of competency.
- c. To assess the development program's impact on organizational goals and individual development.

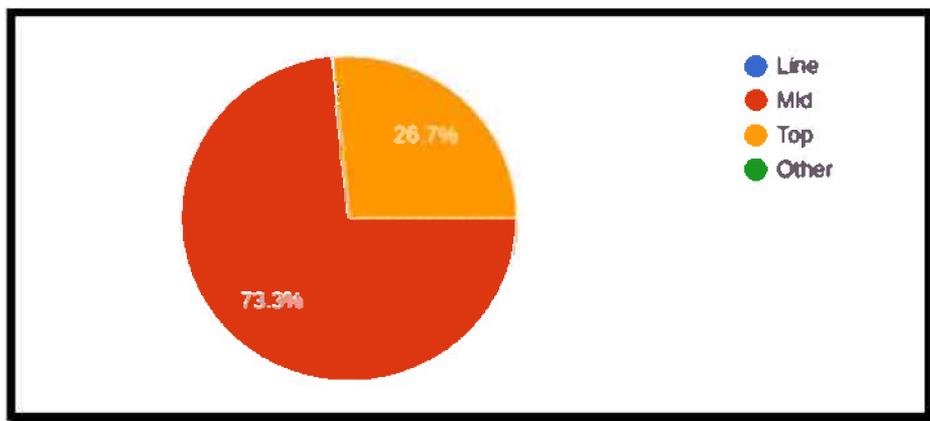
FINDINGS

Mostly, employees from HR field participates in PGDHRM or such development courses for better understanding of job, better learning of leadership or simply for promotion. This program enhances their job related knowledge, skills, abilities and attitudes (KSAA's) to perform better and increase the level of productivity.

The participants agreed on the fact that, this development programs have enhanced their ability to take decisions and enabled their authoritative instinct, which has helped them to control and manage their work and subordinates in a better way than before.

This development program has enabled them to structure their organizational policies and procedures in a more specific manner. As this program develops a manager for better performance, it demonstrates how to build a better culture and work environment and thus, it develops an enhanced relationship between the employer and employees. Over all, the impact of a development program not only helps the individuals to perform better in their work place or manage their job responsibilities in a precise manner but also the organizations to have increases productivity which leads to more profitability.

Job Level of Respondents



Graph-1: Level of job

According to the survey result, most of the employees are in mid-level Position which constitutes 73% whereas 27% employees are at top managerial level of the total respondents which indicates that development program has more participation from mid-level managers to acquire self-esteem and enhance their potentiality to reach the top level. There were no line managers, which is also alarming because, line managers directly deal with the workers. They need more training and development on how to practice human resource management properly.

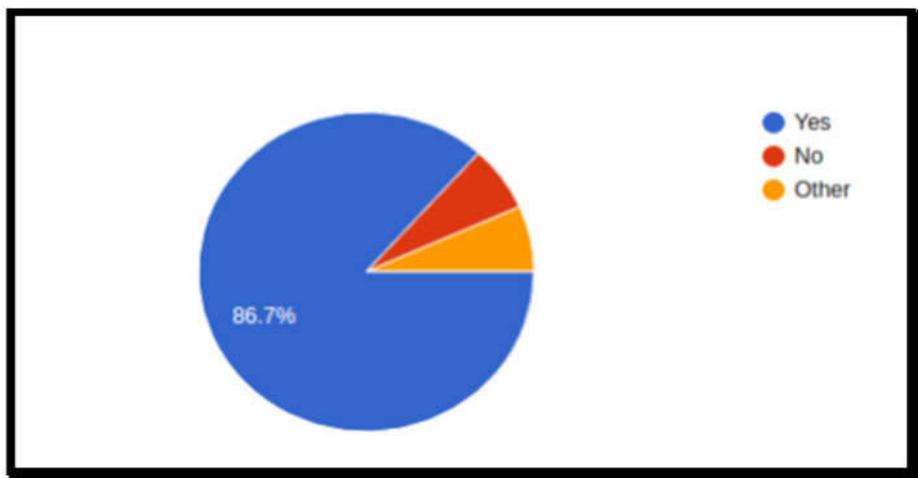
Recognition of Performance

After attending this development program, employees are expected to be more skilled and provide better performance, which generally leads to promotion in many cases. So question was asked to the respondents whether they have got any promotion after completing this development program or not. The outcome of the study shows that 53% of the respondent get promoted to next level within 2 years of completion of this program, whereas 33% of the participants responded they did not get any promotion or there was no change in their level of work and 14% of the participants changed their job track rather than getting promoted to the next level.

Skill Development

The main purpose of a development program is to enhance the level of skill sets of an individual or a group of people. To assess the impact of

PGDHRM program on employee's skill level, the participants were asked whether there was any change in their skill level after completing the program.



Graph-2: Skill development after completion of the program

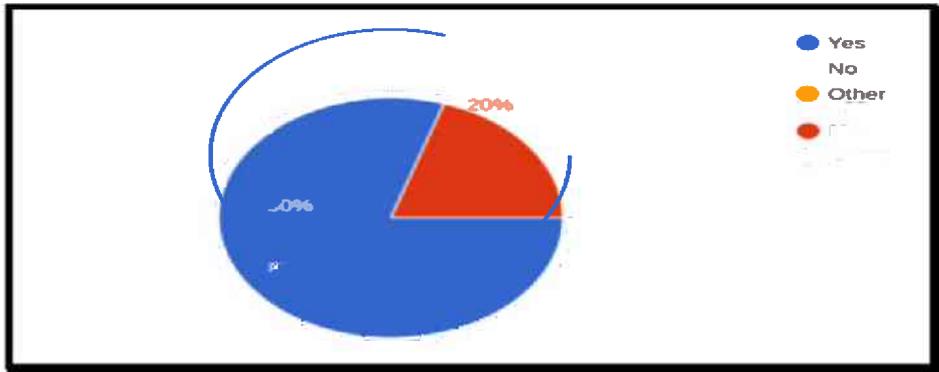
Among the total respondent 87% decided that their levels of working skill have been enhanced whereas 13% reflects that there is no change in their level of skills. Enhanced skill leads to increased productivity and thus, more profitability for any organization.

Job Related Knowledge

Job knowledge is one of the many basic requirements for a minimum level of productivity. Job Knowledge/Skills measures employee's demonstrated job relevant knowledge and essential skills, such as work practices, policies, procedures, resources, laws, customer service, and technical information as well as the relationship of work to the organization's mission.

The surveyors were asked whether their job related knowledge level has increased after completion of the program. Employees conveyed that their job related knowledge has been developed of the due to the accomplishment of this development program is 93% where as only 7% of the total participants have disagreed with the statement.

Improvement of Productivity



Graph-3: increase of productivity

Development program has been invaluable in increasing productivity of organizations. It does not only enhance employees resource fully, but also provides them with an opportunity to virtually learn their jobs and perform more competently. Hence, increasing not only employee's productivity but also organizations' productivity. Respondents have agreed a better level of productivity as an impact of attending the development program. Respondent opined that 80% of them have improved their productivity and 20% responded that their productivity did not improve significantly.

Decision Making

The development programs implemented and executed by BIM have brought changes in the last few decades in order to synchronize employees with organization goals. The human resource department of any organization or business also plays a pivotal role in decision making. A large number of human resource managers opt for dedicated development programs like PGDHRM to ensure that employees have a better understanding of their work and are able to achieve their professional goals more effectively. To verify this variable, our surveyors were asked, if development program enables them to be accountable and authoritative in decision making. The results show that 64% of the employees have conveyed that they are more accountable

and authoritative in decision making. This refers to the positive side of the development program. Participants denied the fact and mentioned that despite of attending this development course they are not yet accountable for any sort of decision making are 36%.

CONCLUSION

Training and Development is an important aspect of HRM. It is important for organization to get skilled and capacitate employees for better performance, and employees will be then competent when they have the knowledge and skill of doing the task. From the analysis, we can conclude that development program is really needed in all companies and that employees should provide opportunities to participate development programs it gives them better performances on the job, motivation, helps in choosing career path, efficiency and effectiveness, improvements in leadership and decision making, making less mistakes. All these factors are not only helping employees to have better working environment but also organizations benefit from the training programs. Enterprises will have growth in the inclusive performances, possible increase in profits and incomes since they will have proficient employees, a smaller amount costs since there will be a lesser amount of faults.

RECOMMENDATIONS

The core purpose of involvement in development programs is to improve employee's performance resulting in enhanced organization's performance. Specific recommendations are:

- a. A training & development program in the corporate world should consider as a need rather than a luxury.
- b. It should be an investment of the organization on Human Resource. Performance might be described as the attainment of particular job calculated on the bases for identified or set standards of accurateness, completeness, speed and cost.
- c. Every organization should have an annual and long term development programs plan for their employees to develop as a successor in the next position.
- d. There should be a budgetary allocation for development program on annual budget.

- e. The development program can be designed for skill development and professional development.
- f. Each development program should assess its impact and return from the development program.

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VISION IN OCCUPATIONAL HEALTH: IMPACT ON PRODUCTIVITY OF WORKERS

Dr. Kazi Reshad Agaz¹

ABSTRACT

Vision is our most precious sense. Our eyes are in constant use every waking minute of every day. The way we use our eyes in our daily routine has changed dramatically over the past number of years. More and more tasks are done at a close viewing distance and we are working under a variety of workplace conditions. This study has mentioned prevalence, type and causes of vision related disorders in different jobs and the main focus is to find out how the eye disorders are related to productivity extracted from different articles and publications. Commonly encountered visual complaints decrease job performance, increase error rates and thus decrease productivity quantitatively and qualitatively. Costs necessitated by visual disorders, and productivity losses related to lower labor force participation of and lower wages earned by visually impaired workers. Occupational vision service should be introduced in all sectors. So caution should be exercised against eye diseases, care of vision and introduction of ergonomic tools and technology in working place. It is the job of the vision consultant to industry to evaluate both vision requirements for job performance and the safety of the employee.

Key words: Vision, disorder, jobs, productivity, safety.

INTRODUCTION

The history of visual demands puts our current day viewing conditions in a historical perspective. The origin of the visual system and its' design shows how our visual system demands have changed. When homo sapiens first appeared- about 40,000 years ago were hunters/gatherers, limiting time to survival skills. Visually, these included hunting, making weapons, cooking, and little else. Since we are living longer and leading more active lifestyles, the effects on the eye must be addressed. (Hemphälä, H. (2014), Vision is our most precious sense. Our eyes are in constant use every waking minute of every day. The way we use our eyes can determine how well we learn, work and perform throughout our lifetime. Over eighty percent of our learning is mediated through our eyes, indicating the important role our vision plays in our daily activities. The way we use our eyes in our daily routine has changed dramatically over the past number of years. More and more tasks are done at a close viewing distance and we are working under a variety of workplace conditions. Our visual system must adapt to these changes in order for us to function to our maximum potential. (Miller S. 2014), A substantial majority of employees are regularly affected by at least one visual

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disturbance at work that could diminish their performance, with most taking multiple breaks during the day to rest their eyes, according to new research sponsored by Transitions Optical Inc., an eyeglass lens technology company.

OBJECTIVE

To review the impact on productivity of workers due to vision related disorders due to occupational exposures and discussing the preventive measures to mitigate the problem.

METHODOLOGY

First, literatures have been searched and then a review of the literature published was performed to identify the main links between vision related problems with productivity of the workers. This knowledge review highlighted costs related to visual disorders as such medical costs, loss of working hours, compensation costs and productivity losses related to lower labor force participation and lower wages earned by visually affected workers. This study mentions prevalence, type and causes of vision related disorders in different jobs and the main focus was to find out how the eye disorders are related to productivity extracted from different articles and publications.

LITERATURE REVIEW

(Islam Mazharul2006), Bangladesh is a developing country. The people of the country have low prevalence of the symptom of asthenopia and computer vision syndrome. Especially the people who are involved in visually demanding occupation like tailor, garments worker, waver, computer operator. Eye diseases decrease job performance, increase error rates and thus, decrease productivity quantitatively and qualitatively. At severe stage of diseases, one may have to discontinue their jobs. So, caution should be exercised against eye diseases. Thus obtaining data about their eye health bears importance.

Problems:

(Rosenfield, 2011), Visually demanding work is associated with eye problems, headaches and muscle pains in the neck and shoulders.

[Anshel, 2005] For computer workers in North America, studies show that 75-90% of the subjects reported subjective eye symptoms or computer vision syndrome (CVS). (Glimne et al. 2013) In a study by the binocular visual ability was affected negatively by glare, and an increase of fixation disparity was found when performing tasks binocularly at a viewing distance of 60 cm. Measuring fixation disparity in a clinical optometric diagnosis is well documented and based on the assumption that when the binocular alignment is under stress, it will have a negative effect on the binocular visual function.

(Steenstra et al. 2009) Lighting, vision and posture are different factors that can contribute to visual performance, which is why it is important to carry out a workplace evaluation. The study found that depending on the time of day, there was a considerable difference in the prevalence of reported complaints from 66% to 93% about teariness, tiredness, itchiness, redness, dryness, eye pain, and difficulty seeing clearly were included.

The major hazards those may affect vision in the workplace are:

Chemical eye burns Both highly acidic (pH <4) and highly alkaline (pH >10) substances are toxic to the eye and cause chemical eye burns if they come into contact with the surface of the eye. Alkaline substances present the greatest risk. Such substances are most commonly found in the industrial environment often includes hazardous chemicals. In many cases, the major concern is injury caused by a liquid chemical that splashes into the eye; however, fumes, vapors, and dry chemicals can also be sources of eye injury. Chemicals that could cause injury include acids, alkalis, organic solvents, and surfactants for example starting from laboratory chemicals to industrial cleaning products.

Invasion of foreign bodies

The eye/s may sometimes be invaded by small foreign particles (e.g. dust from manufacturing activities) which can cause irritation and inflammation. While foreign particles rarely cause lasting damage to the eyes, prompt removal of irritating particles is necessary to avoid permanent eye damage or scarring.

*Trauma injuries: blunt*injuries which do not penetrate the skin and do not result in external bleeding to the eye occur as a result of being struck

by a heavy object. They can cause the eye to bleed internally. Penetrating injuries may also affect resulting minor laceration to loss of eye.

Allergic conjunctivitis is common amongst workers in the food handling and agricultural sectors who are regularly exposed to particular spices, fruits and vegetables. Excessive exposure to ultraviolet radiation (such as sunlight) is associated with working in an outdoor industry and also increases the risk of allergic conjunctivitis.

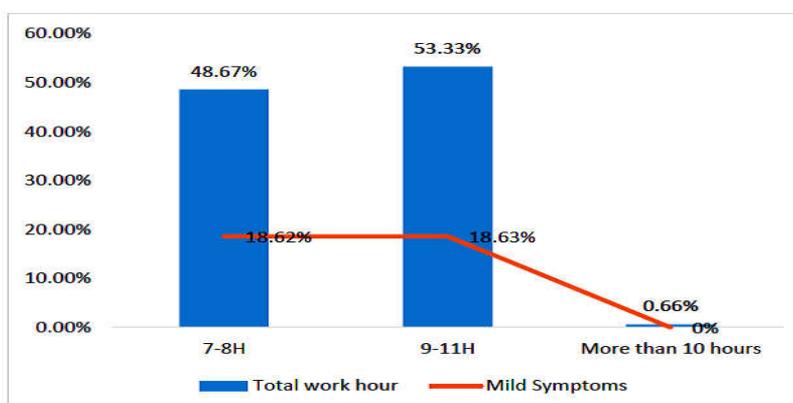
Eye diseases associated with ultraviolet radiation exposure: Outdoor workers are often exposed to ultraviolet radiation (in the form of sunlight) in excessive quantities. There are numerous eye diseases and disorders associated with the eyes' exposure to ultraviolet radiation, including squamous cell carcinoma of the eye, cataract and pterygium. Outdoor workers, therefore, have an increased risk of developing these conditions.

Radiation are also found in a range of workplaces and can damage the eyes. Produced by both artificial sources and the sun, UV radiation is commonly encountered in industrial situations. Probably the most common industrial source is an electric welding arc, which emits large amounts of UV-C, UV-B, UV-A, visible light, and IR. Both the eyes and the skin must be protected from this radiation, as well as from sparks and molten droplets of metal produced during arc welding. These include welding arcs, germicidal lamps and lasers. Thus the above mentioned diseases can also occur as a result of occupational exposure to artificial sources of ultraviolet radiation.

Computer use disorders using a computer for extended periods of time is associated with a range of temporary eye disorders including pain and altered vision. Individuals with eyestrain reported more musculoskeletal discomfort than individuals without eyestrain. Factors shown to have an impact on eyestrain and musculoskeletal discomfort were the visual environment, the individual's perceived visual ability and need for spectacles. Such findings have been reported among computer users.

(David B et al 2006), Population aged 40 years or older (who account for the majority of such disorders): (1) visual impairment; (2) blindness; (3) 4 ocular diseases—age-related macular degeneration (AMD),

cataracts, diabetic retinopathy, and primary open-angle glaucoma—which account for roughly 75% of the cases of blindness and 85% of the cases of visual impairment among adults aged 40 years or older; and refractive errors (myopia and hyperopia), which account for a large additional component of financial burden. (Rein, D.B., et al., 2006), Approximately 48.67%, 53.33%, 66% of subjects worked 7-8 hours, 9-11 hours and more than 11 hours respectively. Mild asthenopia was present in 18.62%, 18.63%, 0.00% of the subjects working 6-9 hours, 9-12 hours and 12-15 hours respectively.



Source: Relation of Total Work hours and Asthenopic Symptoms Mazahar2016.

Economic & Productivity Impact:

Three main components of costs related to visual disorders are: direct medical costs, other direct costs necessitated by visual disorders, and productivity losses related to lower labor force participation of and lower wages earned by visually impaired workers. (Olga S.2010),The occupational vision assessment identifies visual ability that is below the standard for a safe and effective level of productivity. Early identification and prevention of further vision loss enhances workplace productivity and job performance quality.

(World Blindness Overview2009), Blindness and poor vision have a tremendous impact on quality of life, particularly for those living in poverty. The blinds are heavily affected economically, as 90 % of blind

individuals cannot work. (Wagner-Lampl, A. 1994), Culturally, there are often negative stigmas associated with blindness, further alienating the afflicted from their communities. Social disadvantages are also significant. Half of the blind people in impoverished countries report a loss of social standing and decision-making authority, and 80% of all women note a loss of authority within their families. Blind individuals are also less likely to engage in productive activities than others.

(Kuper, H., et. al. 2011), A multi-center intervention study conducted in Kenya, the Philippines and Bangladesh demonstrates the impact of eye disease on socioeconomic status and how interventions may help increase income levels and status. In case of cataract, before the surgery, those with cataracts were poorer than the matched controls in terms of per capita expenditure, assets and self-related wealth. However, after the surgery, the per capita expenditure had increased significantly among operated cases in each of the three settings compared to the level of the controls. The largest per capita expenditure increases were found among the cases that were poorest at baseline and received the surgery. (Polack, S. 2009), Time spent in “inactivity” in Kenya and Bangladesh among operated cases also decreased by approximately 2 hours, and the frequency of reported assistance with activities was more than halved in each setting among those who underwent cataract surgery. [Kuper, H., et. al.2011), Thus, the data “suggest that cataract blindness may cause poverty” and that interventions that reduce and eliminate blindness may help to increase productivity and alleviate poverty.

(Gilbert, C., et. al.2008), Gross domestic product from blindness and low vision in 2000 was estimated at between \$19,223 million and \$22,764 million. (Smith, A. F. and Smith, J. G. 1996), Moreover, researchers Smith and Smith estimated that the annual worldwide productivity cost of blindness was \$168 billion using 1993 data on prevalence rates, gross domestic products, and populations. These authors assumed that all adults and children were productive and that all blind individuals were completely unproductive. This projected cost could be decreased either by limiting the prevalence of blindness or by decreasing the impact of blindness on productivity through workplace accommodations.

RECOMMENDATIONS

The purpose of the occupational vision assessment is to identify visual ability that is out of the reference range for a safe and effective level of

productivity. (Anshel, 2006), A basic vision examination is an important component of the post-offer examination, hazard-specific vision surveillance, or return-to-work fitness determination and it is a means to prevent occupational eye injuries and driving accidents. Workers are screened for general eye health, distance and near vision, color distinction, visual fields, and tonometry. Those who have corrective lens are examined with and without them.

The first step in recapturing that lost productivity is to correctly diagnose vision problems. Regular eye exams by trained eye care providers are important for all of us. Often people don't know they have a vision issue because they only know what they see. The vision they have is normal to them, and they can only assume that everyone sees the same way they do. An accurate prescription for corrective lenses can open the world for someone who didn't know what they weren't seeing.

An annual exam is especially important for those older than 40. Many changes in vision can start when we reach middle age. And often our eyes give doctors insights into underlying health issues such as diabetes and hypertension. Warning signs of changing eyes include cloudy or blurry vision, colors that seem faded, trouble seeing at night, double or multiple vision and loss of peripheral sight.

Vision problems can make work a lot harder than it should be. The good news is that URE is curable. The technology behind corrective lenses has never been better than today. In addition, special computer glasses are on the market that can help those who sit at a monitor all day long prevent eye strain, as well as muscle pain from craning their neck. (McCunney RJ 1988), One of the keys to assessing a patient's workplace tasks is the occupational history. The occupational history includes a complete description of both the visual task and the health hazards within the workplace environment. Completing an assessment of the patient's work environment and multiple workplace tasks should enable the eye care health personnel to prescribe appropriate treatments to maximize the patient's visual efficiency.

CONCLUSION

(Pitts and Kleinstein, 1993), During the comprehensive eye examination, the occupational optometrist should assess all aspects of the relationship

between work and vision, visual performance, eye safety and health. (McCunney, 1988), This complex relationship includes the worker's eyes and visual system, as well as the worker and the workplace environments "One of the keys to assessing a patient's workplace tasks is the occupational history The occupational history includes a complete description of both the visual task and the health hazards within the workplace environment. Completing an assessment of the patient's work environment and multiple workplace tasks should enable the optometrist to prescribe appropriate treatments to maximize the patient's visual efficiency. The usual starting point for enhancing a patient's workplace performance is the comprehensive eye examination resulting in treatment of any eye disease, binocular vision disorder, or refractive problem. From this starting point, occupational vision assessment extends beyond the common tests and treatments to those specifically required for the workplace environment. (Rein DB, Zhang P, Wirth KE, et al 2006), Occupational vision services at three general areas or levels: primary care, eye safety consultation, vision consultation. It is the job of the vision consultant to industry to evaluate both vision requirements and standards for job performance and the safety of the employee and others. Employees should have regular comprehensive eye exams to verify their vision is adequate to complete their jobs safely. Employers should be notified immediately if safety hazards are discovered in the workplace. Those employees who already have reduced vision should ask their employers if prescription glasses or goggles can be provided through the company. Employees should know where the nearest eyewash station is at work and how to use it to properly clean their eyes. Safety eyewear glasses or goggles should be worn at all times whenever eye hazards are present.

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MANAGING CONFLICT IN GOVERNMENT ORGANIZATIONS IN BANGLADESH

Parveen Ahmed ¹

ABSTRACT

Conflict in organizations is inevitable. Conflict refers to any situation in which there are incompatible goals, cognitions, or emotions within or between individuals or groups that lead to opposition or antagonistic interaction. Conflict can be beneficial as well as harmful. Five types of reactions to conflict are avoidance, accommodation, competition, collaboration, and compromise. Depending on the circumstances, a manager may need to either resolve or stimulate conflict. Conflict resolution is necessary when a potentially harmful conflict situation exists. Good management practices can help to avoid unnecessary conflict in government organizations in Bangladesh and deal with inevitable conflict in an effective and professional way which requires a safe and supportive organizational climate, where relationships are based on trust and mutual respect.

Key words: Conflict, Conflict Management, Good Management Practices

INTRODUCTION

(Griffin and Moorhead, 1995) The success of government organizations in Bangladesh depends upon the harmonious relations among all elements of the organization though conflicts in organizations is inevitable.(Newstrom and Davis, 2007) Conflict is the difference in perspective that is inherent in every organization.(Ivancevich, Konopaske and Matteson,1987)Conflict is difficult to define, because it occurs in many different settings. (Griffin and Moorhead, 1995)The essence of conflict seems to be disagreement, contradiction, or incompatibility. Thus, conflict refers to any situation in which there are incompatible goals, cognitions, or emotions within or between individuals or groups that lead to opposition or antagonistic interaction. The definition recognizes three basic types of conflict: Goal conflict is situation in which desired end states or preferred outcomes appear to be incompatible. Cognitive Conflict is a situation in which ideas or thoughts are inconsistent. Affective Conflict is a situation in which feelings or

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emotions are incompatible; that is, people literally become angry with one another. (Newstrom and Davis, 2007) Conflict can be a creative force or a disruptive one, depending on how it is managed. (Richard and John, 1975) Diversity of perspective approaches with an organization help generate ideas and facilitate change. In other words, conflict can be considered as an opportunity, if it is managed wisely. Therefore, effective leaders often see conflict as a source of vitality and impetus for changes.

(Tyagi Archana, 2001) Conflict Management is defined as recognizing the potential value of conflict for driving change and innovation. This means knowing when to confront, and when to avoid a conflict and understanding the issues around which conflict revolve. It means looking for those win/win solutions and seeking agreement on a solution while eliciting commitment to making it work effectively in points.

There are many approaches to conflict management, depending on the nature of the conflict, and the people involved in the conflict. (Griffin and Moorhead, 1995) The conflict management method chosen sometimes reflects the leader's leadership style.

OBJECTIVE

Field of this study is government organizations of Bangladesh. The objective of this study is to identify the causes of workplace conflicts and provide possible solutions for conflict resolution.

LITERATURE REVIEW

By understanding and discussing the symptoms and the sources of conflict, individuals can truly grasp the underlying themes that create conflict situations. Following are examples:

(Dorothy and Jean, 1975) Symptoms of conflict include:

Increased tension among members.

Increased disagreement and complaints.

Avoidance among members.

Increased blaming.

(Gibson F. Cyrus, 1980) Sources of conflict may include.

Misunderstanding or communication failures.

Values in goal differences.

Differences in methods and approaches to work.

Conflict in job roles and responsibilities.

Lack of cooperation.

Authority issues.

Noncompliance issues are differences in the interpretation of rules, policies, or standards.

Common causes of workplace conflict

(Harry and Patrick, 1978) Identifying the most common causes of workplace conflict will help employee to predict, prevent or deal with them. The following factors may be the source of conflict involving employees.

A breached agreement

Skills deficits

A lack of information or misunderstanding

Conflicting interests or values

Discrimination or harassment

Personality style

Scarce resources

Organizational problems

Bad (corrupt or fraudulent) intent.

(Jon and Randy, 2009) Conflict is constructive when it:

Results in clarification of important problems and issues

Results in solutions to problems

Involves people in resolving issues important to them

Causes authentic communication

Helps release emotional anxiety, and stress

Builds cooperation among people through learning more about each other; joining in resolving the conflict
Helps individuals develop understanding and skills

There are three critical steps that can be taken to manage conflict constructively.

- a) First, is understanding the patterns and appearances of conflict, how it looks when it rears its ugly head, as well as knowing what options and alternatives are for dealing with conflict.
- b) Second, is assessing and understanding one's own natural or most typical approach to dealing with conflict.
- c) Third, and most difficult, is developing skills and methods that are needed to apply effectively one's knowledge of how to make conflict work in constructive ways.

The Nature of Conflict

(Griffin and Moorhead, 1995)Figure 1.1 illustrates the basic nature of organizational conflict. When groups strive for the same goal, hold little or no antagonism toward one another, and behave according to rules and procedures, competition is the most likely outcome. In contrast, conflict is likely when one group's goals jeopardize the others', there is open antagonism among the groups, and few rules and procedures regulate their behavior. When this happens, the goals become extremely important, the antagonism increases, rules and procedures are violated, and conflict occurs.

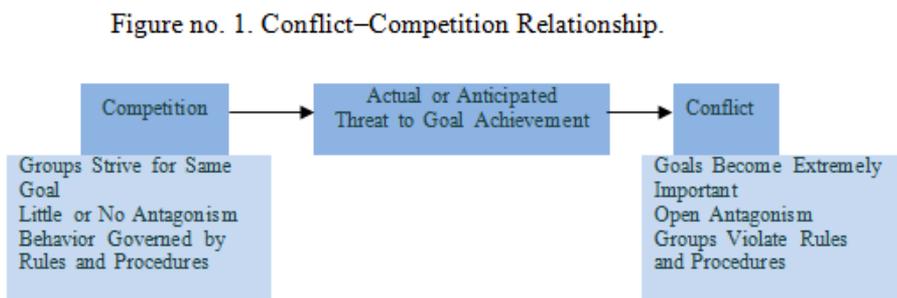
Reactions to Conflict

(Griffin and Moorhead, 1995)The most common reactions to conflict are avoidance, accommodation, competition, collaboration, and compromise." Whenever conflict occurs it is really the people who are in conflict. In many cases, however, people are acting as representatives of the groups to which they belong. In effect they work together, representing their group as they strive to do their part in helping the

group achieve its goals. Thus, whether the conflict is between people acting as individuals or people acting as representatives of groups, the five types of interactions can be analyzed in terms of relationships among the goals of the people or the groups they represent.

Reactions to conflict can be differentiated according to their importance to the attainment of each party's goals and the degree of compatibility among the groups' goals, as shown in Figure 1.1. The importance of the interaction to the goal attainment of each party ranges from very high to very low. The degree of goal compatibility is the extent to which the goals can be achieved simultaneously. In other words, the goals are compatible if one party can accomplish its goals without preventing the other from accomplishing its goals. The goals are incompatible if the accomplishment of one party's goals prohibits the other from accomplishing its goals. The degree of goal compatibility can vary from very incompatible to very compatible. At the midpoint of each continuum, goals are neither very important nor very unimportant and neither very incompatible nor very compatible.

Figure no. 1. Conflict–Competition Relationship.

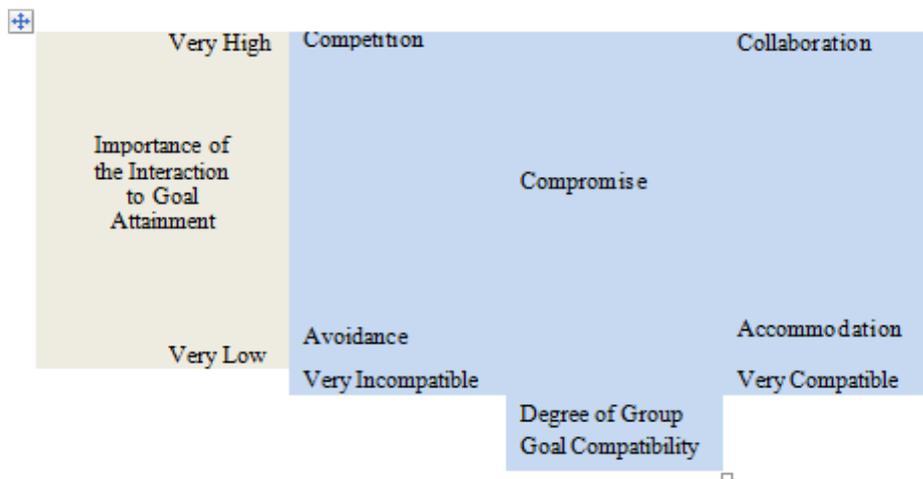


Avoidance: Avoidance occurs when an interaction is relatively unimportant to either party's goals and the goals are incompatible, as in the bottom left-hand corner of Figure 1.1. Because the parties to the conflict are not striving toward compatible goals and the issues in question seem unimportant, the parties simply try to avoid interacting with one another.

Accommodation: Accommodation occurs when the goals are compatible but the interactions are not considered important to overall goal attainment. Interactions of this type may involve discussions that center on how the parties can accomplish their interdependent tasks with the least expenditure of time and effort. This type of interaction tends to be very friendly.

Competition: Competition occurs when the goals are incompatible and the interactions are important to the attainment of each party's goals, as in the top left-hand corner of Figure 1.1. If all parties are striving for a goal but only one can reach its goal, the parties will be in competition. As we noted earlier, if a competitive situation gets out of control, as when there is open antagonism and no rules or procedures to follow, then competition can result in conflict. Thus, the types of interactions, conflict and competition, can interact. Sometimes conflict can be changed to competition if the parties agree to rules to guide the interaction and conflicting parties agree to not be hostile toward each other. On the other hand, a competitive situation can result in conflict if the interaction gets out of control.

Figure no. 1.1 Five Types of Reactions to Conflict.



Collaboration: Collaboration occurs when the interaction is very important to goal attainment and the goals are compatible, as in the top

right-hand corner of Figure 1.1. At first glance, this may seem to be a simple interaction in which the parties participate jointly in activities to accomplish goals after agreeing on the goals and their importance. In many situations, however, agreeing on goals, their importance, and especially the means for achieving them is no easy matter. In a collaborative interaction, goals may differ but be compatible. Parties to a conflict may initially have difficulty working out the ways in which all can achieve their goals. Because the interactions are important to goal attainment, however, the parties are willing to continue to work together to achieve the goals. Collaborative relationships can lead to new and innovative ideas and solutions to any differences among the parties.

Compromise: Compromise occurs when the interactions are moderately important to goal attainment and the goals are neither completely compatible nor completely incompatible. In a compromise situation, parties interact with others striving to achieve goals, but they may not aggressively pursue goal attainment in either a competitive or collaborative manner because the interactions are not that important to goal attainment. On the other hand, the parties may not avoid one another or be accommodating because the interactions are somewhat important. Often each gives up something, but because the interactions are only moderately important, they do not regret what they have given up.

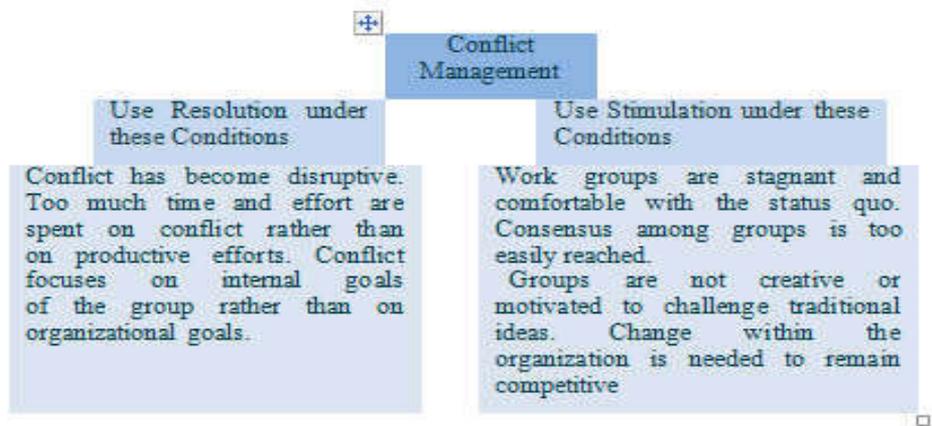
In summary, interactions between people or groups can result in several types of reactions to the conflict. If the goals of the parties are very compatible, the parties may engage in mutually supportive interactions, that is, collaboration or accommodation. If the goals are very incompatible, each may attempt to foster its own success at the expense of the others, engaging in competition or avoidance.

Managing Conflict

Given the potentially disruptive effects of conflict and the multiple reactions to conflict that can occur, managers need to be sensitive to how it can be managed. When a potentially harmful conflict

situation exists, a manager needs to engage in conflict resolution. As Figure 1.2 shows, conflict needs to be resolved when it causes major disruptions in the organization and absorbs time and effort that could be used more productively. In addition, conflict needs to be resolved when its focus is on the group's internal goals rather than on the organizational goals.

Figure no. 1.2 Conflict Management Alternatives.



However, that sometimes a manager should be concerned about the absence of conflict. An absence of conflict may indicate that the organization is stagnant and employees are content with the status quo. It may also suggest that work groups are not motivated to challenge traditional and well-accepted ideas. Conflict stimulation is the creation and constructive use of conflict by a manager. Its purpose is to bring about situations where differences of opinion are exposed for examination by all. If competing organizations are making notable changes in products, markets, or technologies, a manager may need to stimulate innovation and creativity by challenging the status quo. Stimulating conflict may provide employees with the motivation and opportunity to reveal differences of opinion that they previously kept to themselves. When all parties to the conflict are interested enough in an issue to be somewhat antagonistic toward other groups, they often expose their hidden doubts or opinions. This, in turn, allows the parties to

get to the heart of the matter and often to develop unique solutions to the problem. Indeed, the interactions may lead the groups to recognize that a problem in fact exists. Conflict, then, can be a catalyst for creativity and change in an organization.

Several methods for stimulating conflict under controlled conditions are available. These include altering the physical location of groups to stimulate more interaction, forcing more resource sharing, and implementing other changes in relationships among groups. In addition, training programs can be used to increase employee awareness of potential problems in group decision making and group interactions. Adopting the role of "devil's advocate" in discussion sessions is another method of stimulating conflict among groups. In this role, a manager challenges the prevailing consensus of opinion to ensure that all alternatives have been critically appraised and analyzed. Although the devil's advocate role often is unpopular, it is a good way to stimulate constructive conflict.

Of course, too much conflict is also a concern.(Newstrom and Davis, 2007) If conflict becomes excessive or destructive, the manager needs to adopt a strategy for reducing or resolving it. Managers should first attempt to determine the source of the conflict. Is it due to differences in goals, perceptions of the difficulty of goal attainment, or the Importance of the goals to the conflicting parties? Then the manager can attempt to move the conflicting parties into one of the five types of reactions to conflict, depending on the nature of the conflicting parties. To foster collaboration, trying to help people see that their goals are really not as different as they seem to be might be appropriate. One way to do this is to help groups view their goals as part of a superordinate goal to which the goals of both conflicting parties can contribute. A superordinate goal is a goal of the overall organization and is more important to the well-being of the organization and its members than the more specific goals of the conflicting parties. If the goals are not really that important and very incompatible, the manager may need to

develop ways to help the conflicting parties avoid each other. Similarly, accommodation, competition, or compromise might be appropriate for the conflicting parties.

METHODOLOGY

At the beginning of the study an intensive literature review has been done. Focusing on the main objective a survey has been carried out. Total sample number was 50. The sphere of government organizations of Bangladesh is extensive. Keeping eyes on this issue only officers are included in the sample of this study. Focusing on this main objective a survey has been carried out. This survey includes the issues concerning how trainers were selected in their job and trained; what are the personnel training policies, rules and regulations; what type of courses and curricula are there. It also includes service rules, annual reports, various government gazettes and notifications of concern ministries, decision of the Board of Governors, office order, relevant previous files; and conflict related information's of the organization libraries.

To collect sample, officers at various levels have been provided close ended as well as open ended questionnaire. There are 20 questions in the questionnaire. 1-8 are related to personal information of the respondents (not shown here). From No 09-20 are conflict related questions. Among the sample 15 candidates are interviewed. This study also included discussion with motivated/demotivated persons to understand the factual situation. As a result possible in-depth analysis of the issue has been revealed in this study. It is notable that in some cases respondents did not provide any answer and documents. Therefore, hopefully this endeavor will become a value added source for conflict resolution.

FINDINGS

The respondents of this study expressed their concern regarding personnel policy of their respective organizations. Policies are not clear (20%), many organizations do not even have written policy (40%), there also examples of supportive policies in theory but not being practiced by

the organization. It hampers principles of equity, leading to creating conflicts in the organization.

There is no existence of HR department in most of the public organizations. Although administration or personnel division of public organizations carry out the personnel functions but they never address conflict management. Moreover, there is no counselling services in the organization and community. As a result, conflict management is virtually absent. (William and Davis, 1989) In some cases the issue addressed by the supervisors are in the form of advise which is not always acceptable to the employees and not effective as well. Therefore, all public organizations should have HR department where there should be a formal counselling program that will aid conflict resolution also in this regard.

There is no open door to ventilate problem to the higher authority. In one hand there is no conflict management program in the organization, on the other hand employee cannot open up with their problems. Therefore, the problems become cumulative and complex. So there should be an open door policy in the organization.

(Ivancevich, Konopaske and Matteson, 2005) Organizational norms, values, customs, rules and expectations contribute positively or negatively to work/life balance. One of the factors, which complicates organizational culture is the “culture of hours”- the expectation that “serious” employees work longer hours and are always available for early morning or evening meetings. On the basis of their own attitude they expect similar long hour working from others too. As a result it creates conflict.

The rapid and constant change being experienced at the work place level is a key contributor to stress and makes balance more complicated. The change that results from restructuring, downsizing, and managers result in increased workloads and added stress. Too much change and the constancy of it leave employees feeling that they are constantly redesigning the wheel.

The entry of women into the workforce is possibly the most significant social change within families in the present generation. This has generated the need to redistribute care giving and homemaking responsibilities and has created a dramatic shift in both men's and women's roles.

Women, however, still carry the primary responsibility for care giving for children, family dependents and the carrying out of household tasks. The major stress associated with today's workers is to blend the responsibilities of paid work with that of the responsibilities of family and personal life.

The attitude that an employee has to choose either career advancement or family have been identified by most (80%) of the women employees as a source of conflict. Most of their comments indicated that they feel that they are in a "no-win" situation – either to choose a meaningful life outside of work or advance in career. The common problems are: putting family ahead of work hurts career advancement; career development activities often make it more difficult to meet family demands; time crunch has a negative impact on career advancement and career advancement often means relocation, which is difficult on families where both partners are working.

In case of female employee another issue of stress and demonization is associated with pregnancy; post pregnancy period and taking care of child. Although now a days there is an acceptable provision of maternity leave but socio economic structure of the county is not suitable enough to manage child care in family and in office. For example, a good many mother do not get any support in the family to take care of her child while she is engaged in a job. At the same time, there is hardly any standard child care center available in the community to cope with the situation. Similarly, most of the working places do not have any day care provision. All together this remains a stressing issue for a working mother. Some child care center in the community as well as in work place, necessary financial support for the child take care period and suitable working schedule (flexi hour) etc. should be ensured. Positive

psychological and social support from the colleagues and supervisors would be helpful and productive for the women employee.

If any chronic problem persist with the employee that leads the employee gradually to be frustrated. As a consequence, employee become apathetic to his job, organization and prepare to leave the organization. For example, this frequently happens when an employee is debarred from his deserving promotion. To prevent such situation, employee should be provided their dues of any kind. If any justified delay or any injustice to meet the employees due in both the cases he or she must be transparently explained the situation.

Performance appraisal in our country often led to demotivated for the deserving candidates as well as the undeserving candidates because of lack of practice of justified process. Very frequently nepotism, favouritism and influence become the determining factors of employee appraisal which create conflict. To prevent conflict supervisors should have honesty, justice and high moral.

Those working in managerial and professional positions are all more likely to talk about workload issues. They have identified several causes of heavy workloads: unrealistic expectations; inability to plan and set priorities, demanding boss and the impact of office technology.

The majority of respondents were frustrated with the behaviour of their immediate manager/supervisor. The rest felt that leadership at the top was the source of work-life balance problems.

In certain situations, it may be advisable to take a passive role and avoid it all together. It may be specially necessary when getting involved in a situation would provoke further controversy or when conflict is so trivial in nature that it would not be worth the manager's time to get involved and try to solve it. It could also be that the conflict is so fundamental to the position of the parties involved that it may be best either to leave it to them to solve it or to let events take their own course. The parties involved in the conflict may themselves prefer to avoid conflict, especially if they are emotionally upset by the tension and frustration

created by it. People may intrinsically believe that conflict is fundamentally evil and its final consequences are never good. Thus, people may try to get away from conflict causing situations.

Research revealed that a breached agreement, lack of information or misunderstanding can cause conflict in the workplace. It is therefore essential to develop a good record keeping system that employee can confirm the facts when dealing with a disagreement.

Staff trained in conflict resolution techniques and good communication skills are less likely to enter into conflicts. They are more likely to ensure agreements between employees and managers about entitlements, roles and responsibilities and can advise on the help manage conflict.

Experienced employee, if appointed with the necessary skills and authority to deal with conflicts should be in a position to negotiate and communicate with upper as well as lower management and act as a mediator within organization.

CONCLUSION

Good management practices can help to avoid unnecessary conflict and deal with inevitable conflict in an effective and professional way. Best practice can be developed when the issues should be resolved quickly rather than allowing them to escalate through inaction. All relevant parties should be consulted so that all sides of the story are taken into account. Disputes should, where possible, be resolved in a confidential way to minimize impact on other employees. The procedure should be clear to every employee.

All organizations, no matter how well they are managed, there will be differences of opinions which must be resolved through discussions and respect for differing viewpoints. Effectively managing and resolving conflict however requires a safe and supportive organizational climate, where relationships are based on trust and mutual respect. Only then will feel safe to express difference of opinion, and jointly develop strategies for resolving conflict so that everyone wins.

The greater the trust among the members of unit, the more honest and open the communication among them would be. Individuals and units should be encouraged to communicate openly with each other so that they can all understand each other, understand each other's problems and help each other when necessary.

Co-ordination is the next step to communication. Properly co-ordinated activity reduces conflict. Wherever there are problems in co-ordination, a special liaison office should be established to assist such co-ordination.

By developing conflict resolution skills and resolution processes, employees and managers can resolve problems early and avoid major disruptions to the organization. Employee can attend conflict resolution workshops and training, with topics such as: 'Training employees to resolve conflicts'.

Organization can establish a dispute resolution centres where trained mediators to help everyone involved in a workplace conflict reach a satisfying settlement. Mediation sessions are usually attended by 2 mediators who will act as impartial third parties. Their role is to make sure all people involved in the dispute get the chance to make their point. Conflict resolution centers can also help employees workplace develop systems that actively prevent or manage conflict. Authority should learn more about employee rights, entitlements, and anti-discrimination, keeping workplace safe, personal safety in the workplace and equal opportunity rights.

It is expected that if the above mentioned problems are addressed then the government organizations of Bangladesh will attain necessary conflict management programs which will benefit employees for enhancing organizational performance.

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