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Mossammad Salma Sultana and Md. Rezaul Karim*

Ralph Waldo Emerson: The Formation of American Freedom and Progress

Abstract

This article exerts its effort to explore foundations and factors because of which Ralph Waldo Emerson has been treated as a powerfully and outstandingly thought-provoking writer in American literature in particular and elsewhere in European English works of art. It is not unclear that a great many people think him the precursor of Transcendental Movement of America, not a few people tend to believe him a spiritually dignified human being, and a significant number of intelligent people put him into record as an architect in bringing about the ways of higher thoughts, of celestial elevation that finally is moulded into redemption of intellect. While the critical analysis of Emerson's literary reputation is a concern on the one hand, the social textures, the economic conditions, the concepts about the then Unitarian religious dogmas of his own time include an area of examination on the other. This article, however, underpins the components of Ralph Waldo Emerson's authorization which will be characterized by the nature of the creation of freedom and an all-out progress in American literature.

Key Words: Emerson, formation, freedom, progress.

While the present America was born with the pre-Columbian origins and cultures, the beginning of a typical development in perceptions and huge novel ideas in the works of Emerson came into existence through some incorporation of Boston, Massachusetts in which he grew with his own essence of proprietorship of wisdom. The "Executive's War" was initiated against Mexico (1846-1848) by the President James K. Polk which was opposed vehemently by the most American writers of the century. The beginning of this civil war, in the broadest perspective, stirred many intellectual sections of America and Emerson was incited to take the decision into derision. Along with other incitements that paved the way of expressing and ensuring humanistic approach, abject slavery in America is recorded as a big national sin by the conscientious Americans. The enactment of "Fugitive Slave Law" in Boston in 1851 by Melville's father-in-law gave an index of further progress of people's choice to freely enkindle their volition for innovations. As for the disconnection between the people and their development Emerson alarms, "Society is a joint-stock company which the members agree for the better securing of his bread to each shareholder, to surrender the liberty and the culture of the eater. The virtue in most request in conformity." The attitudes of

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the most American whites towards any immigrant or migrant were idiosyncratic that hindered the development of intellect. Born as a simple boy in a traditional Unitarian minister family in Boston, Ralph Waldo Emerson had chances to encounter some awakening and eccentricity that might have aroused his endless curiosity toward trends of preparation to go into the field of growth and escalation. After the death of his father, Emerson was left in the care of his brother who later on helped become "a hopeless school master," of his locality. This family was rigorous in economic constrains, ritual practices and social boundaries. It may, perhaps, be true that Ralph Waldo Emerson was forced, by nature, to inculcate his installation of higher perceptions by his aunt Mary Moody Emerson. Emerson's education from Harvard University had made him different than he was in the family. He was ordained as junior pastor of a church of Boston in 1829 and started practising his own ideology about the pattern of achieving higher king of morality and ethics that were opposed by the existing puritanical and orthodox sets of principles. The present changes that America enjoys in religious dogmas are merely far-reaching feedbacks of the intelligentsia like Emerson, Hawthome, Thoreau, Melville and Douglass among others.

In America it was a firm belief in the 1830s that the Bible was a revelation of God and the people's belief was unshaken in the miracles of the Biblical stories. But Emerson intends to change the then dogmas through his serious theological intuition at Harvard. Indeed, it was a time for ripening wisdom for Emerson simply because he was able to make associations of the intellect in Boston, Massachusetts though at one stage Herman Melville became hostile with the concepts of Ralph Waldo Emerson. Emerson continued sharpening his talent and it went to a height while he came very close to his reading of Samuel Tailor Coleridge's Aides to Reflection.

It is generally assumed that Ralph Waldo Emerson came back from his earlier philosophy and this trend of the change showed its inception through his rejection of Lu.ds Supper's authority and became engrossed in his personal freedom and progress. It was hardly believed that Emerson had not seen myriad inconsistencies in the form of the societal stagnation of America. Politics of the nineteenth century in America was a boiling point to many thinkers and individuals, perhaps, as a result of which this country entered a new epoch of independence and advancement, and critical thoughts and philosophies from and outside America had influenced the whole lot on which the present absolute luxurious pattern of livelihood relied. Emerson entered not only an excellent place of ideas and intuitions, but also studied Kant, Swedenborg, Coleridge and Carlyle. The philosophy of Carlyle was seriously ingrained into the mind and soul of this transforming figure. It argues that the place of Emerson was a meeting place of many different sects and religious beliefs.

Many critics assume that the death of Emerson's father at his eighth, perhaps, made him different in ideologics and beliefs and his private state of hardships continued when his youngest brother Charles died in 1836. At the beginning of 1842, Emerson's eldest son Waldo died. A few years after Emerson's first wife Lydia Jackson passed away at the age of 18 and these sad events added new realizations to his personal domain of knowledge.

A new sort of intellectual revelations grew in the mind of Emerson to relate the individual to the mystery of the universe and this is known as Transcendentalism which is normally treated as an aftermath of integrations of intuitive notions. The unsigned contributions to the publication of *The Dial* at Harvard encouraged him to ponder over this area of study though he could not avail of the chances to be famous at that time. Emerson travelled Europe and met a few intellectual persons and came back to America just after one year. Before this he had already studied German "higher criticism". After his intense observations and solid experiences about life and the world, he had settled in Concord, Massachusetts. It is obvious that Concord was a peace-loving location and the people of highly intellectual calibre used to stay there. The climate of Boston, Harvard and tranquil Concord had immense impacts on the mental formation and growth of Ralph Waldo Emerson.

"Transcendental Movement" was a drive of a group of people of America of the nineteenth century, "Transcendentalism" in the history of American literature was basically fired through the embodiment of the philosophies of Kant, Hegel and Schelling of Germany. The word "Transcend" is usually referred to going beyond the usual limits of knowledge, experience and reason. The word "Transcendentalism" involves a concept or doctrine of philosophy which points to a sort of phenomenological knowledge of humans that may be achieved not by the empirical knowledge or concepts but by the higher kind of intuitions and it is generally asserted that no practical reason or analysis is capable of reaching the area of this understanding rather a mystic or specially made "Over-soul" of an individual readily intends to meet the "Infinitude" by the processes of the knowledge of the "Finitude". This concept is also understood as "the recognition in man of the capacity of knowing truth intuitive, or attaining knowledge transcending the reach of the senses." Ferthingham defines it "as an assertion of the inalienable worth of man." Two reputed analysts and critics like Van Wyck Brooks and O.L. Bettmann state "Transcendentalism referred to the self-sufficiency of human mind, the creative powers of man. It spoke for an order of truth that transcended by the immediate perception, all external evidence.... Transcendentalism "explores an inner life." A transcendentalist holds the view that the external world around the human beings is the appearances of the eternal world. Emerson, however, believes in the union of man, Nature and God by virtue of higher constitution of intuitive knowledge. Every little object of this entire world is to be understood through the understanding of an individualistically enlightened power of thoughts and the power of an individual is necessitated to be properly interwoven with the power of the soul.

While the need of the emergence of the "Transcendentalism" in the era of Ralph Waldo Emerson was, in fact, a matter of the time, the rejection of the authority of William Ellery Channing was crucial for the initiation of new sets of beliefs. The absolute freedom of thought of an individual ushers the realization of eternity and it works as a spontaneous agent of divine attainment. The idea of "Original sin" is of negation to Emerson. Instead he chooses to develop his connection with the Nature and God either by moulding the mystic power or by coming into contact with the superior truth and beauty. Emerson's "Transcendentalism" is also a mix of all natural laws and unquestionable morality of higher attitude of an individual. Rigorous drill of mentality and uncompromising sense of goodness is of considerations to go beyond the knowledge of the existing world. As for the literary progress of its kind, Emerson puts:

Literature is a point outside of our hodiernal circle through which a new one may be described. The use of literature is to afford us a platform whence we may command a view of our present life, a purchase by which we may move it.... Therefore we value the poet. All the argument and all the wisdom is not in the encyclopedia, or the treatise on metaphysics, or the body of Divinity, but in the sonnet or the play.

Emerson's Nature appeared in 1836 as a biblical statement for the Americans in which he disclosed his higher concepts about the procedures of the communication and perfect ways of the visible world and the power of an individual. In Nature he has felt urged to transcend the limits of the mundane power of the traditions and values of his present Unitarian customs and practices simply because he has found no stimulus of the soul to make any progress rather he has seen unsurpassable hindrances in his social, economic, political and religious matters. Thus he argues:

Nature is always consistent, though she feigns to contravene her own laws. She keeps her laws and seems to transcend them. She arms and equips an animal to find its place and living in the earth and at the same time, she arms and equips another animal to destroy it. Space exists to divide creatures; but by clothing the sides of a bird with a few feathers, she gives him a pretty omnipresence.

The establishment of the "Transcendental Club" in 1836 by the radical thinkers of New England worked as a far-reaching influence on the fertile land of intellect and wisdom that resulted in a movement of the ironically insane individuals. The view of "Transcendentalism" is in a favour of the belief that material nature is not merely a commodity but a means of His divine world. Freedom of intellect and definitive development in thoughts are a key to "Transcendentalism." Being a leader in the area of "Transcendentalism", Emerson had made followers like Bronson Alcott, George Ripley, Orestes Brownson, Theodore Parker, Margaret Fuller and Elizabeth Peabody.

Emerson brought out "The American Scholar" (1837) in conjunction with the publication of Nature which threw light on the reaction of the religious failure of the then orthodox system of America and attempted to influence assessment of the scholars of enlightenment, describes values of books and true education. "The Divinity School Address" too deals with Emersonian notions of going into higher world by surpassing the virtual concepts of the world. This address also strikes the note on the ejection of the church domination over the ultimate triumph of an individual. Self-development by ignoring the hackneyed traditions of the establishments of the state, society and religion are basics of understanding. Emerson again echoes his intuitive notion in "The American Scholar":

Man is thus metamorphosed into a thing, into many things. The planter who is man sent out into the field to gather food, is seldom cheered by any idea of the true dignity of his ministry. He sees his bushel and his cart and nothing beyond and sinks into the farmer, instead of man, on the farm. The tradesman scarcely ever gives an ideal worth to his work but is ridden by the routine of his craft, and the soul is subject to dollars. The priest becomes a form; the attorney a statute book; the mechanic a machine; the sailor a rope of the ship.

Emerson argues in "The American Scholar" that an individual must prepare through a few processes; the ways of making an individual educated, and the ways of carrying out duties and responsibilities so as to make a perfect world in which he may demand that he has power of thought to make things happen while progress is taking place. It is, therefore, vivid that what Emerson does in his whole life is a systematic preparation of an accomplished individual, and his perpetual attachment to completion of actions.

In another essay called "The Divinity School Address" Emerson gives his most urgent invitations to the people of America with a view to sharing his most wanted aspirations of the individuals. 'The Address' too focuses the absolute rejection of the traditional values and views of the Americans as he simply found incongruities between what was believed and what was practiced. By bypassing these Unitarian religious customs, he referred to those things that forced the minds of the individuals to create soul. In doing so, Emerson wanted to insert transcendentalism and free thinking into one's world of peace and stability. Emerson writes:

This sentiment is divine and deifying. It is the beatitude of man. It makes him illimitable. Through it, the soul first knows itself. It corrects the capital mistake of the infant man, who seeks to be great by following the great, and hopes to derive advantages from another,-- by showing the fountain of all good to be in himself, and that he, equally with every man, is a door into the deeps of Reason.

"Self- Reliance" (1841) is an intellectual essay of Ralph Waldo Emerson that critically describes aspects of transcendentalism and individualism and this concept implies extreme level of trust incorporating God-reliance to enter the world of happiness and higher truth. It is also understood that creating higher level of realization by forgetting established principles of the society is Emersonian's chief objective. It is mentionable that through this essay Emerson pinpoints the shortcomings out of which self-reliance derives and this want is termed as dissatisfaction of an individual. Self-reliance, Emerson believes, is a kind of doctrine which is merged with the soul of the world and the understanding about the soul of the world is ensured by the presence of intuitive knowledge not by any dogma of the society concerned. It may be argued here that self-reliance is gained through the obedience of high moral laws and acted on the free power of actions of an individual. In reality, this doctrine does not rely on any external ethics or laws rather it is controlled and guided by its own self-confident and elevated morality.

Emerson is critical of the incapability of the human beings' thinking that they feel scared of the feedback of their thoughts and ideas whereas they are made so. Individuals are created with the sense of infinitude and heavenly energy of intellect. As Emerson puts:

Man is timid and apologetic. He is no longer upright. He dares not say' I think, I am,' but quotes some saint or sage. He is ashamed before the blade of grass or the blowing rose. These roses under my window make no reference to former roses or to better ones; they are for what they are; they exist with God to-day. There is no time to them. There is simply the rose; it is perfect in every moment of its existence.

"Self-Reliance" is also about aspects that give an account of education, property, history, conformity, travel and it embodies the implications of reality and practicality of personal experiences. It posits, no doubt, in providing Spartan and Athenian perfection for an individual as Emerson never supports to imitate but to create of one's own that may remain as

an excellent document of innovation and expertise. Thus, Emerson believes in changes for greatness and from the broader perspective, self-education for self-development like ancient sages has been a crucial concern. Again in this regard Emerson emphasises, "Insist on yourself; never imitate. Your own gift you can present every moment with the cumulative force of a whole life's cultivation; but of the adopted talent of another, you have only an extemporaneous, half possession."

Essays of Emerson are unlike others' as they focus on the fundamental need of an individual's transgressing power for existence for producing opportunities of an absolute sense of pleasure. To do so, Emerson is shown keenly interested in his area of civilization and its effects on human mind. He states keeping this idea in mind, "The civilized man has built a coach, but has lost the use of his feet. He is supported on crutches, loses so much support of muscle." It is, then, vital, Emerson believes that decisive progress in attitudes and sentiments must work. Society is never developed until its people are developed of their own. Emerson yet again asserts, "Society never advances. It recedes as fast on one side as it gains on the other. Its progress is only apparent, like the workers of a treadmill."

In "The Poet" (1844) Emerson projects the ideas of the visible and the invisible. He holds the idea that a poet has an ability to express ideas not to demonstrate traditional knowledge. His way of expression is of special consideration because he knows as a poet to grasp the ungraspable, makes things happen as an outcome of mysterious power. A poet is a seer possessing power to turn into anything whatever or however he likes. Emerson states:

But the quality of the imagination is to flow, and not to freeze. The poet did not stop at the color or the form but read their meaning; neither may be rest in this meaning, but he makes the same object exponents of his new thought. Here is the difference betwixt the poet and the mystic that the last nails a symbol to one sense, which was a true sense for a moment, but soon becomes old and false.

A poet unlocks our narrow thoughts and concepts and is ready to perceive the genuine things we desire. He is a medium of emancipation and tries to relieve the soul of the individuals. "The poets are thus liberating gods." While acting as a poet, he puts emphasis on visionary aspects of the world. He knows how to see the things and express himself to the exposure of externalization. He possesses such qualities that turn woods and ponds into the spirit. A poet pursues his goal by experiencing truth and beauty. He tries to experience that what he seeks and does are the culmination of the better perception than other people around him. Everything looks glowing to a poet and no trivial thing is left unexamined and thus, he employs his rapt attention on the creation of intellectual freedom and thereafter, makes noticeable development for all men.

Emerson considers a poet a high priest who feels alone and works for all and who declares himself as an inseparable part of Nature, God and man and thus, he comes to the nature and function of a poet, "Doubt not, O poet, but priest. Say, "It is in me, and shall out. Stand there, baulked and dumb, stuttering and stammering, hissed and hooted, stand and strive." All the creatures of the world are in the hands of the poet's charisma to be made in accordance with the shape and size of him because he enjoys every moment to extract the meanings of reality and imagination so vividly that they finally get their most heavenly appearance.

It is, therefore, apparent from the discussion that Ralph Waldo Emerson introduces American romanticism and a different type of intellectual and cultural independence. Politics of America during the time of Emerson was a central issue in almost all his writings, religion was taken into serious consideration in terms of its reforms, and democracy and the form of the government are also adequately discussed in most of his essays. Barrett Wendell terms the time of Emerson as "The Golden Day". As a matter of fact, Emerson enriched the overall philosophy of USA with his unique perceptions of freedom and progress. There is no denying the fact that The American Renaissance was truly grown by the hands of Emerson along with his other contemporaries including Thoreau, Longfellow, Holmes, Lowell, Hawthorne and Melville. Interestingly enough, all these American Renaissance figures were New Englanders except Melville. It is also realized that real progress of the sense of nationalism for the Americans was initiated during Emerson's period. Full-fledged improvement of science and logic got their foundations to be prepared to work in the widest sense. The United States of America itself got rid of the borrowing trends from Europe and started becoming completely self-reliant in the case of the enhancement for its own history and culture, and, in a nutshell, the elimination of all sorts of intellectual dryness was the pivotal concern of Ralph Waldo Emerson's writings.

References

- Baym, Nina. ed. The Norton Anthology of American Literature. Volume-B, Sixth Edition, New York and London: 2003.
- David, Mrs. Mary S. and Dr. Varshney. A History of American Literature. Bareilly: India, 1999-2000.
- Marr, David. American Worlds since Emerson. The University of Massachusetts Press. Amherst, 1988.
- Matthiessen , F.O. American Renalssance: Art and Expression in the Age of Emerson and Whitman. Oxford University Press: New York, 1941.
- Newfield, Christopher. The Emerson Effect: Individualism and Submission in America. Chicago: The University of Chicago Press, 1996.
- New, Elisa. The Regenerate Lyric: Theology and Innovation in American Poetry. Cambridge: Cambridge University Press, 1993.
- Ruland, Richard and Malcolm Bradbury. From Puritanism to Postmodernism: A History of American Literature. Penguin Books, New York: 1992.
- Richardson, Robert D. Emerson: The Mind on Fire. Berkeley: University of California Press, 1995.
- Wagenknecht, Edward. Ralph Waldo Emerson: Portrait of a Balanced Soul. Oxford University Press: New York, 1974.
- Whicher, Stephen E. Freedom and Fate: An inner Life of Ralph Waldo Emerson. Philadelphia: University of Pennsylvania Press, 1953.



Md. Sajadul Islam Sarker*

Drivers of Economic Growth in Bangladesh through Debt Financing: A Comparative Study

Abstract

The purpose of this paper is to identify the significant impact of debt financing on economic growth in Bangladesh. From the data of last twenty years (FY 1997-2016), we have found that there is a significant gap between bank loan and non bank loan. For quantitative analysis, correlation, regression analysis, test of hypothesis and trend analysis have been conducted in this paper using SPSS. Only secondary data, collected from Bangladesh economic reviews and journals, has been used in this paper. The results suggest that, if the government can balance both the sources of financing, it will help more significantly for achieving targeted GDP as well as economic growth in Bangladesh. Economic growth not only depends on the sources of financing but also on the properly utilization of fund. But, this paper only focuses on the sources of financing. The study will apprise the policy makers that which type of loan is to be emphasized for achieving targeted level of GDP. At the end of the research paper, some recommendations are given regarding the financing balance between the bank loan and non bank loan to drive the economic growth by accelerating investment.

Key Words: Bank loan, GDP, economic growth, non bank loan

1.0 Introduction

Development of banking system is an indicator that a country is strong in economic growth. Domestic financing is the process of developing the country's economic growth and development in the long run. In recent times, the government approved vision 2041 for transforming the country into a modern economy, among the 20 leading countries in the world. Domestic savings help for domestic financing which transforms low saving economy into high savings rates and domestic savings are the key determinants of domestic investment. Domestic investment depends on the various sources of capital in financing. Empirical studies have established an important role of domestic savings as a driver of domestic investment. The domestic sources of financing consist of scattered savings of general people collected through saving accounts by bank and bank credit or loan or non bank loan Ayodele (2014). An efficient financial system maximizes the wealth through mobilizing the scattered domestic savings making credit or loan to the investors' choice or needs and demand (Haque 2006). A group of studies have identified that boosted domestic investment depends on the financial sector development including efficient or expert financial intermediary. Financial intermediation emphasizes the advantage of markets in allocating capital, sharing risk the problems associated with excessively powerful banks.

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Bank based financial system is the happiest engine that was ever invented for spurring economic growth Leitao (2012; Levine (1997); Chekwube (2014). The main purpose of banks in financial sense is to facilitate operation of fund lending as much as possible in order to increase investments in the economy. Banks and Non Bank financial institutions perform an important intermediary role in providing increase of investments through collecting savings from general people by offering different types of accounts and it is also important for investments that ensure economic growth. (Korkmaz 2015); Diego(2003); Fritz (1984) have identified that maintaining efficient credit policy, financial institution can acquire information about firms, managers and general people for the purpose of capital formation and thereby enhancing investment efficiency, economic growth and development through utilizing the capital to make use of economies of scale.

2.0 Objectives of the Study

- To examine how bank loan and non bank loan explain the economic growth in Bangladesh.
- To identify the degree of association among bank loan, non bank loan and GDP over time for faster economic growth in Bangladesh.
- . To recommend some measures needed for faster economic growth in Bangladesh.

3.0 Research Methodology

The study is an empirical research in nature. Theoretical analysis along with numerical evidence has been used to substantiate the findings of the paper comprehensively. Data has been presented in the simple and logical form. Data and information required for the research were collected through secondary data sources only. To develop the theoretical background of the study, secondary data was collected mainly from Bangladesh Economic Review (1997-2016) journals. Here it is taken into consideration GDP (at current market price) for the last 20 years. Well accepted regression model has been developed in the study for identifying the impact of debt financing on GDP in Bangladesh. The model has covered 3 variables including GDP as the dependent variable, and bank loan and non bank loan are used as independent variable. Data entry was conducted in SPSS 16.0 data editor and analyzed under some specific hypothesis. Statistical tools like correlation coefficient, regression coefficient, coefficient of determination, analysis of variance (ANOVA) and trend analysis. Besides, Microsoft Excel has been used to show year to year trend.

4.0 Literature Review

Efficient financial system accelerates information flow between borrower and lender, for both saving and investing to individual and investors. Development of banking system and financial system deregulation are the keys for a country to achieve its economic growth. Reforming to deregulation in other words considerably dwindling interferences and supervisions provide positive contribution to develop the banking system. Financial freedom brought along financial deepening as well as financial deepening played a great role in transferring created funds to real sector (Korkmaz 2015). Ghos (2010) has examined that the interconnection among credit growth, bank facility and financial fragility are required for economic growth because that efficient banking system increases loan supply and financial sector access to credit is of essence to enhancing economic performance. Peter (2015) has identified that domestic savings and bank credit to the private sectors are the main sources of domestic investment rather than foreign direct investment for economic development and

also suggested improving the environment of financial intermediation for domestic savings mobilization. Makinde (2016) has identified that financial institutions are considered as main sources for supplying the capital in the financial market and leading to economic growth. The benefits accruable from a healthy and developed financial system relate to saving mobilization and efficient financial intermediation roles subscribing to the belief that financial development is a key factor of economic growth. Kumar and Woo (2010) opine that financial institution has made a bridge between savers and borrowers by reducing transactional cost and search cost which help to create liquidity in the economy by borrowing short-term, lending long term and ultimately reduced risk involved in financial transaction. Financial institution brings the benefit of asset diversification to the economy and increased production. Vipin (2015) finds that an efficient financial system positively contributes to economic growth, that is why the financial system should be liberalized to ensure its good functioning, boost savings, encourage productive and profitable investments, push technology growth and sustain economic growth. Shittu (2012) examines the impact of financial intermediation on economic growth in Nigeria and concludes that financial intermediation notably deposit mobilization is significant in determining economic growth in Nigeria.

5.0 Statistical Results and Findings

From the econometric analysis of the secondary data of the last twenty fiscal years (1997-2016) regarding Gross Domestic Product (GDP), Bank Loan (BL), Non Bank Loan (NBL), following statistical outcome have been found. Findings of the study are categorically discussed in the following subsections:

5.1. Descriptive Statistics: Descriptive research of the study is presented in Table 1. Descriptive Statistics Table 1 shows the normality of data. The mean of variables BL, NBL, GDP are 114.85, 66.85, and 6531.6 respectively. The descriptive statistics of the study show the close relation among the variables it provides the most average value of the variables.

Table 1: Descriptive Statistics

	BL	NBL	GDP
N	20	20	20
Mean	114.85	66.85	6531.6
Median	52.5	44.5	4440.5
Mode	317	47	1807
Std. Deviation	119.098	73.2115	4834.094
Variance	14184.34	5359.924	23368469
Skewness	0.87481	2.578509	0.977315
Kurtosis	1 0.97208	6.408075	0.23209
Maximum	317	305	17328

5.2. Correlation Analysis

Correlation matrix shows bank loan and non bank loan have high degree positive correlation between GDP and bank loan and non bank loan but bank loan is highly associated with the GDP.

Table 2: Correlation Matrix

		Correlations		
		GDP	BL	NBL
Pearson Correlation	GDP	000.1		
	BL	0.963 (0.000)	1.000	
	NBL	0.811 (0.000)	0.682 (0.000)	1.000

Table: 03

Mo	R	R	Adjusted	Std. Error				
del		Square	R Square	of the Estimate	R Square Change	F Change	Sig. F Change	Durbin Watson
1	.985	0.971	0.967	872.5	0.971	283.1	.000	1,408
a. Pre	dictors: (Constant),	NBL, BL					
b. De	pendent	Variable:	GDP					

Table: 04

		,	ANOVA			
١	Aodel	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.3118	2	2.1558	283.147	,000°
	Residual	1.2947	17	761194,805		
	Total	4.4408	19			

5.3. Coefficient of Correlation *

From table-03, it has been found that there is a high degree of positive correlation (R=0.985) between Bank Loan, Non-Bank Loan and GDP.

						Fable	: 05				- 2		
_		741			C	oeffic	ients						
Model			Unstandardized St Coefficients d Co		t	Sig.	95% Confid Interval	lence	Correlations		ons	Co linearity Statistics	
		В	Std. Error	Beta			Lower Bound	Upp er Bou nd	Zer o- ord er	Par tial	P ar t	Tol cra nce	VIF
1	(Const ant)	1689.2 97	283. 184		5.9 65	.00	1091.8 31	2286 .763					
	BL	31.090	2.29 9	,766	13. 523	.00	26.240	35.9 41	,96 3	,95 7	.5 60	.53 4	1.87
	NBL	19.021	3.74 0	.288	5.0 86	.00	11.130	26.9 12	.81	.77 7	.2 11	.53 4	1.87

5.4. Regression analysis

From table: 05, the following multiple regression has been developed by taking GDP as the dependent variable, and Net Bank Loan and Non Bank Loan as the independent variable. The standardized regression model is:

$$GDP = GDP = a_0 + B_1BL + B_2NBL + \epsilon_1$$
 (Residual factors)..................(i)

The fitted regression model is:

$$GDP = 1689\,.297\,+0.766\,(BL) + 0.288\,(NBL)\,...... \eqno(ii)$$

Where,

GDP

Gross Domestic Product,

BL

Bank Loan

NBL

Non Bank Loan

According to table 01 the value of R^2 = 0.971 or 97.1% which implies that 97.1% of the total variation of GDP can be explained by the above regression model where remaining 0.29% variation can be explained by the variables which are not included in the regression model (Kothari, 2001). Here, the value of adjusted R^2 is 0.967 or 96.7% which suggests that addition of other independent variables will not contribute in explaining any variation in the dependent variable. In the above model, if the value of all the independent variables is zero, then GDP will be Tk. 1689.297 billion.

5.5. Test of Hypothesis: In this study, following Hypothesis has been developed

 H_0 : There is no significant relationship between debt financing (DF) and the GDP

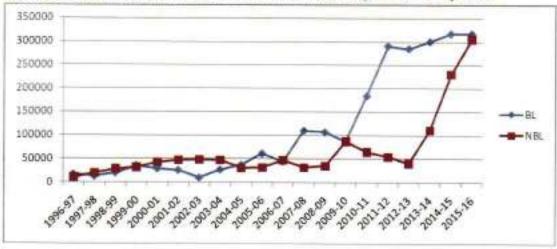
 H_1 : There is a significant relationship between debt financing (DF) and the GDP

The statistical method of F-test has been used at 5% level of significance to identify whether there is significant relationship between GDP and above mentioned two independent variables. In this regard, null hypothesis can be accepted if the calculated p (Significance) value is greater than 0.05 and we can reject the null hypothesis if the calculated p (Significance) value is less than 0.05.

From table-05, it has been found that the value of p (Significance) is 0.000 against all the independent variables which are less than 0.05. Hence, the null hypothesis is rejected. There is significant relationship between the independent variables and dependent variables. It can be said that economic growth in Bangladesh depends on bank loan and non bank loan where bank loan is highly significant (Gujarati, 2012).

5.5. Trend Analysis

Figure: Trend analysis of bank loan and non bank loan against several years.



Sources: Bangladesh Economic Reviews 1997-2016

The above figure shows that both bank loan and non bank loan for the last 20 years, i.e. fiscal year from 1996-97 to 2004-05 were low level of bank loan and non bank loan but for the fiscal year 2009-10, the bank loan is gradually increased and non bank loan is also increased from 2012-13 but such type of loan disbursement is not sufficient for achieving GDP growth level up to 7%.

6.0 Recommendations and Conclusion

For ensuring effectiveness between domestic savings and domestic investment for economic growth, an efficient and expert financial intermediary is necessary. Efficient financial system and financial market is necessary for mobilizing the capital for achieving target GDP. This could be performed by the special functions played by bank and non bank financial institution, especially creating resources pooling, maturity transformation, price recovery and risk mitigation which are the most essential for domestic investment. For proper economic growth in Bangladesh, the bank and non bank financial institutions should design loan

package with low cost credit for the private sector and motivate the domestic savers by increasing depositor interest rate for accelerating domestic savings. For properly implementing domestic debt, government needs to formulate and implement prudent domestic debt management strategies to mitigate the effect of rising debt on the economy. To carry out the objective of the research, statistical analysis such as, correlation, regression, test of hypothesis and trend analysis have been conducted with the help of SPSS. Through the study it has been found that there is high degree of positive correlation among dependent and independent variables. It can be mentioned that economic growth in Bangladesh is dependent on bank loan and non bank loan where bank loan is highly significant.

References

- Ministry of Finance, Peoples Republic of Bangladesh, "Bangladesh Economic Review 1997-2016" Dhaka.
- N.C. Leitao (2012) "Bank Credit and Economic Growth: A Dynamic Panel Data Analysis" "The Economic Research Guardian", 2 (2), 256-267.
- Makinde (2016) "Implications of Commercial Bank Loans on Economic Growth in Nigeria" (1986-2014) Journal of Emerging Trends in Economics and Management Sciences (JETEMS) 7(3):124-136.
- Korkmaz (2015) "Impact of Bank Credits on Economic Growth and Inflation" Journal of Applied Finance & Banking, vol. 5, no. 1, 2015, 57-69.
- Chekwube (2014) "Financial development and economic growth in Nigeria: A reconsideration of empirical evidence. Journal of Economics and sustainable development Vol.5No 28, PP, 199-208.
- Vipin Ghildiyal (2015) "Impact of financial deepening on economic growth in Indian perspective: ADRL bound testing approach to co-integration. Asian Development policy review,2015,3(3):49-60.
- Peter and Charles (2015) "Debt financing and financial performance of SME: Evidence from kenyea". Journal of Economics, Finance and Accounting, Vol.2 Issue; 3 PP. 473481.
- Levine, R. (1997). "Financial Development and Economic Growth: Views and Agenda". Journal of Economic Literature 35: 688-726.
- Kumar, S. and Woo (2010) JIMF Working paper, "Public Debt and Growth", 2010, PP. 21-40
- Haque, S.T. "Effects of Public and Private Investment on Economic Growth in Bangladesh: An econometric analysis", 2013, PP. 121-123.
- CPD, "State of the Bangladesh Economy in FY 2015-16", 2016, pp. 8-12.
- Kothari, C.R. (2001). "Research Methodology: Methods and Techniques". New Age International Publishers, New Dilhi.
- Gujarati, D.N. (2012), "Basic Econometrics", International edition, Fourth edition, pp. 38-49.
- S. Ghosh, (2010) "Credit Growth, Bank Soundness and Financial Fragility: Evidence from Indian Banking Sector", South Asia Economic Journal, 11 (1), 69-98.
- Ayodele, T. D. and Raphael O. A. (2014). "The Impact of Credit Policy on the Performance

- Drivers of Economic Growth in Bangladesh through Debt Financing: A Comparative Study
 - of Nigerian Commercial Banks". International Finance and Banking, 1(2),
- Boyd, J. H. and Prescott, E. C. (1986). "Financial Intermediary-Coalitions" Journal of Economic Theory 38(2): 211-232.
- Diego, R. A. (2003). "Finance and Growth in the EU: New Evidence from the Liberalisation and Harmonisation of the Banking Industry".
- Fritz, R. G. (1984). "Time Series Evidence on the Causal Relationship between Financial Deepening and Economic Development". Journal of Economic Developing. pp 91-112.
- Shittu, A. I. (2012). "Financial Intermediation and Economic Growth in Nigeria". British Journal of Arts and Social Sciences, 4(2), 164-179.

Appendix

(Tk. in billions)

YEAR	GDP	BL	NBL.	YEAR	GDP	BL.	NBL
1997	1807	17	10	2007	4724	44	47
1998	2002	13	19	2008	5419	110	31
1999	2197	20	28	2009	7050	107	35
2000	2371	35	32	2010	7975	87	87
2001	2536	29	42	2011	9158	184	64
2002	2732	26	47	2012	10552	291	54
2003	3005	10	48	2013	11989	285	40
2004	3329	27	47	2014	13436	300	110
2005	3707	37	30	2015	15158	317	230
2006	4157	61	31	2016	17328	317	305

Sources: Ministry of Finance, Peoples' Republic of Bangladesh, "Bangladesh Economic Review 2015-2016" Dhaka.



Md. Shamim Akhter and Iffat Jerin

Pathways involved in TLQP-21 mediated biological functions: A Review

Abstract

VGF (non-acronymic) is a granin-like neuropeptide precursor, primitively acknowledged as a nerve growth factor (NGF) inducible gene product, selectively synthesised predominantly in neuronal as well as in neuroendocrine cells. Among VGF derived peptides TLQP-21 is the most studied beneficial bioactive compound because of its notable roles in energy homeostasis, regulation of hormone, neurotrophin, and/or neurotransmitter release, regulation of emotion/psychiatric disease, pain modulation, etc. In this review, considering the important biological functions of TLQP-21, the pathways involved in TLQP-21 mediated action were analyzed. TLQP-21 follows diverse signal transduction pathway. Binding with receptor gClq-R, TLQP-21 would activate Gq protein, stimulate phospholipase B, DAG and P13K and then activate PKC and intracellular calcium mobilization. By activating primary microglia & interacting with components of the complement system, TLQP-21 could regulate pain. Furthermore, TLQP-21 interaction with gC1q-R could regulate bradykinin formation via the kinin pathway and has role in pain modulation. TLQP-21 increases phosphorylation of AMPK but not HSL. TLQP-21 synergism of isoprenaline-induced lipolysis might result from following together isoprenile- induced cAMP-PKA and TQLP-21 induced Ca2+ AMPK signalling pathways which stimulate HSL activity. PKC and ERK phosphorylation provoked by TLQP-21, induced prolactin expression. The GLP-1/Ex-4 and TLQP-21 are proposed to act on antiapoptotic signaling pathway inhibiting PKA and Akt, thus TLOP-21 protects islet cell death. To summarize, protein like PKC, ERK, PKA, AMPK, etc. are modulated by TLQP-21 to provoke biological functions, notably nociception, diabetes and lipolysis.

Key Words: Pathways, signalling, TLQP-21, VGF.

Introduction

At its simplest, VGF (non-acronymic) is a granin-like neuropeptide precursor, firstly detected as a nerve growth factor (NGF) inducible gene product, is selectively synthesised preponderantly in neuronal as well as in neuroendocrine cells, whose molecular weight is -68kDa and expression of VGF is robustly regulated by neuronal lesions and growth factors (Ferri et al. 1992, Salton et al. 2000, Levi et al. 2004). However, the protein undergoes endoproteolytic cleavage to produce smaller peptides as a consequence of having affluent paired basic amino acids in VGF protein sequence and both in vitro and in vivo these peptides are stored in dense core vesicles and released upon stimulation via the modulated secretory pathway.

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There are some well known bioactive VGF derived peptides and their actions had been already validated, some sort of VGF derived peptides are TLQP-62 (VGF10), TLQP-21, TLQP-42, TLQP-30, TLQP-11, AQEE-30 (Peptide V), LQEQ-19, HFHH-10, APPG-40, NAPP-129, APPG-37, GRPE-37, VGF18, NERP-1, NERP-2, HFHH-51 (VGF 6), HHPD-1

Among them some of the VGF derived peptides are well distinguished, some of them are very active in pain modulation, energy homeostasis, hippocampal synaptic plasticity, reproduction process, diet induce obesity modulation (Lipolysis), prevent apoptosis of islet b cells, insulin regulation, water balance process and proliferate neural progenitor cells (NPCs) and memory formation in Hippocampus cells. The VGF, a neuropeptide precursor that modulates some dimensions of brain purposes and many other endocrine processes involved in metabolism, many metabolic and neurological disorders happened as results of the dysfunctional activities of the different VGF-derived peptides. Following this perspective, researcher suggested that VGF derived peptides can be a prominent disease target. Observing some beneficial functions of VGF derived peptides researchers are encouraged to investigate the mechanism of actions of these peptides so that a very novel drug can be invented to cure so many severe diseases or to delay or prevent some of them (Bartolomucci et al., 2011).

Among VGF-derived peptides TLQP-21 is well characterised, interestingly, the TLQP-21 VGF derived peptide was found provoking energy consumption, suggesting that opposing regulatory effects could be exerted by peptides alternatively cleaved from the VGF precursor (Bartolomucci et al., 2007). Administration of VGF precursor-derived peptide TLQP-21 through intracerebroventricle increased resting energy expenditure, body temperature and circulating adrenaline levels (Bartolomucci et al. 2006). Peptide TLQP-21 also regulates diet induced obesity, it also modulates choronic pain (Ayub, 2012), increased resting energy expenditure and circulating adrenaline levels (Bartolomucci et al. 2006), anorexia (Bartolomucci et al. 2006; Jethwa et al. 2007), nociception (Fairbanks et al. 2014; Chen et al. 2013; Rizzi et al. 2008), gastric shrinkage (Severini et.al. 2009; Bartolomucci et al. 2008). glucose-stimulated insulin secretion (GSIS) (Stephens et al. 2012), blood pressure/hypertension regulation (Fargali et al. 2014), glucose-stimulated insulin secretion (GSIS) (Stephens et al., 2012), reproduction (Aguilar et al. 2013; Pinilla et al. 2011), stress (Razzoli et al. 2012, Bartolomucci et al. 2011), neuroprotective agent (Severini et al. 2008). All these observations suggest that TLQP-21 will render a very interesting pharmacological target in many aspects.

Considering the significance of TLQP-21, the aim of the review was to analyse the signalling pathways of TLQP-21 mediated biological functions.

VGF

Andrea Levi first determined the existence of VGF mRNA in 1985 at the National Institute of Health in the laboratory of Bruce Macdonald Paterson and this observation came out at the time of exploring on neural sympathetic and sensory differentiation induced by nerve growth factor (NGF), here rat pheochromocytoma PC12 cells were used as a model (Levi et al., 1985). By treatment of PC12 cells with NGF a nervous system-specific mRNA was cloned. After exposing the nucleic acid along with amino acid sequences of the NGF33.1 cDNA clone, the researchers denominated this clone corresponding to the NGF-inducible mRNA as VGF (Levi et al., 1985). The 'VGF' term derived from the selection of this clone from plate V of the nerve Growth Factor induced PC12 cell cDNA library (Levi et al., 1985;

Possenti et al., 1989). In 'The EMBO Journal', the total sequence of the mRNA & amino acids were published (Possenti et al., 1989). However, using differential hybridization techniques, VGF was distinctively identified, in response to NGF treatment by several groups (Levi et al., 1985). It is possible that altered RNA stability could contribute to the overall increase observed in VGF mRNA; however, experimental evidence suggests that NGF-treatment may actually decrease VGF mRNA stability.

TLQP-21

TLQP-21, VGF-derived peptide and spans residues 556-576 of the precursor sequence. The molecular weight of TLQP-21 human is 2490.88 Da, formula: C₁₀₇H₁₇₀N₄₀O₂₆ (Levi et al. 2004; Akhter, 2015)

TLQP 21 human

Thr - Leu - Gln - Pro - Pro - Ser - Ala - Leu - Arg - Arg - Arg - His - Tyr - His - His - Ala - Leu - Pro - Pro - Ser - Arg

TLQP-21 (mouse, rat)

Thr-Leu-Gln-Pro-Pro-Ala-Ser-Ser-Arg-Arg-Arg-His-Phe-His-His-Ala-Leu-Pro-Pro-Ala-Arg

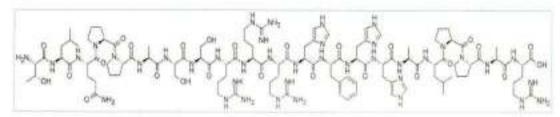


Figure 01: Chemical structure of TLQP-21(Akhter, 2015).

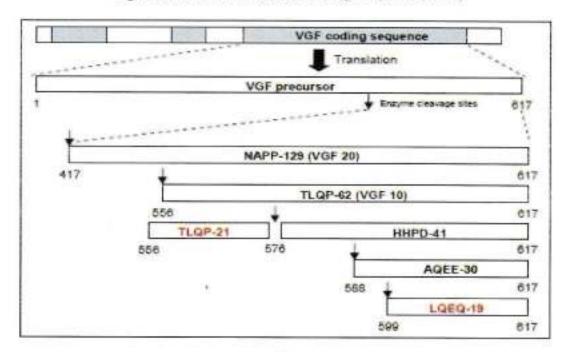


Figure 02: Some of the VGF derived peptides with known functions. The 617 amino acid VGF precursor protein is cleaved at residue 417, using the prohormone convertases PC1/3 and PC2, to form the 20 kDa NAPP-129 peptide, and at the time of additional cleavage the remaining peptide fragments obtain. The fragments represent here having known biological functions (Jethwa and Ebling, 2008).

Table 01: Significance of TLQP-21 as a bioactive VGF derived peptide

Functions	Reference			
Nociception	Fairbanks et al. 2014; Chen et al. 2013; Rizzi et al. 2008			
Gastric shrinkage	Severini et.al. 2009; Bartolomucci et al. 2008			
Glucose-stimulated insulin secretion (GSIS)	Stephens et al. 2012			
Blood pressure/hypertension regulation	Fargali et al. 2014			
Energy expenditure	Possenti et al. 2012; Jethwa et al. 2007; Bartolomucci et al. 2006			
Reproduction	Aguilar et al. 2013; Pinilla et al. 2011			
Stress	Razzoli et al. 2012, Bartolomucci et al. 20			
Neuroprotective agent	Severini et al. 2008			
Anorexia	Bartolomucci et al. 2006; Jethwa et al. 2007			

Pathway Analysis

Effect of VGF-derived peptide TLQP-21 and receptor gC1q-R interaction in pain modulation

TLQP-21 after binding the gC1q-R regulates the gC1q-R - C1q interaction. This results in commencement of whole host as well as activation of microglia via an increase in intracellular Ca²⁺ levels. The interaction which in turn could also modulate neurons and glia cells (in the CNS) behaviour (Ayub, 2012). When TLQP-21 interacts with gC1q-R could stimulate opening of gC1q-Rpore structures in mitochondria or even the ER and plasma membrane. By this way, intracellular Ca²⁺ levels in the cells regulated. TLQP-21 interaction with gC1q-R could regulate bradykinin formation via the kinin pathway. Bradykinin has role in pain modulation. Bradykinin receptors are expressed by microglia cells (Talbot et al. 2010).

On serum and potassium deprived rat cerebellar granule cells (CGCs), TLQP-21, the VGFderived peptide, has neuroprotective roles, which was observed in vitro (Severini et. al. 2008). From this research the molecular mechanisms of action of TLQP-21 was explored in a wide spread way in these cells. It was observed that in vivo TLQP-21 regulated inflammatory pain (Rizzi et al. 2008). Microglia contains two types of Ca²⁺stores, the ER and mitochondria (Kettenmann et al. 2011), from which the Ca2+ obtained. Generally the nerve injury stimulates the gene expression of VGF. Hence when nerve injury occurs, neurons (e.g. DRG neurons) may release VGF-derived peptides, including TLQP-21 in its sequence (Ayub, 2012).

There is also other prospect that microglia regulates the activity of other glia among which astrocytes as well as other immune cells. This got emphasis under the observation of 3 hour TLQP-21 incubation and brought remarkable (Student's t-test; $p \le 0.05$) alteration in expression of two genes in microglia, Ccl11 and Cxcl9. Ccl11 and Cxcl9 are chemokines. In immune cells Ccl11 and Cxcl9 modulate chemotaxis centrally and peripherally. After that TLQP-21 peptide may bind a cell surface receptor, (e.g. a G-protein coupled receptor), as well as the classical IP3 intermediate secretion of Ca²⁺ from internal stores (Ayub, 2012). These internal stores may be mitochondria and/or the ER. Without receptors, the TLQP-21 may have capability to travel across the plasma membrane of microglia, and then directly regulates intracellular Ca^{2+} levels and this process obtained by various protein-protein interactions. (Figure: 03).

Through a Ca2+ independent pathway microglia activation occurred by the interaction between the TLQP-21 and the gC1q-R protein on the plasma membrane but in this process how intracellular calcium ion increased is not known.

The TLQP-21-gC1qR interaction may induce Ca²⁺ release from mitochondria and/or the ER, by regulation of the pore structure which was formed by trimeric gC1q-R (Figure:3). Bradykinin could be formed at the surface of microglia by the interaction of the TLQP-21 and gC1q-R which in turn could modulate neuronal hyperexcitability and chronic pain (Ayub, 2012). (Figure: 04).

Another proposal about TLQP-21-gClq-R interaction also suggested that the interaction with Clq could be regulated, as well as could be stimulated complement activation and either directly induce a Ca²⁺ response in microglia. All pathways may be responsible for ultimate microglia activation, hence makes qualitative changes the microglial phenotype to either provides neuroprotection, or induce neuronal (e.g. dorsal horn neuron) hyperactivity and by this way modulate chronic pain states (Figure: 04).

Researchers found that VGF derived peptides TLQP-21, LQEQ-19 and TLQP-62 when applied in vivo modulates inflammatory and neuropathic pain in direct manner. The molecular mechanisms of action of VGF-derived peptides are investigated in several studies (Chen et al. 2013; Ayub, 2012). They found that from cellular internal stores intracellular Ca²⁺ levels increased in brain and spinal cord-derived primary microglia, when TLQP-21 injected dose dependently. From biochemical analysis using affinity chromatography and LC-MS/MS techniques, the gC1q-R protein was detected as a potential binding partner for TLQP-21. The gC1q-R protein expression is omnipresent as well as multi-compartmental protein involved in inflammatory processes and complement activation, the plasma bradykinin formation pathway (Ayub, 2012). From these observation it was assumed that TLQP-21 have role in pain modulation, later it was proved (Figure 04) (Chen et al. 2013).

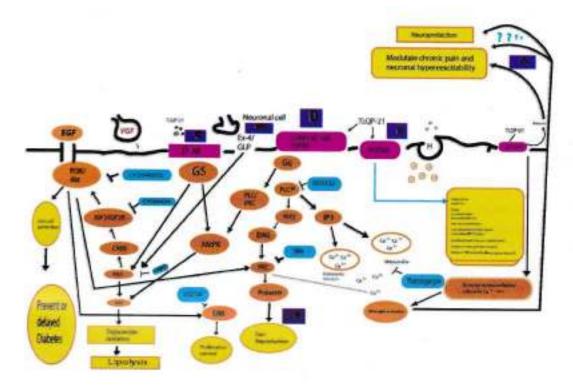


Figure 03: TLQP-21 mediated biological actions, at a glance (Akhter, 2015; Akhter et al. 2017, Ayub, 2012; Chen et al., 2013; Cero et al. 2014).

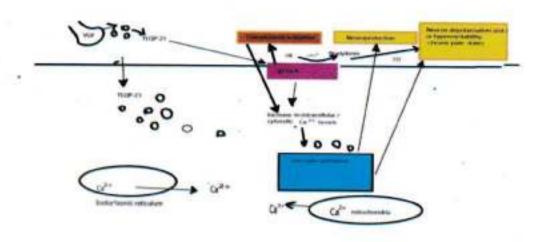


Figure 04: TLQP-21 mediated action, in pain modulation (Ayub, 2012; Chen et al., 2013).

Interaction between TLQP-21 and receptor HSPA8 altering protein expressions

In another observation, TLQP-21 induced alteration of protein expression was evident when bound with HSPA8 receptor which were confirmed by proteomic and phosphoproteomic study. In research six proteins' expressions were found in altered expression stage (Akhter, 2015). These proteins are:

- Mediator of RNA polymerase II transcription subunit 24
- Endothelial differentiation related factor 1
- 1-phosphatidylinositol-3-phosphate-5-kinase (type III PIP kinase)
- Adenylosuccinate synthetase isozyme 2
- Spindle and kinetochore-associatedprotein 2
- Heat shock protein beta-1

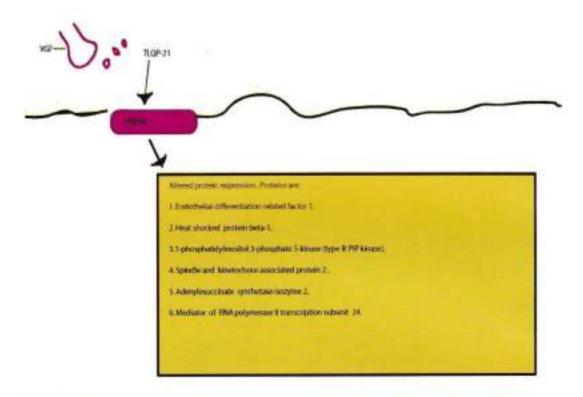


Figure 05: Interaction between TLQP-21 and receptor HSPA8: Altered protein expressions (Akhter, 2015; Akhter et al. 2017).

Table 02. A listing of proteins whose expression altered at the time of interaction between TLQP-21 and receptor HSPA8 (Akhter, 2015).

Protein	MW(Da)	Function
Mediator of RNA polymerase II transcription subunit 24	111716	Involved in the regulated transcription of nearly all RNA polymerase II-dependent genes.
Adenylosuccinatesynthetase isozyme 2	50465	Plays an important role in the de novo pathway and in the salvage pathway of purine nucleotide biosynthesis. Catalyzes the first committed step in the biosynthesis of AMP from IMP.
Spindle and kinetochore- associated protein 2	14236	Essential for proper chromosome segregation. Required for timely anaphase onset during mitosis.
1-phosphatidylinositol-3 phosphate 5-kinase (type III PIP kinase)	239609	Participates in phosphatidylinositol signalling system and regulation of actin cytoskeleton.
Heat shock protein beta-1	22826	Chaperone activity, thermotoleraquee, inhition of apoptosis, regulation of cell development, and cell differentiation, signal transduction.
Endothelial differentiation related factor 1	16359	Transcriptional coactivator stimulating NR5A1 and ligand - dependent NR1H3/LXRA and PPARG transcriptional activities. Enhances the DNA- binding activity of ATF1, ATF2, CREB1 and NR5A1. Regulates nitric oxid synthase.

TLQP-21 regulates diet induced obesity

Here in this pathway, a novel peripheral lipolytic sensitizer mechanism was identified which was induced by the VGF-derived peptide TLQP-21. Binding to a membrane receptor in adi pocyte membranes TLQP-21 exerts a prolipolytic effect in ex vivo and in vivo. It observed that TLQP-21 has a high-affinity binding site in adipocyte membranes. It was also proposed that TLQP-21 released from synaptic nerves locally take parts in neuromodulation of lipolysis (Possenti, 2012) (Figure: 06).

TLQP-21 binding capacity maximize in the adipose tissue due to diet-induced obesity but this was not observed in other tissues. Administration of TLQP-21 (dose-dependently) reduced adipocyte diameter and increased TAG lipolysis in obese mice. TLQP-21 has role in adipocyte diameter through regulation of noradrenaline signalling, that occur by three mechanisms:

✓ First of all, a connection between TLQP-21-dependent alteration in TH/norad renaline, lipolysis and adipocyte diameter in vivo.

- ✓ Second one is, up-regulation of isoprenaline-induced glycerol release in mouse adipocytes which induced by TLQP-21 dose-dependently administration, and
- The last one is stimulation of isoprenaline-induced phosphorylation of HSL in 3T3-L1 adipocytes is done by TLQP-21. Hormones and neurotransmitters with noradrena-line are deemed to be modulated lypolysis through via β-AR activation (Thomson et al. 2010; Carmen et al. 2006).

Some researchers have observed that for translocation to the lipid droplet as well as increased hydrolytic activity of HSL needed PKA-dependent phosphorylation of HSL (Ser659 and Ser660) (Su, C. L. et al. 2003). There was no effect of TLOP-21 in lipolysis in the absence of B-AR activation. Moreover, at the time of co-administration of TLQP-21 along with a submaximal lipolytic dose of isoprenaline, stimulated glycerol releasedosedependently up to 80%. At the same time TLQP-21 provokes phosphorylation of AMPK but not HSL when isoprenaline is absent. TLOP-21 synergism of isoprenaline-induced lipolysis might result from following together isoprenile induced cAMP-PKA and TQLP-21induced Ca2+AMPK (Hawley et al. 2005) signalling pathways which stimulated HSL activity (Figure 06). Researchers found that administration of chronic TLQP-21 treatment increased TH activity/immunoreactivity and noradrenaline content in fat pads during the same time increasing lipolysis. However, researchers hypothesized that TLQP-21 might directly (e.g. binding to a presynaptic receptor on nerve terminals) or indirectly e.g. increasing neurotrophin signalling in adipocytes (Peeraully et al. 2004), increase sympathetic nerve activity, leading to stimulate noradrenergic signalling, and stimulate nerve growth within the white adipose tissue. Sympathetic noradrenergic pathways in white adipose tissue are modulated by TLQP-21 (Possenti et al. 2012). Alhough for apprehension of the molecular mechanism of this selective modulation of sympathetic nerves required more investigation.

A specific and saturable TLQP-21-receptor-binding site and their highest affinity was observed in white adipocytes (possenti et al. 2012). TLQP-21 also binds to adrenals and BAT with an affinity, on the other hand binding capacity with the muscle, liver and cerebellum was moderate (Possenti et al. 2012). Researchers also found TLQP-21 to activate ERK1/2 serine/threonine protein kinases as an effect of its anti-apoptotic neurotrophic action (Severini et al. 2008). Potentiation of TLQP-21 with β-AR agonist isoprenaline phosphorylate ERK and their prolonged effect went down on activation of HSL and AMPK in mice model.

Moreover, down regulation of gC1qR in adipocytes forestalled insulin-induced glucose consumption (Cocco et al. 2008). These observations indicates that in adipogenesis the TLQP-21/gC1qR pathway may also be important. The Effects of High-Fat Diet is prevented by TLQP-21. Administration of TLQP-21 stimulates EE, T, and adipose tissue catabolic mediators is harmonious with the block of weight gain and adiposity, that suggesting that TLQP-21 can be a prominent target for a pharmacological intervention aimed at limiting adiposity by increasing EE (Ayub, 2012).

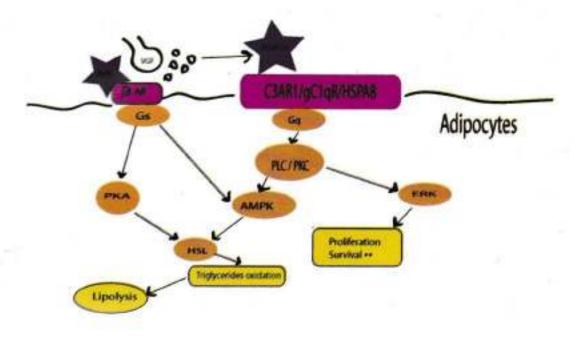


Figure 06: TLQP-21 mediated action in lipolysis (Akhter, 2015; Akhter et al. 2017, Ayub, 2012; Chen et al., 2013; Cero et al. 2014; Possenti, 2012).

TLQP-21 modulated reproduction process

As administration of TLQP-21 provoked VGF mRNA, it is assumed that an autocrine feed forward mechanism might be exerted by TLQP-21. TLQP-21 may bind with HSPA8, C3AR1 or gClqR receptor (Akhter, 2015; Akhter et al. 2017, Ayub, 2012; Chen et al., 2013; Cero et al. 2014) in prolactin synthesis pathway. Stimulation of kinase phosphorylation was observed for PKC, followed by ERK, on the other hand PLA followed by a AMPK phosphorylation was reduced by the induction of TLQP-21 in the GH3 cells. In GH3 cells, EGF signaling involves diversified pathways that cell-specific, occurring between cells, including PI3K, ERK, and PKC. Researchers found that PKC and ERK phosphorylation provoked by both EGF and TLQP-21 induced rapid, and for the induction of prolactin expression this natural event of ERK action may be noteworthy (Figure 07). In intracellular mechanism of signal transduction. EGF and TRH share a common pathway, that is acting through stimulation of the PKC pathway and finally by release of calcium from intracellular storages (e.g. mitochondria). Though prolactin synthesis depends on ERK phosphorylation, but it is not involved in prolactin secretion without deviation and can be activated via PKCdependent pathways activating directly MEK kinase, though PACAP provoked cAMP as well as PKA phosphorylation (Kanasaki et al. 2002), but TLQP-21 does not seem to stimulate this pathway (Possenti et al. 2012),

However, pro-VGF as well as its byproducts are extremely evident in hypothalamic neurons, which project to the mesial pre-eminence mainly in gonadotroph and lactotroph cells (Brancia et al. 2005; Ferri et al. 2011). There is neuromodulatory action of these molecules

for TLQP-21 on reproductive function of male rats (Pinilla et al. 2011). Moreover, further experiments have to do to elucidate the possible role of TLQP-21 as a real mammotrophic peptide, as the dynamics of VGF secretion in the portal-pituitary circulation and a direct action on anterior pituitary are not entirely clear. Researchers also found TLQP-21 peptide could have a neuromodulatory effect as hormone, or acting as paracrine-autocrine hormone on the pituitary gland. From study, it came to know that EGF in CH3 cell line, differentiated lactotroph (Chen et al. 2009), stimulates prolactin content and also capable of bringing on VGF expression both as mRNA and VGF protein. Finally TLQP-21 has roles in reproduction system (Pinilla et al. 2011).

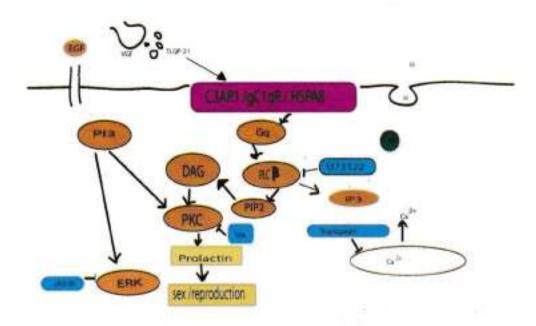


Figure 07: TLQP-21 mediated action in reproduction process (Akhter, 2015; Akhter et al., 2017, Ayub, 2012; Chen et al., 2013; Cero et al. 2014; Aguilar et al., 2013; Pinilla et al., 2011).

The role of TLQP-21 in preventing or delaying diabetes

Enhancement of glucose-stimulated insulin seceretion (GSIS) and increment of β-cell replication result from over expression of Nkx6.1 in rat islets (Stephens et al. 2012). Nkx6.1 robustly upregulates the prohormone VGF in rat islets and to enhance GSIS by Nkx6.1 treatment, and in this mechanism VGF role is essential as well as adequate. However, TLQP-21 stimulates GSIS in rat and human islets as well as in vivo meliorates glucose tolerance. Administration of TLQP-21 chronically conserved islet mass, slows diabetes onset also slowed in prediabetic ZDF rats. TLQP-21 is thought to be a targeted agent for enhancing islet β-cell endurance and function. To block blocking islet β-cell apoptosis induced by two different agents both TLQP-21 and exendin-4 works in a same way. TLQP-21 and GLP-1R

agonists acts as the antidiabetogenic agent e.g. stimulates GSIS, ameliorate glycemic control, blocked islet cell apoptosis (Stephens et al. 2012).

Dose depended administration of TLQP-21 increases GSIS, for example, treatement with a little amount approximately 5 nM peptide showed significant effects and when dose increased at 50 nM, the effects also increased near about 35%, while 80% stimulation occurred as a result of 20 nM exendin-4 administration. TLQP-21 provoked insulin secretion at 16.7 mM glucose concentration.

At the very beginning to search for impact of TLQP-21 on islet biology, researchers injected TLQP-21 on insulin secretion in primary rat islets, and GLP-1R agonist, exendin-4, were used as a positive control. Insulin secretion increased by 42% at 16.7 mM glucose due to TLQP-21 treatment in human islets, while comparing with TLQP-21 induction result exendin-4 increased 82%, with no effect on basal insulin release. This result validated the TLQP-21 role in GSIS in both rat and human islets. From ELISA assay researcher found that when glucose increased at 16.7 mM the TLQP-21 levels also increased 2.5-fold. Generally high glucose levels approximately 0.6 pg TLQP-21/mg islet protein/2hr are secreted from human islets. Glucose does not have capacity to provoke secretion of somatostatin from delta cells nor glucagon from alpha cells, observing these scientists proposed that some of the islet-derived TLQP-21 is coming from β-cells. Administration with TLQP-21 stimulates cAMP levels in rat islets. In HEK293 cells both Exendin-4 and GIP robustly enhanced cAMP levels but there observed no cross activity between them. However, VIP increased cAMP in cells manifesting the VIPR2, but it also comparatively expressed GLP-1R and GIPR. To a similar extent, both TLQP-21 and exendin-4 stimulated circulating insulin levels. This suggested that though TLQP-21 does not affect on gut, but it provoked GSIS (Stephens et al. 2012).

In search for the mode of action of TLQP-21 to stimulte GSIS in rat islets, researchers measured cAMP levels in islet and was observed that TLQP-21 administration doubled cAMP levels, however exendin-4 provoked almost 3-fold, and this happens in both rat and human islets. In studies it found that in isolated rat and human pancreatic islets, stimulation of GSIS happened by the VGF derived peptide TLQP-21 (Stephens et al. 2012). TLQP-21 increases insulin secretion as well with a rise in cAMP, proposing that the effect of TLQP-21 is regulating via downstream targets of activated PKA, as with other cAMP-raising agents e.g GIP, PACAP. GLP-1, and VIP. It has been found that PKA acts on TLQP-21 signaling pathway (Stephens et al. 2012).

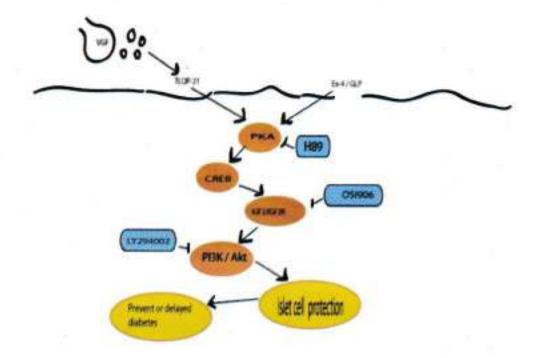


Figure 08: TLQP-21 mediated action, in islet cell protection (Stephens et al. 2012).

Recent update

It was a big challenge to detect the receptors of VGF-derived peptides which clear up their cellular signalling mechanisms, but till now three receptors have been identified by using powerful proteomic methods: C3AR1 (Cero et al. 2014), gC1qR (Chen et al. 2013) and HSPA8 (Akhter et al. 2017). Among these receptors, C3AR1 and gC1qR are receptor were of rodent model, on the contrary, upto now HSPA8 is a receptor (first putative) for human model (Cero et al. 2014; Chen et al. 2013; Akhter et al. 2017).

Conclusion

In this review study the TLQP-21 mediated mechanisms of biological actions were explored, strongly suggesting that TLQP-21 can be used as a prominent therapeutic agent and could open new approaches for diagnostics and therapeutics for a wide range of human diseases related with VGF, in particular those in which TLQP-21 has been shown to have an effect. The major task moving forward is to elucidate the signaling pathways of the ligand TLQP-21 and its receptors HSPA8 in human model, C3AR1 and gC1qR in rodent model.

List of abbreviations

C3a: Complement component-3a

C3AR1: Complement component-3a receptor 1

ERK: Extracellular-signal-regulated kinase

Pathways involved in TLQP-21 mediated biological functions: A review

gC1q-R: Receptor (R) for globular head (g) region of C1q

GSIS: Glucose-stimulated insulin secretion

MAPK: Mitogen-activated protein kinase

PKA: Protein kinase A

TLQP-21: A 21 residue peptide named after its three amino terminal amino acid residues threonine (thr) - leucine (leu) - glutamine (gln) - proline (pro), spans residues 556-576 of the precursor sequence

TNF-α: Tumor necrosis factor alpha

TrkB: Tropomyosin receptor kinase B

VGF: Non acronymic, a neurotrophin

References

- Akhter, S., Chakraborty, S., Moutinho, D., AAlvarez-Coiradas, E., Rosa, I., Viñuela, J., et al. (2017) The human VGF-derived bioactive peptide TLQP-21 binds heat shock 71 kDa protein 8 (HSPA8) on the surface of SH-SY5Y cells. PLoS ONE 12(9): e0185176. https://doi.org/10.1371/journal.pone.0185176.
- Akhter, S. (2015) Isolation of VGF derived Neuropeptide Receptor. Ph. D. Thesis. University of Santiago de Compostela, Spain.
- Ayub, M. (2012) Investigating the mechanisms of action of VGF-derived peptides in the nervous system. Ph D Thesis. Imperial College, London.
- Aguilar, E., Pineda, R., Gayta'n, F., Sa'nchez-Garrido, M. A., Romero, M., Romero-Ruiz, A., Ruiz-Pino, F., Tena-Sempere, M., and Pinilla, L. (2013) Characterization of the reproductive effects of the Vgf-derived peptide TLQP-21 in female rats: in vivo and in vitro studies. Neuroendocrinology. 98:38–50.
- Bartolomucci, A., Corte, G. L., Possenti, R., Locatelli, V., Rigamonti, A. E., Torsello, A., Bresciani, E., Bulgarelli, I., Rizzi, R., Pavone, F., D'Amato, F. R., Severini, C., Mignogna, G., Giorgi, A., Schinina, M. E., Elia, G., Brancia, C., Ferri, G. L., Conti, R., Ciani, B., Pascucci, T., Dell'Omo, G., Muller, E. E., Levi, A., Moles, A. (2006) TLQP-21, a VGF-derived peptide, increases energy expenditure and prevents the early phase of diet-induced obesity, Proc. Natl. Acad. Sci. U. S. A. 103 : 14584–14589.
- Bartolomucci, A., Bresciani, E., Bulgarelli, I., Rigamonti, A. E., Pascucci, T., Levi, A., Possenti, R., Torsello, A., Locatelli, V., Muller, E. E., Moles, A. (2009) Chronic intracerebroventricular injection of TLQP-21 prevents high fat diet induced weight gain in fast weight-gaining mice. Genes Nutr. 4 (1): 49-57. doi: 10.1007/s12263-009-0110-0. Epub 2009 Feb 27.
- Bartolomucci, A., Moles, A., Levi, A., Possenti, R., (2008) Pathophysiological role of TLQP-21: gastrointestinal and metabolic functions. Eat Weight Disord. 13(3): e49-54, PMID: 19011364.

- Bartolomucci, A., Corte, G. L., Possenti, R., Locatelli, V., Rigamonti, A. E., Torsello, A., Bresciani, E., Bulgarelli, I., Rizzi, R., Pavone, F., D'Amato, F. R., Severini, C., Mignogna, G., Giorgi, A., Schinina, M. E., Elia, G., Brancia, C., Ferri, G. L., Conti, R., Ciani, B., Pascucci, T., Dell'Omo, G., Muller, E. E., Bartolomucci, A., Pasinetti, G. M., Salton, S.R.J. (2010) Granins as diseasebiomarkers: translational potential for psychiatric and neurological disorders. Neuroscience 170: 289–297.
- Bartolomucci, A., Possenti, R., Levi, A., Pavone, F., Moles, A. (2007) The role of the vgf gene and VGF-derived peptides in nutrition and metabolism. Genes Nutr. 2 (2): 169-80.
- Bartolomucci, A., Possenti, R., Mahata, S. K., Fischer-Colbrie, R., Loh, Y. P., Salton, S. R. (2011) The extended granin family: structure, function, and biomedical implications. Endocr Rev. 32 (6): 755-97.
- Brancia C, Nicolussi P, Cappai P, La Corte G, Possenti R, Ferri GL: Differential expressionand seasonal modulation of VGF peptides insheep pituitary. J Endocrinol 2005; 186: 97–107.
- Carmen, G. Y. and Victor, S. M. (2006) Signalling mechanisms regulating lipolysis. Cell. Signalling 18, 401–408.
- Cero, C., Vostrikov, V. V., Verardi, R., Severini, C., Gopinath, T., Braun, P. D., Sassano, M. F., Gurney, A., , Roth, B. L., Vulchanova, L., Possenti, R., Veglia, G., Bartolomucci, A. (2014) The TLQP-21 peptide activates the G-proteincoupled receptor C3aR1 via a folding-upon-binding mechanism. Structure 22: 1744–1753
- Chen, S., Bangaru, M. L., Y., Sneade, L., Dunckley, J. A., Ben-Jonathan, N., Kansra, S.(2009) Epidermal growth factor receptor cross-talks with ligand-occupied estrogen receptoralphato modulate both lactotroph proliferation and prolactin gene expression. Am J Physiol Endocrinol Metab. 297: 331–339.
- Chen, Y. C., Pristera, A., Ayub, M., Swanwick, R. S., Karu, K., Hamada, Y., Rice, A. S., Okuse, K. (2013) Identification of a receptor for neuropeptide VGF and its role in neuropathic pain. J Biol Chem. 288 (48): 34638-46.
- Cho, K. O., Skarnes, W. C., Minsk, B., Palmieri, S., Jackson-Grusby, L., Wagner, J. A. (1989) Nerve growth factor regulates gene expression by several distinct mechanisms. Mol. Cell. Biol. 9:135–143.
- Fairbanks, C.A., Peterson, C.D., Speltz, R.H., Riedl, M.S., Kitto, K.F., Dykstra, J.A., Braun, P.D., Sadahiro, M., Salton, S.R., Vulchanova, L. (2014) The VGF-derived peptide TLQP-21 contributes to inflammatory and nerve injury induced hypersensitivity. Pain, 155: 1229–1237.
- Fargali, S., Garcia, A. L., Sadahiro, M., Jiang, C., Janssen, W. G., Lin, W. J., Cogliani, V., Elste, A., Mortillo, S., Cero, C., et al. (2014) The granin VGF promotes genesis of secretory vesicles, and regulates circulating catecholamine levels and blood pressure. FASEB J. 28: 2120–2133.
- Ferri, G. L., Noli, B., Brancia, C., D'Amato, F., Cocco, C. (2011) VGF: an inducible gene product, precursor of a diverse array of neuro-endocrine peptides and tissue-specific disease biomarkers. J Chemic Neuroanat. 42:249–261.

- Hawley, S. A., Pan, D. A., Mustard, K. J., Ross, L., Bain, J., Edelman, A. M., Frenguelli, B. G. and Hardie, D. G. (2005) Calmodulin-dependent protein kinase kinase- is an alternative upstream kinase for AMP-activated protein kinase. Cell Metab. 2, 9–19.
- Jethwa, P. H., Warner, A., Nilaweera, K. N., Brameld, J. M., Keyte, J. W., Carter, W. G., Bolton, N., Bruggraber, M., Morgan, P. J., Barrett, P., et al. (2007) VGF-derived peptide, TLQP-21, regulates food intake and body weight in Siberian hamsters. Endocrinology. 148:4044-4055
- Jethwa, P. H., Ebling, F. J. (2008) Role of VGF-derived peptides in the control of food intake, bodyweight and reproduction. Neuroendocrinology, 88: 80-87. DOI:10.1159/000127319
- Kanasaki, H., Yonehara, T., Yamamoto, H., Takeuchi, Y., Fukunaga, K., Takahashi, K., Mi-yazaki, Miyamoto, E. (2002) Differential regulation of pituitary hormone secretion and gene expression by thyrotropin-releasing hormone. A role for mitogen-activated protein kinase signalling cascade in rat pituitary GH3 Cells. Biol Reprod. 67:107-113.
- Kettenmann, H., Hanisch, U.K., Noda, M., and Verkhratsky, A. (2011) Physiology of microglia. Physiological reviews. 91, 461-553.
- Levi, A., Ferri, G. L., Watson, E., Possenti, R., Salton, S. R. (2004) Processing, distribution and function of VGF, a neuronal and endocrine peptide precursor. Cell Mol Neurobiol. 24:517–533.
- Levi, A., Eldridge, J.D., and Paterson, B.M. (1985) Molecular cloning of a gene sequence regulated by nerve growth factor. Science. 229, 393-395.
- Levi, A., Ferri, G.L., Watson, E., Possenti, R., and Salton, S.R. (2004) Processing, distribution, and function of VGF, a neuronal and endocrine peptide precursor. Cell Mol Neurobiol. 24, 517-533.
- Pecraully, M. R., Jenkins, J. R. and Trayhurn, P. (2004) NGF gene expression and secretion in white adipose tissue: regulation in 3T3-L1 adipocytes by hormones and in ammatory cytokines. Am. J. Physiol. Endocrinol. Metab. 287, E331–E339.
- Pinilla, L., Pineda, R., Gaytan, F., Romero, M., Garcia-Galiano, D., Sanchez-Garrido, M.A., Ruiz-Pino, F., Tena-Sempere, M., and Aguilar, E. (2011) Characterization of the reproductive effects of the anorexigenic VGF-derived peptide TLQP-21: in vivo and in vitro studies in male rats. American journal of physiology Endocrinology and metabolism 300: 837-847.
- Pinilla, L., Pineda, R., Gayta'n, F., Romero, M., García-Galiano, D., Sa'nchez-Garrido, M. A., Ruiz-Pino, F., Tena-Sempere, M., Aguilar, E. 2011 Characterization of the reproductive effects of the anorexigenic VGF-derived peptide, TLQP-21: in vivo and in vitro studies in male rats. Am J Physiol Endocrinol Metab. 300:E837–E847.
- Possenti, R., Eldridge, J. D., Paterson, B. M., Grasso, A., Levi, A. (1989) A protein induced by NGF in PC12 cells is stored in secretory vesicles and released through the regulated pathway. EMBO J. 8(8): 2217-2223.

- Possenti, R., Muccioli, G., Petrocchi, P., Cero, C., Cabassi, A., Vulchanova, L., Riedl, M. S., Manieri, M., Frontini, A., Giordano, A., Cinti, S., Govoni, P., Graiani, G., Quaini, F., Ghè, C., Bresciani, E., Bulgarelli, I., Torsello, A., Locatelli, V., Sanghez, V., Larsen, B. D., Petersen, J. S., Palanza, P., Parmigiani, S., Moles, A., Levi, A., Bartolomucci, A. (2012) Characterization of a novel peripheral pro-lipolytic mechanism in mice: role of VGF-derived peptide TLQP-21. Biochem J. 441 (1): 511-22.
- Razzoli, M., Bo, E., Pascucci, T., Pavone, F., D'Amato, F.R., Cero, C., Sanghez, V., Dadomo, H., Palanza, P., Parmigiani, S., et al. (2012) Implication of the VGF-derived peptide TLQP-21 in mouse acute and chronicstress responses. Behav. Brain Res. 229: 333–339.
- Rizzi, R., Bartolomucci, A., Moles, A., D'Amato, F., Sacerdote, P., Levi, A., La Corte, G., Ciotti, M. T., Possenti, R., Pavone, F. (2008) The VGF-derived peptide TLQP-21: a new modulatorypeptide for inflammatory pain. Neurosci Lett. 441:129–133.
- Salton, S. R., Fischberg, D. J., Dong, K. W. (1991) Structure of the gene encoding VGF, a nervous system-specific mRNA that is rapidly and selectively induced by nerve growth factor in PC12 cells, Mol. Cell. Biol. 11:2335–2349.
- Severini, C., Ciotti, M. T., Biondini, L., Quaresima, S., Rinaldi, A. M., Levi, A., Frank, C., Possenti, R. (2008) TLQP-21, a neuroendocrine VGF-derived peptide, prevents cerebellar granule cells death induced by serum and potassium deprivation. J Neurochem, 104: 534-544.
- Severini, C., La Corte, G., Improta, G., Broccardo, M., Agostini, S., Petrella, C., Sibilia, V., Pagani, F., Guidobono, F., Bulgarelli, I., et al. (2009) In vitro and in vivo pharmacological role of TLQP-21, a VGF-derived peptide, in the regulation of rat gastric motor functions. British journal of pharmacology 157: 984-993.
- Stephens, S. B., Schisler, J. C., Hohmeier, H. E., An, J., Sun, A. Y., Pitt, G. S., Newgard, C. B. (2012) A VGF-derived peptide attenuates development of type 2 diabetes via enhancement of islet -cell survival and function. Cell Metab. 16 (1): 33-43. doi: 10.1016/j.cmet.2012.05.011.
- Su, C. L., Sztairyd, C., Contreras, J. A., Holm, C., Kimmel, A. R. and Londos, C. (2003) Mutational analysis of the hormone-sensitive lipase translocation reaction in adipocytes. J. Biol. Chem. 278, 43615–43619.
- Talbot, S., Chahmi, E., Dias, J.P., and Couture, R. (2010) Key role for spinal dorsal horn microglial kinin B1 receptor in early diabetic pain neuropathy. Journal of neuroinflammation, 7, 36.
- Thompson, B. R., Lobo, S. and Bernlohr, D. A. (2010) Fatty acid flux in adipocytes: The in's and out's of fat cell lipid trafficking. Mol. Cell. Endocrinol. 318, 24–33.



Displacement in Monica Ali's Brick Lane: A Diasporic Study on Nazneen and Chanu

Abstract

Displacement is an integral part of diaspora. The issue of proving identity in different spheres of life is a natural phenomenon experienced by almost all human beings. Displacement causes exploration of 'self' -- different from the existing 'self' -- followed by a continuous battle with the surroundings. This study claims to achieve how the male character Chanu and the female protagonist Nazneen in Monica Ali's Brick Lane respond to the possibilities and challenges of eager displacement and imposed displacement respectively. The aim of this paper is to show through a critical examination the reasons of their displacement and to what extent they are prosperous or futile in their struggles they are involved with.

Key Words: Brick Lane, Chanu, diaspora, displacement, Nazneen

Introduction

From the dawn of the evolution of literature, it has been depicting a variety of experiences human beings go through for ages. Diaspora is one of the key concepts of postcolonial literature having integrated relation with the term 'displacement': "A major feature of postcolonial literatures is the concern with place and displacement. It is here that the special postcolonial crisis of identity comes into being: the concern with the development or recovery of an effective identifying relationship between self and place" (Ashcroft et al. 8). Monica Ali's Brick Lane moves forward with the march of its protagonist from the very birth towards the exploration of transformed 'self'. Along with presenting the flux, ebb and flow of displaced immigrants in diasporic situation, the novel points to multiple dimensions. It has varieties of aspects to be pondered on. In the midst of those, how place can have influence on the life of an individual is the matter of concern of this writing. Chanu Ahmed, the forty years old husband of Nazneen, has been an immigrant in England for about sixteen years and takes Nazneen to Tower Hamlets, London when she is eighteen years old.

The novel talks about how both Nazneen and Chanu manage to undergo their diasporic plights and multiple unpleasant experiences. Stereotypical idea of women's inferiority to men has been given a different shape. Nazneen's determination and courage lead her to assert her identity as a female human capable of maintaining her family socially, economically and emotionally. Nazneen goes through the predicaments as an immigrant and as a woman; creates her identity and achieves integrity. On the other hand, Chanu's already established identity as an educated individual, with a lot of dreams suffers from hesitation, oscillation, and

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ultimately all his efforts are shattered. He goes back to Bangladesh, his native land, as a failure. Both of them are displaced as the result of immigration. Through the process of assimilating and adjusting with the alien situations, they discover the "other" in them. The protagonist Nazneen, an observant girl, studies the surroundings, learns and develops her inner potentialities through silent observations, comparison and analyses. Geographical shift has given the possibilities to Nazneen, but not to Chanu. Chanu's mental strength is not like Nazneen though he is more educated. His ambivalence cannot make him stable. Through pointing out the core causes of their displacement, this paper will show whether they accept or reject the chances offered to or the cultural surroundings limit or empower them.

Objectives

To trace the causes and effects of displacement in the lives of Nazneen and Chanu is the general objective of the study. The specific objectives are:

- i) To demonstrate the nature of displacement in Brick Lane from diasporic perspectives
- ii) To analyse the causes of displacement with regard to Chanu and Nazneen
- To examine and evaluate the effects and consequences of displacement in the lives of Nazneen and Chanu.

Methodology

The study of the topic is conducted mainly through content analysis. The novel Brick Lane is used as the primary source. Some research articles and a number of books on diasphoric theory have been consulted for collecting information and coming up with logical interpretations.

Displacement in Brick Lane: A Concern of Diaspora

The term 'diaspora' originates from a Greek word, the meaning of which is 'to disperse'. A multiple connotations are derived through and modified by several historical contexts. In literature, "Diaspora is simply the displacement of a community/ culture into another geographical and cultural region" (Nayar187). In Brick Lane, Bangladeshi-born British writer Monica Ali has portrayed the picture of Bangladeshi community living in Tower Hamlets of London Borough, England. The displaced condition of the characters concerned is obvious from the very starting of the novel mentioning place and time 'Mymensingh District, East Pakistan, 1967' and from the development of the plot at different times in London city.

People migrate to ex-colonizers' country for various reasons. In the Indian context the migratory movements were governed by historical, political, and economic reasons including higher education, better prospects and marriage. Sometimes the dilemma of evocative past, vague present and undefined future pervade throughout the life of an immigrant. In diasporic situation they feel homesickness, isolation, exile, clash of cultures, problems and possibilities. In Brick Lane we see how the characters suffer, assimilate and survive. Along with Nazneen and Chanu other major characters like Razia, Dr. Azad, and Karim are in the search of suitable 'place' in the world. Razia, who is bold enough, does not care what the community gossips about her and wishes to have a suitable job to maintain her family well. It is only after her dominating husband's accidental death, she gets the freedom to start working and ultimately runs a fashion house where Nazneen works and gets economic salvation. Mrs. Islam has made her position by practising false play like usury. She passes her time showing

fabricated affection to people and at the same time spreading rumors about others in Bangladeshi community.

In the novel, Dr. Azad migrates to England with his wife and achieves his degree through economic struggle. Mrs. Azad welcomes western culture and allows her daughter to go to pub and gradually their family bond deteriorates. Chanu likes the company of this 'intellectual' Dr. Azad who enjoys reading books. He has money and position but no peace in family. With the passage of time Dr. Azad becomes a 'good friend' of Chanu and provides him with the ticket money for going to Bangladesh. Karim, a political activist and a leader, plays an important role in Nazneen's transformation from a culturally dominated and submissive girl to a self-asserting independent woman. He works as a 'middleman' for Nazneen's sewing job. She unconsciously develops an illicit affair but finally she is able to come out of the complexity of the relation.

From the feminist point of view it is clear from the female characters that they do not give up though they live in diasporic situations. The destiny of Chanu and Karim is unpredictable; Dr. Azad is an escapist from family--his westernized wife and daughter. Razia and others are adapting by making the friendly whites 'friend' and leaving 'them alone' who are not 'so friendly'.

In the novel, a parallel story of Nazneen's sister Hasina runs. Hasina lives in Bangladesh and goes through a lot of social, psychological and economic troubles. She elopes with her lover who beats her in their conjugal life. She flees away from him and becomes a gamnent worker, but she cannot exist in the gamnent service due to the malice of other workers. Situations make her a prostitute and she marries a client who promises to give her social status. This new husband also gets tired of her and leaves. Later she becomes a maid in a good family and eventually runs away with the cook of the family. Hasina suffers a lot of troubles but possesses courage to face the situations and according to Nazneen she 'isn't going to give up'.

Displacement also offers multidimensional, uncertain ways coalesced with the glow of challenges and promises. Diasporic literature concerns about the lives of migrants in different host countries from their native lands or countries. Language and culture are two important factors that change with the physical and geographical transformation. Nazneen learns English slowly from the surroundings and her two daughters Shahana and Bibi to cope up with the situation. Direct migrants and children of migrants feel differently. We see this from the activities of Shahana and Bibi. They cannot like Bangladeshi culture from heart. Chanu's attempt continues to make his daughters learn Bangladeshi culture and he remains terrified at the possibility of their going astray following British culture: "Having arrived in a new geographical and cultural context, they negotiate two cultures: their own and the new one" (189). In this context we see the emergence of a new culture— a hybrid culture in Shahana and Bibi.

Displacement sheds light on the possibility and problems of asserting identity. Displacement causes the realization of self which evolves from continuous striving with the surroundings and the psychological process of exploration. The protagonist Nazneen contemplates her position in an arranged marriage and through struggle remakes her identity. On the other hand, Chanu continuously tries to maintain balance between his ambition and preservation of Bangali tradition and tackling racial threats.

Patriarchal and Cultural Push of Nazneen's Displacement

Nazneen after her'still birth' is found as an 'wide- faced, watchful girl' through the teaching of 'Amma' (Nazneen's mother) who believes "Fighting against one's Fate can weaken the blood. Sometimes, or perhaps most times, it can be fatal" (Ali 10). So, Nazneen starts to nourish the seed of fatalistic belief that was sown by Amma. Her sister Hasina elopes with her lover and does not come back. After waiting for a certain period, her father Hamid arranges a marriage for her at the age of eighteen with a middle aged British immigrant. Her Amma's teaching and belief in fate makes her docile: "Abba, it is good that you have chosen my husband. I hope I can be a good wife, like Amma" (12). One of her Amma's characteristics of goodness lies in 'her tearful stoicism that was almost daily in evidence'. Hamid defines the good wife as 'a saint' because she has come 'from a family of saints'. Nazneen's want and dream possess no challenge, but rather passivity. She plants her foot on the unchallenging mission of being 'a good wife'.

Nanzneen's movement to England is mainly caused by fate in the form of established institution – marriage: "she was in this country because that was what had happened to her" (58). As a stereotypical South Asian woman Nazneen is migrated to London to live with her immigrant husband. It is imposed obedience towards the patriarchal domination that makes her passive. From the narrative it is suggested that she could not like an old man with a frog like appearance. Her ego is hurt hearing Chanu's description of her as 'a blind uncle is better than no uncle' over the telephone after six months of their married life. She rebukes herself as 'a foolish girl'; she has thought Chanu was grateful because she, 'young and graceful', had accepted him. That 'stinging rush' proves that she was not actively willing to her arranged marriage with Chanu. To consider from feminism's theoretical stance, this 'Fate' indicates that 'religion, the family, education, the arts, knowledge systems are all social and cultural structures that enable the perpetual reinforcement' of the inequality between men and women: "These structures are effective means of reinforcing male domination because they do not appear oppressive" (Nayar 83).

Nazneen is taught to accept unquestioningly whatever happens to life by her native culture; she learns from her Amma that in a male dominated society women have no right to ask question: "If God wanted us to ask questions, he would have made us men" (Ali 64).

Displacement of Chanu: In Search of Illusory Dream

Chanu is pompous, talkative, eccentric, confused, self-centric, double-minded, kind, full of plans and the so-called South Asian dominant husband of Nazneen as we meet him at the beginning of the novel. While Nazneen's docility drives her to cross the geography, Chanu takes the willing venture for the purpose of having a bright future. In the dream of being a 'big man' Chanu migrates to London.

Chanu has a degree from Dhaka University; he has also studied philosophy, sociology, history, and economics at a British university. About the aim of his movement to the host country he says, "When I came I was a young man, I had ambitions. Big dreams, When I got off the aeroplane I had my degree certificate in my suitcase and a few pounds in my pocket. I thought there would be a red carpet laid out for me. I was going to join the Civil Service and become Private Secretary to the Prime Minister" (26). But he makes his condition clear that he was not 'starving in Dhaka'. Chanu's willing displacement gets disillusioned with the passage of time. Then he finds 'things were a bit different' he explains "these people here

didn't know the difference between me, who stepped off an acroplane with a degree certificate, and the peasants who jumped off the boat possessing only the lice on their heads."

(26) He gives his relatives false image of himself and it can be guessed that it was his illusionary dream to be a 'big man' by migrating to England. Chanu's migration is 'voluntary movement'.

Consequential Disillusionment of Chanu Caused by Displacement

The sense of adjustment, adaptability, mobility and accessibility is very significant in diasporic situations. Along with instinctive characteristics, Chanu goes through some other sides of nature like dichotomy, immobility, ambivalence and lost identity due to the diasporic state of affairs which pave the way for his final disillusionment. While Nazneen can touch her dream and decides to live; Chanu's dream appears as a mirage and ultimately he chooses to leave.

The host culture like western one is very open and free unlike the Bangladeshi culture. English people do not bother what others do. Geographical change cannot alter the male chauvinist perspective of Chanu. His sixteen years of immigrant experience cannot broaden his mentality towards his wife; to him she is a good home maker. Her loneliness, boredom, disgust, small rebellions – nothing can touch the chord of his sensibility. Ironically he says, "I am westernized now. It is lucky for you that you married an educated man... in Bangladesh you would not go out. Coming here you are not missing anything, only broadening your horizon" (35). Nazneen wants to learn English; but, Chanu exhibits indifference to this appeal. He diverts the idea and shows her business and responsibility as a female and a mother. Ironical is the fact that he thinks an educated man like him will not mind her going out but 'ten people' will gossip about her going out and he will feel embarrassed.

One of the chief characteristics of diaspora literature is identity crisis of the displaced migrants: "Migrants tend to arrive in new places with baggage; both in the physical sense of possessions or belongings, but also the less tangible matter of belief, traditions, customs, behaviours and values. This can have consequences for the way in which others may or may not make migrants feel 'at home' on arrival in a new place" (Mcleod 212). Chanu does not get the desired promotion in spite of being very learned, punctual, and sincere. For getting promotion he wants to draw the attention of his boss Mr. Dalloway to his punctual and sincere effort, "...in six years I have not been late on one single day! And only three sick days, even with the ulcer" (Ali 25). He does not get promotion in council job and so after six years he resigns. He changes other jobs and starts complaining.

Chanu is educated but his education does not teach him how to voice his words commandingly. He has a lot of learning about different branches of knowledge. While he reads about racism, history, literature and philosophy, he shares with Nazneen whether she realizes it or not. He remains dipped in the realm of books but does not take any action effectively because of his immobility and paralyzed insight. Chanu aims high but cannot reach his goals due to his such drawbacks.

The reason Chanu shows for his not being promoted in council job is racial conflict and discrimination; "...if he painted his skin pink and white then there would be no problem" (58). In spite of being an 'intellectual' and scholar having degrees and certificates, he gets the job offer of dish washing that he turns down. Ultimately he becomes a taxi driver. Chanu talks about racism. He wants to go back to Bangladesh to save his children from taking up the

British culture of going to pub, drinking alcohol and showing disrespect to their parents. He suffers from loss of identity. While talking to Mrs. Azad he pathetically says,

"I'm talking about the clash between Western values and our own. I'm talking about the struggle to assimilate and the need to preserve one's identity and heritage. I'm talking about children who don't know what their identity is. I'm talking about the feelings of alienation engendered by a society where racism is prevalent. I'm talking about the terrific struggle to preserve one's own sanity while striving to achieve the best for one's family. I'm talking..." (88).

English is not allowed at home for his daughters Shahana and Bibi. He threatens them for wearing short clothes. He wants his daughters to learn Bangladeshi culture but that is very difficult for them to feel and adopt as they do not belong to that culture. He builds the golden picture of Bangladesh to compensate for his failure in host culture: "To live as a migrant may well evoke the pain of loss and of not being firmly rooted in a secure place; but it is also to live in a world of immense possibility with the realization that new knowledges and ways of seeing...which challenge the authority of older ideas of rootedness and fixity" (Mcleod 215). Chanu complains that the British presents bad images like flood and famine of Bangladesh in school. So the second generations do not acquire the proper knowledge about Bangladesh.

The identity crisis of Chanu becomes acute and ultimately he gives up the thought of position and becomes a driver and 'just takes' money away from the white. He goes through the dichotomy of character and possesses racial prejudice. He thinks himself superior to the African conductor he has met while going to Dr. Azad's house uninvited. He invokes the shame and sadness of history of slavery in public places. He classifies the uneducated and unintellectual Bangladeshis and does not allow Nazneen to mix with them. Contradictorily he paints the picture of golden Bangladesh and looks down upon the fellowmen as primitive and uneducated.

Once Chanu shows a research work by some professors at the London School of Economies to his daughters that "Bangladeshis are the happiest people in the world" and he says to Shahana "You see, when we go there, what will you lose? Burgers and chips and...tight jeans. And what will you gain? Happiness" (290). He is proud of his country's commodities once exported to other countries. But, while talking about a 'begging letter' from a policeman with 'enormous moustaches', Chanu indicates his taking bribes: "He built himself a big house with all the bribe money, and he rose through the ranks. He had four or five servants and his wife gave the best parties..." (97). Thus, he hurls himself in contradiction.

At the mentioning of Chanu's complaint about 'discrimination' Razia by the way raises the point to Nazneen: "Is it better than our own country, or is it worse? If it is worse, then why is he here? If it is better, why does he complain?" (58), whether it is a complaint or not, Nazneen thinks, "He just likes to talk about things" (58)

Dichotomy of Chanu's character is obvious in the obsessesion with English literature and at the same time blaming the English people. He ocsiliates 'between wanting one thing and wanting its opposite' (Ashcroft, et al.10). In Dr. Azad's house he participates in taking alcohol, "...it's part of the culture here...Back home, if you drink you risk being an outcast. In London, if you don't drink you risk the same thing. That's when it becomes dangerous, and when they start so young they can easily end up alcoholic. For myself, and for your wife, there's no harm done" (Ali 90) According to Nazneen's close observation, Chanu would like to 'talk about things' such as racial issues, politics, religious hatred, prospects of Bangladesh and so on but no particular summation comes from his talk; rather it makes him boring to the listeners. Failure in reality drives him to take shelter in utopian world of earning only knowledge and discharging it with satisfaction:

"Where Nazneen turned in, he turned out; where she strove to accept, he was determined to struggle; where she attempted to dull her mind and numb her thoughts, he argued loud; while she wanted to look neither to the past nor to the future, he lived exclusively in both. They took different paths but they had journeyed, so she realized, together" (99)

Chanu searches for a 'place' and 'Going Home Syndrome' pulls him back to his own country. His learning and experience show him to see the immigrant tragedy only. His duality and ambivalence do not allow him to see the 'place'. He goes through negotiation which is not steady and ultimately loses himself.

Chanu feels threatened more deeply after the visible clashes between the Muslims and the Christians. The climax reaches its peak with the 9/11 attack. Chanu takes the action seriously. Social problems like instability and insecurity are the consequences of certain factors. We get the pathetic tone of Chanu,

"Sometimes I look back and I am shocked. Everyday of my life I have prepared for success, worked for it, waited for it, and you don't notice how the days pass until nearly a lifetime is finished. Then it hits you—the thing you have been waiting for has already gone by. And it was going in the other direction, It's like I've been waiting on the wrong side of the road for a bus that was already full" (265).

Chanu has moved to western country with stereotypical patriarchal dominative tendency. He alters his dominating tendency towards the end of the novel during his helpless position of joblessness; consequently, he agrees to accept the empowerment of Nazneen. He goes through several changes. The Chanu we meet at the beginning gets changed at the end. He brings a sewing machine for Nazneen and helps her to be empowered. He admits Nazneen's contribution; he gets the recognition as a good father and a caring husband. He can understand his strength is family: "All these years I dreamed of going home a Big Man. Only now, when it's nearly finished for me, I realized what is important. As long as I have my family with me, my wife, my daughters, I am as strong as any man alive" (400). Chanu is victorious in this sense unlike Dr. Azad who has money and status but lacks the family bondage. At the end Nazneen for the first time admits her love for him, "what is all this Strong Man? Do you think that is why I love you? Is that what there is in you, to be loved?" (400)

Chanu takes the action seriously and goes back to Bangladesh where he starts soap business. He keeps regular contact with his family and inquires whether they need money; but in the meantime Nazneen becomes independent enough to maintain her family. Up to this stage of the story Chanu's disillusionment is obvious and his future is uncertain.

Rejuvenating Effects of Displacement on Nazneen

The effect of displacement in Nazneen's life is constant; some feelings, observations and incidents work as driving forces in her displaced journey towards her transformed self. Feeling of loneliness, urge for learning English, fascination with ice skating, affair with

Karim, thought about dressing, facing Mrs. Islam boldly and finally deciding to stay in London are obvious consequences of displacement.

Naznjeen's crossing border makes her lonely. Displacement causes her loneliness "In all her eighteen years, she could scarcely remember a moment that she had spent alone" (18). She passes her time doing household activities such as washing, cleaning, cooking and passing time waving at the 'tattoo lady'. What she can do is only to pass another day. She tries to soothe her troubled mind by reading extracts from the Holy Quran. She feels an urge to talk to the 'tattoo lady' of the opposite block but language becomes the barrier. She can realize the importance of learning English. Her loneliness raises her desire for social acclimatization that is obvious from her yearning to go to the flat of tattoo lady and pass time more easily. Along with the constant digressions from the memories and dreams of her village, new 'place' offers her prototype of thought towards pondering over the matters and people's behaviours.

From the beginning of her coming to Tower Hamlets, Nazneen gets fascinated by the programme ice-skating on TV. The urgency, intensity and a declaration of ice-skating touch the evolving sense of Nazneen which pushes her into a kind of metamorphosis. While she watches on the TV "...she was no longer a collection of the hopes, random thoughts, petty anxieties and selfish wants that made her, but was whole and pure. The old Nazneen was sublimated and the new Nazneen was filled with white light, glory" (32). With regard to this, introspection shows that the desires Nazneen possesses and represses try to expose themselves. This indicates that everyday provides her fuel to evaluate the existing belief and surroundings and ultimately drives her to take challenge. Often at the time of her mental rebellion she imagines herself in ice skating. When she finally becomes independent in decision making and maintaining her family economically, Shahana and Razia take her to ice skating that symbolizes her self- assertion.

Nazneen tries to divert her mind from constant anxiety about Hasina, nostalgia of her past, and passes the time more easily. After six months of her arrival to England, the days start to become 'tolerable, and the evenings were nothing to complain about'(31). She likes to pass time with Razia who has always 'stories to tell' and she is 'a good distraction'. Nazneen's willingness to cool down her mind is a sign of her taking the challenges of being settled in the new place.

The repressed desire of Nazneen finds expression when she goes out and loses way and ultimately manages to come back using two words in English 'sorry' and 'thank you'. This is the first step of her raising confidence, sense of power and evolution. She transcends her mental captivity of patriarchal domination from Chanu who does not want her to go out alone and mix with other women in the community.

Though her life at the beginning is governed by her mother's teaching of not wasting energy 'fighting against Fate', Nazneen takes Raqib, her first son because of his illness, to hospital. She quibbles over whether abiding passively by the grip of fate or to taking steps of her free choice. With the passage of time her developing and subtly analysing thought raises her courage to take the decision.

Dressing plays a very important role in Nazneen's evolving thoughts. She tries herself with the western dress-up in secret. She for the moment thinks "if she changed her clothes her entire life would change as well...If she had a tiny tiny skirt..." (229). Here dress-up symbolizes culture. Her yearning to get freedom makes her think about western dressing, "for a glorious moment it was clear that clothes, not fate, made her life" (230). For that moment she feels that sari symbolizes her Bangladeshi culture which does not allow women to think and act freely. Ironically, Razia thinks herself westernized having western dress up, but she cannot engage herself with job while her husband lives. She thinks her husband will come to the factory and slaughter her like a lamb. Mrs. Azad is free having western clothes but she is alchoholic and allows her daughter to go to pub, Surprisingly the indication about cloth at the end "this is England...you can do whatever you like" (413) shows that Nazneen needs not change her entire culture forgetting the root; rather she has adopted a particular side of western culture that is mental and economic freedom without patriarchal constraints.

Nazneen is inspired by seeing other women at sewing work and feels the urge to earn money for home fund and help Hasina. Chanu brings the sewing machine for her at the time of his joblessness. This stage is the indication of reaching very near to her final economic emancipation.

The very transitional period of Nazneen's growth is her unconscious engagement with Karim. The cherished disgust to the indifference of Chanu psychologically promotes her to engage with an illicit love affair with the 'middle man' Karim. According to the psychoanalytical theory of Freud, the repressed desires are expressed and released when it gets chance. Gradually, she feels attraction to Karim who is young, handsome and active unlike Chanu. She can understand that it is Karim who has made her black and white world colourful by giving her importance, paying attention to her opinions and by raising confidence in her. She falls in dilemma and believes that this relation is a sin summoning future complexities for her family. She subtly analyses the relationship and comes to a conclusion. She rejects Karim's thought of marrying her and when Karim inquires whether the reason is 'the sin' of the relation or not she explains, "...always there was a problem between us. ...I wasn't me, and you weren't you. From the very beginning to the very end, we didn't see things. What we did-we made each other up" (380).

Mrs. Islam continuously harasses the family as a usurer. She demands more and more interest based on the lent money to Chanu. Nazneen has the courage to face her and very boldly says 'no'. Embarrassed at hearing Nazneen's utterance, Mrs. Islam departs. Ironically Mrs. Islam's saying becomes the power for her, "God provided a way... God provided a way, and I found it" (373). She discovers the final determination, finishes with Mrs. Islam and says 'no' to Karim. She nourishes the saying of Mrs. Islam "if you think you are powerless, then you are. Everything is in you, where God put it" (52).

Nazneen learns many English vocabularies with the passage of time. She picks the words from Chanu, Razia and her daughters. She goes through the mental struggle to adopt. At several times Chanu rejects her plan for attending English classes. But through her sincere attempts she learns English, succeeds in her job and sends money to Hasina. She is in a dilemma between going and not going back to Bangladesh. Her daughters will never forgive her and there is no certainty that Chanu's dream will be fulfilled there. Eventually from the support of her empowerment she decides to stay. She becomes able to maintain her family without the help of Chanu from Bangladesh and on top of that she saves some money and continues providing for Hasina.

Female migrants face double edged problems; they feel alienated from the host community and are addressed as a child producing home maker by their native patriarchal community. Women's empowerment changes the view of men. Instead of 'an unspoilt girl' from a village now Chanu gives her the status of 'boss woman'. There are "some women spend in, twenty years here and they sit in the kitchen grinding spices all day and learn only two words of English. They go around covered from head to toe, in their little walking prisons" (Ali 83). In contrast, Nazneen comes out and it is not an easy journey.

Nazneen's possibility is the result of the place, where in the same job Hasina fails but she succeeds. Nazneen's emotional development and desire to 'find the way' would not have been possible if she were in Bangladesh. "The necessity of dislocation does indeed become the mother of invention. Hence the disruptive and 'disorienting' experience of dislocation becomes a primary influence on the regenerative energies in a post-colonial culture" (Ashcroft et al, 65).

Conclusion

It lies on the agency and potentiality of an individual to adapt with and to prove identity in different spheres of life as well as in displaced situation. Diaspora is a journey towards self-realization, self-recognition, self-knowledge and self-definition. Deep sense of flexibility, accessibility, adaptability, and adjustment is prerequisite for the migrants. For almost thirty years Chanu struggles but cannot determine his place; on the other hand, Nazneen finds her place within seventeen years of self- exploration. Chanu's voluntary migration in the hope of earning much money shatters; whereas Nazneen's imposed displacement takes a new form.

Though Ali has shown racism, religious clash, deterioration of youth taking alcohol, she has very positively welcomed the freedom loving people who grasp the chances: "The migrant seems in a better position than others to realise all the systems of knowledge, all views of the world, are never totalising, whole or pure, but incomplete, muddled and hybrid" (Mcleod 215). Hasina living in Bangladesh and having all the spirit needed for better survival with self- respect goes through humiliating situations; it is the diasporic experience of Nazneen that provides her with the scope to explore her inherent potentialities. She overcomes three folded constraints such as patriarchal, cultural, and displaced situation. We see Chanu is a failure as an immigrant who has to fight 'racism, ignorance, poverty'. In spite of having a strong family bondage, he gives up the hope and retreats. He knows many theories about philosophy, politics etc. But ironically he has no insight like Nazneen. Nazneen develops her introspection as shown through almost page by page of the novel and evolves phase by phase. Chanu moves round confusedly in a cycle and comes back at the same point from where he has started. He is not strong enough to 'withstand the storm'; Nazneen's acquired selfassurance is built 'on a solid foundation' and that achieves the power 'to stand fast and wait for the storm to pass'. The famous saying of Sophocles in King Oedipus echoes the perspective of Nazneen:

Chance rules our lives, and the future is all unknown. Best live as best we may, from day to day.

References

Agrawl, B. R. and M.P. Sinha. Major Trends in the Post-Independence Indian English

Fiction. New Delhi: Atlantic Publishers and Distributors, 2003.

Ali, Monica. Brick Lane. London: Transworld Publishers, 2003.

Ashcroft, Bill et al. Post-Colonial Studies: The Key Concepts. London and New York: Routledge, 2007.

Barry, Peter. Beginning Theory.Manchester University Press, 1995.

Lumba, Ania. Colonialism / Postcolonialism. London: New Letter Lane, 1998.

Hussain, Yasmin. Writing Diaspora: South Asian Women, Culture and Ethnicity.

Aldeshot: Ashhate Publishing, 2005.

Mcleod, John. Beginning Postcolonialism. Manchester University Press, 2007.

Nayar, Pramod K. Contemporary Literary and Cultural Theory: From Structuralism to Ecocriticism. India: Pearson, 2012.

Nayar, Pramod K. Postcolonial Literature: An Introduction. India: Pearson, 2013.

Sophocles. The Theban Plays Trans. E.F. Watling. England: Penguin Books, 1979.

Webster, Roger. Studying Literary Theory: An Introduction. London: Arnold, 1996.



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Analysis of Women's Preference of Imitation Jewelry: Bangladesh Perspective

Abstract

To most women fashion is a mode of expressing themselves. Wearing jewelry adds value to this trend of fashion. Jewelry can be made from precious element like gold or diamond and there is another option that is imitation jewelry. But, not all women have the opportunity to wear gold jewelry due to high price or other reasons. So, a large number of women are accustomed to wearing imitation jewelry which is also known as fashion jewelry. This paper attempts to find out what enticed women to prefer this imitation jewelry. A survey was conducted among 100 users of imitation jewelries to collect data for this study. Judgmental sampling technique has been administered to reach and gather data from the respondents. Collected data have been analyzed using frequency distribution and multiple regression approach. Reliability of the items has been tested to ensure that the measurement is free from random error and results are consistent. This study reveals that three variables namely low cost of imitation jewelry, innovative and elegant design and matching with apparels significantly affect Bangladeshi women's preference of using imitation jewelry. However, the researchers come up with the findings that Bangladeshi women are less susceptible to consider endless options of design, safety and security, availability as significant determinants in case of purchasing imitation Jewelry, looking like gold and easy for carrying.

Key Words: Fashion jewelry, imitation jewelry, judgmental sampling, reliability testing.

1. Introduction

Demand for luxurious items has been growing day by day. Since jewelry is a luxurious item, jewelry industry seems to have a glittering future. Jewelry, which is attached to the body or the clothes, is small decorative items worn for personal adornment, such as brooches, rings, necklaces, earrings, and bracelets. Modern fine jewelry is usually made of gold, white gold, platinum, palladium, titanium, or silver (Subject Wiki for Jewellery, 2017).

Among the several oldest industries in Bangladesh, gold jewelry industry is one of them. The experience of the artisans who make jewelry items ranges from 1-35 years (Sultana, Siddique & Islam, 2015).

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Like many other industries, the jewelry industry is not devoid of consumer behavior. How people identify a demand, how they search for information, how they finally make decision comparing the available alternative products and how they perceive satisfaction from used products are the focal issues of consumer behavior study. It also discusses the consumers' behavioral, demographic and psychographic characteristics which play a vital role in case of buying decision process. The demand and price of jewelry products largely depend on consumers' income, cost of raw materials and existing fashionability and trend.

Recently like many other industries, jewelry industry has been affected by worldwide recession. On the other hand, customers have become choosier than before. Because of rising price of traditional jewelry items, usage trends of Bangladeshi jewelries are moving from gold to gold plated or imitation jewelries (Ukessays, 2015). Along with rising consumer demand there has been a rise in the imitation jewelry industry in Bangladesh. Previously, several researches have been conducted on overall Jewelry business. Lack of attention on imitation jewelry industry calls for an extensive study in this field. Through this study it has been tried to identify the factors that affect Bangladeshi Women's Preference of Wearing Imitation Jewelry (IMJ).

2. Literature Review

Jewelry is a type of accessory that includes necklaces, rings, bracelets, watches, and earrings, etc. Jewelry is being designed for men, women, and children and can be made from a variety of different categories (Kumari & Anitha, 2016). Imitation jewelry has been made of cut and uncut stones, plastic beads, cast iron, brass, nickel and other attractive materials. Imitation jewelry is also termed as fashion jewelry or costume jewelry (CBI, 2015). Imitation jewelry is an accessory used to highlight one's personality, style and ensemble. It can be artisan-made or mass-produced. Costume jewelry often incorporates the non-precious metals such as brass, steel, zinc casting, tin casting; semi-precious metals such as sterling silver, gold- or silver-plated brass and other alloys; non-metal materials such as leather, textile, resins, cords, natural wood, coconut chips, dyed or engraved or cracked shells, etc. and non- or semi-precious stones, including crystal and cubic zirconia (CBI, 2015).

The annual worldwide sales of jewelry industry is expected to grow five to six percent each year, totaling 250 billion pound by 2020 (Dauriz, Remy & Tochtermann 2017). This statistics identifies the span of jewelry industry around the globe. Along with sales growth and the consumer behavior, the jewelry industry itself is experiencing consequential changes. Enthusiasm of consumer for jewelry items is changing as well as largely affected by the rising price. The jewelry industry of Bangladesh has experienced a drop down because of rising price of US dollars which results in less consumption as consumer purchase ability has declined. For the last 3 years, sale of gold jewelry has experienced fifty percent drop down (Ukessays, 2015). This situation is evident around the globe. Though the shares have been increasing, the sales of branded jewelry accounts only for 20 percent of the total jewelry market (Dauriz, Remy & Tochtermann 2017).

In Bangladesh, recently without any special occasion people do not purchase gold jewelry rather there has been a rise in the demand of silver, gold-plated and diamond jewelry. Now, the usage of gold-plated silver or imitation jewelry at lower cost than before facilitates Bangladeshi women looking beautiful (Ukessays, 2015). Low labor cost and unique design of jewelries made from materials like soil, wood, fiber, plastic, cheaper stones etc. create the

export opportunities for Bangladesh in international market (Ukessays, 2015).

For many years, imitation jewelry has been a part of our subcontinent's culture. During the 18th century jewelers started making imitation jewelry using inexpensive glass. After that, in the 19th century jewelers started using semi-precious materials for imitation jewelry. By the mid of the 20th century with the saturation of industrial revolution, golden era of imitation jewelry has begun (Joseph, 2016). According to Joseph (2016) China is the first and India is the second largest manufacturer of imitation jewelry. Every year Bangladesh imports a large volume of imitation jewelry from India.

Fashion-conscious women always need a high dose of fashion, which includes apparel, accessory, footwear, jewelry, bag, watches, etc.; such use of imitation jewelry increases women's aesthetics. From olden days Bangladeshi women are accustomed to the use of gold jewelry. But now modern women are using imitation jewelry besides gold jewelry. This preference of imitation jewelry is in good trend due to a number of reasons.

Bangladeshi jewelers cannot purchase gold legally. Also the increase of VAT on gold adds a new burden for the jewelers which make the traditional jewelry market unstable (Sultana, Siddique and Islam, 2015). This is one of the reasons for rising demand for imitation jewelry here. Yagmur and Yesilyurt (2012) postulated jewelry is usually liked by young women and there is a positive relationship between likeliness of jewelry and high education and income levels.

Peer pressures, availability of information or the individual's budget affect consumer purchase behavior. In case of jewelry items, consumers get inclined by their friends, colleagues and family members (Ukessays, 2015). As Bangladeshi women belong to a traditional Bangla culture, they wear dresses like Saree and Kameez which look beautiful on them and embellish them with jewelries to enhance their beauty.

Yagmur and Yesilyurt (2012) identified several factors of jewelries like being eye-catching, unique, having a special design, being authentic, having symbolic or spiritual meaning, having stone trimming with precious metals and having historical and cultural connotation which are positively associated with the likeliness of jewelry items.

According to Gunasundari (2015), Demographic features, Quality, Safety, Design, Price, Attraction, Comfortable and Weightless significantly affect women to choose imitation jewelry.

According to dream jewelry (2015) women buy imitation jewelry because of their affordability, security, less paranoia and stress, fashion trend, economical variety, new budget,

Indian beautiful art (2016) that posits women's preference for imitation jewelry is facilitated by affordability, gorgeousnes, endless designs, style, color, size, and a large variety of inexpensive jewelry items.

Kentucky folk Web (2010) identified that women get a number of advantages while buying imitation or fashion jewelry. These advantages outweigh their motivation to buy gold jewelry. The advantages are: jewelries to suit you get up for an important occasion, low cost, fashion jewelries are still looking as elegant, as gorgeous and as breath-taking, a sense of safety and security. Additionally, fashion jewelries are cheap, so users could easily buy hundreds of them any time.

Customers from different ages and classes postulated that it is cheaper to choose from the bangles, earrings and necklaces looking as good as the real items (gold); the latest designs and colors, safety and finery being of good quality are the major reasons for using imitation jewelry (Manjitkaur 2013).

3. Objectives

This study seeks to achieve the following objectives:

- a. To identify the factors that influence Bangladeshi women to prefer imitation jewelry.
- To measure the strength of relationship between Preference of Imitation Jewelry and the underlying influential factors.
- c. To categorize the forms of imitation jewelry worn by Bangladeshi women.

4. Rationale of the Study

From the prehistoric era women of all ages — the young, the middle-aged and the old have a fascination to wear jewelries mostly of gold and silver jewelry. But, cost for gold and silver jewelries is pretty high and in some cases the costs have gone out of the affordability of the buyers. This fact has paved the way to the use of imitation jewelry— jewelries made of metal, glass, plastic, enamel, silver, artificial gold, artificial diamond, wood and more.

Currently a large number of people are using these artificial ornaments to make them beautiful and present them gorgeously. This paper tries to find out what influences the preference of women to turn the habits of wearing gold jewelries to imitation jewelries.

5. Methodology of the Study

- 5.1 Sampling Plan: All women using imitation jewelry in Bangladesh have been considered as the part of population whereas individual woman using imitation jewelry has been considered as samples to conduct this study. No well-structured sampling frame was available to track down the samples. Judgmental sampling technique has been administered to collect research data from 100 users of imitation jewelry to conduct this study. Judgmental sampling technique has been undertaken since it is believed to be a good method of picking up samples that are more representatives of the population of interest and samples are easy to locate.
- 5.2 Data Collection Method: This research has been conducted based on both primary and secondary data. Primary data have been collected from targeted samples of Barisal area through structured questionnaire survey that has 5 response options ranging from 'strongly disagree' to 'strongly agree'. Skilled consumer-survey interviewers were used to conduct the survey. The respondents were interviewed face-to-face outside the shopping malls and also in their convenient locations. Secondary data have been collected from sources like Articles, Journals, Magazines, Brochures, Newspapers and other Web sources.
- 5.3 Research Design: The study is descriptive in nature and is administered to find out what influences Bangladeshi women's preference of using imitation jewelries. Quantitative data have been collected through questionnaire survey to conduct this study.
- 5.4 Data Analysis Procedure: Frequency distribution and multiple regression analysis have been used to identify what influences Bangladeshi women's preference of using imitation jewelry. Reliability testing has been conducted to measure the consistency of results and

ensure that items or measures are error free. Statistical Package for Social Science (SPSS 20.0), Software is used to analyze the data and get output.

6. Theoretical Framework of the Research

This research has been undertaken with the notion that the adoption of artificial or imitation or costume or fashion jewelry is influenced by a number of factors. Studies of large number of literatures help the researchers choose some variables to conduct this study like: Low Cost, Endless Options of Design, Safety and Security, Finer Quality, Innovative and Elegant Design, Availability, Look like Gold, Ease of Carrying, Matching with Apparels and Best Suited for Occasions.

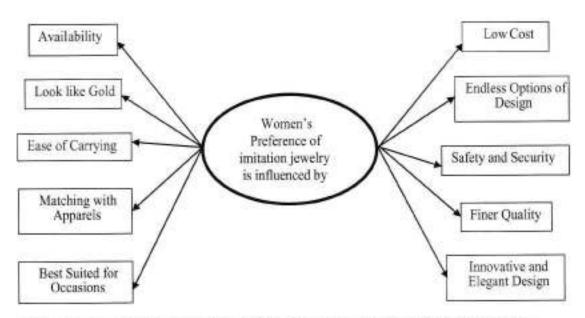


Figure: Factors that influence Bangladeshi women's preference of imitation jewelry.

7. Findings of the Study

Demographics of the respondents: All the 120 respondents were aged between 18-35 years and all of them live in Barisal city. As the survey questionnaire was in English language, so it was made sure that all of them have proficiency on English literacy. Among the 120 respondents, 55 were students, 30 were service holders, 30 were house wives, 02 were doctors and 03 were entrepreneurs. All of the respondents were female.

Dependent variable: Bangladeshi Women's Preference of Wearing Imitation Jewelry (IMJ) is the dependent variable for the study.

Independent variable: Independent variables were Low Cost, Endless Options of Design, Safety and Security, Finer Quality, Innovative and Elegant Design, Availability, Look like Gold, Ease of Carrying, Matching with Apparels and Best Suited for Occasions.

Reliability Testing

Table 01: Reliability	Statistics
Cronbach's Alpha	N of Items
.774	10

The Cronbach's Alpha measure of reliability for the factors was 0.774 (Table 01). Although Alpha value of 0.70 and higher is often considered the criterion for internally consistent established factors (Hair et al., 1998; Robinson, Shaver and Wrightman, 1991), Nunnally (1978) suggests that Alpha value of 0.50 and 0.60 is also acceptable in the early stages of research. Since, Cronbach's Alpha value is above 0.50; factors are accepted as being reliable for the research.

Model Estimation

The regression model of this analysis consists of both dependent and independent variables and the model is given below:

PWIJ= D + β LC + β EOD + β SS + β FC + β IED + β A + β LLG + β EC + β MA + β BSO + ei

Here,

PWIJ = Preference of Wearing Imitation Jewelry

D - Multiple Regression Constant

LC = Low Cost

EOD = Endless Options of Design

SS - Safety and Security

FC = Finer Quality

IED = Innovative and Elegant Design

A = Availability

LLG = Look like Gold

EC = Ease of Carrying

MA = Matching with Apparels

BSO = Best Suited for Occasions

ci = error

Table 02: Model Summary				
Model	R	R Square '	Adjused R Square	Std. Error of the Estimate
1	.562ª	.316	.239	1.474

a. Predictors: (Constant), Best Suited for Occasions, Availability, Safety and Security, Look Like Gold, Ease of Carrying, Low Cost, Innovative and Elegant Design, Endless Options of Design, Matching with Apparels, Finer Quality.

Here (Table 02), the value of R is 0.562 which tells us that there is a good correlation between dependent and independent variables. The R^2 value indicates the amount of explained variation (variance) in dependent variable from the independent variables on a range from 0-100 percent. In this case this value is 0.316. Also the adjusted R value is close to the R^2 value which denotes that addition of other variables makes a contribution in explaining the variation in dependent variable (Malhotra & Dash, 2008).

Significance testing

H_n:R²_{pop} =O (There is no relationship between Preference of Wearing Imitation Jewelry with Low Cost, Endless Options of Design, Safety and Security, Finer Quality, Innovative and Elegant Design, Availability, Look like Gold, Ease of Carrying, Matching with Apparels and Best Suited for Occasions)

H₁:R²_{pop} ‡O (There is a significant relationship between Preference of Wearing Imitation Jewelry with Low Cost, Endless Options of Design, Safety and Security, Finer Quality, Innovative and Elegant Design, Availability, Look like Gold, Ease of Carrying, Matching with Apparels and Best Suited for Occasions)

Table 03	· AN	NOVA
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	Model	Sum of Squares	df	Mean Square	F	Sig.
	Regression	89.280	10	8.928	4.107	.000b
1	Residual	193,470	89	2.174		
	Total	282,750	99			

- a. Dependent Variable: Preference of Imitation Jewelry
- b. Predictors: (Constant), Best Suited for Occasions, Availability, Safety and Security, Look Like Gold, Ease of Carrying, Low Cost, Innovative and Elegant Design, Endless Options of Design, Matching with Apparels, Finer Quality.

Hypothesis has been tested with ANOVA. According to ANOVA table (Table 03) the calculated F value, 4.107 is larger than critical F value, 1.83 with 10 and 89 degrees of freedom, which is significant at the 0.05 level (P value, 0.000<0.05). So, the null hypothesis is rejected.

The result posits there is a significant relationship between Preference of Wearing Imitation Jewelry with Low Cost, Endless Options of Design, Safety and Security, Finer Quality, Innovative and Elegant Design, Availability, Look like Gold, Ease of Carrying, Matching with Apparels and Best Suited for Occasions.

Table 04: Coefficients a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	1.711	.974		1.757	.082
	Low Cost	.397	.098	.442	4.068	.000
	Endless Options of Design	103	.129	091	798	.427
	Safety and Security	011	.121	-,010	094	.925
	Finer Quality	.054	.131	.049	.415	.679
1	Innovative and Elegant Design	.240	.126	.196	1.903	.048
	Availability	.089	.126	.072	.707	.482
	Look Like Gold	.080	.092	.090	.862	.391
	Ease of Carrying	.106	.108	.098	.980	.330
	Matching with Apparels	269	.125	244	-2.158	.034
	Best Suited for Occasions	115	.107	.122	1.076	.285

a. Dependent Variable: Peference of Imitation Jewelry

Table 04 suggests only three variables named Low Cost, Innovative & Elegant Design and Matching with Apparels are significant at the 0.05 level. The calculated t value is also greater than critical t value, 1.66 for these three variables. So the regression model is Preference of Wearing Imitation Jewelry = 1.711 + .397 (Low cost) + .240 (Innovative and Elegant Design) + -.269(Matching with Apparels).

The model suggests the factors named Low Cost and Innovative and Elegant Design affect positively and the factor named Matching with Apparels affects negatively on Bangladeshi Women's Preference of Wearing Imitation Jewelry (IMJ).

8. Overall Discussion

- a) Of the imitation jewelry items, necklaces, bracelets, rings, earrings, rosaries, shell necklaces and anklets are common.
- b) The result shows that mostly the young female aged 18-30 years are more likely to use imitation jewelry.
- Wedding Ceremony, Baby Birth and Festivals with traditional belief are the major occasions of wearing imitation jewelry.

- d) An important finding was that the working women are major users of imitation jewelry. Among the respondents, 35 samples were working women and 31 of them (89%) preferred imitation jewelry because of its safety and security.
- e) There is a positive association between income and preference of imitation jewelry.
- f) Result suggests Low Cost; Innovative and Elegant Design and Matching with Apparels of imitation jewelry influence women to prefer imitation jewelry to gold jewelry.
- g) Some other important factors like endless options of Design, Safety and Security, Availability, Look Like Gold and Ease of Carrying are found irrelevant to preference of imitation jewelry.

9. Limitations and further Research

As the research area is rarely explored by previous researchers, this study lacks comprehensive literature review of recent relevant articles. Researchers also faced time and monetary constraints which prohibit the research from using a large sample. Also, this research is limited to a particular region. So the researchers suggest that future researcher should incorporate more respondents and more items or take measures to make this research more exhaustive. Data analysis can be improved further using factor analysis.

10. Conclusion

Wearing Jewelries by women around the world is a common phenomenon. Jewelries increase aesthetics of women. In Bangladesh women also love wearing jewelries. In the past, gold or other precious metal jewelries met most of the jewelry demand of women. In recent time, a large number of women have shifted from gold jewelries to fashion or imitation jewelries. But, why do women prefer imitation to gold? This paper has tried to answer this question. This paper infers that while choosing imitation jewelry over gold or other precious metals, their decisions are significantly influenced by comparatively Low Cost and Innovative and Elegant Design and Matching with Apparels factors. This paper is believed to be helpful to the manufacturers and marketers to design, and to promote the use of these ornaments by the women customers.

References

- CBI. (2015) CBI Product Factsheet: Costume Jewellery in Italy [Online] Available from https://www.cbi.cu/sites/default/files/market_information/researches/productfactsheet-italy-costume-jewellery-2015.pdf. [Accessed: 10th April 2017]
- Dauriz, L., Remy, N., & Tochtermann, T. (2017) A multifaceted future: The jewelry industry in 2020 [Online] Available from - http://www.mckinsey.com/industries/retail/ourinsights/a-multifaceted-future-the-jewelry-industry-in-2020. [Accessed: 5th April 2017]
- Dream jewelry. (2015) Why Buy Imitation Jewelry? [Online] 19th Nov 2015. Available from https://dreamjewelry.com/blog/why-buy-imitation-jewelry. [Accessed: 5th March 2017]

- Gunasundari, K.(2015), "A study on buying behaviour of women customers towards one gram gold jewellery in erode city" *International Journal in Commerce, IT & Social Sciences*, Vol. 2 Issue.10, pp. 38-45
- Hair, J., Anderson, R., Tatham, R. & Black, W. (1998), Multivariate Data Analysis, fifth ed. Prentice-Hall International, Inc., USA.
- Indian beautiful art (2016) Why Women Prefer Imitation Jewelry [Online] 11th Sep 2015, Accessed from - http://indianbeautifulartjewelry.blogspot.com/2015/09/why-womenprefer-imitation-jewelry.html [Accessed: 5th March 2017]
- Joseph, H. (2016), "A Study on the Effect of Imitation Jewellery on Real Sales of Gold Jewellery" International Journal of Exclusive Management Research, Vol. 6 Issue. 07, pp. 1-6
- Kentucky folk web. (2010) The Advantage of Buying and Wearing Fashion Jewelry [Online] Accessed from - http://www.kentuckyfolkweb.com/the-advantage-of-buying-and-wearing-fashion-jewelry/ [Accessed: 5th March 2017]
- Kumari, K.P., and Anitha, M. (2016), "A study on consumer preference towards gold jewellery shop in erode city", International Journal of Commerce, Business and Management (IJCBM), Vol.5, No.2, pp. 295-302.
- Malhotra, N., K. & Dash, S. (2012), Marketing Research: An applied orientation, 6th ed., Dorling kindersly Pvt. Ltd., India.
- ManjitKaur. (2013) People are wearing imitation gold jewellery due to the increase in snatch theft cases [Online] 12th August 2013. Accessed from http://www.thestar.com.my/news/community/2013/08/12/a-cheaper-alternativepeople-are-wearing-imitation-gold-jewellery-due-to-the-increase-in-snatch-thef/ [Accessed: 5th March 2017]
- Nunnally, J.C. (1978), Psychometric Theory, 2nd ed., McGraw-Hill, New York, NY.
- Robinson, J.P., Shaver, P. R., & Wrightman, L. S. (1991), Measures of Personality and social Psychology Attitudes, Academic Press, San Diego.
- Sultana, M., Siddique, P.J. and Islam, S. (2015), "Factor Analysis of Consumer Behaviour in Jewellery Business: An Empirical Study on Bangladesh", European Journal of Business and Management, Vol.7, No.5, pp. 79-84.
- Ukessays. (2015) Over View In The Jewelry Market In Bangladesh Marketing Essay.
 [Online] 23rd March 2015. Available from https://www.ukessays.com/cssays/marketing/over-view-in-the-jewelry-market-in-bangladesh-marketing-essay.php [Accessed: 4th April 2017]
- Wikipedia (2017) Jewellery [Online] Available from https://en.wikipedia.org/wiki/Jewellery [Accessed: 4th April 2017]
- Yagmur, O. and Yesilyurt, F.(2012), "A Study on Modern Jewelry Designed with Traditional Turkish Ceramics and Women's Acceptance of This Jewelry", Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, Vol. 16, No. 2, pp. 271-284.



Md. Mamin Ullah

Sexual Harassment at the Workplace: A Comprehensive Review of the Literature and a Proposed Research Model for Further Study

Abstract

Sexual harassment at the workplace is one of the most debating contemporary phenomena in the business world. Employees at workplace are suffering from this man-created torture and this is one of the challenging tasks for human resource managers now-a-days. This study attempts at reviewing the existing literature on sexual harassment at the workplace and then proposing a 'research model' for future study. Thus, it is a comprehensive literature review. The methodology involves basically with the archival method. This study has been conducted in three different stages. First, the theoretical frameworks of the sexual harassment at the workplace including the definitions, forms, perspectives, and theories to build up a sound conceptual understanding are analysed. Then a critical review is made on the papers of perceptions, causes, consequences, and coping strategies of sexual harassment. Finally, the study is concluded with a proposed research model for future study. This study is expected to contribute to the existing field of study with the concrete and organized facts regarding sexual harassment at the workplace. Research gaps and policy implications are identified.

Key Words: Gender discrimination, harassment at workplace, sexual harassment, sex and work

1.0 Introduction

1.1 Background

The last few decades have seen considerable discussion throughout the world about the issues of sexual harassment at the workplace. This term has become a buzzword in the public and legal arenas. Accordingly, of all the articles on sexual harassment and gender discrimination, more than 85% articles have been published on this topic since 1990. The number of studies on sexual harassment has skyrocketed since the early 1990s. It is seen that local and national governments have taken legal and other actions to combat the sexual harassment at the workplace.

Even international organizations such as the European Communities, the ILO, FAO, the World Bank, and the United Nations are also giving special attention to sexual harassment by formulating legislations and creating pressures on the member countries to combat sexual harassment at the workplace. For example, the 1979 United Nations Convention on the

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Elimination of All Forms of Discrimination against Women emphasized the equal right of both men and women at the workplace.

Sexual harassment has got attention in the field of research since 1980s (Fitzgerald et al., 1988). However, the majority of the studies on sexual harassment dealt primarily with the causes and consequences. Gelfand et al. (1995) criticized these studies as they made little attempt to aggregate behaviors at a higher level of generality. Most studies tested only one or two antecedents or outcomes of sexual harassment at a time. However, there is an exception in case of certain studies. For example, Fitzgerald et al. (1997) studied the relationships of sexual harassment, its antecedents and consequences simultaneously through an integrated model. Fitzgerald et al. (1988) introduced the Sexual Experiences Questionnaire (SEQ) to assess the prevalence and frequency of sexual harassment.

Although the vast majority of the victims of sexual harassment are women (Fitzgerald et al.,1988), men also suffer from sexual harassment (Riger, 1991), Research shows that between 40% and 68% of women are sexually harassed (Pryor, 1995). Magley et al. (1999) reported that 52% men think that they experience same-sex harassment. Generally it is observed that the supervisors and co-workers are sexually harassing the female workers. Also, a female can be harassed by the clients of the firm, and in some cases, it is more prevalent than harassment by co-employees (Lawlor, 1995).

Numerous studies were conducted on the antecedents and consequences of sexual harassment. Gruber and Bjorn, (1982), Gutek (1985), and Pryor et al. (1993) stated that organizational context and individual characteristics are the most important predictors of sexual harassment. On the other hand, there is a link between sexual harassment and negative work outcomes such as, increased job stress, loss of commitment to work, and decreased job satisfaction (Gutek, 1985; Williams et al., 1999; and Browne (2006).

Although numerous quantitative and qualitative studies are available on sexual harassment, very few literature reviews are available on sexual harassment at workplace. Maximum literature reviews are in isolated form i.e., they focus on either antecedents or consequences, or on separate models. Not a single comprehensive literature review was found focusing on the concepts, causes, perceptions, consequences, and coping strategies of sexual harassment at the workplace in concrete form. This study attempts at reviewing the existing literature on sexual harassment at the workplace incorporating all the major issues like concepts, perceptions, causes, consequences, and coping strategies. This study concludes with a research model based on the comprehensive analysis of existing literature.

In this study, we first analyze the theoretical frameworks of the sexual harassment at the workplace including the definitions, forms, perspectives, and theories. This helps us understand the importance and broadness of the topic. Then we critically review the existing literature of sexual harassment incorporating all the minor and major issues. It is wise to be noted that sexual harassment occur in various areas like home, school, workplaces, universities, and so on. The current study focuses only on the sexual harassment at workplace.

1.2 Objectives

The basic objective of this study is to critically review the literature of sexual harassment at the workplace and then propose a research model for further study. However, the paper also attempts at achieving the following objectives in addition to the main objective.

- To analyze and clarify the concepts and forms of sexual harassment at the workplace.
- To analyze the existing literatures of causes, antecedents, consequences, theories, and coping strategies of sexual harassment at the workplace.
- iii. To evaluate the adequacy of the literature and find out the research gaps.
- iv. To develop research model for the further study based on the analysis of the literature.
- To provide some practical implications for the stakeholders.

1.3 Methodology

This study is basically a comprehensive review paper. Literature review is adopted as it enables to structure research and to build a reliable knowledge base in this field (Tranfield et al., 2003). In order to achieve the stated review objective, a systematic review of literature was conducted by using an archival method. By conducting a comprehensive narrative review rather than a meta-analysis, the different ways are examined and through those ways the concepts, theories, perceptions, causes, consequences, and coping strategies of sexual harassment at the workplace are conceptualized and measured in the literature, and the theory underpinning the results is explored. This is critically important when the field of research is relatively new.

Now, it is decided to go for comprehensive review rather than meta-analysis as metaanalytic techniques have been criticized for their failure to consider heterogeneity in both subjects and methods, and have also been accused of over-generalizing results and overemphasizing quantitative comparisons of substantively different literatures (Slavin, 1986). Since sexual harassment is a relative term, it has wide variety of definitions and forms. Therefore, meta- analysis is not suitable option for this review paper.

Papers were selected for this review on the basis of their basic objectives of sexual harassment at the workplace. Relevant articles were identified using computerized searches on PsycInfo, Science Direct, Scopus, Gale, EBSCO host, Business Source Premier, Google Scholar, PAIS International, Research Gate and International Bibliography of the Social Sciences search indices. No specific journals were targeted, included, or excluded. The key search terms used in conducting the study include sexual harassment, sexual harassment and work, gender discrimination at work, sexuality at work, workplace harassment, and sexual injustice at work.

Four steps are followed as methodological approach in conducting this study. First, the research papers are collected using searchable databases. Second, exclusion criteria to confine our intention to sexual harassment at the workplace are applied. Third, the exclusively relevant research papers are analyzed. Finally, a research model for further study is proposed.

2.0 Sexual Harassment at the Workplace

2.1 Definitions of Sexual Harasyment

Since sexual harassment is a relative term, it is very complex to define this phenomenon. Sexual harassment includes a wide range of behavior of a sexual nature which causes another person's distress intentionally or unintentionally. This behavior is unwanted,

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unsolicited and unreciprocated conduct or sexual nature. It may be just one incident or a series of incidents. A particular man or a women is subject to sexual harassment from either a person of the same or the opposite sex.

Gutek & Cohen (1992) identified four factors that affect the definition of sexual harassment: characteristics of the behavior, the nature of the relationship between actors, characteristics of the observer, and context factors. Later Gutek & Cohen (1992) commented that the most important factor determining judgment of sexual harassment is the behavior involved.

Sexual harassment is bullying or coercion of a sexual nature, or the unwelcome or inappropriate promise of rewards in exchange for sexual favors (Paludi et al., 1991). Yusuf (2010) defined sexual harassment in more comprehensive form. He stated that sexual harassment consists of behavioral patterns such as sexual teasing, jokes, comments or unwanted pressure for sexual favor or date.

The United States' Equal Employment Opportunity Commission (EEOC) defines workplace sexual harassment as:

"unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when this conduct explicitly or implicitly affects an individual's employment, unreasonably interferes with an individual's work performance, or creates an intimidating, hostile, or offensive work environment"

Although EEOC defined the sexual harassment in more comprehensive form, this definition was also criticized. This definition is difficult to apply to certain circumstances as the laws of each state vary in their protections against sexual harassment at the workplace, some requiring employers to adopt specific policies to prevent and deal with sexual harassment cases, while others only allow victims to sue their employers under the theory of invasion of privacy.

ILO's Definition of Sexual Harassment

Any insult or inappropriate remark, joke, insinuation and comment on a person's dress, physique, age, family situation, etc; a condescending or paternalistic attitude with sexual implications undermining dignity; any unwelcome invitation or request, implicit or explicit, whether or not accompanied by threats; any lascivious look or other gesture associated with sexuality; and any unnecessary physical contact such as touching, caresses, pinching or assault.

The ILO's definition provides some examples along with the core concept of sexual harassment. The ILO stated that in order to amount to sexual harassment, the behavior must either "be justly perceived as a condition of employment or precondition for employment or influence decisions taken in this field" and/or "affect job performance". In short, sexual harassment is covered in the workplace when it happens at work or work-related events. This is a form of gender discrimination that occurs in the workplace.

2.2 Nature and Forms of Sexual Harassments

Based on the analysis of the definitions of sexual harassment, we can identify two forms of sexual harassment. The first one is the 'quid pro quo'. It means a situation in which a supervisor or other senior official with control over a subordinate's employment status

solicits sexual favors in exchange for the position itself or for a job-related benefit, Rejecting a proposal by the harasser can result in dismissal, demotion, tarnished work record, and difficult work conditions.

The second form is the 'hostile environment' which refers to unwelcome behavior on the part of anyone in the workplace. The harasser may be a subordinate, a peer or a senior official. Such behavior can be either deliberately offensive or inadvertently. So, we can state that a behavior or attitude is sexual harassment when it interferes with an employee's work performance and overall comfort (Fitzgerald, 1993). Gruber, Smith and Kauppinen-Toropainen (1996) introduced the Inventory of Sexual Harassment (ISH) in order to categorize sexually harassing behaviors. According to ISH, the sexual behavior at the workplace can be classified into three types. They are verbal comments, verbal requests, and non-verbal displays, all of which range in severity. However, based on the analysis of existing literature, we can classify the sexual harassment behavior into three types: verbal, non-verbal, and physical. A list of this classification along with the examples is presented in Table 1.

Table 1: Types of Sexual Harassment with examples

Verbal	Non-Verbal	Physical
i. Sexual comments, slurs, jokes ii. Verbal sexual advances iii. Making sexual comments - "Your dress is really sexy," or "You look sexy in this dress." iv. Suggestive/obscene letters v. Asking sexual fantasies vi. Asking questions about sex vii. Insulting	i. Leering ii. Making suggestive gestures iii. Displaying pomography iv. Having sexually suggestive software on a work or academic computer v. Suggestive or insulting sounds	i. Touching on the breast or body with an elbow or arm, pretending it to be by accident. ii. Unwanted massages iii. Men looking at women's breasts. iv. Caressing or fondling v. Standing closer vi. Unnecessary hugging vii. Blocking a person's movement

Source: Author's own devolopment based on sources

2.3 Perceptions of Sexual Harassment

Undoubtedly it is important to understand what issues people are willing to acknowledge as sexual harassments. Perceptions of sexual harassment can be very important factors in the antecedents, consequences, and responses (Pina and Gannon, 2012). Stockdale et al. (1995) summarized five general models or hypotheses for explaining how individuals come to identify behaviors as being sexually harassing. The five general models are the types of experience, attribution, affect, organizational power, and personal characteristics.

There are different perspectives of sexual harassment. Ottensmeyer and McCarthy (1996) identified three different perspectives of sexual harassment. Feminist perspective focuses on a power relationship, men over women. Feminist scholars argue that sexual harassment is, in fact, misuse of power used to subordinate women in society (MacKinnon, 1983). Pryor (1985) found that sexual harassment is more likely to occur if the perpetrator's status was higher than the victim's. According to legal perspective, sexual harassment involves both implicit and explicit terms of employment. Managerial perspective holds the belief that the improper uses of power are responsible for sexual gratification. A detail scenario under each perspective is presented in Table 2.

Table 2: Perspectives on Sexual Harassment

Three Perspectives on Sexual Harassment

Feminist Perspective
 Reflects a power relationship, men over women
 Constitutes economic coercion
 Threatens women's economic livelihood

Legal perspective
 Reflects unequal power relationship that is exploitative
 Involves both implicit and explicit terms of employment

3a. Managerial perspective: older view Reflects personal proclivities Consists of misperception or misunderstanding of a person's intentions

Managerial perspective: Newer view
 Improper use of power to export sexual gratification
 Treats women as sex objects; asserts sex role over work role

Source: Ottensmeyer and McCarthy (1996).

It is quite interesting to see that sexual harassment is perceived in different ways in different societies. The first issue arises in terms of gender. There were differences in perception between men and women regarding sexual harassment. For example, a study in Nepal found that 58.8 percent of males and 30.8 percent of the female policy makers, lawyers and civil societies perceived sexual harassment as a gender issue. The study concluded that sexual harassment occurs mainly due to the patriarchal norms in society, discriminating between men and women, perceiving the former as superior and the latter as inferior. Stockdale et al. (1995) found that the most critical factor that predicts acknowledgment differences is gender. The second perception is that sexual harassment is uninvited, embarrassing and humiliating (Blumenthal, 1998; Pryor, 1995). The third perception is about workplace violence i.e., sexual harassment is perceived as a violation of the right to work in a safe and secure environment (Blumenthal, 1998). It is also perceived as explicit or implicit coercive sexual behavior intended to control, influence or affect the career or job of another. Fourth, another common perception is that sexual harassment means sexual intercourse.

Another notable perception is that sexual harassment occurs because the harasser is suffering from some kind of a mental disease (Stockdale et al., 1995).

2.4 Theories of Sexual Harassment

What actually constitute the sexual harassment are basically the underlying principles of sexual harassment theories. For example, laws that protect workers from sexual harassment may reflect different theories of sexual harassment. There are no set theories which alone explain the phenomena of sexual harassment at the workplace. But five theories are widely accepted by the researchers that are shown in the following table 3.

Table 3: Theories of Sexual Harassment at the Workplace

Theory	Theory Essence	
Natural/biologic al theory	Male has more sex drive than female which is the major cause of sexual harassment.	Tangri et. al., 1982; Hearn et al., 1989
Organizational theory	This theory is based on the assumption that various kinds of power used in organization are linked to gender and help explain sexual harassment.	Cleveland and Krest (1993)
Sex role spill over theory	This theory is the combination of organizational and socio cultural theory. When the sex-ratio of an organisation is skewed (the organisation is either male or female dominated) the sex role of the dominant gender "spills over" the work role expectations of the job.	Kanter, 1977; Gutek and Morasch, 1982
Socio-cultural	Socio-cultural theory is characterized by patriarchal society in which we live.	Tangri et al., 1982
Four-factor theory	This model is based on several models of sexual harassment including the biological model, the organizational model, the sociocultural model, and the sex role spillover model. This model is a better predictor of sexual harassment than the alternative models.	O'Donohue, 1998

Source: Author's own devolopment based on sources

2.5 Causes of Sexual Harassment at the Workplace

A significant number of studies have been conducted since 1970s focusing on the antecedents and consequences of sexual harassment (Glomb et al, 1999; Hesson-McInnis & Fitzgerald, 1997; Willness et al., 2007). Although numerous studies are available on the antecedents of sexual harassment, it is very difficult to identify the common causes of sexual harassment at the workplace as this sexual harassment phenomenon differs from culture to culture. For example, Willness et al. (2007) conducted a meta-analysis of 41 studies examining direct experiences of sexual harassment (N 70,000) and found that the organizational climate (tolerance of sexual harassment) and the job-gender context of an organization play an important part in facilitating sexual harassment. Carothers and Crull

(1984) stated that traditional female occupation is also an important antecedent of sexual harassment. It is broadly accepted that one of the common antecedents behind sexual harassment is power (Cleveland & Kerst, 1993). Stockdale (1996) supported this statement as he stated that the sense of power can lead in some cases to sexual harassment. However, Graverholz, (1989) denied this statement as he found that women in power positions within organizations experience sexual harassment by men who hold even less powerful positions. However, based on the study of several literatures on the antecedents of sexual harassment at the workplace, the causes of sexual harassment into four categories can be classified: individual factors, organizational factors, work environment factors, and job related factors that are shown below:

Table 4: Causes of Sexual Harassment at the Workplace

Causes of Sexual Harassment	Supporting Studies
Gender Role	Charney and Russel (1994)
Attraction to Sex	Ellis and Symons (1990)
Women as Sex Object	Stockdale et al. (1995)
Individual's Self Esteem and Sexual Belief	Dekker and Barling (1998)
Sexual Ratio between Men and Women at Workplace	Dekker and Barling (1998); Willness
Lack of Sexual Harassment Policy and Grievance	Ishak and Ching (2001)
Unclearly defined policies	Riger (1991)
Power Differentials	Begany and Millburn (2002); MacKinnon (1983); Stockdale
Organizational Climate	Cleveland and Kerst (1993),
Perceptions of Tolerance of Sexual Harassment	Ragins and Scandura (1995)
Lack of Recognition of Sexual Harassment	ILO, 2004
Sexist Attitudes among Co-Workers	O'Hare and O'Donohue (1998)
An Unprofessional Work Environment	O'Hare and O'Donohue (1998)
Skewed Sex Ratios	Ohio State University (2008)
Young Women	Williams et al. (1999)
Customers' Attitude towards the Job	Browne (2006)
Characteristics of a Person's Job	Lopez et al. (2009)
Traditional Occupation	Carothers and Crull (1984)

Source: Author's own devolopment based on sources

2.6 Consequences of Sexual Harassment at the Workplace

Since Sexual harassment is perceived differently by the different people, the consequences of sexual harassment are also varied. However, there are some common consequences of sexual harassment at the workplace disregarding the nationality. The International Labour Organization (ILO) has stated the consequences of sexual harassment at the workplace very clearly as follows:

Sexual harassment undermines equality at the workplace by calling into question individual integrity and the well-being of workers, it damages an enterprise by weakening the bases upon which work relationships are built and impairing productivity. In view of the gravity and serious repercussions of the practice, some countries are now adopting legislation prohibiting it and making it subject to civil and/or criminal penalties.

Source: Committee of Experts: Special Survey on the Application of Convention No. 111 on Discrimination in Employment and Occupation (Geneva, ILO, 1996), p. 16.

Numerous studies were conducted regarding the consequences of sexual harassment at the workplace. Different studies identified different consequences as shown in table 5. For example, Lengnick-Hall (1995) stated that sexual harassment decreases productivity and increases cost to the victim. Adams (1988) identified the stress related health problems as the adverse impact of sexual harassment. The outcomes are as follows in Table 5:

Table 5: Consequences of the Sexual Harassment at Workplace

Dekker and Barling (1998)
Darius et al. (2008)
Ironson (1992); Ishak and Ching (2001); Mueller
Gruber (1998); Magley et al. (1999)
Gruber & Smith (1995).
Lengnick-Hall (1995)
Gruber & Smith (1995).
Lengnick-Hall (1995)
Merkin and Shah (2014); Willness et al. (2007)
Quinn (2002)
Willness et al. (2007); Hogler, Frame & Thornton
Willness et al. (2007); Pryor (1995); Fitzgerald et
Adams (1988); Dekker and Barling (1998)
Pryor (1995); Crocker and Kalemba (1999)
Gutek and Koss (1993); Willness et al. (2007)
Cortina and Wasti (2005)

Source: Author's own devolopment based on sources

2.7 Victims' Responses to Sexual Harassment at the Workplace

Since the nature and forms of sexual harassment vary greatly, the victim's responses to the harassment vary accordingly. There is an increasing literature on the victims' responding strategies to sexual harassment (Gruber, 1998; Dougherty, 1999; Pryor, 1995).

One thing is clear that victims' experiences of and reactions to sexual harassment are varied, personal, and complex (Pina & Gannon, 2012). More recent works have attempted to link sexual harassment and the coping literature (Cortina and Wasti, 2005; Knapp et al., 1997; Wasti and Cortina, 2002) as presented in table 6. Although very few victims tolerate sexual harassment, reporting of it and filing grievances or taking legal action remain very low (Charney & Russell, 1994). Based on the analysis of the existing literature, victims' responses to sexual harassment can be classified into four types: formal reports, informal complaints, social support strategies, and attempts to communicate with the harasser (Bingham and Scherer, 1993).

Table 6: Victims' Responses to Sexual Harassment

Supporting Studies	Victims
Dougherty (1999).	Raising awareness of the phenomenon and its unacceptability
Bingham (1991); Knapp et al. (1997)	Formal reports
Bingham and Scherer (1993)	Informal complaints
Livingston (1982)	Seeking social support from friends and co-workers
Bingham and Scherer (1993);	Attempts to communicate with the harasser
ILO (2004)	Empowering women
Knapp et al. (1997)	Two-by-two typology of sexual harassment (focus and mode)
Knapp et al. (1997)	Confrontation/negotiation with perpetrator
Fitzgerald (1990)	Detachment (detaching not only from the harassment but also from any implementation of coping responses)
Avina and O'Donohue (2002)	PTSD
ILO (2004)	Gender sensitive training

Source: Author's own devolopment based on sources

3. Proposed Research Model

Based on the analysis of the literature of the sexual harassment at the workplace, we can propose a research model for further study as in Figure 1. In this model, we highlight that there are some environmental factors that largely determine the antecedents of sexual harassment at the workplace. These both external and internal factors are perceptions, company policies, government's laws, and employees' association. As stated earlier, different people around the world perceive the sexual harassment differently. For example, Stockdale et al. (1995) identified five indicators that largely determine the behavior as sexually harassment. These five

indicators are type of experience, attribution, affect, organizational power, and personal characteristics. Pryor (1995) documented that the variability in perceptions of sexual harassment depends on many factors, such as, gender, situational context, and attractiveness. In addition to the perceptions, company policies, government's laws, and employees' association largely influence the causes of sexual harassment at the workplace. In this model, the antecedents of sexual harassment are classified into four types, such as individual factors, organizational factors, work environment factors and job related factors. (table 4 in sections 2.5 for details) Whatever the cause is; when the victim experiences sexual harassment, it has two types of outcomes. One is work-related consequences and another is individual consequences (Pina and Gannon, 2012). See Table 5 in section 2.6 for details. The victim responds to the sexual harassment in a number of ways (Bingham & Scherer, 1993), which is presented as the last part of this model. A list of the victims' responses and coping strategies of sexual harassment at the workplace is presented in table 6 in section 2.7.

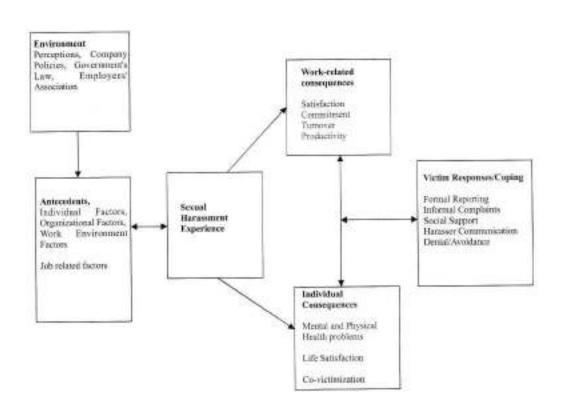


Figure 1: Proposed Research Model for Further Study

Source: Author's own devolopment based on sources

4. Conclusion

The increasing number of studies and the concerned different pressure groups have verified the existence and importance of the study of sexual harassment at the workplace. Undoubtedly, sexual harassment affects the victims negatively and it is a form of sexist discrimination. Although sexual harassment prevails at the workplace in many countries, the definition of the term varies widely. The forms and antecedents of sexual harassment vary across cultures. The negative and severe effects of sexual harassment on the personal as well as organizational level are unquestionable and it is thoroughly supported in the literature. Although governments of the countries are adopting legislations to combat the sexual harassment, the degree and adequacy are questionable. The government, employers, and employees should work together to combat the sexual harassment behavior at the workplace.

5. Research Gap and Policy Implications

There has been extensive and increasing research on the sexual harassment at the workplace, especially the negative consequences of sexual harassment on its victims (Willness et al., 2007). The research on this issue is at the introduction stage. Maximum studies involve with causes and consequences of sexual harassment with simple checklist methodologies. Still we do not have scientific model and extensive empirical studies. Again the maximum research is confined to national level. There are few cross-cultural studies available. Based on the extensive review of the literature, a number of potential research areas have been identified on sexual harassment at the workplace like developing models, empirical research in different sectors of the economy, roles of each antecedent of sexual harassment, cross-cultural studies, impact of sexual harassment on firm's productivity and profitability, review of the existing local and international laws, roles of international humanitarian organizations, effectiveness of coping strategies and so on.

Undoubtedly, sexual harassment at the workplace is one of the contemporary debating terms in the business world. The academics, independent researchers, and professionals are interestingly focusing on this issue. Therefore, a comprehensive literature review will be helpful in this regard.

This study aims at critically reviewing the existing literature and then proposing a research model for future study. The findings in this study have implications for employers, employees, government agencies, researchers, legal advisors, and policy makers.

This paper is critically important for a number of reasons. First, this article will contribute to the existing field of research with a comprehensive literature of the subject. There are numerous studies available on the sexual harassment, but they are in isolated forms with different focuses. The need for a comprehensive review is unquestionable. Interested researchers can take the inputs from this study and will explore future studies on sexual harassment. Second, it will serve as a theoretical manual for the interested readers and the students of respective field. Third, it provides a research model for further research on sexual harassment. Fourth, it will serve a set of guidelines for the employers and employees to combat sexual harassment. Finally, it will help the national and international policy makers to adopt acceptable anti-sexual harassment policy.

References

- Avina, C., & O'Donohue, W. (2002). Sexual harassment and PTSD: Is sexual harassment diagnosable trauma? Journal of Traumatic Stress, 15(1), 69-75.
- Begany, J. J., & Milburn, M. A. (2002). Psychological predictors of sexual harassment: Authoritarianism, hostile sexism and rape myths. Psychology of Men & Masculinity, 3 (2), 119-126.
- Bingham, S. G. (1991). Communication strategies for managing sexual harassment in organizations: Understanding message options and their effects. Journal of Applied Communication Research, 19(1-2), 88-115.
- Bingham, S. G., & Scherer, L. L. (1993). Factors associated with responses to sexual harassment and satisfaction with outcome. Sex Roles, 29(3-4), 239-269.
- Blumenthal, J. A. (1998). The Reasonable Woman Standard: A meta-analytic review gender differences in perceptions of sexual harassment. Law and Human Behavior, 22(1), 33-57. Browne, K. R. (2006). Sex, power, and dominance: The evolutionary psychology of sexual harassment. Managerial and Decision Economics, 27(2-3), 145-158.
- Carothers, S. C., & Crull, P. (1984). Contrasting sexual harassment in female- and maledominated occupations. In K. B. Sacks & D. Remy (Eds.), My troubles are going to have trouble with me: Everyday trials and triumphs of women workers (219-227). New Brunswick, NJ: Rutgers Univ. Press.
- Charney, D.A., & Russell, R.C. (1994). An overview of sexual harassment. American Journal of Psychiatry, 151(1), 10-17.
- Cleveland, J. N., & Kerst, M. E. (1993). Sexual harassment and perceptions of power: an under-articulated relationship. Journal of Vocational Behavior, 42, 49-67.
- Committee of Experts: Special survey on the application of Convention No. 111 on Discrimination in Employment and Occupation (Geneva, ILO, 1996), 16.
- Cortina, L. M., & Wasti, S. A. (2005). Profiles in coping: responses to sexual harassment across persons, organizations and cultures. Journal of Applied Psychology, 90(1), 182-192.
- Crocker, D., & Kalemba, V. (1999). The incidence and impact of women's experiences of sexual harassment in Canadian workplaces. The Canadian Review of Sociology and Anthropology, 36, 541-558.
- Darius, K-S. C., Chun, B. L., Suk, Y. C., & Shu, F. C. (2008). Examining The Job-related, Psychological, and Physical Outcomes of Workplace Sexual Harassment: A Metaanalytic Review. Psychology of Women Quarterly, 32 (4), 362-376.
- Dekker L. & Barling J. (1998). Personal and organizational predictors of workplace sexual harassment of women by men. Journal of Occupational Health Psychology, 3, 7-18.
- Dougherty, D. S. (1999). Dialogue through standpoint: Understanding women's and men's standpoints of sexual harassment. Management Communication Quarterly, 12(3), 436-468.
- DiTomaso, N. (1989). Sexuality in the workplace: Discrimination and harassment. In J. Hearn,
- D. L., Sheppard, P. Tancred-Sheriff, & G. Burell (Eds.), The sexuality of organizations (pp. 71-90). Newbury Park, CA: Sage.
- EEOC Guidelines on Discrimination Because of Sex, 29 C.F.R.1604.11 (1991).
- Ellis, B.J., & Symons, D. (1990). Sex differences in sexual fantasy: An evolutionary psychological approach. The Journal of Sex Research, 27, 527-555.

- Sexual Harassment at the Workplace: A Comprehensive Review of the Literature and a Proposed Research Model for Further Study
- Fitzgerald, L. F. (1990). Assessing strategies for coping and sexual harassment: A theoretical/empirical approach. Paper presented at the midwinter Association of Women in Psychology Conference, Tempe, AZ.
- Fitzgerald, L. F., Drasgow, F., Hulin, C. L., & Gelfand, M. J. (1997). Antecedents and consequences of sexual harassment in organizations: A test of an integrated model. Journal of Applied Psychology, 82(4), 578-589.
- Fitzgerald, L. F., Shullman, S., Bailey, N., Richards, M., Swecker, J., Gold, A., Ormerod, A. J., & Weitzman, L. (1988). The incidence and dimensions of sexual harassment in academia and the workplace. Journal of Vocational Behavior, 32, 152-175.
- Gelfand, M. J., Fitzgerald, L. F., & Drasgow, F. (1995). The structure of sexual harassment: A confirmatory analysis across cultures and settings. Journal of Vocational Behavior, 47(2), 164-177.
- Glomb, T. M., Munson, L. J., Hulin, C. L., Bergman, M. E., & Drasgow, F. (1999). Structural equation models of sexual harassment: Longitudinal explorations and cross-sectional generalisations. Journal of Applied Psychology, 84, 14-28.
- Gruber, J. E. (1998). The impact of male work environments and organizational policies on women's experiences of sexual harassment. Gender & Society, 12, 301-20.
- Gruber, J. E., & Bjorn, L. (1982). Blue-collar blues: The sexual harassment of women autoworkers. Work and Occupations, 9, 271-298.
- Gruber, J. E., & Smith, M. D. (1995). Women's responses to sexual harassment: A multivariate analysis. Basic and Applied Social Psychology, 17(4), 543-562.
- Gruber, J. E., Smith, M., & Kauppinen-Toropainen, K. (1996). Sexual harassment types and severity: Linking research and policy. In M. S. Stockdale (Ed.), Sexual harassment in the workplace: Perspectives, frontiers, and response Strategies (pp. 151-173). Thousand Oaks, CA: Sage.
- Gutek, B., & Cohen, A. (1985). Sex ratios, sex role spillover, and sex at work: A comparison of women's and men's experiences. Human Relations, 40, 97-115.
- Gutek, B. A., & Koss, M. P. (1993). Changed women and changed organisations: Consequences of and coping with sexual harassment. Journal of Vocational Behavior, 42, 28-48.
- Gutek, B. A., & Morasch, B. (1982). Sex ratios, sex-role spillover and sexual harassment of women at work. Journal of Social Issues, 38(4), 55-74.
- Hogler, R. L., Frame, J. H., & Thornton, G. (2002). Workplace sexual harassment law: An empirical analysis of organizational justice and legal policy. Journal of Managerial Issues, 14, 234-251.
- International Labour Office in Nepal (Eds.). (2004). Sexual harassment at the workplace in Nepal. Kathmandu: International Labour Organization.
- Ironson, G. H. (1992). Job stress and health. In C. J. Cranny, P. Smith, E. F. Stone (Eds.), Job satisfaction: How people feel about their jobs and how it affects their performance (pp. 219-240). NY: Lexington Books.
- Ishak, M. S., & Ching, L. L. (2001). Gangguan seksual di tempat kerja dan hubungannya dengan tekanan kerja dan kepuasan kerja. Jurnal Teknologi, 34(E), 51-64.
- Knapp, D. E., Faley, R. H., Ekeberg, S. E., & Dubois, C. L. Z. (1997). Determinants of target responses to sexual harassment: A conceptual framework. Academy of Management Review, 22, 687-729
- Lawlor, J. (1995). Stepping over the line. Sales & Marketing Management, 147(10), 90-97.

- Livingston, J. (1982). Responses to sexual harassment on the job: legal, organizational, and individual actions. Journal of Social Issues, 38, 5-22.
- Lopez, S. H., Randy, H., & Vincent J. R. (2009). Discrimination, Women, and Work: Dimensions and Variations by Race and Class. Sociological Quarterly, 50(2), 336-359.
- MacKinnon, C. A. (1983). Feminism, Marxism, method, and the state: Toward feminist jurisprudence. Journal of Women in Culture and Society, 8, 635-658.
- Merkin, R. S., & Shah, M. K. (2014). The impact of sexual harassment on job satisfaction, turnover intentions, and absenteeism: findings from Pakistan compared to the United States. Springer Plus, 3(1), 215.
- Magley, V. J., Waldo, C. R., Drasgow, F., & Fitzgerald, L. F. (1999). Impact of sexual harassment on military personnel: Is it the same for men and women? Military Psychology, 11, 283-302.
- Mueller, C. W., De Coster, S., & Estes, S. B. (2001). Sexual harassment in the workplace: Unanticipated consequences of modern social control in organizations. Work and Occupations, 28(4), 411-446.
- O'Connell, C. E., & Korabik, K. (2000). Sexual harassment: The relationship of personal vulnerability, work context, perpetrator status, and type of harassment to outcomes. Journal of Vocational Behavior, 56, 299-329.
- O'Hare, E. A., & O'Donohue, W. (1998). Sexual harassment: Identifying risk factors. Archives of Sexual Behavior, 27, 561-562.
- Ohio State University. (2008). Sisters and Scholars: Women at the Ohio State University, 1912-1926.
- Ottensmeyer, E.J., & McCarthy, G.D.. (1996). Ethics in the Workplace. New York: McGraw-Hill.
- Paludi, M. A., Barickman, B.R., & Barickman, R. (1991). Academic and Workplace Sexual Harassment. New York: SUNY Press.
- Pina, A., & Gannon, T. A. (2012). An Overview of the Literature on Antecedents, Perceptions, and Behavioural Consequences of Sexual Harassment. Journal of Sexual Aggression, 18 (2), 209-232.
- Pryor, J. B. (1985). The lay person's understanding of sexual harassment. Sex Roles, 13, 273-278.
- Pryor, J. B. (1995). The phenomenology of sexual harassment: Why does sexual behavior bother people in the workplace? Consulting Psychology Journal: Practice and Research, 47, 160-168.
- Pryor, J. B., & McKinney, K. (1995). Research on sexual harassment: Lingering issues and future directions. Basic and Applied Social Psychology, 17, 605-611.
- Pryor, J. B., LaVite, C., & Stoller, L. (1993). A social psychological analysis of sexual harassment: The person/situation interaction. Journal of Vocational Behavior, 42, 68-81.
- Quinn, B. A. (2002). Sexual harassment and masculinity. The power and meaning of "girl watching". Gender & Society, 16(3), 386-402.
- Ragins, B. R., & Scandura, T. A. (1995). Antecedents and work-related correlates of reported sexual harassment: An empirical investigation of competing hypotheses. Sex Roles, 32, 429-455.
- Riger, S. (1991). Gender dilemmas in sexual harassment policies and procedures. American Psychologist, 46, 496-505.

- Sexual Harassment at the Workplace: A Comprehensive Review of the Literature and a Proposed Research Model for Further Study
- Slavin, R. E. (1986). Using Student Team Learning. (3rd ed.). Baltimore: John Hopkins University, Center for Research on Elementary and Middle Schools.
- Stockdale, M. S. (Ed.) (1996). Sexual Harassment in the Workplace. Thousand Oakes, California: Sage Publications, Inc.
- Stockdale, M. S., Vaux, A., & Cashin, J. (1995). Acknowledging sexual harassment: A test of alternative models. Basic and Applied Social Psychology, 17(4), 469-496.
- Tangri, S. S., Burt, M. R., & Johnson, L. B. (1982). Sexual harassment at work: Three explanatory models. Journal of Social Issues, 38, 33-54.
- Terpstra D. E. (1986). Organizational costs of sexual harassment. Journal of Employment Counseling, 23, 112-119.
- Tranfield, D., Denyer, D., Smart, P. (2003). Towards a methodology for developing evidence informed management knowledge by means of systematic review. British Journal of Management, 14(3), 207-222.
- Wasti, S. A., & Cortina, L. M. (2002). Coping in context: sociocultural determinants of responses to sexual harassment. Journal of Personality and Social Psychology, 83(2), 934-405.
- Williams, J. H., Fitzgerald, L. F., & Drasgow, F. (1999). The effects of organizational practices on sexual harassment and individual outcomes in the military. Military Psychology, 11, 303-328.
- Willness, C. R., Steel, P., & Lee, K. (2007). A meta-analysis of the antecedents and consequences of workplace sexual harassment. Personnel Psychology, 60, 127-162.
- World Bank: International Finance Corporation. (2013). Women, Business, and the Law 2014.
 : Removing Restrictions to Enhance Gender Equality. London: Bloomsbury.
- Yusuf, N. (2010): Experience of Sexual Harassment at Work by Female Employees in a Nigerian Work Environment. Journal of Human Ecology, 30(3), 179-186.



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Corporate Social Responsibility Practices in Bangladesh: A Study on Commercial Banks

Abstract

Banks conduct business in the society. Hence, they have some responsibilities towards the welfare of the society. Corporate Social Responsibility (CSR) as an integral part of the long term sustainable strategy has now emerged as a growing practice of the present banking sector. This study examines the relationship between responsibilities towards the society and contribution of the banks as a corporate body. The descriptive research has been conducted with secondary data which were collected from the annual reports of the selected commercial banks for the year 2012 to 2013, reviewing different relevant articles, books, periodicals, journals etc. and relevant websites. The findings of the study reveal that CSR activities of the banks are concentrated on limited areas of the country especially on education, health, humanitarian sector, disaster, environment, sports and culture. Moreover, the contribution of the commercial banks to CSR activities is very inconsequential in proportion to their profit amount.

Key Words: Annual report, corporate social responsibility (CSR), commercial bank, profit.

Introduction

In the contemporary phenomena, globally competitive companies must portray themselves as socially responsible companies. Poor governance, human rights violation, gender discrimination and environmental pollution are considered as common phenomena in Bangladeshi companies. (Hossain, et al. 2005). CSR may play a vital role in improving the overall image of corporate sector. Researchers said that CSR practices are found in the government, non-government and business sectors. Banking sector of Bangladesh consists of private commercial banks, public commercial banks and specialized banks. Now Commercial banks are dominating the financial sector. As such, the topic has been selected as "Corporate Social Responsibility Practices in Bangladesh: A Study on Commercial Banks" for intensive study. At present commercial banks are more competitive. To sustain in the competitive market they have taken different comparative strategies; CSR is one of the main components. For that reason, banks contribute to the society as CSR which is the strategic investment for their business. This is an investment but not the value adds with the goods just like quality management.

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