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E-mail: bhartipublications@gmail. com

info@bharatipublications. com

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Message from the Principal



It gives me immense pleasure to share the information that the Post Graduate and Research Department of Commerce of our college has taken the initiative to publish an Edited Book Series Anveshan (अन्वेषण) from 2021 to encourage the students of Post Graduate & Research Department of Commerce to pursue research.

As a matter of further advancement in commerce education, this initiative unique in the sense, will inspire our young post graduate students to undertake meaningful research. It will be an add-on attempt to the enriched catalogue of college publications and academic literature.

I would like to congratulate the students whose dissertations are published in this edited volume as a research paper and simultaneously expect that all the students will consider research more seriously. In addition to that, I also like to congratulate the Editors and the entire Editorial Board members for their wonderful job and I strongly believe that this good work will be carried forward in the years to come.

Nihil Ultra

Rev. Dr. Dominic Savio, S. J.

Principal

St. Xavier's College (Autonomous), Kolkata

Message from the Vice Principal (Commerce-Evening)



It is a matter of pride that Post Graduate and Research Department of Commerce of our college has taken a noble initiative to launch an Edited Book Series Anveshan (अन्वेषण) from 2021 to encourage the students of Post Graduate & Research Department of Commerce to pursue meaningful research. As we know, research starts with questions for which a researcher wishes to seek answers. Through these initiatives, we try to inculcate a culture of research in the mind of younger generations. It will enrich the college publications and academic literature of our oldest post graduate department.

I would like to congratulate the students whose dissertations are published in this edited volume. Besides that, I also like to congratulate the Editors and the entire editorial advisory team for their continuous effort in this regard. I strongly believe that this will bring a new culture of research centric environment in line with New Education Policy 2020.

Nihil Ultra

Rev. Fr. Peter Arockiam S.J.

Vice Principal, Commerce (Evening)

St. Xavier's College (Autonomous), Kolkata,

West Bengal, India.

Editorial

St. Xavier's College (Autonomous), Kolkata is well known for its academic excellence and committed services towards dissemination of knowledge in the academic world. The College appreciates the role of research in education and aims in developing an inclination towards research among the faculty members and the students. In this pursuit, the Post Graduate and Research Department of Commerce has taken an initiative to publish an Edited Book Series titled Anveshan (अन्वेषण) from 2021 to encourage the students of Post Graduate and Research Department of Commerce to pursue meaningful research under the able guidance of the faculty members of the department.

The research articles for this volume are selected on the basis of the final score obtained by the respective candidates in their Dissertation Work at the end semester examination. The articles cover the contemporary issues in the field of accounting, finance as well as marketing management.

We sincerely thank to Rev. Dr. Dominic Savio, S.J., Principal and Rev. Fr. A. Peter Arockiam, S.J., Vice-Principal, Department of Commerce (Evening) of our college for their constant words of inspiration and support.

We congratulate all the students whose research papers are published in this edited volume and express our sincere thanks to their supervisors and referees.

We would also like to thank Almighty God and pray for His blessings without which this achievement would not have been possible.

**Sanjib Kumar Basu
Sumanta Dutta**

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Section 1

Accounting & Finance

An Empirical Study of Dividend Policy of Select Indian Firms with reference to the Energy Sector

Dikshita Baruah¹

Post Graduate & Research Department of Commerce (M.Com),
St. Xavier's College (Autonomous), Kolkata

ABSTRACT

The current study 'Empirical Study of Dividend Policy of Select Indian Firms with reference to the Energy sector' makes an attempt to understand the relative importance of various factors which affect the dividend policy of a firm. Discriminant analysis has been used to categorize firms into payers and non-payers and the relative importance of different factors have been analysed for the study period from 2005-06 to 2021-22. The results suggest that size has the highest discriminating power compared to other factors for majority of the years over the study period. Other factors in order of their relative importance include size, investment opportunities and leverage. The mathematical model of 2020-21 has been proposed as the standard model for categorical classification of firms into payers and non-payers.

Keywords: discriminant analysis, dividend policy, factors, India, relative importance.

INTRODUCTION

Financial management forms the backbone for the sustained existence of corporate organisations. In the current competitive era, all firms rely on an appropriate blend of financing, investment and dividend decisions to ensure success. While financing decisions involve acquiring funds from different sources at low costs, investment decisions entail investing the same in suitable ventures which would maximize the returns to the company. Dividend decisions, on the other hand are associated with the proper distribution of the residual earnings of the company to the shareholders. All these three decisions are interconnected and inter-dependable. Out of these three, dividend decision is of utmost

1. This dissertation done by the scholar under the guidance of Prof. Ankita Samanta.

importance to the company and its shareholders. Dividends are a measure of the firm's performance. The management might try to give out its excess profits as dividends to raise the share price and maintain the standing of the company. Contrarily, the higher the dividends paid by the company, lesser will be the funds available for investment which will ultimately push the company to look for other alternative sources of finance. Hence it is essential to strike a balance between these two so as to protect the interests of all the stakeholders involved.

Again, from a broader point of view, dividend policies of all firms in the economy taken together aid in ascertaining saving and investment rates in general and direction of flow of funds. Dividend policies are also associated with socio-economic aspects. If shareholders are restricted to a handful of income groups, these changes in the income earned from dividend will have an impact on the entire distribution of income along with shares allotted to factors of production. Unreasonable, that is too high or too low dividend payouts in such situations will lead to improper apportionment of resources in the economy.

The key of a dividend policy for any firm lies in whether to dispense its profits as dividend or to retain them for the purpose of reinvestment and growth. No optimum dividend policy has been developed till date which can be perfectly applied in all situations. Although many researchers have tried to address dividend behaviour, there has been contrasting findings with respect to factors which influence dividend policy. Thus, there still exists the absence of a definite explanation to this dividend puzzle as pointed out by Black in 1976. Against such a background, this study aims to get an idea of the relative importance of various firm characteristics which affect dividend behaviour of a firm.

The present study will be beneficial for various stakeholders since dividend policy is interpreted differently by different parties associated with the company. Investors not only view dividends as regular sources of income, but also as a means for assessing the value of the company. Managers can decide on the earnings to be ploughed back in other investments depending on the amount disbursed as dividends. Lenders also look forward to the dividends declared by the company as they might face difficulties in redeeming their claims if dividends are paid in higher amounts.

REVIEW OF LITERATURE

Naceur *et al.* (2006) determined in their research paper titled '*On the Determinants and Dynamics of Dividend Policy*' that profitability is positively related with dividends while size and stock market liquidity negatively influence dividends. Tunisian firms depend on current earnings for deciding their dividends.

Denis and Osobov (2008) carried out a study titled '*Why Do Firms Pay Dividends? International Evidence on the Determinants of Dividend Policy*' to find out the various firm characteristics impacting payment of dividend in various developed economies, including United States, United Kingdom, France, etc. They inferred that size and profitability positively affect the tendency to declare and pay dividends.

Al-Kuwari (2010) put forward several firm-characteristics shaping dividend policy of Qatar listed non-financial firms in a study titled '*To Pay or Not to Pay: Using Emerging Panel Data to Identify Factors Influencing Corporate Dividend Payout Decisions*'. The findings indicate that payers are associated with higher government ownership, profitability and size on one hand and lower growth opportunities on the other.

Barros *et al.* (2020) in a study titled '*What Firm's Characteristics Drive the Dividend Policy? A Mixed-Method Study on the Euronext Stock Exchange*' found that greater the proportion of small individual ownership, higher the amount of dividend paid, thus supporting the clientele theory of dividends. Larger firms tend to follow a more stable payout ratio compared to smaller firms.

In a study titled '*Do Firm Characteristics of Concentrated Ownership Firms Affect Dividend Payout Beyond Traditional Motivations?*', Jawade (2021) asserted that in companies with higher growth potential and earnings volatility, dividend cuts are not uncommon. A firm's earnings have the greatest impact on dividends, while excessive leverage restricts dividend payments. There was no conclusive evidence for signaling, agency cost, and life cycle theories in respect of firms with concentrated ownership.

RESEARCH GAP

The following reasons provide viable research gaps to conduct the current study:

- Going through previous literature, it has been observed that studies have been carried out on the determinants of dividend policy in the international context. There are however, fewer of such studies on Indian firms.
- There has hardly been any research done which has focused on the relative importance of different factors affecting the dividend policy of a firm.
- Although dividend policies of different sectors altogether have been studied earlier, there is hardly any study which has specifically focused on the energy sector in India.
- Previous studies have been based mostly on older study periods, and hence there is a paucity of studies that have accounted for recent datasets.

RESEARCH QUESTIONS

The present study aims to answer the following research questions:

- i) What are some factors which influence the dividend policy of a firm?
- ii) What is the relative importance of varied factors which affect the dividend policy of a firm?

RESEARCH OBJECTIVES

The objectives of the current study are:

- i) To provide an overview of dividend policy.
- ii) To investigate the relative importance of the factors affecting dividend policies of Indian firms belonging to the energy sector.

RESEARCH METHODOLOGY

Population and Sample of the study

The data for this study comprises of listed Indian firms belonging to the Energy sector which have been extracted from ProwessIQ database maintained by the Centre for Monitoring Indian Economy (CMIE) over the period of 2005-06 to 2021-22. A total of 27 firms have been considered for which data have been available for the entire study period. Firms with missing data over the study period have been excluded for the purpose of analysis.

Period of the study

The present study has been conducted with the help of secondary data extracted from ProwessIQ database. The data relates to a period of seventeen years from starting from 2005-06 to 2021-22. The seventeen years of data is considered to be sufficient to deduce conclusions.

Variables and their measurement

Reviewing previous literature, it has been observed that various factors have been identified which affect the dividend policy of a firm. In accordance with prior literature, the determinants incorporated in the present study include size, liquidity, profitability, leverage, growth opportunities and firm risk. The measures for the determinants are given below:

1. **Size of Firm:** Size is measured as the natural log of market capitalisation. Al-Kuwari (2010), Yarram and Dollery (2014), Labhane (2017) used a similar measure of Size in their study.
2. **Liquidity:** Liquidity is taken as a measure of ratio of Current Assets to Current Liabilities, given by the Current ratio. Such a measure was used by Wajhudi (2018) and Barros et al. (2019).
3. **Profitability:** The current study uses profitability as the ratio of Earnings before Interest and Tax (EBIT) to Total Equity. Labhane (2017) employed a similar measure in their study.
4. **Leverage:** Leverage is measured as a ratio of Total Debt to Total Equity, given by the Debt-to-Equity ratio. Such a measure was used by Arko et al. (2014), Labhane (2017), Barros et al. (2019), and Pahi and Yadav (2021).
5. **Investment Opportunities:** In the present study, growth opportunities are measured as the percentage change in total assets of the firm. Pahi and Yadav (2021) used such a measure of growth opportunities in their study.
6. **Firm risk:** Firm risk is measured as the ratio of Market Price of share to Earnings per share, given by the P/E ratio. Pahi and Yadav (2021) made use of a similar measure in their study.

Statistical tools and techniques

In order to achieve the objectives of the study, the present study makes use of discriminant analysis. Discriminant analysis has been employed to predict the

discriminating power and relative importance of various factors included in the study which influence the dividend policy. The data has been analysed using Statistical Package for Social Sciences (SPSS) version 26.

ANALYSIS AND INTERPRETATION

The current study makes use of discriminant analysis to study the relative importance of different factors over the study period. Discriminant analysis (DA) is a multivariate technique for separating two or more groups of observations based on underlying variables measured on each sample unit and determining the contribution of each variable to group separation. Linear combinations of the selected variables are estimated for the analysis. The results lead to a mathematical model that will help in classification of predicted groups. The resultant model will help to examine the relationship between the selected predictors and the observations. Additionally, the contribution of each predictor can also be assessed using the model. The discriminant equation for this study is estimated as follows:

$$Z = a + bX_1 + cX_2 + dX_3 + eX_4 + fX_5 + gX_6$$

Where,

Dependent variable: $Z=1$ for payers and 2 for non-payers

Independent variables:

X_1 = Investment Opportunities

X_2 = Profitability

X_3 = Liquidity

X_4 = Leverage

X_5 = Risk

X_6 = Size of firm.

The relative importance of different variables affecting dividend policy have been studied for the past seventeen years from 2005-06 to 2021-22 using discriminant analysis.

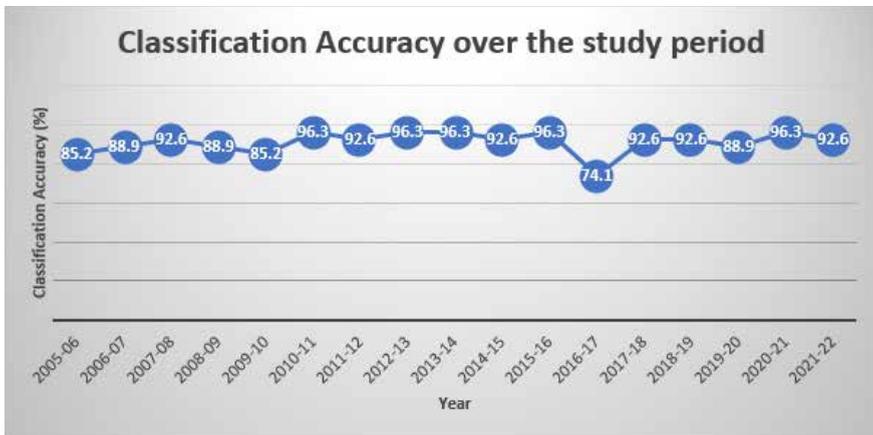
The compiled classification accuracy of the seventeen years' discriminant analysis is shown below in the form of a table and a line chart:

Table 1: Summary of classification accuracy over the study period

Year	Classification Accuracy	Wilks' Lambda	p-value
2021-22	92.6	0.328	0.000
2020-21	96.3	0.314	0.000
2019-20	88.9	0.579	0.058
2018-19	92.6	0.615	0.098

Year	Classification Accuracy	Wilks' Lambda	p-value
2017-18	92.6	0.570	0.054
2016-17	74.1	0.654	0.155
2015-16	96.3	0.342	0.001
2014-15	92.6	0.409	0.003
2013-14	96.3	0.387	0.002
2012-13	96.3	0.332	0.000
2011-12	92.6	0.550	0.041
2010-11	96.3	0.358	0.001
2009-10	85.2	0.592	0.073
2008-09	88.9	0.638	0.130
2007-08	92.6	0.405	0.003
2006-07	88.9	0.552	0.042
2005-06	85.2	0.650	0.148

Source: Self-compilation using Word 2019



Source: Self-compilation using Word 2019

Fig. 1: Graphical representation of classification accuracy over the study period

Out of the seventeen years' study period considered for analysis, the Wilks' Lambda and significance values for the years 2016-17, 2008-09 and 2005-06 have not been statistically significant.

The classification accuracy for the financial year 2020-21 stands at 96.3% which is the highest in the entire study period. Since it has the highest classification

accuracy and is highly statistically significant, the mathematical model for the year 2020-21 is assumed to be the standard model for proposed classification of the three years viz. 2016-17, 2008-09 and 2005-06 where the classification has not been accurate and statistically significant. Using the unstandardized canonical discriminant functions from table 1.1 for the year 2020-21, the Z-critical value is evaluated using the following formula:

$$Z_{\text{crit}} = (N_a \times Z_b + N_b \times Z_a) / (N_a + N_b)$$

Table 1.1: Unstandardized canonical discriminant functions evaluated using group means for the year 2020-21

Dividend	Function 1
Payer	0.923
Non-Payer	-2.193

Source: Analysed using SPSS version 26 and self-compiled using Word 2019

The Z_{crit} value is estimated at -1.26974.

Using the discriminant equation of the year 2020-21, the Z-values for the all the sample firms in the financial years 2016-17, 2008-09 and 2006-07 have been estimated. The firms that have Z-values greater than Z_{crit} value are classified as payers and non-payers otherwise. The discriminant analysis is re-run to evaluate the efficacy of the standard mathematical model. The results so obtained for all the three financial years indicate that the discrimination is statistically significant at 5% level of significance and have 100% accuracy implying that all sample firms have been correctly classified. Thus, this suggests that the standard mathematical model is effective for the purpose of proposed classification.

The highest discriminating power predictor over the seventeen years have been presented in the following table:

Table 1.2: Table showing highest discriminating power of variables over the study period

Year	Highest Discriminating Power Predictor	Relative Importance (in Absolute Values)
2021-22	Size	.606
2020-21	Size	.504
2019-20	Risk	.639
2018-19	Risk	.867
2017-18	Risk	.705
2016-17	Risk	.713
2015-16	Size	.374

Year	Highest Discriminating Power Predictor	Relative Importance (in Absolute Values)
2014-15	Investment Opportunities	.511
2013-14	Leverage	.482
2012-13	Risk	.581
2011-12	Risk	.913
2010-11	Risk	.748
2009-10	Risk	.893
2008-09	Risk	-.602
2007-08	Investment Opportunities	.481
2006-07	Size	.568
2005-06	Risk	.516

Source: Self-compilation using Word 2019

As evident from the table, it is observed from across the study period that risk has been the highest discriminating power predictor for ten years out of the seventeen years period considered for analysis. It is hence deduced that firm risk has the highest relative importance in influencing dividend payments of listed energy firms. The other factors in order of relative importance are size, investment opportunities and leverage.

The standard mathematical model put forward by the study for classification of dividend payers and non-payers is proposed below:

$$Z = -6.257 + 0.042X_1 + 5.049X_2 + 0.128X_3 - 1.029X_4 - 0.011X_5 + 0.573X_6$$

Where,

Dependent variable: Z=1 for payers and 2 for non-payers

Independent variables:

X1 = Investment Opportunities

X2 = Profitability

X3 = Liquidity

X4 = Leverage

X5 = Risk

X6 = Size of firm.

The classification accuracy and significance values obtained after employing the standard mathematical model reveals that the standard is effective for proposed classification of payers and non-payers.

CONCLUSION

The current study 'An Empirical Study of Dividend Policy of Select Indian Firms with reference to the Energy Sector' makes an attempt to identify the relative importance of different factors which impact the payment of dividends considering listed energy firms during the period of 2005-06 to 2021-22. To achieve this, discriminant analysis has been used to test the classification accuracy of firms categorized into payers and non-payers. The findings indicate that over the entire study period, firm risk has the highest impact on dividend policy for most of the years followed by size, investment opportunities and leverage. The mathematical model for the year 2020-21 is proposed to be effective for categorical classification of firms into payers and non-payers on the basis of underlying variables which include risk, size, investment opportunities, leverage, profitability and liquidity.

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The Role of Select State Government Schemes in Financial Inclusion among Low-income Residents of Kolkata

Anushree Roy¹

Post Graduate & Research Department of Commerce (M.Com),
St. Xavier's College (Autonomous), Kolkata

ABSTRACT

Financial inclusion in the simplest terms means providing the financial services available, to all sections of the population without any biasedness. Inclusive financial growth is significant for the overall economic and social development of a country, especially the economically deprived sections. The government of India has been making constant efforts to enhance the financial inclusion rate in the country by initiating and implementing various policies and in the process, the West Bengal government has also launched a few state-specific schemes targeting financial inclusion. Though much research has been done at the national level, studies need to be conducted to analyze the extent of financial inclusion at the micro level. This article is an attempt to analyze the contribution of such state government schemes in increasing the financial inclusion rate and satisfaction of the people using these schemes. For the study, five West Bengal government schemes have been selected which are Kanyashree, Lakshmir Bhandar, Swasthya Sathi, Karmasathi Prakalpa, and Student Credit Card Scheme. To achieve the objectives of the study, primary data has been collected using a structured questionnaire and cross-tabulation of data has been done using Excel. The findings of the study suggest that although these schemes have been successful in reaching out to more people, they require more efficiency. In the context of financial empowerment of women, the schemes have reduced gender disparity. Low-income groups of people are still more inclined towards the traditional banking system. Imparting financial knowledge and more employment generation will help in faster inclusive financial growth in West Bengal.

Keywords: Financial inclusion, Government Schemes, Kolkata, Low-income Group, West Bengal.

1. This dissertation done by the scholar under the guidance of Prof. Ankita Samanta.

INTRODUCTION

Countries around the world are striving to accelerate economic growth and development. Authorities and Governing bodies of every country are making attempts to strengthen their financial standing by adopting various measures and implementing different initiatives. Various studies have acknowledged the fact that for overall economic development it is important to make each and every citizen of a country financially stable and sound.

The term financial inclusion means extending various finance-oriented services like banking services, insurance, pension, and other related facilities to every citizen of the country without any biasedness, by establishing an easily accessible, economical, and hassle-free financial infrastructure.

In India, banks have been the linkage between people and finances for years. But still there remains a significant number of people who are unbanked and therefore are unable to access basic banking facilities. It has also been noted that especially the economically weaker sections of society remain deprived of basic financial facilities such as banking services which could be due to lack of awareness, literacy, and knowledge.

To overcome the barriers to financial inclusion, the constant efforts of the government are a must. Government is the administrating and regulating body of a country and in democratic countries like India having a huge population, the government, and its proper policy frame working skills can help reach out to the maximum number of people. With the central government putting in its effort to enhance financial inclusion, the state government has also launched various such schemes. The West Bengal government, in this context, has devised various policies like Ananda Dhara, Lakshmi Bhandar, Kanyashree, and many more. This article focuses on 5 such schemes which are:

- **Kanyashree**, this scheme aims at providing financial assistance in the form of an annual scholarship of ₹ 500 and a one-time grant of ₹25,000 to unmarried girls aged between 13 years to 18 years.
- **Lakshmir Bhandar**, this scheme provides ₹1000/ ₹500 to financially support the household women which is directly deposited to their bank accounts.
- **Swasthya Sathi** is a medical insurance, covering healthcare facilities covering upto ₹.5, 00,000 per annum per family, the entire premium of which is borne by the government.
- **Karmasathi Prakalpa**, under this scheme the West Bengal government has declared to provide loans at a subsidized interest rate to 1,00,000 prospective entrepreneurs every year.
- **Student Credit Card Scheme**, this scheme aims at providing a loan to the students at a subsidized interest rate and without any collateral.

West Bengal with a population of around 9.12 crores as updated by the West Bengal government in May 2022, is the 4th most populated state of India. Thus,

the contribution of West Bengal towards financial inclusion is significant for the overall economic growth of the nation. In this context, the study aims to analyse the contribution of state government schemes of West Bengal to financial inclusion.

LITERATURE REVIEW

Chattopadhyay (2011) surveyed 3 rural districts of West Bengal and found that only 61.7% of households have bank accounts. Factors such as low-income levels and the inaccessibility of banks are desisting people from opening bank accounts. **Mukherjee & Chakraborty (2012)** emphasized on creating a more approachable and friendly banking system to include more deprived and impoverished population of Jharkhand in the financial infrastructure. **Cnaan et al. (2012)** noted that apart from the lack of security to offer and the dearth of savings, the non-friendly nature of banks and the lack of information regarding banking services also act as barriers to inclusive financial growth. **Majumdar & Gupta (2013)** observed that most of the people belonging to the minority section, backward classes, daily wage earners, and agricultural laborers remain excluded from the financial structure. **Krishnakumar & Vijaykumar (2013)** found that there exists a significant association between demographic factors and financial inclusion and that more females and economically deprived sections need to be included in the financial infrastructure. **Ambarkhane et al. (2016)** developed a Comprehensive Financial Inclusion Index (CFII) in which many states including West Bengal were classified in the lower category indicating the need for improvement in the financial inclusion of these states. **Kumar (2018)** observed that PMJDY has been a successful campaign in increasing the number of bank account holders but most of these bank accounts remain inactive. The author highlighted that the reason for inactive bank accounts is the lack of job opportunities and insufficient savings in the country, while **Gupta (2019)** reported that the PMJDY scheme did not prove to be a very successful campaign in West Bengal. It was found that the people were not aware of all the benefits that they would receive under the scheme, especially the rural population lacks proper knowledge of the scheme, account holders rarely visited the banks and also the banks did not give much effort. **Vaid et al. (2020)** studied the impact of various determinants on financial inclusion and concluded that both demand-side and supply-side factors materially affect financial inclusion. **Raichoudhury (2020)** through econometric analysis, observed that infrastructure and employment are the key socio-economic indicators of financial inclusion. **Singh (2021)** observed that the number of post offices and bank accounts opened under MGNREGS were the key indicators of the performance of the districts of West Bengal in financial inclusion. **Kandari et al. (2021)** highlighted that financial literacy plays an important role in enhancing the rate of financial inclusion. The authors also observed that women and people from lower castes had the least access to mobile banking and financial services.

RESEARCH GAP

After conducting a review of the literature following gaps have been identified:

- Most of the research has studied the function of central government schemes like Pradhan Mantri Jan Dhan Yojana (PMJDY) in financial inclusion. Very few research has been done to analyze the role of State Government schemes in financial inclusion.
- No significant studies have been conducted on the State Government schemes of West Bengal to recognize their contribution to financial inclusion.
- Very few researchers have studied the rate of financial inclusion among low-income groups in urban areas of West Bengal.
- A handful of research has explored the reach of the state government schemes of West Bengal and awareness of such schemes among the low-income group of people with minimal financial literacy.

RESEARCH QUESTIONS

- In what ways are the government schemes helpful in inclusive financial growth?
- What is the satisfaction level of such government schemes?

OBJECTIVES

- To study the contribution of the state government schemes of West Bengal in enhancing the rate of financial inclusion among the low-income group of people residing in Kolkata.
- To analyse the satisfaction of beneficiaries of the West Bengal government schemes.

RESEARCH METHODOLOGY

To achieve the above objectives, primary data has been collected using a structured questionnaire. Since the population for the study could not be specifically determined, scientific probabilistic sampling was not suitable. Thus, 60 respondents were selected using non-probabilistic convenient sampling who have applied for the Government schemes of West Bengal. Respondents have been selected primarily from Maniktala, Rajabazaar, Girish Park, Bagmari, Kankurgachi, and Phoolbagan regions of Kolkata. The rate of financial inclusion is based on the number of bank accounts opened, deposits made, access and usage of ATM cards, and knowledge about various banking facilities. A reliability test has been conducted using SPSS software and to analyze the data, cross-tabulation of data has been done using Excel.

ANALYSIS AND INTERPRETATIONS

For different sets (total number of items=5) of associated factors in the questionnaire, the value of Cronbach's Alpha has been obtained as 0.698 which

is higher than the benchmark value of 0.50. This shows that the data is reliable and further analysis can be conducted on this data set.

Table 1: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha on Standardized Items	No. of Items
0.698	0.646	5

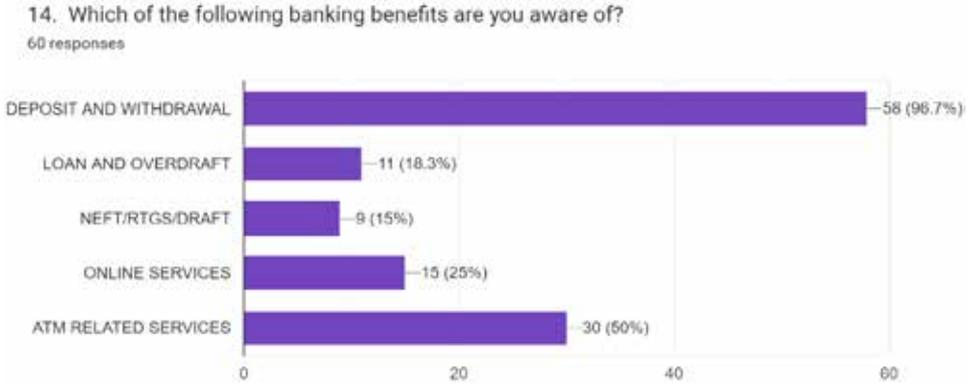


Fig. 1: Awareness on various banking facilities

Since the study has been conducted on a low-income group of people, the deposit and withdrawal being the most basic facility of the bank are mostly known to the respondents. This reveals that many people still remain unaware of the various facilities offered by banks.

Table 2: Gender and Frequency of Bank visit

Gender	Frequency of Bank Vist				Grand Total
	Rarely	Sometimes	Often	Never	
Female	15	11	3	5	34
Male	9	11	5		25
Other			1		1
Grand Total	24	22	9	5	60

From the above table, it could be seen that though, the number of females visiting banks is more than the number of males visiting the bank, but the frequency of females rarely visiting banks is comparatively more than that of males. This shows that gender disparity has an impact on access to banks and that people are reluctant in visiting the bank which is why the number of respondents rarely visiting the bank is more.

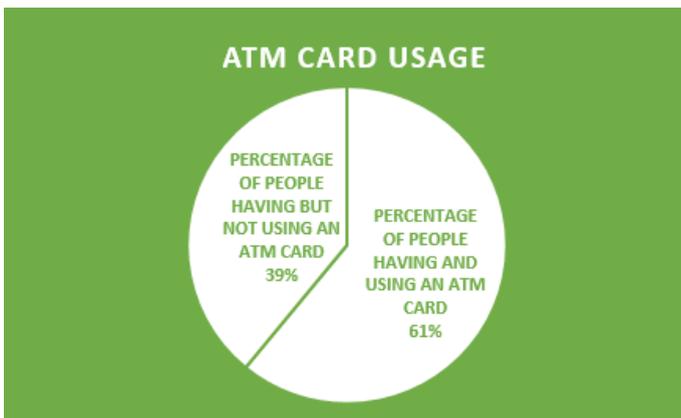
Table 3: Monthly Income and making deposits in bank account

Monthly Income	Make Deposits in Bank Account	
	Yes	No
Less Than 6000	3	18
6001- 10000	12	5
10001 – 15000	15	1
More Than 15000	6	0
Grand Total	36	24

It can be inferred from the above table that people earning less than 6000 in a month barely make any deposits in bank accounts while people having an income of more than 15000 actively make deposits in bank accounts. Hence, it can be concluded that the level of income affects the deposits made and the savings done by people.

Table 4: Usage of ATM cards

	Yes	No	Total
Having An Atm Card	41	19	60
Using Atm Card	25	35	60

**Fig. 2: Respondents having and using an ATM card (in percentage)**

From the above table 3 and pie chart 2, we can conclude that most of the respondents held an ATM card but were not accustomed to using it.

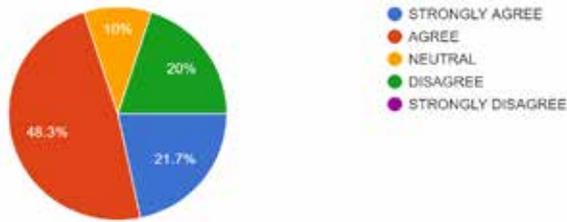


Fig. 3: The process of application to obtain benefits under West Bengal government schemes is quick and simple.

The above pie chart shows that 48.3% of respondents agreed and 21.7% strongly agreed that the application process for West Bengal government schemes is quick and simple while 20% of the respondents were in disagreement which was possibly due to the difficulties they had faced while applying for the schemes.

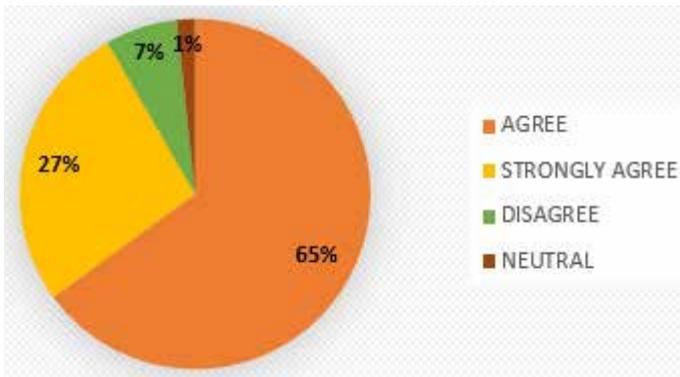


Fig. 4: The benefits of the schemes are transferred timely by the government.

The survey conducted shows that 65% of the respondents agreed that the government is consistent in transferring the scheme benefits while 7% of respondents believed that the government fails to transfer the benefits on time.

CONCLUSION

From the study, we can conclude that the government of West Bengal is constantly making efforts to increase the rate of financial inclusion in the state by implementing various schemes but still has some major gaps to be filled. The use of ATM cards is much less, and online banking facilities are not very popular among low-income groups of people. The schemes of the West Bengal government have been successful in reaching out to more people. The schemes are effective, but more efficiency is required. The schemes have also focused on women empowerment to reduce gender disparity. People have been found to be very less aware of the banking facilities offered which is an important aspect of inclusive financial growth. People were also reluctant in availing of loans as they thought it might create financial burdens on them.

The low-income group of people however was satisfied with the benefits the schemes are providing but have also agreed to the fact that some schemes need updates such as an increase in the amount provided under the Lakshmir Bhandar scheme. With a huge population of 9.12 crores, the West Bengal government needs more effective schemes to include more low-income groups of people as they remain the most deprived section of the population.

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Pattern of Sustainable Reporting Disclosure Practices by Selected Cement Companies in India- A Study

Sayan Saha¹

Post Graduate & Research Department of Commerce (M.Com),
St. Xavier's College (Autonomous), Kolkata

ABSTRACT

Sustainable reporting is disclosing non-financial information to outsiders of organisation whether voluntarily or mandatorily. These disclosures help in decision making of the major stakeholders of any organisation in this current world. In this paper, we have considered the cement industry in India by taking into account the top five cement companies according to their market capitalisation. Only these companies have been considered from top 30 NSE companies due to time and resource constraints. Annual reports/corporate social responsibility/sustainability reports of these 5 companies were reviewed. The data have been collected for a period of 5 years (2017-18 to 2021-22). We have focused mainly on the Triple Bottom Line approach in this study. For that, we have assigned a scoring index where we would see how many disclosures are made in each of three domains of TBL- Environmental, Social and Economic. For better understanding, we are considering only the variables which are subsumed under both GRI and ESG frameworks. The maximum score obtained by a company in terms of Triple Bottom Line disclosures is 92% (Ultratech Cement) and the minimum score obtained by a company in terms of TBL disclosures is 80% (Shree Cement, JK Cement, Ambuja Cement).

Keywords: Sustainable Reporting, Triple Bottom Line, Environment, Social Disclosure, Profit.

INTRODUCTION

Sustainable reporting means disclosing and communicating various environmental, social and governance (ESG) goals and how the companies have made efforts to progress towards them. It is playing a key role in influencing the decisions made by the stakeholders. There are many aspects

1. This dissertation done by the scholar under the guidance of Dr. Sumanta Dutta.

and parameters in sustainable reporting. The manufacturing sector needs to focus on the social and environmental disclosures in their annual reports and make people aware of their CSR practices they are carrying out. They should provide the pattern and the framework within which they are preparing this sustainability reports. Here we try to focus on the cement sector taking the selected cement companies. In many instances, there has been research on how the cement companies are performing sustainable reporting practices (Mishra and Siddiqui, 2021; Chouhan *et al.*, 2021; Hajizadeh, 2019; Kudtarkar, 2018; Khan *et.al*,2014). Apart from India, there has been research on these sustainability topics in countries like Egypt and Ghana (Maama and Appiah, 2019; Rizk *et al.*, 2008). As cement manufacturing industry is the second largest in the world currently so it becomes very essential to assess and know that the top selected companies are performing their reporting practices in the prescribed manner following a specific framework. The indicators used by them for performing these disclosures and also presenting in the annual reports plays an important role. For this dynamic domain of sustainable reporting, this study is viable to be conducted for exploring the pattern of disclosure by the company and also discovering the framework followed by them to do the same.

LITERATURE REVIEW

Theme	Author	Year of Publication	Objective	Findings
Sustainable reporting as a 21st century problem statement: using a quality lens to understand and analyse the challenges	Swaminathan Ramanathan and Raine Isakkson	2022	To explore quality science and quality management as a potential pathway to resolve the hurdles of corporate sustainability reporting.	The frameworks existing for measurement of CSR is limited. They are neither aligned nor appropriate for accurate measurement of a company's ecological footprint to reduce climate change
Sustainable reporting practices with special reference to cement industry in India	Ms. Krishna Oza and Dr. Marzun Jokhi	2021	To know current practices of selected companies in the cement industry	All the cement companies are sensitive towards the social issues. Companies are reporting their initiatives towards sustainability in the years which were considered for data collection for the study.
Sustainable reporting practices of selected cement companies in India: A case study	Vineet Chouhan <i>et.al</i>	2021	To analyse the current sustainability of accounting practices in Indian cement companies.	Best standards of environmental sustainability should be followed by the corporations to strengthen their activities.

Theme	Author	Year of Publication	Objective	Findings
CSR and sustainability reporting practices in India: an in-depth content analysis of top-listed companies	Priyanka Aggarwal and Ajay Kumar Singh	2019	To analyse the current sustainability of accounting practices in Indian cement companies.	Best standards of environmental sustainability should be followed by the corporations to strengthen their activities.
A sustainability assessment framework for cement industry – a case study	Kuldip Singh Sangwan <i>et.al</i>	2019	To develop a framework and key performance indicators (KPIs) for assessing the sustainability of the manufacturing organizations along the integrated supply chain.	Triple bottom line sustainability assessment indicators are identified for the first time in Indian cement industry using empirical investigation. More KPIs can be developed by using multiple case studies.
Advent of Environmental Management Accounting and Case Study of ACC Cement with respect to Environmental Disclosures in India	Parviz Hajizadeh	2019	To focus on the environmental disclosure practices followed by a leading cement company, namely, ACC Cement by understanding the concept of Environmental Management Accounting	The environmental accounting and reporting Practices of the Indian companies are having a slow advancement with poor environmental disclosure practices. Companies have to consider environmental accounting and reporting as a strategic management tool for gaining competitive advantage.
Indian Cement Industry on Path of Environment Sustainability through Innovation and Resource Optimization	Sandeep Kudtarkar	2018	To evaluate the Indian cement industry in terms of its performance to mitigate environmental degradation	Cement companies are well aware of impact of their operations on environment and society at large. They are addressing the issue of maintaining environment sustainability in their core as well as competitive strategies.
Corporate Social Reporting: A Comparative Study of Cement Companies in India	Dr. R.K. Tailor and Dr. Ravi Kant Modi	2017	To find out the CSR activities of the companies taken in the study, evaluating the CSR practices adopted by them and examine the sector-wise fulfilment of CSR.	All the selected companies are engaged in CSR activities but the more recent companies are using their profits towards them. CSR is an important area included by the companies in their core values.

Theme	Author	Year of Publication	Objective	Findings
Sustainable accounting reporting practices of Indian cement industry: An exploratory study	Shagufta Khan <i>et.al</i>	2014	To identify the prominent sustainability factors on environmental, social and economic dimensions, understanding the reporting pattern of the selected cement companies and analysing the gap between their reporting practices and the level of disclosure they desire to provide.	Compulsory regulations are required in terms of disclosure under accounting and reporting related to sustainable issue. There should be a uniform accounting reporting system for effective comparison between their practices.
The crippled bottom line – measuring and managing sustainability	Raine Birger Isaksson <i>et.al</i>	2014	To study the what of sustainability by linking this to global boundaries and proposing how the authors could manage change towards sustainability.	Many large cement companies are preparing their reports in accordance with GRI guidelines and following the Triple Bottom Line (TBL) logic.
Climate policy and business climate strategies EU cement companies' response to climate change and barriers against action	Chukwumerije Okereke and Kristina Kung	2013	To provide a descriptive analysis of the carbon management activities of the cement industry in Europe based on a study made of four largest cement producers in the world.	The prime obstacle faced by the managers in emission reduction is that there is an inadequate and unfavourable regulatory structure. The response to the climate change depends on their right incentive structure of the managers.
Corporate environmental disclosure practices in India	Mitali Sen <i>et.al</i>	2011	To identify the existing status of environmental disclosure practices in Indian core sector companies.	The disclosure made by the core sector companies does not adequately fulfill the informational needs of stakeholders. The study supports that there is a need of a suitable framework for environmental disclosure so that it gives the stakeholders highly credible information.

RESEARCH GAP

To undertake the thesis titled 'Pattern of Sustainable Reporting Disclosure Practices by Selected Cement Companies in India-A Study', we have reviewed 20 papers. From this review, we have noticed that the majority of the research has been conducted for the patter of sustainable reporting in:

1. CSR practices by the companies (Aggarwal and Singh, 2019; Kudtarkar, 2018; Tailor and Modi,2017; Rizk et.al,2008)
2. Different indicators of sustainable reporting (Mishra and Siddiqui, 2021; Sangwan et.al,2019)
3. Environmental disclosure practices (Oza and Jokhi,2021; Hajizadeh,2019; Belkhir et.al,2017; Sen et.al,2011)
4. Sustainable reporting practices by cement companies (Mishra and Siddiqui,2021; Chouhan et.al,2021; Hajizadeh,2019; Kudtarkar,2018; Khan et.al,2014)
5. Impact of soft TQM (Total Quality Management) on firm performance (FP) (Dubey,2015)
6. Triple Bottom Line (Profit, Planet and People) (Isaksson et.al,2014)

We can see that very few researchers have undertaken to perform a study on the pattern of sustainable reporting by the various cement companies. The research on the parameters used by them in Triple Bottom line aspect and the pattern of disclosure is limited. We will try to focus on exploring these areas by the virtue of our study.

RESEARCH OBJECTIVES

From the research gap we have identified above, the following are the research objectives of this thesis titled 'Pattern of Sustainable Reporting Disclosure Practices by Selected Cement Companies in India – A Study':

1. To assess the pattern of disclosure by the selected Cement Companies in India;
2. To analyse the different dimensions of Triple Bottom Line by the selected Cement Companies in India.

RESEARCH METHODOLOGY

1. Data Collection

To explore the given research objectives, secondary data have been collected. Secondary data has been collected from published annual reports and websites of the selected cement companies for the past 5 years. After reviewing the sustainability reports of the cement companies over the past 5 financial years, we have collected 30 variables in total. 10 variables are taken each under the three heads- economic, environmental and social indicating the profit, planet and people aspects of TBL. Out of these 30 variables, 25 variables (5 under economic,

all 10 under environmental and social variables) come under both GRI and ESG frameworks so we try to calculate which disclosures are made by the companies in the particular financial year and which pattern they are following. After this we will try to assign scores to each company for a particular financial year and analyse the same.

The Variables Disclosed Under Both Gri and Esg Framework by the Selected Cement Companies

ECONOMIC VARIABLES
Business performance
Regulatory compliance
Anti-Corruption Practices
Customer Satisfaction
Indirect Economic Impacts
ENVIRONMENTAL VARIABLES
Climate Change
Biodiversity Management
Water Management
Emissions Management
Waste Management
Energy Management
Circular Economy
Responsible Mining
Natural Resources Management
Recycled Input Materials
SOCIAL VARIABLES
Occupational Health and Safety
Human Rights
Diversity and Equal Opportunity
Community Development
Employee Training and Development
Employee Job Satisfaction
Education
Infrastructural Development
Employment
Non-Discrimination

2. Period of Study

The period of study is starting from financial year 2017-18 to 2021-22.

3. Sampling Method

The companies have been selected from the top 30 NSE companies. From the same, top 5 cement companies have been taken according to their market capitalisation. Whether they have followed GRI or ESG framework has also been considered while selecting them for our study.

4. Tools Used

Content analysis is used in this research. Through this, we can quantify and analyse the meanings and relationships of certain words, terms or concepts. In this analysis, dichotomy is the only level of measure. Here a score of 1 is assigned if the company has disclosed the items and a score of 0 if it has not disclosed the items in a particular financial year.

5. Assignment of Scores

According to the total variables considered by the sample cement companies and their importance towards the different disclosures, a table has been prepared:

Indicator and scoring system

Primary Indicator	Score
Environmental	10
Social	10
Economic	5
Total	25

Now, we need to find out in each of the financial year, out of these 25 disclosures or sub indicators how many have been done by the sample cement companies in the study. For calculation of the percentage of score obtained by each company in a particular financial year the following formula is adopted:

Percentage of the Disclosure Scores Obtained = (Total Score Obtained/25) *100

In our research, we have shown some insights into the various dimensions under the Triple Bottom Line approach. The 5 selected cement companies has followed some framework, either GRI or ESG, to disclose the variables under various indicators (economic, social and environmental). There are different scores obtained by the selected companies in each of the 3 variables in the period of study. The percentage of the disclosure scores has also been computed for the companies.

ANALYSIS & INTERPRETATIONS

1. Interpretation of The First Objective

The first objective of our study is to assess the pattern of disclosure by the selected Cement Companies in India. We have observed the following in achieving this objective:

- **Ultratech Cement** has followed the SDGs in alignment with the GRI standards to disclose the variables under the TBL aspect in 2017-18. In 2018-19, it has addressed the SDG goals through GRI framework and disclosed on the 3Ps aspect of Triple Bottom Line mainly. In 2019-20 also it has followed the GRI framework while making its disclosure in the environmental, social and economic parameters. The company follows UN SDGs before implementing their sustainable strategy. In the year 2020-21, the company follows GRI framework as a whole for disclosing their sustainability practices. In the financial year 2021-22, the company has disclosed on the economic, social and environmental variables according to the GRI standards.
- **Shree Cement** has followed ESG framework while making the disclosures under the heads of environmental stewardship, social responsibility and corporate governance in their sustainability reports of 2017-18, 2018-19, 2019-20 and 2021-22. The disclosure is being represented under the GRI index under the different parameters mainly environmental, social and economic. The same is attached in the annexure of the reports. The year of exception is 2020-21 where the disclosures are made under the 3Ps of Triple Bottom Line- People, Profit and Planet. The variables disclosed are represented according to the GRI index acceptable all over the globe.
- **JK Cement** has made disclosures in their Business Responsibility Report and performed various CSR activities which come under the GRI Index and ESG framework as well. These are disclosed in the annual reports of the company for the years 2017-18, 2018-19 and 2019-20. In the financial years 2020-21 and 2021-22 it has followed the UN SDGs and their long-term sustainable strategies. After that they have made the disclosures in alignment with the GRI framework.
- **Ambuja Cement** in the year 2017-18 made disclosures in alignment with UN SDGs according to the GRI index framework. In 2018-19, it followed GRI framework to make the disclosures and also attached a BRR to its annual report. In 2019-20, the company prepared sustainability report separately to inform people about their disclosures in environmental, social and economic aspects. It followed GRI index to report about the same. In FY 2020-21, the company aligned its disclosures with UN SDGs and presented them in the form of GRI indicators in their integrated annual report. They provided a BRR in the annual report too. In the year 2021-22, the company followed GRI framework for disclosure and BRR was prepared in alignment with ESG framework.

The common principles were mapped by the company as per SEBI.

- **ACC Cement** released its sustainability report as per the GRI framework, It framed its sustainable development plan in alignment with its parent company in 2016 and has been making disclosures according to it in the financial years 2017-18 and 2018-19. In 2019-20, it prepared an integrated annual report where the disclosures were made following the GRI framework and provided a BRR too. In alignment with the UN SDGs, the company made disclosures according to GRI standards in its integrated annual report of 2020-21. In the financial year 2021-22, ACC Cement follows the Triple Bottom Line approach and makes disclosures under the economic, social and environmental indicators according to the GRI standards.

2. Interpretation of the Second Objective

The second objective of our study is to analyse the different dimensions of Triple Bottom Line and the disclosures made under these dimensions by the selected Cement Companies in India. We have made some observations in alignment with this objective:

- In 2017-18, **Ultratech Cement** disclosed under all the three dimensions of TBL economic, social and environmental. It made 3 economic disclosures, 9 social disclosures and 9 environmental disclosures. In the FY 2018-19, it made 3 economic disclosures, 7 social disclosures and 8 environmental disclosures. In 2019-20, it has made 4 economic disclosures, 9 social disclosures and 9 environmental disclosures. In 2020-21, the company has made 4 economic disclosures, 9 social disclosures and 9 environmental disclosures. For the financial year 2021-22, the company made 5 economic disclosures, 9 social disclosures and 9 environmental disclosures.
- **Shree Cement** made disclosures under all the 3Ps of Triple Bottom Line-Profit, Planet and People. It has made 3 economic disclosures, 8 social disclosures and 6 environmental disclosures in 2017-18. In 2018-19, it has made 4 economic disclosures, 6 social disclosures and 7 environmental disclosures. For the financial year 2019-20, the company has made 4 economic disclosures, 6 social disclosures and 8 environmental disclosures. In 2020-21, it has made 4 economic disclosures, 7 social disclosures and 8 environmental disclosures. For the financial year 2021-22, Shree Cement made 4 economic disclosures, 7 social disclosures and 9 environmental disclosures.
- **JK Cement**, in 2017-18, it has made 3 economic disclosures, 6 social disclosures and 7 environmental disclosures. In 2018-19, it has made 3 economic disclosures, 6 social disclosures and 7 environmental disclosures. In the financial year 2019-20, it has made 3 economic disclosures, 6 social disclosures and 8 environmental disclosures. In the year 2020-21, the company made 3 economic disclosures, 8 social disclosures and 9 environmental disclosures. For the financial year 2021-22, it has made 3 economic disclosures, 8 social disclosures and 9 environmental disclosures.
- **Ambuja Cement** made disclosures under all the 3Ps of Triple Bottom Line- Profit, Planet and People. It has made 5 economic disclosures, 8 social

disclosures and 9 environmental disclosures in 2017-18. In 2018-19, it has made 4 economic disclosures, 8 social disclosures and 8 environmental disclosures. For the financial year 2019-20, the company has made 3 economic disclosures, 8 social disclosures and 9 environmental disclosures. In 2020-21, it has made 4 economic disclosures, 7 social disclosures and 9 environmental disclosures. For the financial year 2021-22, Shree Cement made 5 economic disclosures, 6 social disclosures and 9 environmental disclosures.

- **ACC Cement**, in 2017-18, it has made 3 economic disclosures, 6 social disclosures and 8 environmental disclosures. In 2018-19, it has made 3 economic disclosures, 6 social disclosures and 8 environmental disclosures. In the financial year 2019-20, it has made 3 economic disclosures, 6 social disclosures and 7 environmental disclosures. In the year 2020-21, the company made 5 economic disclosures, 8 social disclosures and 8 environmental disclosures. For the financial year 2021-22, it has made 5 economic disclosures, 8 social disclosures and 9 environmental disclosures.

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Factors Responsible for Fluctuation of Dollar Prices in BRICS: An Empirical Investigation

Dattatreya Dutta¹

Post Graduate & Research Department of Commerce (M.Com),
St. Xavier's College (Autonomous), Kolkata

ABSTRACT

Foreign Exchange Reserves act an insulator to protect the economy against exchange rate fluctuations owing to changes in the geopolitical situations worldwide. The forex reserves of countries contain several assets and currencies out of which the US Dollar occupies a significant quantum. US Dollar was established as an international reserve currency in 1944 as per the Bretton Woods Agreement. The status of Dollar as an international reserve currency was never questioned before because of its ability to provide for liquidity in international monetary system. However, owing to negativities involving the US Debt and government securities markets and weaponization of Dollar against unfriendly regimes, question marks are being raised about the longevity of Dollar as a reserve currency in the coming years. BRICS nations have been at the forefront of raising their voice against this unfair practice of dollar hegemony in the international monetary system and often have often adopted alternative mechanisms to transact by avoiding dollar at times. The study explores the trends of forex reserves of BRICS Nations and factors influencing foreign exchange reserves of BRICS nations using Regression Analysis. The paper also throws evidences to the fact that there is a negative relationship between SDR reserves and dollar denominated assets of BRICS nations between January 2021 and December 2022 using Correlation analysis. Moreover, the most important finding reveals that most of the BRICS nations have reduced their position in Dollar denominated assets post Russia- Ukraine crisis (February 2022 to December 2022) and have compensated the reduction by holding more SDR reserves.

The findings of this paper throws wide array of opportunities for future research to find out possible currency and non-currency regimes in the international monetary system if dollar loses its position as a key international reserve currency in the future.

Keywords: Bretton Woods, BRICS, Liquidity, SDR, US Dollar.

1. This dissertation done by the scholar under the guidance of Dr. Samrat Roy.

INTRODUCTION

US Dollar was established as a reserve currency way back in 1944 as per the Bretton woods Agreement. Over the years, no question is raised about the dominant position of Dollar in the international monetary system. However, in the last decade growing public and corporate debt and falling yields of dollar denominated bonds in the US led to fluctuation of dollar prices and currently dramatic appreciation of Dollar due to hawkish monetary policy of US Federal Reserve have raised warning signs about the stability of Dollar used by the economies for trade and other purposes.

The study aims to capture how combination of certain parameters are responsible for fluctuation of Dollar prices which has bearing upon countries foreign exchange reserves which are still dollar dominant. The reason for selecting BRICS nations to study the factors responsible for fluctuation of dollar prices is firstly, BRICS being a representation of Emerging and Developing Economies and secondly to capture Russia's forex position post its invasion of Ukraine and impact on other BRICS economies due to fluctuation in dollar prices.

LITERATURE REVIEW

A working paper on Reserves Management by Jochen Schanz (2019) discussed about the importance of holding diversified portfolio of reserves by Central banks which acts as a shield against monetary and financial instability. Mei. et.al (2020) empirically validated that increasing foreign exchange reserves helps in combating financial fragility by contributing to domestic and external sector stability. Adriyani.et.al (2020) depicted that Foreign Exchange Reserves that Foreign Debt and Exports have a positive impact on Forex Reserves, Forex Rate has a negative impact on Forex Reserves whereas Inflation has no impact upon Forex Reserves.

A study by Bell.*et al.* (2022) talked about the erosion in the dominance of dollar across countries foreign exchange reserves due to diversification towards other non-traditional currencies. T. Sablik (2022) stated that Dollar's share in forex reserves is at an all-time low and having multiple currency to provide for safe assets would lead to more stability in the international financial system.

Brunnermeier.*et al.* (2022) concluded that Dollar's dominant status is unlikely to be challenged in the coming years and the possibility of SDR as a possible alternative to reserves is restricted. Garber.et.al (2022) showed that US must impose sanctions if it wants dollar to maintain the status of reserve currency. John Taskinsoy (2019) raised questions about the sustenance of Dollar Dominance in the trade and reserves of country and the potential alternatives replacing the same.

A paper by Aglietta & Coudert (2019) revealed the key objective of a universal currency which is to provide liquidity for international transactions. Gopinath & Itskhoki (2021) explored the pivotal role that a key currency plays in international trade along with the patterns of currency in international trade. Ito & McCauley

(2019) examined that greater the dollar's share in export greater is the presence of dollar in country's foreign exchange reserves.

A study by Schreger.et.al (2019) explored the growth of Dollar in comparison to Euro using certain international market parameters. D.I Kondratov (2021) showed that almost 80% of the international payments are made in Dollar, Euro, or Japanese Yen.

A study by Boswell.et.al (2020) explored that for Emerging Markets and Developing Countries (EMDEs) financial linkages are an important parameter for holding a currency in Forex reserves. Meini Jiang (2020) revealed that financial globalization, international situation, and tag of growing economy is the main reasons behind shift from fixed to flexible or managed floating exchange rate by the BRICS countries. Mahalakshmi.et.al (2018) examined the spillover effect of US Dollar on the stock indices of BRICS using Pane Generalized Methods of Moments (GMM). A study by Stephen & Matthew D. (2016) explored the strategic relations between BRICS nations and the proactive role played by them across institutions of global importance. Ito & McCauley (2019) explored the reasons behind global imbalances due to Dollar and the prospects of Renminbi becoming a key currency alongside the Dollar and the Euro. McCauley & Shu (2018) revealed that trade links, business cycle movements, financial links and monetary links are the key factors behind co-movements of Renminbi across regional and emerging markets. Finally, Lu & Wang (2019) concluded that Renminbi's share is high across countries liquidity tranche indicating that it is used as a reference currency for trade related purposes.

RESEARCH GAP

Most of the literatures do not address the fluctuation of exchange rates having an impact on the currency composition of forex reserves after the Russia Ukraine crisis and the role of digital currencies' impact upon dominant currency usage for trade related purposes. Over the years the BRICS nations have diversified their forex reserves from dollars to other non-conventional reserve currencies, the reason for such a shift is not delved into by the existing literatures and finally the internationalization of Renminbi after its inclusion in the SDR basket in 2016 and its impact on the exchange rate system of BRICS.

RESEARCH QUESTIONS

- What are the factors responsible for fluctuation of Forex Reserves of BRICS?
- Is there a relationship between SDR Reserves and Dollar denominated assets for BRICS?
- Did the position of BRICS nations in Dollar Denominated assets change post the Russia- Ukraine crisis?

RESEARCH OBJECTIVES

- To comprehend the trends of forex in BRICS and explore the causes of fluctuation in Dollar in BRICS.

- To examine the factors responsible for fluctuation of Foreign Exchange Reserves in BRICS.
- To examine the relationship between SDR Holdings and Investment in Dollar denominated assets for BRICS.
- To empirically validate the position of BRICS nations in Dollar denominated assets pre and post the Russia- Ukraine crisis.

RESEARCH METHODOLOGY

Multiple Linear Regression

Multiple linear regression is a statistical concept which explains the relationship between a dependent variable and series of independent variables.

The result of a multiple linear regression model has two implications from a statistical point of view:

- Degree of association between multiple independent variables and the dependent variables explains the robustness of the linear regression model.
- Based the association between multiple independent and dependent variables, the value of the dependent variable can be ascertained for a certain value of the independent variable.

So, the formula for multiple linear regression model is as follows:

$$y = \delta_0 + \delta_1 X_1 + \delta_2 X_2 + \dots + \delta_n X_n + \varepsilon$$

Here

y = the value of the dependent variable

δ_0 = the y - intercept

δ_1 = the regression coefficient of the first independent variable x_1

δ_2 = the regression coefficient of the 2nd independent variable x_2

δ_n = the regression coefficient of the n^{th} independent variable x_n

ε = error term

Paired T –Test

Paired T- Test is used when the samples drawn are dependent amongst each other, i.e., they are correlated amongst each other.

Let us assume $(p_1, q_1), (p_2, q_2), \dots, (p_n, q_n)$ be n pairs of observations of the correlated variables p and q in a sample.

The Null Hypothesis (H_0) and Alternative Hypothesis (H_a) for a paired t- test is as follows:

H_0 : The mean value of the paired difference is equal to zero.

H_a : The mean value of the paired difference is not equal to zero.

If the p- value obtained is less than 0.05 we reject the null hypothesis and if p-value obtained is more than or equal to 0.05 we accept the null hypothesis.

Trend Analysis

Trend Analysis is a statistical tool which helps us to ascertain the current movement and decide upon the future movement based upon current and historical data.

A trend line fit is said to be a perfect fit if the value of R^2 is close to 1 and the square deviation of values from the trend line is minimum

Karl Pearson Correlation Coefficient

If $(c_1, d_1), (c_2, d_2), \dots, (c_n, d_n)$ be the n pairs of observations of two variables c and d, then covariance of c and d denoted by $\text{cov}(c, d)$ will be defined as

$$\text{cov}(c, d) = \frac{1}{n} \sum (c - \bar{c})(d - \bar{d})$$

If $(c_1, d_1), (c_2, d_2), \dots, (c_n, d_n)$ be the n pairs of observations of two variables c and d, then correlation coefficient between c and d denoted by $r(c, d)$ will be defined as:

$$\Rightarrow r(c, d) = \frac{\text{cov}(c, d)}{\sigma_c \sigma_d}$$

$$\Rightarrow r(c, d) = \frac{\frac{\sum cd}{n} - \left[\frac{\sum c}{n} \right] \left[\frac{\sum d}{n} \right]}{\sqrt{\frac{\sum c^2}{n} - \left[\frac{\sum c}{n} \right]^2} \sqrt{\frac{\sum d^2}{n} - \left[\frac{\sum d}{n} \right]^2}}$$

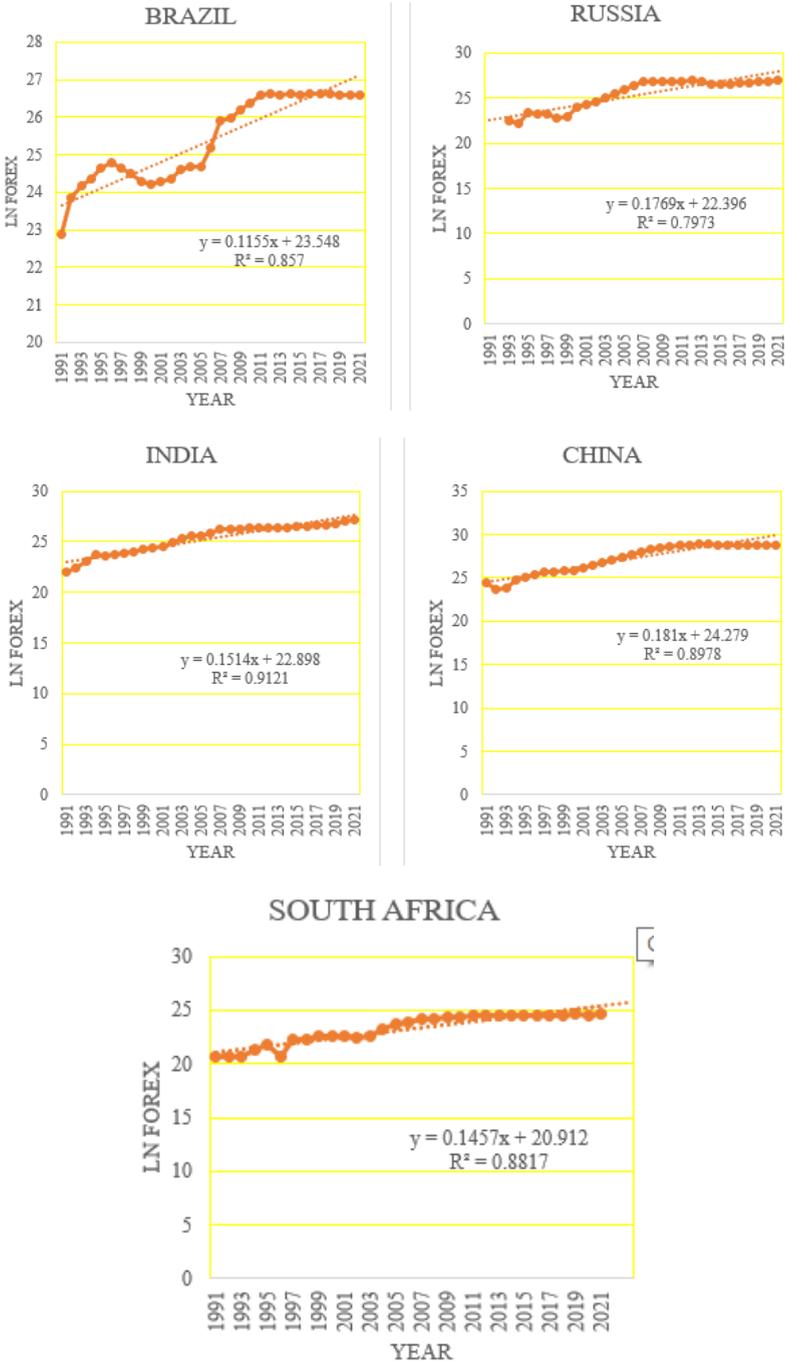
The value of the correlation coefficient lies between -1 to +1.

ANALYSIS AND INTERPRETATIONS

Trend Analysis of Forex Reserves on BRICS

For the purpose of doing trend analysis the data on foreign exchange reserves for 31 years (1991-2021) is converted in terms of logarithmic numbers in order to reduce disparity among the values of respective years, eliminating the exponential pattern and the heteroscedasticity in the dataset. The result of trend analysis obtained is as follows:

Trend Analysis of BRICS Countries Forex Reserves (1991-2021)



Source: World Bank

The value of R^2 obtained indicates the change in foreign exchange reserves with respect to time. As per the analysis the forex reserves of all the BRICS have increased significantly since 1991 which is one of the main reason behind BRICS nations being categorized as "Emerging and Developing Economies".

Factors Influencing Forex Reserves of BRICS Nations Using Multiple Linear Regression

There are several factors which affects Forex Reserves. However, for the purpose of empirical validation only four factors are selected to eliminate the problem of multicollinearity of independent variables. The Independent variables are selected on the basis of a research paper by Andriyani *et al.*

The Independent Variables are Foreign Debt, Foreign Exchange rate, Inflation and Exports.

The data for all the dependent and independent Variables is collected for the time period from 1996 to 2021.

The result of the analysis is as follows:

Table 1: Multiple Linear Regression Model for BRICS Nations

Country	Constant	Independent Variables							
		Foreign Debt		Inflation		Forex Rate		Exports	
		Coefficient	p value	Coefficient	p value	Coefficient	p value	Coefficient	p value
Brazil	-17.505	0.777	0.000	0.084	0.403	-0.663	0.000	0.881	0.000
Russia	-15.462	1.493	0.064	-0.534	0.028	0.245	0.314	0.078	0.889
India	6.067	-0.919	0.013	-0.026	0.858	1.053	0.094	1.521	0.000
China	8.557	-0.284	0.009	-0.060	0.202	-2.456	0.001	1.150	0.000
South Africa	-21.794	-0.257	0.533	-0.181	0.405	0.774	0.038	2.016	0.001

(Computation using World Bank Data using SPSS)

As per the analysis the following independent variable significantly affect forex reserves for BRICS nations as the p value for those variables is lower than 0.05 at 5% level of significance.

- Brazil – Foreign Debt, Foreign Exchange Rate and Exports
- Russia- Inflation
- India- Exports
- China- Forex Rate and Exports
- South Africa- Forex Rate and Exports

If we analyze the factors which impacts Forex Reserves in BRICS, we see that Forex Rate and Exports are the dominant factors which are common to all almost all the countries. This is because of the fact that most of the BRICS countries are frontrunners in global goods and services trade and they possess skilled people at lower cost compared to developed countries. From a negative perspective, the currencies of most of the BRICS nations are not so robust compared to US

Dollar. So, a change in Forex Rate has an impact on Forex Reserves which are dollar dominated.

Relationship between SDR Holdings and Investment in US Treasuries and Securities

Central Banks across the world invest in dollar denominated assets and bonds which is a lucrative source of investment considering the ability of Federal Reserve to provide for safe and liquid assets. The Data for Major Foreign Holders of US Treasuries is maintained by the Department of Treasury, US Federal Board. The data is published on a monthly basis for selected countries in billions of dollars denomination.

On the other hand SDR is a supplementary reserve currency created by the IMF in 1969 consisting of Basket of five currencies namely US Dollar, Euro, British Pound, Japanese Yen, and Chinese Renminbi (introduced in 2016). Amongst BRICS countries there has been a growth in SDR reserves.

The analysis aims to capture the relationship between SDR Holding and investment in US Treasuries and Securities using Karl Pearson correlation Coefficient.

The result of the analysis is as follows:

Table 2: Correlation between SDR Holdings and Investment in US Treasuries for BRICS Nations from January 2021 to December 2022

Country	Correlation Coefficient	P value
Brazil	-0.895	0.000
Russia	-0.647	0.001
India	-0.107	0.620
China	-0.685	0.000
South Africa	-0.475	0.119

(Computation based on data from IMF and US Federal Reserve using SPSS)

As per the analysis, there is a negative relationship between SDR holdings and Investment in US Treasuries for all BRICS nations from January 2021 to December 2022, which is followed by a rise in SDR holdings and a fall in Investment in US Treasuries and Securities. This has been due to consistent low yields of US Dollar denominated bonds and Securities and hike in interest rates by US Federal Reserve which makes bonds less attractive.

However for India and South Africa, the value of correlation coefficient is not significant as the p value obtained for those variables is greater than 0.05.

Position of BRICS Nations in US Treasuries and Securities Pre and Post the Russia-Ukraine Crisis

The war between Russia and Ukraine erupted from 24th February 2022 onwards, so for the purpose of analysis the Pre Russia- Ukraine Crisis is considered from the period between February 2021 to December 2021 and Post Russia-Ukraine Crisis is considered from the period from February 2022 to December 2022 (except South Africa). The analysis is done on the basis of Paired Sample T-Test (one tailed) to comprehend the position of BRICS nation investment in US Treasuries and Securities. The null and alternate hypothesis is as follows:

H_0 : There exists no difference between positions in US Treasuries and Securities Pre and Post the Russia-Ukraine Crisis for BRICS.

H_a : Position of BRICS nations in US Treasuries and Securities has reduced Post the Russia- Ukraine Crisis.

Table 3: Results of Paired T-Test for BRICS Nations

Country	T-Test	P Value
Brazil	21.50409	0.000
Russia	9.53543	0.000
India	0.144185	0.444
China	12.60831	0.000

(Computation based on US Federal Reserve Data using SPSS)

For paired t- test the result is significant at 5% level if t statistic is greater than 1.812. As per the analysis the position of BRICS nations in US Treasuries and Securities has reduced significantly for BRICS Nations except India and South Africa.

This is primarily because of the following reasons:

- Countries fear that their Foreign Exchange Reserves which is still Dollar dominated may become completely useless if sanctions are imposed by USA.
- Volatility in interest rates of Dollar denominated bonds and securities.

Due to the following reasons BRICS Nations are diversifying their forex reserves with Gold and SDR.

The case for India not reducing their exposure to US Treasuries and Securities is the fact that the RBI is trying to drain liquidity from the Indian Monetary system due to rising inflation by investing in US Treasuries and Securities.

For South Africa, the analysis cannot be performed due to non-availability of data.

CONCLUSION

In a nutshell the study has captured some intricate issues which has caused changes in the Forex Reserves of BRICS. Since 2020, from the onset of the pandemic to the Russia- Ukraine crisis, BRICS have stood tall in terms fundamental economic parameters. This can be best explained from the point of view of Russia, as it was able to recover its forex and currency position within months after US imposed sanctions upon it. The study attempts to throw evidences that Dollar domination is slowly waning by showing a negative relationship between SDR holdings and Investment in US Treasuries and Securities. However, future research endeavors should focus upon Currency Composition in the Forex Reserves of countries to know whether any currency or a group of currencies can replace US Dollar as a reserve currency in the future.

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An Analysis of the Growth of Zomato Post the Introduction of Additional Services

Sayoni Nandi¹

Post Graduate & Research Department of Commerce (M.Com),
St. Xavier's College (Autonomous), Kolkata

ABSTRACT

The most vital industries have almost ceased in India as a result of COVID-19. In this regard, a study was conducted to examine how Covid-19 altered consumers' tendencies of online meal ordering through Zomato. Since technology has made it simpler for customers to participate in innovative market behaviours, relationships, and experiences connected to online meal delivery, the primary objective of the study is to investigate how Covid-19 affects individual purchasing behaviour. It also seeks to comprehend how Zomato's clients are affected by the pandemic, as well as potential developments and market trends. The samples taken are on the basis of the Non Probabilistic Sampling method, under this Convenience Sampling has been done.

120 people were included in the survey, and Zomato customers made up the sampling block. The survey technique was used as the major means of gathering primary data. As a result, all of the original data was gathered via poll using an online form made with Google Forms and an organized questionnaire. Utilizing the SPSS tool, the analysis portion involved conducting frequency analysis, factor analysis, and multiple response studies on the gathered answers.

Online meal delivery services have greatly facilitated people's lives during this pandemic. Covid-19 has had a significant negative effect on eateries, leading to the closure of many of them. Online meal delivery services must therefore improve their customer outreach plan. The results and probable recommendations of the current research may assist Zomato in determining the effect of Covid 19 on consumer purchasing patterns and taking appropriate action.

Keywords: Covid-19, Factor Analysis, Online food delivery, Sampling, Zomato.

1. This dissertation done by the scholar under the guidance of Dr. Soheli Ghosh.

INTRODUCTION

Food Tech refers to businesses and initiatives that use technologies like the Internet of Things, big data, and Artificial Intelligence to make the agrifood industry more cutting-edge, efficient, and sustainable at all of its stages, from food production to distribution to consumption.

As evidenced by the increased investment in innovation initiatives, such as those relating to Food Tech, by the global agrifood business, technology is currently the most desired component in our diet. With better and more environmentally friendly eating habits, the industry hopes to keep up with the changes and meet the expectations of consumers.

Some of the fastest-growing sectors of the Indian e-commerce market is the online meal delivery sector. Meal technology is allowing for unrestricted customisation of high-quality food staples. In India, platform-to-customer delivery is the most popular type of service. Almost three-fourths of the market is accounted for these services.

Zomato being a star of the food-tech industry, began as a platform for restaurant reviews, but it has rapidly evolved to include delivery, promotional programs, and other related areas of the food-tech ecosystem. It now links more than 55 million people to a variety of restaurants in 24 different nations.

LITERATURE REVIEW- **Nidhi Yadav et al. (2022)** analysed the function of platform governance for managing and investigating Zomato's networks and assess its strategic risks for maintain profits and capture value. **Dr. Nitu Nimbrain et al. (2022)** studied the concept of an online meal ordering and delivery system that led people to order food online. **K. M. Kiran Raj et al. (2021)** analysed Zomato providing various information about its financial health, surveys and findings, also assessed its advantages and disadvantages. **Prof. Amita Goel et al. (2021)** analysed Zomato's data to determine the various tactics its rivals have used. **Prof. Jayadatta S et al. (2020)** studied how Covid 19 affected consumers using online food delivery services, examine the various services Zomato offers and how customers make purchasing decisions. **Parthik Choudhary (2020)** The objective of the study was to comprehend several rules that apply to such firms built on the same sidelines and effect business and participants in the Indian restaurant aggregator market. **Sandeep Sapkal (2019)** studied the customer perceptions about Swiggy, Zomato, and Food Panda and the degree of customer satisfaction with various features. **Dr. Mitali Gupta (2019)** analysed how restaurant business is affected by food delivery start-ups like Zomato, swiggy and to understand the tactics used by them. **Prashant Raman (2018)** studied entire life of Zomato, from conception through growth and consolidation. **Harsh Balihallimath et al. (2016)** evaluated the growth and operational strategies of four such aggregator meal delivery companies. This case study examines the possibilities of an expanding market in one of the world's greatest economies.

RESEARCH GAP

- This paper mainly focuses on ZOMATO by using primary data and so the data is restricted to the opinions of the respondents therefore it may be biased.
- This study will advance understanding of all potential benefits and take a favourable stance toward the effect of COVID-19 on food technology firms. The outcome of this study implies that we still have a lot to learn about how these organizations will develop in the future.
- Secondary Data (ratios) are taken from different websites, therefore there is a lack of information about the profitability conditions of the company.

RESEARCH QUESTIONS

- Were the additional services introduced helpful?
- Are the customers satisfied with its additional services?
- What is the market position of Zomato with respect to its competitors?
- According to customers, will Zomato be able to survive in the future?

OBJECTIVES

- To analyse the impact of ancillary services on the profitability of Zomato.
- To study the perceived level of customer satisfaction in using the additional services of Zomato over other competitor businesses.
- To understand the market position of Zomato in the industry through SWOT analysis.

RESEARCH METHODOLOGY

Sample-This study is based on a closed ended google form questionnaire which contained 30 questions, circulated among 120 respondents who belong to West Bengal. The samples taken are on the basis of the Non Probabilistic Sampling method, under this Convenience Sampling has been done.

Data type

- To meet with the first objective, past 4 years (2019-2022) Ratio of Zomato has been analysed.
- To meet with the second objective, a preliminary study based on the primary data has been taken into consideration.

Tools used

- For Demographic and Binary questions- Frequency distribution and Pie charts has been used.
- For Likert scale questions- Explanatory factor analysis has been done.

ANALYSIS AND INTERPRETATION

Secondary Data: A comparative data may be utilized to demonstrate how Zomato is performing through time and in future with the help of Ratio Analysis.

Ratios	2022	2021	2020	2019
Gross Profit ratio	-48.76	-27.02	-97.06	-163.17
Net Profit Ratio	-29.16	-40.94	-91.58	-76.27
Operating Profit Ratio	-33.74	-20.25	-87.87	-167.43
Return on Assets	-6.97	-9.33	-81.61	-28.83
Return on Net Worth	-7.32	-10.63	-517.54	-40.39
Earnings per share	-1.67	-1.51	-5.42	-0.03

Source: Moneycontrol

Gross Profit: The ratios have always been negative, as the company's overall sales are outpacing its manufacturing costs. Therefore, the addition of the extra services has significantly assisted Zomato in regaining its profitable position in the market. Following which, they were able to perform better, with a production cost of 2020 that was significantly lower than that of 2019.

Net Profit: There is no doubt that Zomato has not been able to make a sizable profit throughout the years. A minor rise in the company's losses is shown by the ratio, which is -76.27 in 2019 and -91.58 in 2020. However, the ratio drops to -40.94 and -29.16 in 2021 and 2022, respectively, showing that the inclusion of additional services has assisted Zomato in posting lesser losses than the prior year.

Operating Profit Ratio: A negative operational profit margin may signify a company's inability to control costs. It was observed that Zomato managed its manufacturing costs, which improved its performance in following years. This ratio contributes to the argument that the firm as a whole has benefited from the addition of new services during the Covid epidemic.

Return on Assets: Zomato currently has a negative return on assets, which indicates that the firm is unable to generate enough earnings to cover the costs of its underlying assets. The ratio decreases to -9.33 and -6.98 in the following years of 2021 and 2022, respectively, showing that Zomato's incorporation of new services has improved the company's performance and increased its earnings compared to earlier years.

Return on Net Worth: Zomato's negative return on net value over time in this area demonstrates the company's inability to manage shareholder funds. The pandemic had a substantial negative impact on Zomato, but additional services were added which helped the company reclaim its position and utilize the funds from its shareholders in an efficient manner.

Factor Analysis: This SPSS tool has been used for analysing the perceived degree of consumer satisfaction in choosing Zomato's supplemental services over those of other rival companies.

Data minimization is the main motivation for using factor analysis, which reduces the number of variables as too many linked areas may make analysis more difficult.

Here, the experience or satisfaction of the customers is taken into consideration as the 1st factor for which a total of 6 variables are taken.

1. How often does the respondent's order.

Once a day	-
Once in 3-4 days	03
Once a week	15
Once in 15 days	84
Once a month	18

How often does the respondent's order.

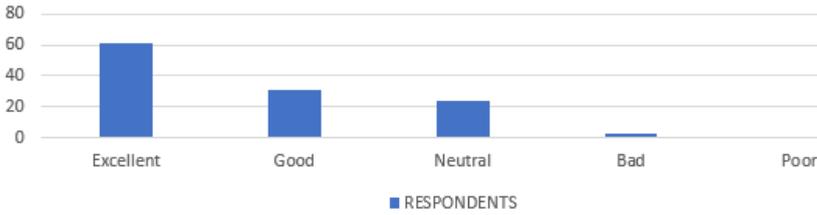


Interpretation-Maximum were seen ordering once in 15 days and least preferred for once in 3-4 days. This states that people somewhere prefer online ordering of food and grocery but not on a daily basis. So, people are dependent on these applications which is a positive mark.

2. Rating the food ordering services of Zomato.

Excellent	61
Good	31
Neutral	24
Bad	03
Poor	01

Rating the food ordering services of Zomato.

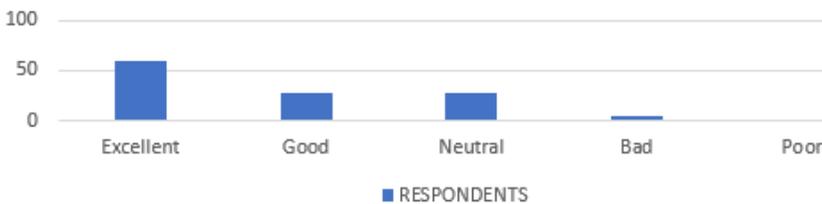


Interpretation-Here, 92 of them finds the ordering services of Zomato excellent and 24 people had neutral experience whereas only 4 had a bad ordering experience. This states that Zomato is able to provide an excellent ordering service lately, but it still has to look after the needs of its customers.

3. Rating the grocery delivery services of Zomato.

Excellent	60
Good	28
Neutral	27
Bad	05
Poor	-

Rating the grocery delivery services of Zomato.

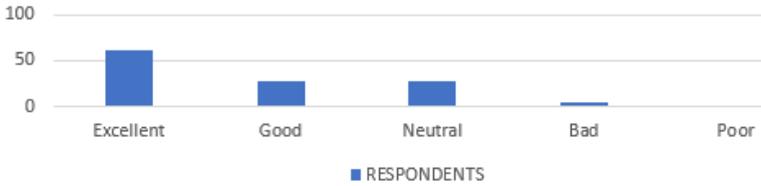


Interpretation-88 of them finds the grocery services of Zomato excellent and 27 people had neutral experience whereas only 5 had a bad experience. This shows that Zomato is able to provide a good grocery delivery services and customers are also preferring it.

4. Rating the item selection process of Zomato.

Excellent	61
Good	27
Neutral	27
Bad	05
Poor	-

Rating the item selection process of Zomato.

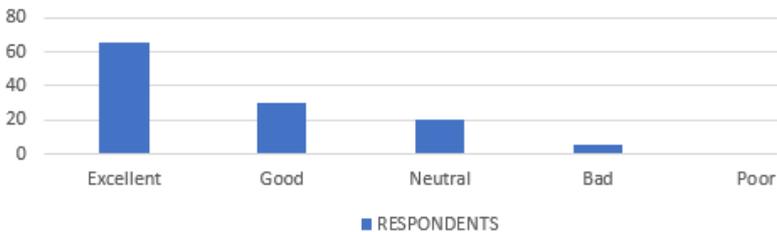


Interpretation-88 are happy with the selection process of Zomato whereas 27 have neither a good nor a bad experience and only a handful of 5 faced difficulty with the process. Zomato still somewhere needs to rectify the issues faced by few in order to achieve better levels.

5. Rating the delivery services provided by Zomato.

Highly satisfied	65
Satisfied	30
Neutral	20
Dissatisfied	05
Highly Dissatisfied	-

Rating the delivery services of Zomato.

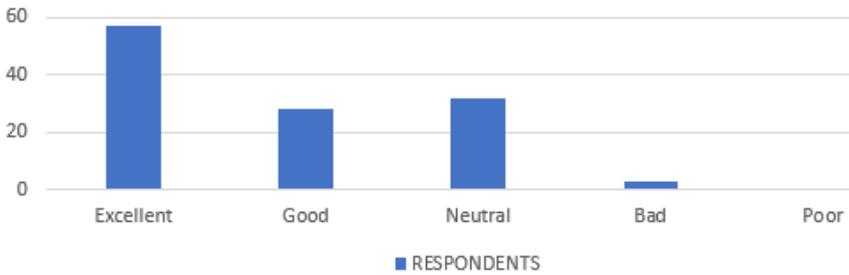


Interpretation-95 are happy with the food delivery of Zomato whereas 20 have neither a good nor a bad experience and only 5 of them faced difficulty with the process. This makes sure that Zomato provides good food delivery services.

6. Rating the grievance redressal process of Zomato.

Highly satisfied	57
Satisfied	28
Neutral	32
Dissatisfied	03
Highly Dissatisfied	-

Rating the grievance redressal process of Zomato



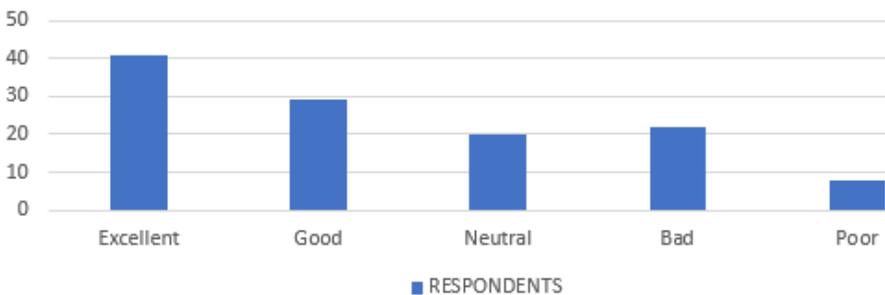
Interpretation-85 are satisfied with the grievance redressal of Zomato whereas 32 have neither a good nor a bad experience and only 5 faced difficulty with the process.

To measure the perception of the customer about Zomato is considered as the second factor for which 3 variables have been taken.

1. Services Zomato excels as compared to its competitors.

Fast Delivery	41
Packaging Services	29
Good Quality	20
Good Offers	22
On time delivery	08

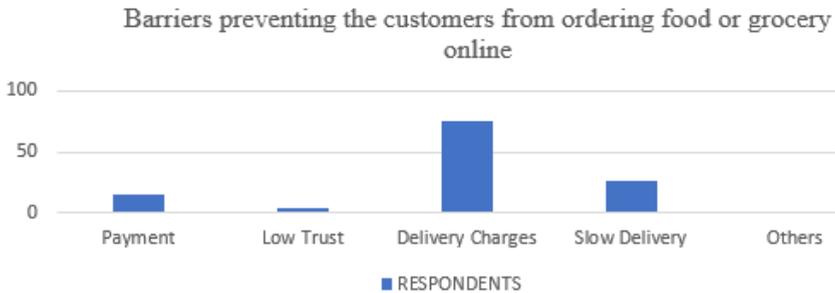
Services Zomato excels as compared to its competitors



Interpretation-41 agrees that Zomato fast delivery makes it excel than its competitors whereas 29 likes their packaging services. 20 of them prefers good services and the rest votes for on time delivery. This states that Zomato is able to provide better services than its competitors.

2. Barriers preventing the customers from ordering food or grocery online.

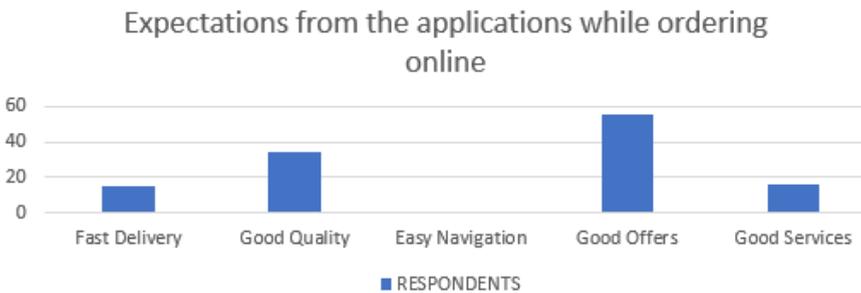
Payment	15
Low Trust	04
Delivery Charges	75
Slow Delivery	26
Others	-



Interpretation-Out of 120 respondents, 75 finds difficult to order online because of high delivery charges. 26 respondents find slow delivery as a barrier, rest 19 considers payment and low trust issues towards the application as a barrier.

3. Expectations from the applications while ordering online.

Fast Delivery	15
Good Quality Products	34
Easy Navigation	-
Good Offers	55
Good Services	16



Interpretation-Out of 120 respondents, 55 prefers application providing good offers, next 36 of them prefers good quality products. 16 people considers application with good services and the rest prefers fast delivery.

But before Factor Analysis, the data collected has to be treated for their reliability, therefore a reliability test is required for all the mentioned variables.

Reliability Test-Reliability analysis states that a scale should consistently represent the construct it is meant to measure. Therefore, this test was conducted prior to factor analysis. Only when the Cronbach's Alpha is greater than 0.70 are the tested data considered credible. Factor analysis may be done if the tested data are valid.

Cronbach's Alpha	N of Items
.782	9

Interpretation-Running the Reliability Test allowed for the analysis of the data's reliability test. The lowest number achieved from the reliability tests was 0.782, which is greater than 0.70. This illustrates the accuracy of the data. As a consequence, it may be used to run further tests for the article's analysis.

Factor Analysis Results

Hypothesis-This hypothesis is designed to determine whether people in the present day prefer the already-existing firm Zomato. In order to gauge consumers' experiences with and preferences for Zomato, a total of 9 Likert scale questions were used. This test also indicates why the business will continue to exist in the future.

On the basis of the collected data, Reliability test and Factor Analysis test has been applied to test the hypothesis.

Ho-The customers do not prefer Zomato over other competitors.

H1-The customer prefers Zomato over other competitors.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.885
Bartlett's Test of Sphericity	Approx. Chi-Square	910.068
	Df	36
	Sig.	<.001

KMO and Bartlett's Test of Significance

Interpretation-Since the KMO value is 0.885, which is greater than 50% and statistically significant at the 5% level, factor analysis is appropriate. The correlation coefficient matrix is also significant, as shown by the p value for the chi-square statistic. The value is 0.001, which is lower than 0.05, indicating that the null hypothesis is rejected and that customers prefer Zomato over its rivals.

CONCLUSION

The growth of online delivery services is quickening. Consumer buying patterns slowed down as a result of COVID-19, but Zomato has taken several steps to solve the issue and help its partners. Although the survey's findings indicate a

drop in orders, it is predicted that this trend will eventually reverse itself. The survey claims that customers are not loyal to a single service provider. Zomato ought to expand their given the significant client demand there. Food quality issues and logistical issues must be fixed for deliveries to be made on time.

In order to keep its customers interested, Zomato's digital marketing approach will need to continually change to reflect the most recent trends. They are presently doing a fantastic job. Zomato has to be more responsive to customer expectations and dynamic in order to compete with other online meal delivery businesses.

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Performance Evaluation of Mutual Funds: A study on select Equity Oriented Schemes in India

Soumavo Banerjee¹

Post Graduate & Research Department of Commerce (M.Com),
St. Xavier's College (Autonomous), Kolkata

ABSTRACT

There has been a dearth in the field of research on the performance of mutual funds after the Covid-19 pandemic. This study aims to address this gap so as to make investors more aware about the performance of mutual funds. The study compares the returns of the schemes with that of the market index, by using two models, namely, Sharpe ratio and Treynor ratio. A total of ten schemes have been taken, for a period of five years from 2017 to 2022, taking into account all the ups and downs that have occurred during the pandemic period. This study explores the evolution of the mutual fund industry in India and showcases its ever growing popularity over the years. One of the primary goals of this study is to make investors aware about the returns that they might receive from individual schemes and the rates the market index has been offering for the concerned five-year period. The results of this study show that most schemes have outperformed the market index, thereby showcasing the value of mutual funds as a safe form of investment with consistent returns even during the pandemic years. After calculating the returns, a comparison of the two ratios have been made and ranks have been assigned to the schemes based upon their performance which was calculated using the said ratios, in order to make it easier to understand. Thus, this study can help to instil a sense of security and confidence in the investors, by providing them a relevant overview about the performance of mutual funds in recent years.

INTRODUCTION

Financial institutions are at the core of a financial system which gives individuals the ability to save and invest wherever they want. A financial market is an important component of the financial system which helps the savings investment

1. This dissertation done by the scholar under the guidance of Prof. Ankita Samanta.

process. A financial market comprises a primary market and secondary market. With the increase in importance of the capital market, the concept of mutual fund gained popularity. The money is basically invested in equity or debt or in a combination of two. These funds are managed by professionals and are a safe way of investing which has been providing consistent returns over the years. As the industry gets bigger this study will help people gain knowledge about the returns the mutual funds have been generating over the years.

LITERATURE REVIEW

Treynor (1965) had presented a new way of viewing performance results. Treynor developed a model to evaluate performances which was popularly known as reward to volatility ratio. Treynor have talked about both market influence on portfolio returns and investors aversion to risk.

Shortly after that Sharpe (1966) explained the idea that the expected return on an efficient portfolio and the risk attached to it are linearly connected. Unlike Treynor he used standard deviation. Sharpe had examined 34 open end mutual funds for the period ranging from 1954-1963 and found considerable variability in the Sharpe ratio ranging from 0.78 to 0.43. He offered two possible explanations: (a) the difference is attributable to management skills; and (b) the cross sectional variation is either random or due to excessive fund expenses.

Fama (1972) introduced a multi-pricing model allowing evaluation to be done period by period on a cumulative basis. When an investment manager decides to concentrate his holdings in what he believes to be a winner, he offered ways for quantifying the foregone diversity.

Puri (2010) took a time period of 3 years ranging from September 2007 to August 2010. He compared 30 mutual funds, finding that HDFC Growth was the highest performer while JM Financial (Dividend) was a below average fund in terms of performance. Daily NAV has been taken into consideration. 13 out of 30 schemes were found to have performed well which means 43% of the balanced schemes have provided better returns than the market. It was discovered that 13 of the 15 growth plans (or roughly 87%) had higher risk-adjusted excess returns, showing that balanced-growth strategies are more likely to compensate investors for the added risk they are taking.

Das and Shankar lall (2018) has made a study on fifteen different mutual fund schemes where it compares the rate of return and volatility and tells that mutual fund is a better investment platform with good return and low risk. It tried to show that mutual funds are good for risk-averse investors.

Chaudhari (2020) had taken into consideration 10 hybrid mutual funds categorized into aggressive and conservative and the time period is for 3 years from 2017 to 2019. It was found out that the majority of the aggressive category belonged to the equity and they are riskier whereas conservative category consisted mostly of debt and fixed income funds which are less volatile and less risky. It was also found that conservative category yielded higher returns whereas aggressive yielded negative returns.

RESEARCH GAP

The above literature review states that there has been no proper comparison on the performance of mutual funds and which funds to invest in. There has been no proper study made on the performance for the last few years especially during the Covid-19 pandemic.

OBJECTIVES

1. To provide a conceptual framework of mutual funds.
2. To compare different types of equity based mutual funds
3. To provide an understanding regarding investments in select mutual funds.

RESEARCH METHODOLOGY

The data consists of ten samples which are HDFC Top 100 Fund-Direct Plan – Growth Large Cap Fund, ICICI Prudential Bluechip Fund - Direct Plan – Growth Large Cap Fund, Quant Mid Cap Fund - Direct Plan – Growth Mid Cap Fund, Motilal Oswal Midcap Fund - Direct Plan – Growth Mid Cap Fund, HDFC Focused 30 Fund - Direct Plan – Growth Focused Fund, Franklin India Focused Equity Fund - Direct – Growth Focused Fund, Quant Tax Plan - Direct Plan – Growth ELSS, HDFC Tax Saver Fund - Direct Plan – Growth ELSS, HDFC Flexi Cap Fund - Direct Plan – Growth Flexi Cap Fund, JM Flexi Cap Fund - Direct – Growth Flexi Cap Fund. The time period is for five years ranging from 2017-2022. Half Yearly monthly end NAV's have been taken to calculate the returns. The NAV's have been collected from the website of AMFI. The risk-free rate i.e., implicit yield of 91- Day T-Bill has been taken from the website of RBI. The benchmark index i.e S & P BSE Sensex has been taken and the returns have been calculated. All the workings have been done in excel. Two measures have been used to calculate the performance of mutual funds. The measures are: Sharpe Ratio and Treynor Ratio.

ANALYSIS AND INTERPRETATIONS

We can see in Table 1 that all the schemes have generated higher returns than the market portfolio. The schemes have earned more than the sample average (8.51%). The average total risk for the scheme is 18.817% which is higher than the average of 16%. This says that higher returns are generated by schemes with higher risk.

Table 2 displays all the betas of the schemes. JM Flexi Cap shows the minimum beta (0.883268) and Quant Tax Plan shows the maximum Beta (1.407927) when S & P BSE Sensex is the index. Here it is found that the Large Cap has the lowest systematic risk of average 16.63%. The average beta for ELSS is 1.206241 and average systematic risk for it is 21.715% which are the highest. Quant tax Plan has the highest systematic risk of 26.02% and ICICI Prudential Blue-chip Fund has the lowest with 16.26%.

Table 3 which is done using the Sharpe ratio shows that five out of ten schemes, i.e., 50% have crossed the benchmark index. It means that it has superior performance. The top two performing funds are Quant Mid Cap Fund and Quant Tax Plan.

By using Treynor ratio it can be seen that these five schemes out of ten, have outperformed the benchmark index. The top two performing funds are Quant Mid Cap Fund and Quant Tax Plan. The ranks are somewhat like the Sharpe ratio. This is because Sharpe ratio takes into consideration the systematic risk while Treynor takes beta or the market risk.

CONCLUSION

Mutual Funds have been preferred by the retail investors for investing all over the world due to the advantages that it holds. It diversifies the risk of the portfolio and maximizes your return. The average Asset Under Management (AUM) has grown by leaps and bounds in the last few years. The no. of SIP accounts has increased by a huge margin from April, 2016 to February, 2023.

In chapter 2 the conceptual issues of the mutual funds are discussed. Different terminologies that are related to mutual funds have been mentioned. Different measures of performance evaluation have been written there. Two ratios have been used in this project to evaluate the performance of mutual funds. The two measures are Sharpe Ratio and Treynor Ratio.

Coming to chapter 3, development of mutual funds in India have been incorporated. It consists of the stages of growth from the year 1963 to 2023. This chapter depicts how the mutual fund industry in India has grown over the years.

Finally in chapter four all the workings regarding the performance of the mutual funds have been shown. The risk and the return have been calculated using various methods. Thus letting the investor know about the returns that the schemes are providing and the market index has been generating.

This shows that mutual funds have been providing consistent returns over the years even during the covid - 19 pandemic. Thus this study aims to make investor aware about the return and that it is a safe space for investing.

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Table 1: Risk and Return of Scheme vs Benchmark Portfolio

Sl. No.	Scheme	Scheme Return	Scheme Risk	Market Return	Market Risk	Risk-Free Rate
1	HDFC Top 100 Fund - Direct Plan – Growth Large Cap Fund	7%	17%	8.51%	16%	7.45
2	ICICI Prudential Blue-chip Fund - Direct Plan – Growth Large Cap Fund	8.10%	16.26%	8.51%	16%	7.45%
3	Quant Mid Cap Fund - Direct Plan – Growth Mid Cap Fund	13.02%	20.61%	8.51%	16%	7.45%
4	Motilal Oswal Midcap Fund - Direct Plan – Growth Mid Cap Fund	8.82%	17.75%	8.51%	16%	7.45%
5	HDFC Focused 30 Fund - Direct Plan – Growth Focused Fund	7.00%	18.15%	8.51%	16%	7.45%
6	Franklin India Focused Equity Fund - Direct - Growth Focused Fund	9.03%	20.10%	8.51%	16%	7.45%
7	Quant Tax Plan - Direct Plan – Growth ELSS	14.76%	26.02%	8.51%	16%	7.45%
8	HDFC Tax Saver Fund - Direct Plan – Growth ELSS	6.41%	17.41%	8.51%	16%	7.45%

Sl. No.	Scheme	Scheme Return	Scheme Risk	Market Return	Market Risk	Risk-Free Rate
9	HDFC Flexi Cap Fund - Direct Plan – Growth Flexi Cap Fund	8.55%	19.09%	8.51%	16%	7.45%
10	JM Flexi Cap Fund - Direct – Growth Flexi Cap Fund	7.84%	16.78%	8.51%	16%	7.45%
		9.053%	18.917%	8.51%	16%	7.45%

Table 2: Risk and Return of Mutual Funds (Grouped)

Sl. No.	Scheme	Scheme Return	Total Risk	Beta
Large Cap				
1	HDFC Top 100 Fund - Direct Plan – Growth Large Cap Fund	7%	17%	1.0046014
2	ICICI Prudential Bluechip Fund - Direct Plan – Growth Large Cap Fund	8.10%	16.26%	0.9643051
		7.55%	16.63%	0.98445325
Mid Cap				
3	Quant Mid Cap Fund - Direct Plan – Growth Mid Cap Fund	13.02%	20.61%	1.083334
4	Motilal Oswal Midcap Fund - Direct Plan – Growth Mid Cap Fund	8.82%	17.75%	0.953109
		10.92%	19.18%	1.0182215
Focused Fund				
5	HDFC Focused 30 Fund - Direct Plan – Growth Focused Fund	7.00%	18.15%	0.976892
6	Franklin India Focused Equity Fund - Direct – Growth Focused Fund	9.03%	20.10%	1.065175
		8.015%	19.125%	1.0210335
ELSS				
7	Quant Tax Plan - Direct Plan – Growth ELSS	14.76%	26.02%	1.407927

Sl. No.	Scheme	Scheme Return	Total Risk	Beta
8	HDFC Tax Saver Fund - Direct Plan – Growth ELSS	6.41%	17.41%	1.004555
		10.585%	21.715%	1.206241
Flexi Cap				
9	HDFC Flexi Cap Fund - Direct Plan – Growth Flexi Cap Fund	8.55%	19.09%	1.06144
10	JM Flexi Cap Fund - Direct – Growth Flexi Cap Fund	7.84%	16.78%	0.883268
		8.195%	17.935%	0.972354

Table 3

Sl. No.	Scheme	Scheme's Treynor Ratio	Rank	Benchmark's Treynor Ratio
1	HDFC Top 100 Fund - Direct Plan – Growth Large Cap Fund	0.071408493	8	0.085099654
2	ICICI Prudential Blue-chip Fund - Direct Plan – Growth Large Cap Fund	0.081001527	6	0.085099654
3	Quant Mid Cap Fund - Direct Plan – Growth Mid Cap Fund	0.130196699	2	0.085099654
4	Motilal Oswal Midcap Fund - Direct Plan – Growth Mid Cap Fund	0.088246696	4	0.085099654
5	HDFC Focused 30 Fund - Direct Plan – Growth Focused Fund	0.069967107	9	0.085099654
6	Franklin India Focused Equity Fund - Direct – Growth Focused Fund	0.090299132	3	0.085099654
7	Quant Tax Plan - Direct Plan – Growth ELSS	0.147574775	1	0.085099654
8	HDFC Tax Saver Fund - Direct Plan – Growth ELSS	0.064051427	10	0.085099654
9	HDFC Flexi Cap Fund - Direct Plan – Growth Flexi Cap Fund	0.085512887	5	0.085099654
10	JM Flexi Cap Fund - Direct – Growth Flexi Cap Fund	0.078425854	7	0.085099654

Analysis of the Spread of Financial Literacy in Kolkata

Kingshuk Bagchi¹

Post Graduate & Research Department of Commerce (M.Com),
St. Xavier's College (Autonomous), Kolkata

ABSTRACT

'Financial Literacy' is a term which has evolved over the years across the globe and has become a point of focus for researchers, academicians, policy makers and investors. Financial literacy has gathered importance with the development of large number of financial products, major changes in economic factors and complications of the market in India. According to the last National Centre for Financial Education report, only 27 per cent of India's population is financially literate. Low level of financial literacy results in ill-informed financial decisions which ultimately have a negative impact on the financial system and on the economy as a whole. Most of the Indians are investing in low return and traditional instruments and hence are unable to reap the benefits of modern financial instruments which give much higher returns due to lack of financial literacy. The vision of making India a digital and cashless economy can only be achieved by improving the financial literacy level. The fear and hesitation in the minds of the people to transact online must be erased completely with emphasis on security. This project is an attempt to study the present level of financial literacy, financial education and inclusion.

Keywords: Financial literacy, financial education and financial Inclusion.

INTRODUCTION

Financial Literacy is a very important term which starts in a person's life in childhood when his / her parents encourage him / her to save money in little piggy banks. A child learns about financial behaviour in terms of those little savings which are very precious to him / her. Over a period of time the habit of saving coins / small notes in piggy bank changes to saving one's pocket money to buy something special. Financial knowledge comes with arithmetic in school

1. This dissertation done by the scholar under the guidance of Dr. Sreemoyee Guha Roy.

curriculum in terms of chapters like banking, simple and compound interest, shares and dividends etc. Slowly the little savings change into saving in bank accounts and investing the money intelligently to make it grow, and to keep it secured too with the help of insurance. 'FINANCIAL LITERACY' is learning about managing finances and this learning starts at a young age and continues to increase throughout life.

Financial Literacy is the gateway to financial success and individual financial success contributes to the nation's economic and financial well-being.

If we talk about financial literacy in our country's context then I would like to talk about a saying in our classic language Sanskrit which says "**Dhanam Moolam Idam Jagat**". If it is translated literally, it means Money is the centre of this universe. While uncompromisingly one can argue on this saying, logically we need to accept this, as money, which has an immense exchange power, can open almost all doors.

LITERATURE REVIEW

A study by Rahul Singh Gautam. *et.al* in 2022 from 29 states and 2 Union territories of India was conducted on Financial Literacy and its impact on rural development in India. The findings were that Financial Literacy has a positive impact on India's Financial Inclusion and rural development. Financial Literacy helps to promote Financial Inclusion and is very important for rural and urban development.

A study by Anusree Bose. *et.al* in 2021 to measure financial literacy levels of college teachers of Kolkata indicated that though the scores of Financial Attitude were moderate, the scores of financial behaviour and financial knowledge were quite low. It was observed that Financial Literacy levels of teachers were the lowest for the age group 50 and above. Furthermore, it was inferred that neither there was any significant difference with respect to Financial Literacy levels between various educational departments nor between the score of male and female respondents which was also quite low as compared to the qualifying mark.

A research on Financial Literacy and Financial Decision with reference to service sector in Kolkata carried out by Priyanka Banik 2021 revealed that the respondents were not aware of various investment schemes and did not take any advantage of the insurance sector and trusted only banks for savings and were not comfortable in using Mutual funds. This mindset deprived them from making secure savings, choosing the best possible investment options and thereby secure higher returns.

In 2021 Shubhra Biswas. *Et al* studied the impact of Financial Literacy on household decision making in the state of West Bengal (8 districts). The study brought out the fact that Kolkata had the highest mean Financial Literacy score primarily because of their superior knowledge since residing in a large city. The other findings were that female financial literacy was lower than that of males

and Financial Literacy of rural areas were lower than that of urban areas. Higher income and education were the other two major influencing factors.

RESEARCH GAP

Based on the various literature reviews that we have placed it is observed that the studies on Financial Literacy and Financial Inclusion have been carried out across several districts which included both rural and urban areas (covering backward areas also). The studies which had been carried out in Kolkata districts covered specific types of samples like – teachers of colleges, service holders in private companies. There still lies various unattended sectors like school teachers, teachers who are only running tutorials, business man, professionals, maids, drivers and college students (above 18 years of age), un-skilled and semi-skilled labourers, less educated people etc. who are also a major part of the population. Our study which will be based on sample studies of Kolkata district will be covering these areas also along with the other segments as also covered in the above studies based on Kolkata district

RESEARCH QUESTIONS

- Is there any relation between financial literacy and age, gender, education, household income, etc. in Kolkata?
- What is the financial literacy level from the providers' perspective like Banks, Insurance, Mutual Funds, etc.?

RESEARCH OBJECTIVES:

1. To assess the level of financial literacy classified on the basis of age, gender, education, household income, etc. in Kolkata.
2. To assess the level of financial literacy from providers' perspective like Banks, Insurance, Mutual Funds, etc.

RESEARCH METHODOLOGY

The entire research is based on 2 objectives. The methodology that will be followed are as follows:-

OBJECTIVE 1: It is based on primary data. The primary data has been collected on the basis of well – drafted questionnaire as per the **Organization for Economic Cooperation and Development (OECD)** guidelines (Annexure I). The data collected has been carefully analysed using advanced statistical tools like Cross-Tabulation, .Chi-Square. Tests to find out relationships between concerned variables.

Objective 2: It is based on secondary data collected from various official websites of Reserve Bank of India (RBI), Insurance Regulatory Authority of India (**IRDAI**), Mutual Funds, Pension Fund Regulatory and Development Authority (**PFRDA**), India Budget, Investor Education and Protection Fund (**IEPF**), National Centre for Financial Education (**NCFE**), Securities and Exchange Board of India (**SEBI**),

news clippings, etc. The data has been compiled and analysed to find out the trend of growth/decline in financial literacy and financial inclusion levels from provider's perspective like Banks, Insurance, and Mutual Funds etc. over the past few years.

ANALYSIS & INTERPRETATION

Primary Data Analysis

Respondents

Total Respondents	-	150
Males	-	90
Females	-	60

DEMOGRAPHIC DETAILS OF RESPONDENTS

The study for Financial Literacy has been done in Kolkata. The respondents belong to various age groups and have different levels of educational qualifications. Further, they belong to different professional backgrounds and fall under different slabs of household incomes. The details of the various slabs are given below (Table 3A.1, 3A.2, 3A.3):

Table 3A.1

Classification according to Age Group

Age Group (in years)	No. of Respondents
18 – 29	35
30 – 49	54
50 - 69	56
70 - 89	5
Total	150

Source: Field Survey

Table 3A.2

Classification according to Educational Qualification

Educational Qualifications	No. of Respondents
10 th Pass or less	19
12 th Pass	3
Graduation & Equivalent	58
Post Graduation /Equivalent and above	70
Total	150

Source: Field Survey

Table 3A.3
Classification according to Household Income

Household Income	No. of Respondents
< Rs. 20,000	22
Rs. 20,000 – Rs. 40,000	26
Rs. 40,000 – Rs. 60,000	27
Rs.60,000	75
Total	150

Source: Field Survey

The findings of the survey are based on the scores of Financial Literacy divided into three attributes namely **Financial Attitude (FA)**, **Financial Behaviour (FB)** and **Financial Knowledge (FK)**. Based on the **Organization for Economic Cooperation and Development (OECD) guidelines 2022**, a person will be considered as Financially Literate if he/she reaches the minimum threshold scores of each of the attributes as given below:

Financial Attitude \geq 2.4

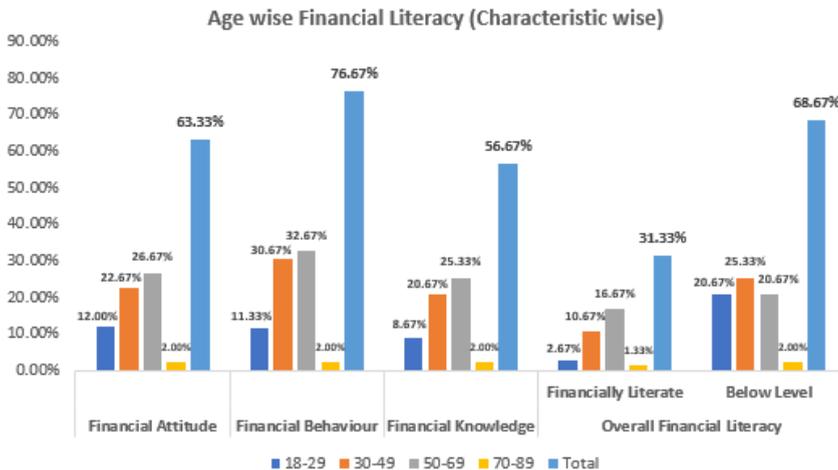
Financial Behaviour \geq 6

Financial Knowledge \geq 5.25

Total Financial Literacy Score \geq 13.65 (subject to attainment the minimum threshold score for each of the above attributes).

Based on the above criteria, various reports have been prepared to analyze the data into meaningful and easy to understand conclusions.

(i)



Source: Field Survey

Table: 3A.7 Chi-Square Test

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	371.827 ^a	216	0.000
Likelihood Ratio	210.856	216	0.586
Linear-by-Linear Association	29.178	1	0.000
N of Valid Cases	150		

a. 258 cells (99.6%) have expected count less than 5. The minimum expected count is .01.

ANALYSIS

Table 3A.6 shows the cross-tabulation which maps Educational Qualifications with Financial Literacy Score.

The cross-tabulation data indicates that people who are less educated have got either low or mediocre scores and have not reached the high scores at all, whereas the data for respondents who are more educated are less concentrated on the lower side.

Moreover, it can be observed that those who are graduate and post – graduate scored much higher compared to other professions. This implies higher education has an impact on Financial Literacy. The Chi – Square test has also been performed under Table 3A.7 to find out whether there is any significant relationship of educational qualification with Financial Literacy level.

Chi – Square Test Analysis

H₀: There is no relation between Educational Qualifications and Total Score of Financial Literacy

H₁: There is a relation between Educational Qualifications and Total Score of Financial Literacy

The Chi-Square Test significance shows a value of **0.003** which is <0.05 , indicating that **H₀** gets rejected; **H₁** gets accepted which states significant relation exists between Educational Qualifications and Total Score of financial literacy. The Chi Square test results imply that a person's educational qualification influences the financial literacy level of that person.

ANALYSIS OF FINANCIAL LITERACY FROM PROVIDERS PERSPECTIVE (SECONDARY DATA ANALYSIS)

The financial service sector in India which comprises of the providers like bankers, insurance regulators, pension regulators , mutual fund regulators etc.

has brought about major important changes in the last 7-8 years. It has been observed as more and more people get financially included, more the benefits of these changes reach out to the common man. Hence, Financial Inclusion is of utmost priority since it enables economic growth. The Government of India and the financial sectors regulators like RBI, SEBI, IRDAI & PFRDA have taken various steps in the direction of Financial Inclusion to ensure access to appropriate financial products and services required by all sections or groups of people at affordable costs.

The financial education initiative taken by the providers are guided by the National Strategy for Financial Education (NSFE). India's first NSFE was released in 2013. To attain the objective of NSFE, the National Centre for Financial Education (NCFE) was established as a section 8 company under The Companies Act, 2013 by all the financial sector regulators.

I. Role of Banks in the Financial Inclusion

1. Initiation of Pradhan Mantri Jan Dhan Yojana (PMJDY) Accounts
2. Initiatives in Priority Sector Lending (PSL)
3. Enhancement of Collateral Free Loans to Self Help Groups (SHGs) under Deendayal Antyodaya Yojana
4. Retail Participation and Consumer Protection
5. Reserve Bank Retail Direct Scheme
6. Payments and Settlement Systems
7. Centres for Financial Literacy(CFLs) and Financial Literacy Centres (FLCs)

The below chart (Table 3B.1) shows the progress of banks in the financial literacy plan:-

Table: 3B.1
Progress in Financial Inclusion Plan
(At end-March)

Sr No.	Particulars	2016	2015	2020	2021	2022*
1	Banking Outlets in Villages- Branches	33,378	49,571	54,561	55,112	53,287
2	Banking Outlets in Villages- 2000-BCs	8,390	90,877	1,49,106	8,50,406	18,92,462
3	Banking Outlets in Villages < 2000-BCs	25,784	4,08,713	3,92,069	3,40,019	3,26,008
4	Total Banking Outlets in Villages – BCs	34,174	4,99,590	5,41,175	11,90,425	22,18,470
5	Banking Outlets in Villages – Other Modes	142	4,552	3,481	2,542	2,479
6	Banking Outlets in Villages – Total	67,694	5,53,713	5,99,217	12,48,079	22,74,236
7	Urban Locations Covered Through BCs	447	96,847	6,35,046	4,26,745	12,95,307
8	BSEDA - Through Branches (No. in Lakh)	600	2,103	2,616	2,659	2,661
9	BSEDA - Through Branches (Amt. in Crore)	4,400	38,498	90,831	1,18,392	1,20,464
10	BSEDA - Through BCs (No. in Lakh)	130	1,678	3,388	3,796	4,015
11	BSEDA - Through BCs (Amt. in Crore)	1,100	7,457	72,581	87,623	1,07,415
12	BSEDA - Total (No. in Lakh)	735	3,981	6,004	6,455	6,677
13	BSEDA - Total (Amt. in Crore)	5,500	43,955	1,68,412	2,06,015	2,27,879
14	OD Facility Availed in BSEDA (No. in Lakh)	2	76	64	60	68
15	OD Facility Availed in BSEDA (Amt. in Crore)	10	1,991	829	534	731
16	KCC - Total (No. in Lakh)	340	426	475	466	473
17	KCC - Total (Amt. in Crore)	1,24,000	4,38,229	6,39,069	6,72,624	7,10,715
18	GCC - Total (No. in Lakh)	10	92	202	202	96
19	GCC - Total (Amt. in Crore)	3,500	131,160	1,94,048	1,55,826	1,70,203
20	ICTA/Cs-BC-Total Transactions (No. in Lakh) #	270	4,770	32,318	30,551	28,533
21	ICTA/Cs-BC-Total Transactions (Amt. in Crore) #	700	85,980	8,70,643	8,49,771	9,05,232

Notes: 1. * Provisional.

2. # Transactions during the financial year.

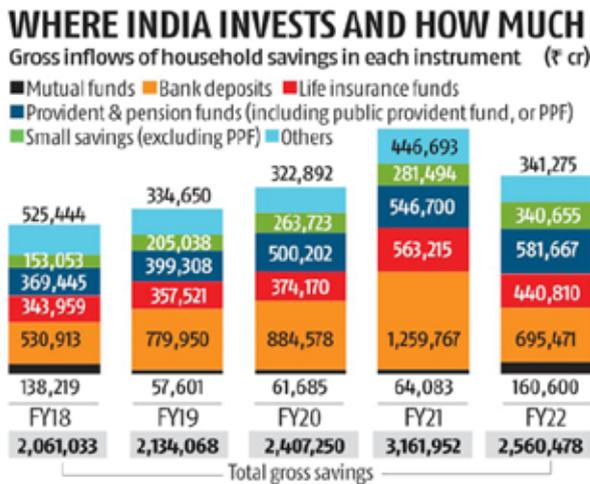
3. ~ There is a significant increase in data reported by few private sector banks.

Source: FIP returns submitted by public sector banks, private sector banks and regional rural banks.

II. **Pension Fund Regulatory Development Authority (PFRDA)** also played a significant role in Financial Literacy. In 2015 Atal Pension Yojana (APY) was introduced in order to provide social security to all sections of the citizens of India. Individuals aged 18-40 years will be covered under this scheme with more importance to the low-income, unorganised and underprivileged individuals. The Asset under Management (AUM) of NPS and APY showed a growth of 34.8%. The total number of subscribers under Atal Pension Yojana (APY) and New Pension Scheme (NPS) recorded a growth of 23.7% from the year 2020 to 2021.

III. **The Mutual Fund (MF) Industry** has witnessed a good growth during the last few years. The Indian Mutual Fund Industry had ₹ 39, 50, 323 crores in Assets under Management (AUM) as on October 31, 2022. This AUM has become more than five times during the last 10-year period from ₹ 7.68 trillion on October 31, 2012 to Rs. 39.50 trillion on October 31, 2022.

Table/Chart: 3B.2



Source: RBI

As per table 3B.2, it is observed that no. of bank deposits have increased rapidly over the years from FY18 – 21 but after that it experienced a declined. Again, mutual funds showed a positive rise from FY21 – 22. It implies that people has started moving from keeping savings in bank deposits to making savings in mutual funds.

CONCLUSION

The CEO and Executive Chairman of Berkshire Hathaway Warren Buffett once said “Do not save what is left after spending, but spend what is left after saving”. The two factors (savings and investments) have a lot of determinants which include the level of income which can be disposed, the real interest rate, effects of taxation, financial reforms etc. We fail to understand the facts in these areas or

segments due to lack of Financial Knowledge. The level of awareness on where we should invest, the operation of securities markets, what should be the saving pattern for retirement, risk-reward relationship etc. is still very low amongst most of us.

A major problem is that there are some perceptions which exist amongst a majority of people who still believe in saving a lot of cash in their homes which ultimately limits the circulation of money in the economy and hence level of investments in the capital market becomes low which ultimately affects the growth of the economy. The solutions to all such issues have led to take steps in improving the level of financial literacy in the country. To improve financial literacy, it is important that children at an early age understand the concepts of savings and develop their interest in the field of financial literacy. Setting up the initial base at school level gives the children a sense of responsibility and pride towards developing economy of which they are a part. It is important that people invest in instruments other than fixed income securities also.

Hence, let us join the drive of financial literacy together to include all sections of the country to make India a '**Financially Literate**' nation.

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Section 2

Marketing

Representation of Women in Bengali Print Magazine Advertisements: A Longitudinal Study

Koninika Kundu¹

Post Graduate & Research Department of Commerce (M.Com),
St. Xavier's College (Autonomous), Kolkata

ABSTRACT

Women are multifaceted. They are considered natural caregivers, often objects of desire, sometimes the breadwinners, and occasionally, are all three. Women are also consumers of products; a consumer that in the past has solely been treated as the target of household products, or of beauty, to help them place themselves in the standards of expectations set by the culture they reside in. The onset of feminism in the latter half of the 20th century saw a shift in these sentiments. Women were portrayed less as housewives, but were still subject to stereotyping in advertisements, with their concern for physical attractiveness brought to the forefront. These shifts in portrayals however, differ from culture to culture, and studies show that the more patriarchal societies such as India, are still behind when it comes to diverse portrayal of women.

This monotony extends to beauty standards in India as well, with fair, light-skinned models appearing frequently in advertisements, and often portrayed as the paragon of femininity. Advertisements reflect the sentiments of the society and form a large aspect of the content in Bengali language magazines such as Sananda and Anandalok, and they often project an ideal to aspire to, depicting individuals in a desirable light as a promotion of their products. These idolised visualisations many a times are not a true representation of the female demographic, and can have women feeling alienated, and negatively impact their self-image. Hence, the purpose of this paper is to observe these advertisements and understand the portrayal of the regional Bengali female consumer, both in gender roles, and in beauty standards.

Keywords: Women magazines, Gender roles, Advertisements, Semiotic Analysis.

1. This dissertation done by the scholar under the guidance of Dr. Sumanta Dutta.

INTRODUCTION

Women as consumers have traditionally been treated as the head of the household. They are the people who make decisions regarding items in a home, or are concerned with beautification of themselves for the appeasement of the society they are residing in. The advertisements thus targeted to them reflected these sentiments, although with the onset of feminism, these portrayals started to shift. In the latter half of the 20th century, women were portrayed comparatively less as housewives, but persistently continued to be shown as desirable objects and were subject to stereotyping in products such as cosmetics and clothes (Michell & Taylor, 1990; Lysonski, 1985). These portrayals however, differ from culture to culture, with many studies proving that the more patriarchal and traditional the society of a country, the likelier it is for women to be portrayed traditionally in advertisements (Zhang *et al.*, 2009; Khairullah & Khairullah, 2009; Dallman, 2001). India is one such society where patriarchal values persist, and where the emancipation of women lags Western, and other developed countries. Therefore, advertisements reflect cultural opinion, and examining the portrayal of women in advertisements, especially in relation to how women view themselves as consumers is important to understand the changing ideas and perception of gender roles.

Moreover, magazines not only act as an advertiser, but they also project the idea of an 'ideal woman,' a representation of whom the female readership of the magazines should aspire to be (Shinoda *et al.*, 2020; French *et al.*, 2020; Yazdanparast *et al.*, 2018; Basnyat & Chang, 2014). These representations range from being traditionally perfect housewives, a career woman who should be desired and envied upon, or a beautiful object in line with societal beauty standards. Often, these are not a true reflection of the demographic and do not represent the average woman, which can alienate women from the advertisements, (Kates & Shaw-Garlock, 1999) negatively impact self-image, and suggest certain ideologies women should adhere to (Gür *et al.*, 2021). In India as well, beauty standards are widely upheld, with light-skinned models primarily representing a far more diverse female population (Parameswaran & Cardoza, 2009). Although affluent strata of women are largely sceptical of such advertisements, their less educated, traditional or older counterparts generally do not find issues with them (Ford *et al.*, 1991). Readership of magazines in regional languages tend to fall in the latter category.

Hence, it is vital to understand the pulse of the female consumer of such magazines and the products advertised in them to examine both the portrayal of women, and the societal expectations placed upon them.

LITERATURE REVIEW

It is important to examine the influence of advertisements among women to truly navigate the powerful tool it is to disseminate ideas of beauty, societal roles and expectations (Vinayan & Raj, 2019; Summers *et al.*, 2013). In this regard, women's magazines play an integral role, as reading them is an activity women

look to do in their downtime or leisure (Ytre-Arne, 2011). Advertisements form a major chunk of the content in these magazines, and both utilitarian and hedonic products are promoted, with women being portrayed in varying roles depending on the category of product (Plakoyiannaki & Zotos, 2009). These advertisements not only promote the product, but also promote an ideal lifestyle— either of a perfect home life through different home appliances and food products (Freeman & Bell, 2013), or of a flawless beauty, through cosmetics and fashion (Gür *et al.*, 2021; French *et al.*, 2020; Yazdanparast *et al.*, 2018; Demarest & Garner, 1992; Michell & Taylor, 1990; Lysonski, 1985), despite women seeking information on various topics like medicine, art and politics from women's magazines (Kitsa & Mudra, 2018) and being sceptical of traditional representation (Ford *et al.*, 1991). Women are subjected to stereotyping in magazines, with studies finding that traditional stereotyping such as women being concerned with home, or physical attractiveness is more prevalent in countries that still have persistent conventional values (Basnyat & Chang, 2014; Zhang *et al.*, 2009; Khairullah & Khairullah, 2009; Frith & Feng, 2019; Dallman, 2001; Basu, 2001). Along with gender stereotypes, women are also portrayed in a set of certain beauty standards, which often are not a true representation of the population (Shinoda *et al.*, 2020; French *et al.*, 2020).

RESEARCH GAP

From the above reviewed literature, we observe that a majority of them have concerned themselves with the portrayal of women in women's magazines (Gür *et al.*, 2021; French *et al.*, 2020; Yazdanparast *et al.*, 2018; Basnyat & Chang, 2014; Summers *et al.*, 2013; Freeman & Bell 2013; Ytre-Arne, 2011; Demarest & Garner, 1992; Michell & Taylor, 1990), and some studies observed portrayals in general audiences and male oriented magazines (Zhang *et al.*, 2009; Plakoyiannaki & Zotos, 2009; Khairullah & Khairullah, 2009; Dallman, 2001; Lysonski, 1985). Furthermore, studies have been expanded to include cultural sentiments and their effect on portrayal of gender roles (French *et al.*, 2020; Yazdanparast *et al.*, 2018; Frith & Feng, 2009; Zhang *et al.*, 2009, Khairullah & Khairullah, 2009; Dallman, 2001) and beauty standards (Shinoda *et al.*, 2020; French *et al.*, 2020; Yazdanparast *et al.*, 2018). As such, no study has been conducted on Indian regional language magazines with respect to women's representation in advertisements, and by the virtue of our dissertation we will attempt to address this gap.

RESEARCH OBJECTIVES

1. To study the frequency of female roles and stereotypes portrayed in Bengali print magazine advertisements.
2. To observe the frequency of gender stereotypes across the product categories of utilitarian and hedonic.
3. To examine the standards of beauty for women portrayed in respect to advertisements through semiotic analysis.

RESEARCH METHODOLOGY

Data Collection

Step one: For the proposed research, we first examined the highest read Bengali language magazines. Due to the high readership, and hence the influence of the magazines, they would be fit to understand the pulse of the Bengali consumer, as not only are they well circulated, but also advertisers would choose these magazines first. In case of magazines, we consider readership more than circulation numbers as magazines have a high shelf life, and in most cases, are passed down reader to reader, unlike in the case of newspapers, which have a very short product life.

According to the latest report by the Indian Readership Survey (henceforth, IRS) in the first quarter of 2019, the following table represents the top five Bengali language magazines on the basis of readership:

Total Readership: Basis Respective Periodicity

Magazine	Periodicity	IRS 2017	IRS Q1 2019
Karmasangsthaan	Weekly	1702	1774
Karmakshetra	Weekly	1319	1357
Sananda	Fortnightly	1287	1319
Saptahik Bartaman	Weekly	937	942
Anandalok	Fortnightly	890	921

Source: Top Magazines by Language of IRS 2019 Q1– Highlights report, page 48 (mruc.net/latest-update)

Step two: We further examined the periodicals mentioned by IRS as the highest read among Bengali language magazines.

- Karmasangsthaan: A free weekly newspaper that provides information on employment opportunities and vacancies.
- Karmakshetra: A weekly magazine on employment and self-employment advice.
- Sananda: A fortnightly women's interest magazine established in 1986 by ABP Pvt. Ltd.
- Saptahik Bartaman: A general interest weekly magazine published by Bartaman Pvt. Ltd.
- Anandalok: A fortnightly celebrity and film magazine established in 1975 by ABP Pvt. Ltd.

Step three: Among the above five magazines, Karmasangsthaan and Karmakshetra are job posting newspapers, barring them as the subject of the study due to their very nature. Saptahik Bartaman, is also not suitable for the study due to its generic fare, and negligible growth from 2017 to 2019. Therefore,

it left us with Sananda and Anandalok — both magazines by ABP Pvt. Ltd. which finds a large part of its demographic among Bengali women, especially in the case of Sananda, which is marketed as a women's interest magazine, and is one of the most influential and well-read magazines in the state of West Bengal.

Step four: The study uses secondary data, and the advertisements are selected from two Bengali language magazines.

The selected magazines are as follows:

- 'Anandalok,' a general audience fortnightly film and celebrity magazine in circulation from 1975;
- 'Sananda,' a women's interest fortnightly lifestyle magazine in circulation from 1986.

Sampling: The advertisements for the sample are at least half page, full page or two-page prints (Yazdanparast *et al.*, 2018; Lysonski, 1985), and at least one woman with more than 1/3rd of her body must be visible (Shinoda *et al.*, 2020).

Only regular issues of the magazines have been studied, excluding special editions and the Bangladesh editions released by ABP Pvt Ltd.

Period of study

The longitudinal approach of this study covers ten years i.e., from 2011 to 2021, to have a fair sample size for the analysis.

Codification scheme

The codification for the analysis and the study of frequency of female role portrayal has been adopted from Shinoda *et al.* (2020); Plakoyiannaki & Zotos (2009); Michell & Taylor (1990); Lysonski (1985), who proposed and used the following codification:

Women in traditional roles

Category	Description
1. Dependency	Dependent on male's protection; In need of reassurance; Making unimportant decisions.
2. Housewife	Women's place is in the home; Primary role is to be a good housewife; Concerned with tasks of housekeeping.

Women in decorative roles

Category	Description
3. Women concerned with physical attractiveness	To appear more appealing (youthful); Concerned with cosmetics and jewellery products; Concerned with fashion.
4. Women as sex objects	Sex is related to product; Sex is unrelated to product.

Women in non-traditional roles

Category	Description
5. Women in non-traditional activities	Engaged in activities outside the home (buying a car etc.); Engaged in sports (e.g., tennis, cricket, football etc.)
6. Career oriented women	Professional occupations; Entertainer; Non-professional (clerical); Blue collar.
7. Voice of authority	The expert.

Women portrayed as equal to men

Category	Description
8. Neutral	Women are shown as equal to men.

This codification can be further classified to product categories of hedonic and utilitarian:

Hedonic Products	Utilitarian Products
1. Recreation and travel	1. Food and drinks
2. Auto and related products	2. Household items (e.g. detergents, cleaning liquids etc.)
3. Jewellery	3. Personal hygiene
4. High-tech devices	4. Financial services
5. Apparel	5. Home appliances
6. Cosmetics	

APPLICATION OF SEMIOTIC ANALYSIS

To understand how beauty standards are portrayed in Bengali magazine advertisements, we propose a codification based on past research conducted on semiotics in relation to women's print advertisements:

Physical representation of women in advertisements (Yazdanparast *et al.*, 2018)

Category	Description
Woman's salience in the advertisement	Depicted in the foreground or in the background.
Woman's look	Western features or Indian features.
Style of clothing	Western or Traditional Indian Bengali style of clothing.

Physical characteristics of women in advertisements (Shinoda *et al.*, 2020)

Category	Description
Age	<ul style="list-style-type: none"> • Young • Adult • Mature adult • Elderly
Body type	<ul style="list-style-type: none"> • Thin • Fat • Average weight • Curvaceous
Skin colour	<ul style="list-style-type: none"> • Fair • Dusky • Dark

Analysis and Interpretation

Objective 1: To study the frequency of female roles and stereotypes portrayed in Bengali print magazine advertisements.

There was a clear bias in advertisements towards the portrayal of women in traditional stereotypical roles. 'Concerned with physical attractiveness' is by far the most popular portrayal, followed by 'housewife'. Even during the years of the pandemic, when life was at a complete standstill, the need for physical attractiveness of a woman is still emphasised by the advertisements. Furthermore, there has been no growth towards progressive thinking as the frequency of gender portrayal remains consistent throughout our ten-year study period. Another point of note when it comes to traditional portrayal of women is the negligible usage of female sex appeal, as it conflicts with the Indian culture of female modesty, an observation that was remarked upon by Das (2000) as well.

These traditional portrayals of women are congruent with the findings by Khairullah & Khairullah (2009) who found that Indian advertisements seemed to place women more traditionally than their Western counterparts. This finding also supports Dallman's cross cultural research on patriarchal sentiments affecting magazine advertisements (Dallman, 2001) and observes that a patriarchal country such as India still portrays women in a regressive light. This finding does not concur with study on print advertising done in Brazil by Shinoda *et al.* (2020) which had found a significant decrease in the traditional portrayal of women.

Objective 2: To observe the frequency of gender stereotypes across the product categories of utilitarian and hedonic.

The overall findings reveal that hedonic products employ the stereotype of 'concerned with physical attractiveness' the most, and that utilitarian products

tend to use 'housewife' as one of their primary stereotypes, although non-traditional portrayals such as voice of authority, neutral, and career-oriented women. This is concurrent with the findings of Plakoyiannaki & Zotos (2009), whose study revealed that hedonic products generally seemed to show women in decorative roles, whereas utilitarian products leaned towards different portrayals of women— both traditional and non-traditional.

Objective 3: To examine the standards of beauty for women portrayed in respect to advertisements through semiotic analysis.

Women are portrayed in the forefront far more, and are hence given importance in the advertisements. The usage of models with Indian and South Asian features in favour of Western ones displays the advertisers emphasising the merits of personal representation more than using Western ideals as a point of prestige. This finding diverges from the study conducted by Yazdanparast *et al.* (2018) on Iranian women's magazines, which found that Western beauty ideals were widely used and employed to enhance the brand's glamour and affluence. The style of clothing too, leaned towards traditional Indian apparel.

As for the physical characteristics of women, we found that models were primarily adult, irrespective of the mature adult demographic of the magazine readers, and were thin, and fair. This corresponds to study done by Shinoda *et al.* (2020) who found there was a lack of representation of non-conventional beauty standards among the women in Brazilian print advertising. This is also true for Indian beauty standards as found by Parameswaran & Cardoza (2009) who observed the disproportionate use of light-skinned, fair models in Indian advertisements, despite India being a diverse country of various skin tones.

CONCLUSION

Our study titled 'Representation of Women in Bengali Print Magazine Advertisements: A longitudinal study' sought to study the gender stereotypes and beauty standards that women are subjected to in Bengali language magazine advertisements through the means of a ten-year longitudinal study of the most popular magazines in the state of West Bengal.

We can conclude that in Indian regional magazines, such as Sananda and Anandalok, women are still portrayed in a traditional light, corresponding to the Indian values set for women. This finding concurs with past research, wherein Indian women lagged behind their Western counterparts even when it came to empowering representations of themselves. Hedonic products are also promoted far more to women, mostly to propagate the enhancement of themselves according to the societal standards of beauty. In the same thread, the beauty standards remain regressive, with the over-representation and idolization of fair skin and thin bodies emerging as the primary sentiment in Indian culture as well as advertisements. Hence, there seems to be a long way to go till the Bengali woman can feel empowered and represented in the media they consume.

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A Study of the Gig Workers Motivation Regarding Online Food Delivery Sector in South Kolkata: A Study

Cynthia Saha¹

Post Graduate & Research Department of Commerce (M.Com),
St. Xavier's College (Autonomous), Kolkata

ABSTRACT

In India, there are many food delivery apps which hire people as 'delivery partners'. They are a part of the gig economy and belong to the population of gig workers. Millions of drivers have been employed by the online food delivery sectors, who sell their labour as platform employees. The purpose of this study is to throw a light on the 'new economy' namely the gig economy particularly the online food delivery sector of South Kolkata. This research topic aims to identify why and how the gig workers of the online food delivery industry of South Kolkata are motivated to take up such jobs, complete their task and earn money to sustain their needs and families despite not having a concrete brick and mortar structure of organisation.

Keywords: Gig workers, Motivation, Online Food Delivery Platforms, and Phenomenological Analysis.

INTRODUCTION

The whole world was facing a volatile situation after the economic crisis of 2008. People were losing jobs, and there was a situation of unequal employment opportunities resulting in a rise in unemployment and underemployment. In this context, there was a growing demand of part-time temporary jobs, which resulted in the emergence of a new type of economy, 'The Gig Economy'. The gig economy provides employment that is limited and temporary in nature, such as freelancing and other 'non-permanent' jobs (Gleim *et al.*, 2019). However nowadays to achieve work-life balance, many people are choosing to work as gig workers, as it is part time and flexible in nature. People choose contract or 'gig work' that is project- or task-based because it gives them more independence,

1. This dissertation done by the scholar under the guidance of Dr. Sumanta Dutta.

pays them according to their task completed and favours a short-term working relationship with the customers (Manyika *et al.*, 2016).

In India, there are many food delivery apps which hire people as 'delivery partner'. They are a part of the gig economy and belong to the population of gig workers. Millions of drivers have been employed by the platform food delivery sector, who sell their labour as platform employees (Huang, 2022). They work for flexible hours and receive payments according to the number of orders they have delivered to the customers plus they get tips and incentives, and ratings are given to them according to their performance by the customers. Certain criterions that are considered by the online apps while hiring gig workers are – they must have Smartphone with good internet service, and they should possess vehicles according to the need of the jobs. Criterions like education qualification, family background, race, gender, income are not considered by the apps while recruiting. They should know the common languages particularly Hindi and other regional languages. These online service-based apps generate large amount of employment opportunities for the mass especially during festivals like Durga Puja, Diwali, Holi, Christmas etc, thereby reducing unemployment rate and poverty. Some popular online food delivery apps that provide service of ordering readymade foods from various restaurants across the states of India are Zomato, Swiggy, Dunzo, TravelKhana, Box8, FreshMenu, Eat.Fit, EatSure, MagicPin and Voosh¹. Each app has their own different mission and vision and promises the customers to deliver readymade food from the restaurants in less time, so they do not have to wait for the food for longer hours to get delivered. The apps charge commission from restaurants ranging from 25% to 30% for business generation.

LITERATURE REVIEW

González (2022) highlighted the difference between online food delivery platform companies and the conventional full time food delivery companies with respect to quality of service and consumer satisfaction provided by them. The study initially stated that there exists a negative relation between online food delivery services and the quality of service provided by them. The researcher adopted a mix approach study on gig workers and using a thematic analysis of the consumer reviews using 'KH Coder', it was found that consumers do not find the service of the online food delivery unsatisfactory.

Lord *et al.* (2022) conducted a literature-based study to examine the sustainability issue related to the online food delivery workers who form the part of the gig economy. This study throws a light on how the new increasing online last mile delivery service of food and grocery items impacts the logistics and transportation system thereby questioning environmental sustainability. A qualitative study has been undertaken using the conflict model of Sustainability proposed by Campbell and Systems Thinking to analyse and prove the presence of sustainability in the gig economy and it was found that in broader aspect

1 Online food delivery apps that hire gig workers for their services.

there exists a negative relationship between sustainability and work of online food delivery workers.

Pereira *et al.* (2022) conducted an exploratory study to understand how 'gamification' can be used by organisations to increase the gig workers engagement and their level of performance. The study is based on empirical analysis of 532 responses to a set of questionnaires, sent to HR managers of firms hiring the gig workers, for a period of one month. The primary data collected is tested by using 'Common Method Bias' and theories of 'Swift Trust' and 'Psychological Contracts'. The study concluded that there exists a positive relation between performance, 'swift trust' and gig workers engagement and task performed moderates the link between 'swift trust' and gig workers engagement.

Mahato *et al.* (2021) firstly examined the potential effects of closing the distinction between conventional methods of work and the gig work on the 'blended workforce' but lastly using the theoretical concepts it concluded that the 'blended workforce' is anticipated to have a significant role in generating new employment prospects, enhancing job satisfaction, and lowering expenses while raising businesses' productivity. The study is qualitative in nature, and it is done based on the Indian context by using theoretical models such as 'SORT (skill set, openness, rise and trace) model, Youth Leadership Programme (YLP) and 3-Strike fit technique'.

Nath (2020) conducted a literature based descriptive study to find out the existence of trust among the gig economic workers. The study showed that the management platform companies should support and protect the gig workers when they encounter discriminations during their interaction with the customers in the market. The study concluded that building trust can be greatly aided by formalising the methods through which platform businesses interact with gig economy workers and to ensure that gig economy workers are covered by labour laws and to preserve their fundamental interests, regulatory changes are necessary.

Jabagi *et al.* (2019) conducted a study to find out how the gig workers are motivated to work and enhance engagement and complete their set tasks despite having a proper brick and mortar structure. Therefore, the study stated the various ways used by online platforms to encourage, help, or support and motivate the gig economy workers in absence of human efforts to do so. The study is qualitative in nature, and it pointed out how the theory of self-determination and theory of job characteristics evokes motivation within the gig workers. Social media technologies like social networking and social badging help gig workers communicate with other gig workers which has a positive impact on their competence level and enhances motivation to complete their tasks.

Prabhat *et al.* (2019) conducted an empirical study for a period of seven months to analyse the life of the 133 gig workers, which is the sample size of this study, with special reference to the Uber drivers. The study which is qualitative in

nature, pointed out the opportunities, struggles and challenges faced by the Uber drivers while working for ridesharing application and the motivational force behind taking up such jobs as a career option in a developing country like India.

Flanagan (2017) conducted a literature-based study and observed that gig economy is a concept of workplace fissure. He stated that gig economy is not something which is new, but it is the revival of old procedures of extraction of labour. Like every other workplace, gig economy has uneven distribution of powers among the platform company's management system and requires attentive administration to make sure that all the people of Australia are working either in online platforms or somewhere else and earning enough to lead a standard life.

RESEARCH GAP

From the reviewed literature we have found that much research has been done on basic framework of the gig economy (Pereira *et al.*, 2022&Nath, 2020), as well as on the effect of gig economy in the generation of employment all over the world and change in the traditional work style (Mahato *et al.*, 2021& Flanagan, 2017).The working of the gig workers who are a part of the digital platform organisations (Prabhat *et al.*, 2019) and the work life, success, and motivation of the gig workers in online food delivery platform in foreign countries (Gonz'alez, 2022; Lord *et al.*, 2022 & Jabagi *et al.*, 2019).

We have noticed that very few researches have been conducted to identify the driving force or the motivation of the gig workers to take up such job and we can see that no study has been undertaken till date in the city of South Kolkata related to this issue of gig economy. We will try to look deep into these issues and explore more with the help of this qualitative study.

RESEARCH QUESTIONS

From the above-mentioned research gap, we have identified the following research questions:

1. What are the different ways of motivating the gig workers of the online food delivering sector?
2. Can sustainability be achieved by the gig workers of the online food delivering sector?

RESEARCH OBJECTIVES

From the research gap identified above, the following research objective have been set for the paper '**A Study Of The Gig Workers Motivation Regarding Online Food Delivery Sector In South Kolkata: A Study**': To identify the factors affecting the motivation of the gig workers of the online food delivery sector in South Kolkata.

RESEARCH METHODS

Type of Study

This study employs a qualitative research technique based on a thematic analysis of phenomenological approach to understand the “lived experiences” of the online food delivery gig workers.

Period of Study

The location of this study is Kolkata and the delivery partners have been interviewed for a period of three months starting from December 2022 till March 2023.

Sampling Method

In this study, the snowball sampling technique is applied. This technique of sampling method is generally used when it is difficult to identify the members of the desired population. Here in our study the targeted group is the gig workers of food delivery companies of Zomato and Swiggy of South Kolkata.

Sample Size

For our study, about 10 delivery partners from Zomato and Swiggy were interviewed using snowball technique to collect data needed to undertake the phenomenological analysis. These participants have been assigned the codes of GW1-GW10 to preserve individual anonymity.

Sampling Tools

Using the qualitative data analysis programme NVivo, the interviews were coded and analysed. Topics and groups were created based on the major keywords identified through word, paragraph, and overall meaning structure analysis of verbatim transcripts (Rahman *et al.*, 2022). Using the same programme, the codes were then utilised to create word clouds (Ganguly *et al.*, 2022).

ANALYSIS AND INTERPRETATIONS

This study has been undertaken to understand what motivates the gig workers of online delivery food platforms to take up such jobs. For our study we have interviewed the gig workers of only Swiggy and Zomato², the two most popular online food delivery apps of South Kolkata.

PARTICIPANT'S PROFILE

Table 1: Demographics of the participants

Participants	Age (years)	Gender	Hometown	Education level	Marital status	Online food delivery platform	Part-time/ Full-time
GW1	30	Male	Kolkata	Upto class 12	Married	Zomato	Full-time

2 Popular online food delivery apps operating in India.

Participants	Age (years)	Gender	Hometown	Education level	Marital status	Online food delivery platform	Part-time/ Full-time
GW2	28	Male	Kolkata	Graduate	Married	Swiggy	Full-time
GW3	51	Male	Kolkata	Graduate	Married	Zomato	Full-time
GW4	26	Male	Kolkata	Upto class 12	Married	Zomato	Part-time
GW5	24	Male	Kolkata	Upto class 12	Single	Swiggy	Full-time
GW6	24	Male	Kolkata	Graduate & pursuing ITI	Single	Swiggy	Full-time
GW7	28	Male	Kolkata	Upto class 8	Single	Zomato	Full-time
GW8	21	Male	Kolkata	Upto class 12	Single	Zomato	Part-time
GW9	23	Female	Sundarban	Pursuing Post Graduation	Single	Zomato	Part-time
GW10	27	Female	Kolkata	Graduate	Married	Swiggy	Part-time

The above Table 1 depicts the demographics of the participants in this study.

Participant's Details: This study includes 10 participants both male and female. The participants have been assigned the codes of GW1 to GW10 to preserve individual anonymity. The analytical results shows that 8 participants are male and 2 are female participants. 9 participants of this study are from Kolkata and 1 female participant is from Sundarban area who has shifted to Kolkata for her studies.

Age: The participants in the research varied in age from 21 to 51 years old.

Education Qualification: 1 male participant of this study has education qualification upto class 8, 4 male participants have education qualification upto class 12 and the remaining 4 participants are graduated, and one female candidate is pursuing Postgraduation.

Marital Status: The study includes both married and unmarried individuals in terms of marital status. Individuals who are married have one child each.

Online Food Delivery Platform: 6 participants work in Zomato out of which 3 participants work as full-time delivery partners and 3 participants work as part-time delivery partners. 4 participants work in Swiggy out of which 2 participants work as full-time delivery partners and 1 participant work as part-time delivery partner.

DATA INTERPRETATION

NVivo software was used to analyse the collected data and word clouds were created by using the codes assigned to the transcribed document of the recorded interviews. The interpretations for each research objectives are as follows:

Discussion: Our study aims to identify the factors affecting motivation of the gig workers behind taking up jobs as delivery partners in the online food delivery platform- Zomato and Swiggy. The figure1 is a word cloud depicting the most frequently used words by the participants when they were asked about the motivating factors and reasons to work as online food delivery gig workers.



Fig. 1: Word Cloud of interviews for delivery partners relating to motivational factors³

The ERG theory of motivation can be connected to delivery partners working for food delivery firms such as Swiggy or Zomato in the following ways:

1. **Existence Needs:** Existence needs are connected to fundamental physiological requirements such as food, housing, and safety for delivery partners. Food delivery services like Swiggy and Zomato provide delivery partners with a source of revenue to help them fulfil their necessities. Food delivery firms, for example, might assist their delivery partners in meeting their survival needs by providing flexible work hours, safe working conditions and regular reimbursements.
2. **Relatedness Needs:** Relatedness requirements are connected to delivery partners' desire for social engagement and connections. Meal delivery services can help to build a sense of relatedness. Relatedness demands are connected to delivery partners' desire for social engagement and connections. Food delivery organisations can assist delivery partners in meeting their relatedness demands by establishing a pleasant work culture.
3. **Growth Needs:** Growth requirements of delivery partners are tied to their desire for personal and professional development. Food delivery firms may

³ **Source:** Author's own computation generated from NVivo software

help their delivery partners improve by offering training and development programmes, performance-based rewards, and prospects for advancement. Food delivery firms may assist fulfil their growth objectives by investing in the growth and development of their delivery partners.

Ultimately, the ERG theory of motivation emphasises on the significance of meeting the different demands of delivery partners employed by food delivery firms. Food delivery organisations ensures that their delivery partners feel motivated, engaged, and devoted to their work by addressing their requirements for existence, relatedness, and growth.

Following are some motivational factors that could be identified:

Incentives – The delivery partners of both Zomato and Swiggy receive incentives when they work for more than 14 hours a day and deliver food via bike and during special occasions like Durga Puja, Christmas, New Year’s Eve. This was mentioned by **GW8** who works in Zomato which is –*“Incentives are received during occasions like on Holi, Durga Puja, Christmas, I get an incentive of ₹2700 if I complete 24 orders per day.”* This was confirmed by **GW9** who also works in Zomato – *“I get incentives when there is any special occasion or on national holidays.”*

GW2 who works in Swiggy said that – *“During Durga Puja or any other festival I receive incentive of ₹800 per day from Swiggy which is higher than what Zomato pays their delivery workers. Swiggy offers more incentives than Zomato.”* Additionally, he mentions that *“delivery partners who use bike to deliver food gets more incentive than the bicycle riders”* and this was confirmed by **GW6** who said – *“I deliver food via bicycle, so I do not get incentive. I only get incentive by working 16 hours long per day.”*



Fig. 2: Picture of Respondent GW4⁴

4 Source: Clicked by the Author.

Tips and Bonus – The delivery partners receive tips from customers for fast delivery and good behaviour and they receive joining bonus as well. This was stated by **GW6** “.... but whenever there is a Cash on Delivery order, I get ₹50 to ₹100 tips by chance if the order value is ₹3000 or more” and confirmed by **GW2** who mentioned that - “it is a difficult to earn incentives now because maximum orders are prepaid and only when there is Cash on Delivery order, I might expect tips.”

GW8 said that - “customers give tips of ₹20 or ₹30 when I go to deliver food.”

GW4 pointed out that - “There is a Zomato scheme of joining bonus of ₹400 which one can get within a month after completing delivery of 100 orders...”

Flexibility Of Working Hours - There exists flexibility of working hours as the delivery partners can work anytime, they want to as part-time or full-time. **GW9** mentioned that - “I work as a part-time delivery partner and I have no fixed working hours; in the morning I login for 2 hours and then I go to college and spend time studying and going to tuitions and then again when I am free, I start working especially at night.”

GW8 stated that – “.... a part time job for me and I am doing it for time pass. I work whenever I want to specially when I get an off or on weekends as I am working as a full-time tele caller in a BPO in Salt lake area.”

GW10 who works for Swiggy and is a mother said that – “I work as a part time delivery woman. I start my shift around 10 am in the morning after dropping my daughter to her school and continue to work till 3pm in the afternoon until my daughter comes home from school.”

GW2 stated that – “This is a full-time job for me. My shift timings are from 12 noon till 4pm and again from 6pm till 11.30pm. There is a non-pick hour from 4pm to 6pm and I can login in that time also which signifies there’s no fixed time. I can login whenever I wish to.”



Fig. 3: Picture of Respondent **GW9**⁵

5 **Source:** Clicked by the Author.

Company Benefits –Both the companies- Zomato and Swiggy give their deliver partners health insurance and accidental insurance. This is evident when **GW1** who works in Zomato addressed in the interview that – *“I have received an insurance of ₹10,00,000 for death coverage and outdoor accidental insurance of ₹50,000 which I can claim if I face any accident while working”* and the same was confirmed by **GW4** who also works in Zomato.

GW7 stated that – *“Zomato has introduced a new scheme where the workers get ₹500 per day on showing proper medical proof if they are sick and unable to work.”*

GW2 mentioned that – *“Swiggy has given me an accident insurance of ₹3,00,000 and death insurance of ₹5,00,000. As I work full-time, weekly I get one day off on any weekdays but not weekends because rush is maximum in weekends. Swiggy also organises award function where award is given to delivery partner who has the record of highest orders delivered.”*

GW10 mentioned that – *“Last year September, I had an accident and when I informed the team leader, he sent two people to take me to hospital where I underwent treatment, and all the expenses were borne by Swiggy. The hospital bill was submitted to Swiggy, and the company reimbursed the full amount...”*

GW2 said that – *“In Swiggy there is a rule that if any delivery boy who is working for them for more than 6 years, they are hired to work in Swiggy’s back office and work as team leader and guide other delivery boys. The experienced ones are only hired because they have the first hand on road experience.”*



Fig. 4: Picture of Respondent GW5⁶

6 **Source:** Clicked by the Author.

Customer feedbacks – Behaviour of the customers, their positive feedbacks and high ratings and tips also motivate the delivery partners to work. **GW2** said that – *“I have good customer experience. “Royal customers” those who order food frequently. I have very good relationship with them, and the customers know me. During summer when I go to deliver food, the customer first gives me water or any drink and tells me to relax for 5 mins and then takes the order and gives me ₹100 tips.”*

GW10 mentioned that – *“Once it has happened that I delivered an order way before the time that was showing in the Zomato app, so the customer got happy and send me extra ₹150 in my Gpay account and gave me a 5-star rating.”*

GW9 mentioned that- *“80% customers are good. But some people are very rude and behave badly with me.”*

GW6 stated that – *“Most of the customers give me 5-star ratings.”*



Fig. 5: Picture of Respondent GW3⁷

Lack Of Availability Of Jobs – Due to the pandemic of Covid-19, many people have lost their jobs because the company they were working in got shut down and after that there’s a lack of availability of job and this was confirmed by **GW1** who said that – *“I have taken up this job in Zomato because the last company where I used to work got shut down due to the pandemic of Covid-19. I have searched for other jobs that time and even now but did not get any or were not paying me a decent salary.”*

Even **GW3** said the same thing – *“I lost my job during the pandemic of Covid-19, so I started working as a Swiggy delivery boy to support my family financially. I earn more in this job than what the other companies are offering me.”*

⁷ **Source:** Clicked by the Author.

GW7 said that – “... because I am not getting job vacancy anywhere. Previously I used to work as a salesman but due to lockdown the company got shut down.”

GW6 stated that “I have taken up this job because in market there is no job despite being a graduate. Everywhere political power and support is required to get a job in the private sector.”

CONCLUSION

Our study titled ‘**A Study of the Gig Workers motivation regarding online food delivery sector in South Kolkata: A Study**’ aimed to identify the factors affecting the motivation of the gig employees of the online food delivery sector in South Kolkata. From the given data analysis and interpretations, we can conclude that delivery partners from Swiggy and Zomato are motivated by a variety of factors, including financial incentives, flexibility, and autonomy. A good relationship between delivery partners and consumers is critical for social sustainability as it leads to positive feedback and word of mouth, higher trust, and loyalty, better working conditions and better communication. A good relationship between delivery partners of Swiggy and Zomato and good relationship between delivery partners and team leaders of Swiggy and Zomato is essential for achieving social sustainability because it leads to more efficient operations, increased safety, improved working conditions, and collaboration and learning, greater support for delivery partners and more accurate feedback and evaluation.

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A Longitudinal Study of Controversial Television Advertisements in India: A Semiotic Analysis

Ankita Dutta¹

Post Graduate & Research Department of Commerce (M.Com),
St. Xavier's College (Autonomous), Kolkata

ABSTRACT

Purpose: Advertisements are a major tool of promoting and generating awareness among masses at large. It is largely responsible for choices we make in choosing products and services to satisfy our needs. Controversial advertisement campaigns are mainly used to generate viewership among the masses, and to grab attention. One of the major problems in advertising for goods and services is with regards to ad clutter. Advertisements that go controversial are generally seeking to break away the large number of advertisements we view day in and day out. However, for advertisements to stand out in that way comes with its own disadvantages. Controversial advertisement campaigns have a tendency to negatively affect sentiments and feelings of people. A society's ethics and moral principles can be largely violated and it can lead to uproar and upheaval among masses. It can also violate guidelines set out by regulatory bodies. This paper aims at presenting controversial advertisements over the past 10 years and analysing them with the help of tools relevant to the advertising realm.

Design/Methodology/Approach: This study makes use of content analysis to make an objective assessment of the content of each controversial advertisement selected in the sample. Further, each advertisement is explained with the help of semiotic analysis. Sample consists of ten controversial advertisements, one from each year that have created large controversy and upheaval among the masses.

Research implications/limitations: Semiotic analysis can be subjective and interpreted differently by different people. Other mediums of advertisement such as print media, radio, etc were not considered as a part of the study. Due to time limitations, a period of longer than 10 years is not selected.

1. This dissertation done by the scholar under the guidance of Dr. Sumanta Dutta.

Originality/Value: *This study presents ten prominent controversial television advertisements using data from online sources, which have created large upheaval among the masses.*

Keywords: Controversy, India, Longitudinal Study, Semiotic Analysis, Television Advertisements.

INTRODUCTION

Advertisements are a major tool of promoting and generating awareness among masses at large. Given advertising has been a widely used tool, one problem advertisers face is with regards to ad clutter. It is found that the number of brands advertising using television alone has been rising each year. Data from TAM Media Research shows that the number of advertisements rose from 3832 in the year 1994 to 11963 in the year 2005 (Shah & D'Souza, 2009, pp.737).

Both males and females report that they find sexually controversial advertisements much more interesting than its non-controversial substitutes (Daniel *et al.*, 1983). It was also found that women who were within the age range 34 to 55 viewed offensive advertising as an aggressive force that will have a negative impact on society (Christy, 2006). Blatantly using sexual appeal in advertisement may not work because of strong philosophical sensitivities among people (Latour & Henthorne, 2013).

Controversial advertisements have in many ways led to violations, which go back to the year 2001 in Bulgaria. Hence, comes with advertising a need to maintain social responsibility. Besides the law, careful consideration of ethics and morality is important when it comes to controversial advertisements. Consideration of all aspects will allow to assess ethics in controversial advertisements (Gould, 1994).

LITERATURE REVIEW

There has been extensive work done on this topic in the past years. It was found in the year 1999 that that females are the most opposed by advertising of alcohol whereas for males it was men's underwear (Waller, 1999). Given the increase in the number of advertisements, and gradual increase in the number of controversial advertisements, a study was made in Singapore which found using mall intercept method that advertisements having sexual connotations, or those that invoked unnecessary fear were considered to be the most offensive (Phau & Prendergast, 2001). A cross-sectional survey was also made across 11 countries of people belonging to different regions. It was found that following Christianity and Hinduism were neutral and liberal whereas Buddhists felt as though the regulations were too strict (Wang *et al.*, 2018). Further, it was found that consumer perception based on the most offensive type of advertisement and technique of execution depended largely on characteristics such as age, education and gender (Singh & Chahal, 2019). Authors also attributed a change in perception of offensiveness over time to the feminist movement, and the growing awareness of people around social issues (Lanjekar & Tilak, 2019). More recent researchers also used SmartPLS and through carrying out a partial

least square-structural equation modelling, and found that consumer's attitude with regards to offensive advertising impacts brand hate and brand retaliation (Noor *et al.*, 2022).

RESEARCH GAP

From the reviewed literature, we find that research work has already been made on religiosity in advertisements (Noor *et al.*, 2022) and ethics in advertising and violations of the same through controversial advertising (Lanjekar & Tilak, 2019). Perceptions of consumers about controversial products or execution technique (Singh & Chahal, 2019; Phau & Prendergast, 2001; Waller, 1999) along with regulations put on controversial advertisements (Wang *et al.*, 2018) have been already looked into. By virtue of this study, we will analyse selected advertisements with the help of content analysis and semiotic analysis.

RESEARCH QUESTIONS

From the research gap that remains, the question that comes forward is – How do we effectively analyse controversial television advertisements in India over the past 10 years?

RESEARCH OBJECTIVES

From the research gap as identified above, our research paper titled, “A Longitudinal Study of Controversial Television Advertisements in India: A Semiotic Analysis” has the following objective for this study: To analyse controversial advertisements over the past 10 years that have created chaos and upheaval among the masses.

RESEARCH METHODS

1. Type of study

This study is qualitative in nature and makes use of secondary data.

2. Period of study

The time period chosen is ten years i.e from 2012-13 to 2021-22, to maintain the relevancy of the paper.

3. Data collection

This study uses secondary data, for the collection of which we have heavily relied on web-based information and journals.

4. Selection of sample cases

In a ten year time period, we have chosen ten prominent controversial television advertisement cases in India, one from each year which have created comparatively more controversy than others. We have also chosen brands which are very well-known and are household names, hence they are capable of creating much more chaos through their advertisements as compared to lesser known brands.

5. Application of Content analysis and Semiotic analysis

Each of the advertisements so selected have been analysed in a table format with the help of content analysis and semiotic analysis. Content analysis will allow us an objective assessment of content of the advertisement under consideration, wherein semiotic analysis will allow us to understand what each advertisement is connotatively trying to interpret.

ANALYSIS AND INTERPRETATIONS

Brand and Year	Content Analysis	Semiotic Analysis	Exhibit
PEPSICO (2022)	The advertisement unnecessarily portrays a ghost, who is apparently living in the household. The advertisement commercial will not be appropriate for children or young aged people.	An aura of fear is already in the advertisement from the very beginning due to darkness. The ghost also comes out from the dark only when the pack of chips is brought out. This helps draw attention to the product.	 Figure 1 ¹
DABUR (2021)	Dabur had to take down an advertisement released in 2021 wherein two women were getting ready for karvachauth. It was not hurtful to sentiments of people until it was revealed later in the advertisement that these two women are in a same sex relationship with each other. This created large scale controversy.	The main theme of the advertisement which is a same sex marriage is portrayed by showing two women in the beginning of the advertisement. Branding of the product is done by displaying the product and its usage. The main moment captures two women fulfilling traditional rituals without being a traditional couple.	 Figure 2 ²
TANISHQ (2020)	In this advertisement, we find that a Hindu woman who was actually pregnant was being accompanied to a celebration, which is her baby shower for which she is being escorted by her Muslim mother-in-law. This advertisement was seen negatively, due to no support for an inter-caste marriage. It was seen as a promotion of, "love jihad".	Analysis of semiotics portrays the extensive set of jewellery by Tanishq in every scene, thus allowing for its branding. The degree of closeness between the daughter-in-law and mother-in-law establish the closeness between Hindus and Muslims. White signifies purity and innocence, reinforcing the purity involved in love, birth, and oneness.	 Figure 3 ³
SURF EXCEL (2019)	This advertisement portrayed a Hindu girl riding a bicycle, challenging kids in her neighbourhood to throw Holi colours on her. It is later revealed that she was doing so to protect her Muslim friend who she dropped off at a mosque. This advertisement was claimed to promote, "love jihad" whilst others claimed that Muslim prayers are being given more importance in a Hindu festival. People disliked Holi colours being referred to as, "daag" (stains).	A study of semiotics in this advertisement prominently portrayed the colourful nature of the Holi festival which is complimentary to Surf Excel since it is looking to prove its ability to clean clothing to a perfect white colour. The girl protected her friend from being thrown Holi colours at, which is a representation of the protection that the brand provides to its consumers. White clothing indicates cleanliness, purity and neatness Surf Excel seeks to provide.	 Figure 4 ⁴

Brand and Year	Content Analysis	Semiotic Analysis	Exhibit
KALYAN JEWELLERS (2018)	This advertisement showcases a daughter accompanying her father to a bank, where the officials are behaving in a corrupt manner. His pension had been credited to his account twice mistakenly which he wants to return but no bank employees have the time or patience to attend to him.. This hurt sentiments of Indian bank officials who protested for withdrawal of the advertisement.	An analysis of semiotics shows that the portrayal of Amitabh Bachchan as pure, truthful, authentic and having integrity are the same qualities that Kalyan Jewellers wanted to attach to its brand values. The colour white which is worn by Amitabh Bachchan is also symbolic of the same transparency, authenticity and honesty.	 <p data-bbox="924 447 1000 469">Figure 5⁵</p>
COMFORT (2017)	A mother is about to wash clothes and her two children, a boy watching the television and a girl. The advertisement shows that when the mother is about to use the product in order to wash clothes, the boy child asks his elder sister to, “pay attention”, because it will come to use one day for her. The mother, disappointed at this statement did not react badly, but gently nudged her son to help her with the work.	The advertisement helps unlearn sexist thinking that is engrained in our brains, but it also effectively demonstrates the use of the product. As the mother explains to the child, she also explains to the audience. The mother is the primary medium through which the brand is promoting the product, is wearing white clothes. White is symbolic of authenticity, transparency, cleanliness and softness which this product provides.	 <p data-bbox="924 748 1000 769">Figure 6⁶</p>
TITAN (2016)	Bosses in a company are having a meeting together, and discussing somebody by name of Kiran, who is assisting one of the seniors in every single task. The visuals hint an affair inside office premises. It turns out however that Kiran is a male employee. When we think of a woman employee and a boss working together, it is immediately associated with her using unfair means to get to the top which is untrue.	Faces, gestures, and their dialogues of bosses are indicative of their assumption of an affair. Kiran is shown to be wearing dark coloured clothes, and dark colours signify contradiction and oppositions. It is revealed thereon that Kiran is a male employee. Titan has efficiently placed itself in the advertisement by talking about working day and night. Speaking of time connotatively makes a viewer think about a watch, which is the product advertised about.	 <p data-bbox="924 1101 1000 1122">Figure 7⁷</p>
MYNTRA (2015)	The advertisement sought to break stereotypes regarding pregnant women working. They are viewed as disabled and are not given promotions at work or paid equally. This advertisement shows how a woman is not getting promoted in her job, even after doing all the work because of her pregnancy. Later, she reveals to her boss that she is starting a business of her own and is leaving her old job.	In this advertisement, a car is shown which is a moving vehicle. This signifies something moving ahead. Branding of the product takes place when the boss appreciates the jacket she is wearing, as it, “hides her bump”. The pregnant lady is shown to be wearing bright red clothes which is showing passion, signifying triumph over failure. The boss is wearing a dull red colour and showing loss, and defeat signifying her loss of her employee.	 <p data-bbox="924 1470 1000 1492">Figure 8⁸</p>

Brand and Year	Content Analysis	Semiotic Analysis	Exhibit
NIRMA (2014)	This advertisement shows that an ambulance is stuck in the middle of a road amongst dirt. Within emergency and urgency, no one is coming forward to help the crisis. Men are dressed in suits and good clothes, didn't come ahead but the females in the crows came forth to push the ambulance forward and get it going. This showcases the strength and determination a woman holds within.	In this advertisement, an ambulance is shown to be stuck in the midst of a muddy road. An ambulance indicates emergency. So the advertisement. Analysis of semiotics tells us that dirt and mud is associated with feelings of being stuck. This is allowing for branding of the product since the detergent being advertised for is considered effective and quick to remove stains.	 <p data-bbox="924 451 1000 475">Figure 9⁹</p>
EMAMI (2013)	Actor Shahrukh Khan plays a part in narrating about his life story with regards to being an ordinary boy to a well-known and famous celebrity. He aggravated insecurities of men who do not have fair skin and the advertisement aimed at making people realise that confidence is fairness, and vice versa.	The advertisement banks on an insecurity and hence it portrays other males who are dark skinned and are looking up to the actor who looks so fresh and fair. Dark colours are associated traits like heaviness, depression, and negativity. Effective branding of the product is done when the actor presents and displays the product in the advertisement and alongside its benefits are mentioned such as sweat proof, effective skin penetration, and most importantly fairness. The advertisement ends with a voiceover that says, "Because men need something extra". This commercial banks on insecurity and tells males that the secret formula behind success, fame and glory is this fairness.	 <p data-bbox="924 742 1000 766">Figure 10¹⁰</p>

CONCLUSION

Through the study we can conclude that controversial advertisements may indeed be successful in allowing the advertisement to stand out, however to what extent it creates a positive association with a brand is very questionable. Controversial advertisement campaigns may lead to a loss of peace and equilibrium among the masses but may play a vital role in breaking stereotypes. We could conclude by establishing that controversial advertisement campaigns may break through the clutter, but may lead to a, "make it or break it" scenario when it comes to image of the brand under consideration. Careful consideration of Indian sentiments may allow for advertisement campaigns to perform better.

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FOOTNOTES

- 1 Source: <https://www.socialsamosa.com/2023/01/kurkures-new-ad-scary-route/>
- 2 Source: <https://indianexpress.com/article/entertainment/entertainment-others/dabur-ad-controversy-you-can-either-glow-with-pride-or-bleach-the-rainbow-7599998/>
- 3 Source: <https://indianexpress.com/article/india/tanishq-pulls-down-ad-after-social-media-uproar-6724045/>
- 4 Source: <https://bestmediainfo.com/2019/03/surf-excel-highlights-the-true-spirit-of-togetherness-in-holi-campaign>
- 5 Source: <https://www.medianews4u.com/facing-backlash-from-bank-unions-kalyanjewellers-withdraws-controversial-ad-featuring-bachchan/>
- 6 Source: <https://bestmediainfo.com/public/2017/09/comfort-breaks-gender-stereotypes-takes-a-small-step-to-send-a-big-message>
- 7 Source: <https://www.india.com/viral/this-womens-day-2016-titan-raga-ad-urges-us-to-respect-a-womans-success-watch-video-1012800/>
- 8 Source: <https://www.exchange4media.com/advertising-news/mynta's-in-house-brand-anouk-gets-bolder-with-new-ad-film-65708.html>
- 9 Source: <https://brandyuva.in/2016/12/nirma-washing-powder-popular-adv-jingle.html>
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Impact of Social Media on Social Distancing and Mental Health Issues: A Study among urban youth

Srija Dutta¹

Post Graduate & Research Department of Commerce (M.Com),
St. Xavier's College (Autonomous), Kolkata

ABSTRACT

Communication holds an extremely important place in human lives. It not just consists of the event of sharing information but also leads to personal growth and development in our everyday lives. Over the different eras, the communication process as well as the communication medium has changed and developed in an enormous manner. Today social media is one of the most crucial, indispensable mode of communication in our daily lives. The term "social media" indicates a vast idea of being a mince of the communication or networking among many audiences. The youth of today's generation are known to be the maximum user of these social media platforms. Starting from sharing their day to day lives to searching for rapid updates about regular happenings, their lives nowadays are extremely oriented around social media as well as social networking. This extreme dependency on social media platforms have had a significant amount of impact on their behaviours, mental and psychological health and moreover their overall individual lives. Moreover, the pandemic has contributed towards this practice even more. Not just social distancing, this practice has taken a toll on the mental health of the youth as well which portrays psychology, human emotions, and well-being. As intriguing as it might sound, social media and social networking platforms also affects the stability of the mental health of this generation.

Keywords: Anxiety, Distress, Mental health, Social distancing, Social media.

INTRODUCTION

In recent years, social media has revolutionized the way people connect and interact with one another, transcending geographical boundaries and reshaping social dynamics. The urban youth demographic is of particular interest due to

1. This dissertation done by the scholar under the guidance of Dr. Shivaji Banerjee.

their extensive use of social media platforms and their susceptibility to mental health challenges. By examining the relationship between social media usage, adherence to social distancing guidelines, and mental health outcomes, this study seeks to shed light on the complex interplay between technology, social behaviour, and psychological well-being. While social media offers numerous benefits, such as fostering social support, disseminating public health information, and providing a platform for virtual socializing, it also poses potential risks to mental health. Issues such as excessive screen time, cyberbullying, fear of missing out (FOMO), and exposure to misinformation can have detrimental effects on the psychological well-being of individuals, particularly among vulnerable populations like urban youth. This research endeavours to contribute to the existing body of knowledge on the subject, providing insights that can inform policy decisions and support the well-being of urban youth in an increasingly digital world.

REVIEW OF LITERATURE

A thorough analysis and evaluation of the available literature on the restaurant business was done by us for the study. Extracts of the most relevant secondary sources have been presented in the paper.

Secker (2009), in her paper "**Mental health, social exclusion and social inclusion**" has tried finding out the relationship between exclusion and inclusion, social exclusion/inclusion and mental health, democracy and the law through the help of a two-axis model of social exclusion and social inclusion and has found out that the people who are socially excluded most of the times are the ones who suffer from mental health issues most of the times.

Zexin Ma (2017), in her paper "**How the media cover mental illnesses: a review**", has tried to cover, the problem of mental illness due to media, in a narrative manner for which they have reviewed a total of 41 studies from the past 12 years period and it has been observed that media generally showcases mental illness in a negative manner which in term disgraces the mental health making it stigmatized.

Kaur et al. (2021), in their paper "**Social media platforms and sleep problems: a systematic literature review, synthesis and framework for future research**", have aimed to carefully select, integrate, and assess the practical investigations in this field. A total of 45 suitable studies were detected from Scopus and Web of Science (WoS) databases and thoroughly evaluated to construct an all-inclusive research outline, detect areas where knowledge is lacking, and outline emerging research themes. The conclusions drawn from this analysis reveal that previous research is constrained by deficiencies in research methodology and the selection of participants.

Thygesen et.al. (2022), in his paper "**Social Media Use and Its Associations with Mental Health 9 Months After the COVID-19 Outbreak: A Cross-National Study**" has described the impact of COVID-19 outbreak has also been considered to create a huge impact on mental health issues () and an association

of increased social media usage with loneliness and poorer mental health has been found through a cross-national survey conducted online. However, the pre-established mental health problems have not been considered and the analysis has been done based on self-reports only.

RESEARCH GAP

There are very few numbers of research, studies available including the association of social media usage and its impact towards social distancing and creation of mental health issues in context of urban youth generation. Most of the relevant studies cover only the effects and relevance of social media in daily life which includes the state of mental health and the issues faced by the fellow users.

RESEARCH OBJECTIVES

Based on the research gap as we have identified above, the study undertaken, intends to accomplish the objectives mentioned below:

1. To assess the association between social media usage and its impact towards creating social distancing and mental health issues among urban youth.
2. To examine the impact of social media usage on lack of concentration and academic results of the urban youth.

RESEARCH METHODOLOGY

Data Collection

For exploring the research objectives mentioned above, quantitative data were considered and analysed accordingly. We have worked on primary data for this study which was collected by a survey through the help of a questionnaire which was circulated to a group of people in form of a Google form and the collected responses were analysed using the statistical software SPSS.

Sampling Method

Snowball sampling is used for this research as the population is unknown to us. We are looking for sampling units from urban youth and since it is not possible to define the population, we can try to collect as many responses as we can using online and offline mediums. A sample size of 385 for the study was calculated using Cochran's formula. Out of the sample size data could be collected from **245 respondents**.

DATA ANALYSIS AND INTERPRETATIONS

Demographic profiles of respondents

In this study, three questions were asked in the first section to obtain a clearer picture of the background of the respondents. This provides a quick understanding of the pattern of the responses received.

Table 1: GENDER

Category	Frequency	Percentage
Male	104	42.4
Female	141	57.6
Total	245	100

Table 2: AGE

Category	Frequency	Percentage
Below 18	25	10.2
18-25	150	61.2
25-35	66	26.9
Above 35	4	1.6
Total	245	100

Table 3: OCCUPATION

Category	Frequency	Percentage
Employed	101	41.2
Unemployed	13	5.3
Student	131	53.5
Total	245	100

The above tables depict the demographic profiles of the respondents in a comprehensive manner. Table 1 portrays that majority of the respondents were female which consist of 58% or 141 respondents, while the minority were male which consist of 42% or 104 respondents. Based on Table 2 it can be concluded that maximum respondents were in the age range between 18 to 25 years old. According to Table 3 the highest population of respondents consisting of 54% fell in the category of students suggesting that they might be teenagers or young adults.

Hypotheses Testing

H_1 : There is a significant difference in terms of social distancing and mental health issues across the variation of social media usage hours.

H_2 : Social media usage hours have a positive impact on concentration and academic results of the urban youth.

To prove the above stated hypothesis Chi Square Test shall be used. The chosen significance level is 0.05. Hence the null hypothesis is rejected if p - value is less than 0.05 and vice versa.

Table 1: Chi Square Test - Relationship between social media usage hours and social distancing

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.959 ^a	18	.595
Likelihood Ratio	16.532	18	.555
Linear-by-Linear Association	3.676	1	.055
N of Valid Cases	245		

In table 1 the p-value in the above table is greater than 0.05. Hence, we accept the null hypothesis, and reject the alternative hypothesis. This shows that there is not enough evidence to establish an association between social media usage hours and social distancing.

Table 2: Chi Square Test - Relationship between social media usage hours and Mental Isolation

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-square	20.698 ^a	18	.295
Likelihood Ratio	27.701	18	.067
Linear-by-Linear Association	2.753	1	.097
N of Valid Cases	245		

a) 14 cells (50.0%) have expected count less than 5. The minimum expected count is .74.

In table 2 the p-value in the above table is greater than 0.05. Hence, we accept the null hypothesis, and reject the alternative hypothesis. This shows that there is not enough evidence to establish an association between social media usage hours and mental isolation.

Table 3: Chi Square Test - Relationship between social media usage hours and Depression

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	20.698 ^a	18	.295
Likelihood Ratio	27.701	18	.067
Linear-by-Linear Association	2.753	1	.097
N of Valid Cases	245		

In table 3 the p-value in the above table is greater than 0.05. Hence, we accept the null hypothesis, and reject the alternative hypothesis. This shows that there is not enough evidence to establish an association between social media usage hours and Depression.

Table 4: Chi Square Test - Relationship between social media usage hours and Loneliness

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	27.611 ^a	18	.068
Likelihood Ratio	34.133	18	.012
Linear-by-Linear Association	4.172	1	.041
N of Valid Cases	245		

\ In table 4 the p-value in the above table is greater than 0.05. Hence, we accept the null hypothesis, and reject the alternative hypothesis. This shows that there is not enough evidence to establish an association between social media usage hours and Loneliness.

Table 5: Chi Square Test - Relationship between social media usage hours and lack of concentration

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.866 ^a	12	.986
Likelihood Ratio	3.804	12	.987
Linear-by-Linear Association	1.963	1	.161
N of Valid Cases	245		

In table 5 the p-value in the above table is greater than 0.05. Hence, we accept the null hypothesis, and reject the alternative hypothesis. This shows that social media usage hours do not have a positive impact on the concentration power of the respondents.

Table 6: Chi Square Test - Relationship between social media usage hours and academic results of the respondents

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.086 ^a	6	.912
Likelihood Ratio	2.131	6	.907
Linear-by-Linear Association	.157	1	.692
N of Valid Cases	245		

In table 6 the p-value in the above table is greater than 0.05. Hence, we accept the null hypothesis, and reject the alternative hypothesis. This shows that social media usage hours do not have a positive impact on the Academic results of the respondents.

FINDINGS AND CONCLUSION

With regards to Objective 1 hypotheses, in all the cases, the p value being greater than 0.05, the null hypotheses are rejected which shows that there is not enough evidence to establish an association between social media usage hours and social distancing. In other words, the results based on the collected data tells us that the variation in terms of the usage hours of social media does not make any significant difference in the state of social distancing or mental health issues.

With regards to Objective 2, in both the cases, the p value being greater than 0.05, the null hypotheses are rejected which shows that the social media usage hours do not have any positive impact on the concentration power as well as the academic results of the respondents. Hence, excessive social media usage has no value adding contribution towards the betterment of academic results or concentration.

Overall, social media can have both positive and negative effects on mental health during social distancing. It's important to use social media mindfully, and to prioritize self-care and mental health support as needed.

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Role of ITI in Skill Development and Employment Generation: A Study of Howrah District in West Bengal

Raunak Shaw¹

Post Graduate & Research Department of Commerce (M.Com),
St. Xavier's College (Autonomous), Kolkata

ABSTRACT

Industrial Training Institutes (ITIs) are essential components of India's vocational education landscape, established by the Directorate General of Training (DGT), Ministry of Skill Development and Entrepreneurship, Union Government. This study explores the pivotal role played by ITIs in skill-based education and employability in Howrah district, West Bengal, with a focus on understanding the perceived benefits of skill-based education by students.

The study identifies various objectives of ITIs, including skill based training, bridging the skills gap, promoting entrepreneurship, enhancing employability, advocating Vocational Education and Training (VET), contributing to economic development, empowering women, and prioritizing practical training over theory. To investigate these objectives, the study collected data using both primary and secondary sources. Primary data was obtained through a questionnaire distributed to ITI students in Howrah district, and secondary data included reports, guidelines, criteria, and literature related to vocational education. Quota sampling was employed due to the unknown population size, and Garrett's Ranking Technique was used to understand the factors influencing respondents' choices of it is and rank them accordingly.

The findings demonstrate that ITIs have become vital platforms for skill enhancement and employability across diverse age groups and socioeconomic backgrounds. Women's participation in ITIs has increased significantly, contributing to their empowerment. Respondents primarily chose ITIs for skill and quality enhancement, followed by placement opportunities, curriculum adaptability, job satisfaction, and NCVT certification. Overall, ITIs were perceived positively, with an emphasis on high-paying

1. This dissertation done by the scholar under the guidance of Dr. Sumanta Dutta.

job prospects, quality lab training, and government employment opportunities. The study underscores the success of ITIs in fulfilling their core objectives and their critical role in shaping the skill-based education landscape in Howrah district, West Bengal, and beyond.

Keywords: Employment Generation, Howrah District, Industrial Training Institute, National Council for Vocational Training, Skill Development

INTRODUCTION

Industrial Training Institutes (ITIs) play a pivotal role in India's vocational education landscape. Established by the Directorate General of Training (DGT), Ministry of Skill Development and Entrepreneurship, Union Government, these post-secondary diploma schools offer training in a wide range of trades. The primary objective is to provide skilled and trained manpower to industries while generating employment opportunities for the youth.

ITIs cater to students who have completed grades 8 and 12, with eligibility criteria varying for engineering and non-engineering trades. Engineering courses may require students to pass the class 12 board exam. After completing training, trainees take the All India Trade Test (AITT) to earn the National Trade Certificate (NTC), recognized both nationally and internationally. Over 130 distinct specializations are available, with training durations ranging from six months to two years. The curriculum emphasizes 70% skill-based training and 30% theory-based instruction.

The objectives of ITIs include:

1. Providing competency-based training in various technical trades.
2. Bridging the skills gap between industry demand and the available workforce.
3. Encouraging entrepreneurship among young people.
4. Enhancing employability among economically disadvantaged groups.
5. Promoting Vocational Education and Training (VET) as a career choice.
6. Contributing to India's economic development by producing a skilled workforce.
7. Empowering women through skill development and training.
8. Emphasizing practical training over theory.

ITIs admit students based on written tests, following recommendations from the National Council for Vocational Training (NCVT). Admission typically begins in August, with government and private ITIs offering different fee structures. Female candidates often receive special concessions and additional seats during the admission process. West Bengal has ITIs in nineteen districts, offering various trades and technical education opportunities. Each district has government-managed and private ITIs contributing to state and national development.

LITERATURE REVIEW

Nimmi *et al.* (2022) highlights the employability improvement activities of India's Additional Skills Acquisition Program (ASAP). The research found that students who participated in the program had a higher likelihood of securing jobs, especially for those coming from underprivileged backgrounds. Collaboration between educational institutions and skill development organizations can bridge the talent gap and address unemployment issues.

Ghosh *et al.* (2022) analyzes the impact of skill development programs in Jharkhand and emphasizes the need for counseling and attitudinal restructuring of young people. The study suggests multi-skill training programs and stakeholder-based curriculum design to enhance student retention and align skill development with employment demand.

Musonda & Okoro (2021), skills such as health and safety proficiency, decision-making, problem-solving, and familiarity with technology are crucial for productivity and competitiveness. Technology advancements require managerial skills to ensure project success, indicating the need for continuous skill learning in the workforce.

Patil & Charantimath (2021) shed light on the significance of employability skills and the need to bridge the gap between industry expectations and student training. They recommend updating training curricula to align with industry standards and international requirements.

Bisht & Pattanaik (2020) examine the interrelationship between educational achievement and employability prospects. Their study emphasizes the importance of choice-based education and skill-based occupations in empowering youth for employment opportunities.

Kulkarni *et al.* (2020) conducted a research on start-ups being the new avenue for innovation and employment, keeping the aim to understand role of strategic management on skill development and engagement of employees. The goal of the study was to determine how key strategic management characteristics affected employee engagement and skill development.

RESEARCH GAP

To undertake the research titled Role of ITI in Skill Development and Employment Generation: A Study of Howrah District in West Bengal several papers have been reviewed. From this review it has been noticed that majority of the research that have been conducted are on setting up of proper skill based training programs and their adaptation through various government programs some aided and some non-aided ones. Government delivering and setting up skill based program state wise and issues faced by students (Ghosh *et al.*, 2022). Study of Additional Skill Acquisition Programme (Nimmi *et al.* 2022). Emphasis of skill development in construction based industry both national and internationally (Musonda & Okoro, 2021). Curriculum improvement and suggestion of enhancement of on field training (Patil & Charantimath, 2021; Bisht & Pattanaik, 2020). Employment and self-employment created by ITI's (Kulkarni *et al.*, 2020). It has been noted that

relatively few scholars have investigated how a devoted and accredited private industrial training institute contributes to employment and skill development.

RESEARCH QUESTIONS

1. What is the role of Industrial Training Institutes in the development of skill-based education and employability in Howrah district?
2. What are the perceived benefits of skill-based education by students in Howrah district?

RESEARCH OBJECTIVES

1. To examine the role of Industrial Training Institutes in development of Skill based education and employability in Howrah district.
2. To understand the perceived benefits of the skill based education by students in Howrah district.

RESEARCH METHODOLOGY

DATA COLLECTION

To explore the given research objectives, there are two types of data used in the research primary and secondary data. Primary data was collected by circulating a questionnaire. The questionnaire was circulated to using Google Form. The respondents were mainly students of ITI College both studying in the present batch of 2022 and pass outs from previous batches. All respondents were mainly from Howrah district of West Bengal. The respondents belonged to different age groups and varied social status. The secondary data used in this study is a combination of reports, guidelines, criteria's, rules and regulations laid down by Directorate General of Training, National Council for Vocational training, Central Government of India, State Government of West Bengal. Existing Literature such as research papers by other scholars on the subject matter, news articles, blogs and press releases of Government initiatives to promote skill development and creation of employment through short term ITI courses.

PERIOD OF THE STUDY

The location of this study is Howrah, West Bengal and the time frame for the study is from October 2022 to March 2023.

SAMPLING METHOD

Quota sampling is used for this research as the population is unknown to us. We are looking for respondents in Howrah district of West-Bengal who are a part of ITI College and since it is not possible to generate optimum data by interviewing a random population who may or may not be a part of the ITI colleges. Since we cannot apply a probability sampling method in factor identifying and involving every element from the said population is impossible, quota sampling is a way that we can collect responses to conduct our study and also the above mentioned sampling technique is exploratory in nature.

SAMPLE SIZE AND FORMULA USED:

We circulated a structured questionnaire to 160 individuals, to which we received complete 160 responses. Thus our sample size is 160. To understand the respondents reason for choosing ITI college for skill enhancement and employability Garretts Ranking Technique has been used.

Formula used for Garretts Ranking Technique is:

$$\text{Percent Position} = 100 (R_{ij} - 0.5) / N_j$$

Where,

R_{ij} = Rank given for the i^{th} variable by the j^{th} respondents.

N_j = Number of variables ranked by j^{th} respondents.

In our study we have taken five factors for Garrett's Ranking Technique so, our $N_j = 5$

ANALYSIS AND INTERPRETATION

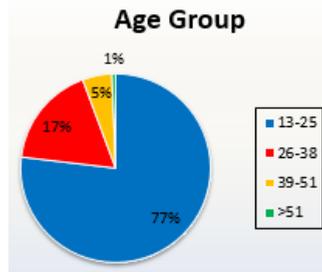


Fig. 1.1: Pie chart showing age group of the respondents.

Source: Researchers own computation

The survey covered 160 respondents and shed light on the demographic distribution of ITI students. Notably, a majority of respondents fell into the age groups of 13-25 and 26-38. This demonstrates that ITIs are not just for the youth; individuals aged 39-51 and beyond are also benefiting from ITI training, which enhances their employability.

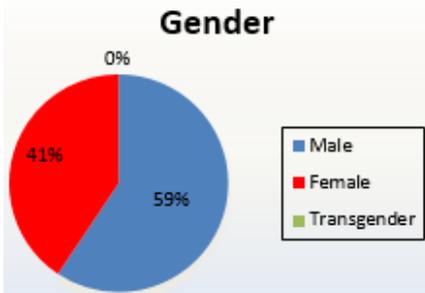


Fig. 1.2: Pie chart showing gender of the respondents.

Source: Researchers own computation.



Fig. 1.3: Pie chart showing qualification of the respondents.

Source: Researchers own computation.

Gender-wise, the survey revealed that 59% of respondents were male, while 41% were female. This indicates a commendable increase in female participation in ITIs, reflecting the government's efforts to promote women's involvement in this field. In terms of educational qualifications, the survey found that 69% of respondents had completed their 12th grade, 19% were undergraduates, and 6% held postgraduate degrees. Surprisingly, even postgraduates were enrolling in ITIs to gain practical skills and hands-on experience, highlighting the value of ITI courses.

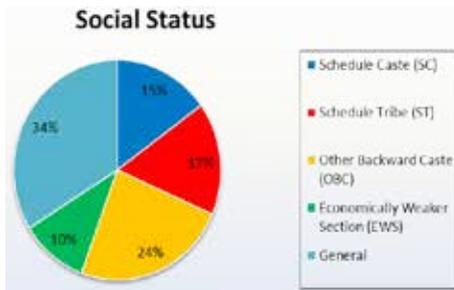


Fig. 1.4: Pie chart showing social status of the respondents.

Source: Researchers own computation.

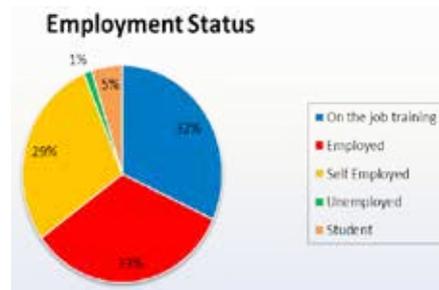


Fig. 1.5: Pie chart showing employment status of the respondents.

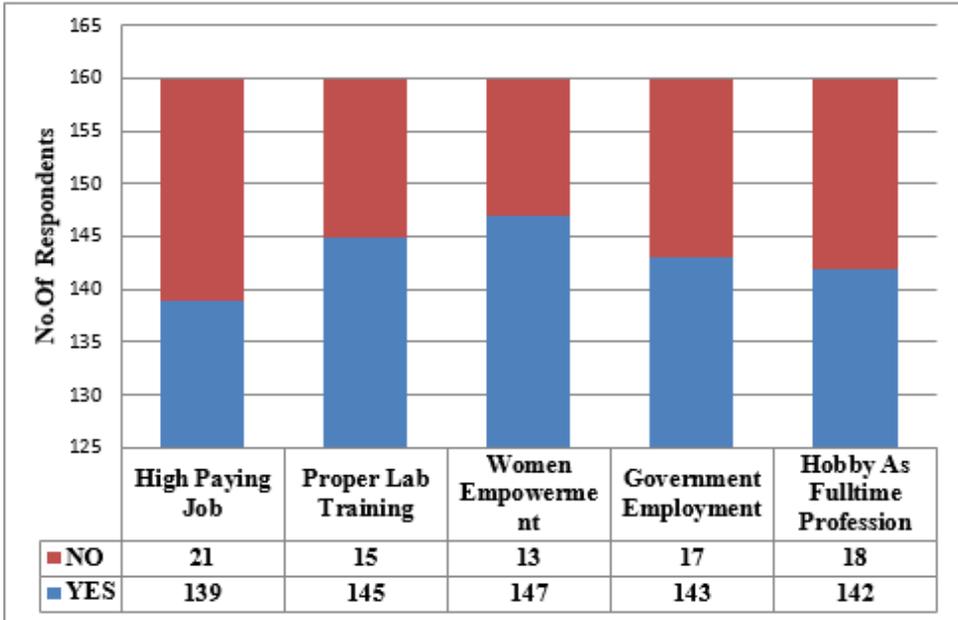
Source: Researchers own computation.

The social status of respondents varied, with 34% belonging to the General category, 24% to

Other Backward Castes (OBC), 17% to Scheduled Tribes (ST), 15% to Scheduled Castes (SC), and 10% to the Economically Weaker Section (EWS). ITIs offer equal opportunities for individuals from diverse social backgrounds to acquire skills and secure employment. The employment status of respondents was equally promising. Only 1% of the total respondents were unemployed, while 33% had secured employment after completing their ITI courses. A significant 32% were currently undergoing on-the-job training, a testament to ITI's reliable placement services. Furthermore, 29% of respondents were self-employed entrepreneurs, demonstrating that ITIs empower individuals to start their own businesses. Lastly, 5% were still students aspiring to join ITIs, aware of the benefits these institutions offer.

The survey explored respondents' perceptions of ITIs and their benefits. A majority (139 respondents) believed that ITIs provided high-paying jobs, while only 21 disagreed. Similarly, 145 respondents were satisfied with the proper lab training provided by ITIs, while 15 were not. The survey also indicated that non-engineering courses offered by ITIs contributed to women's empowerment, with 147 respondents in agreement. Additionally, 143 respondents believed that ITIs offered government employment opportunities, while 17 disagreed. Furthermore, 142 respondents saw ITIs as a platform to turn their hobbies into full-time professions.

Table 1.1: Bar graph representing respondents concern towards various aspects of ITI.



Garrett’s Ranking Technique

Table 1.2: Showing Calculation of Percent Position and Garrets Table Value.

Rank	Percent Position	Garrets Table Value
1	$100(1-0.5)/5=10\%$	75
2	$100(2-0.5)/5=30\%$	60
3	$100(3-0.5)/5=50\%$	50
4	$100(4-0.5)/5=70\%$	40
5	$100(5-0.5)/5=90\%$	25

According to Mean score obtained the factors have been placed in their particular ranks as:

Rank 1- Skill and quality enhancement.

Rank 2- Placement

Rank 3- Curriculum Adaptability

Rank 4- Job Satisfaction

Rank 5- NCVT Certification

Table 1.3: Garrett Ranking Conversion

GARRETT RANKING CONVERSION TABLE**The conversion of orders of merits into units of amount of "soces"**

Percent	Score	Percent	Score	Percent	Score
0.09	99	22.32	65	83.31	31
0.20	98	23.88	64	84.56	30
0.32	97	25.48	63	85.75	29
0.45	96	27.15	62	86.89	28
0.61	95	28.86	61	87.96	27
0.78	94	30.61	60	88.97	26
0.97	93	32.42	59	89.94	25
1.18	92	34.25	58	90.83	24
1.42	91	36.15	57	91.67	23
1.68	90	38.06	56	92.45	22
1.96	89	40.01	55	93.19	21
2.28	88	41.97	54	93.86	20
2.69	87	43.97	53	94.49	19
3.01	86	45.97	52	95.08	18
3.43	85	47.98	51	95.62	17
3.89	84	50.00	50	96.11	16
4.38	83	52.02	49	96.57	15
4.92	82	54.03	48	96.99	14
5.51	81	56.03	47	97.37	13
6.14	80	58.03	46	97.72	12
6.81	79	59.99	45	98.04	11
7.55	78	61.94	44	98.32	10
8.33	77	63.85	43	98.58	9
9.17	76	65.75	42	98.82	8
10.06	75	67.48	41	99.03	7
11.03	74	69.39	40	99.22	6
12.04	73	71.14	39	99.39	5
13.11	72	72.85	38	99.55	4
14.25	71	74.52	37	99.68	3
15.44	70	76.12	36	99.80	2
16.69	69	77.68	35	99.91	1
18.01	68	79.17	34	100.00	0
19.39	67	80.61	33		
20.93	66	81.99	32		

Table 1.4: Showing factors and its frequencies.

Rank	Job Satisfaction	Curriculum Adaptability	Placements	NCVT Certification	Skill Quality Enhancement
I	144	146	144	143	147
II	5	6	8	7	5
III	8	3	5	6	5
IV	3	3	2	1	2
V	0	2	1	3	1
TOTAL	160	160	160	160	160

Table 1.5: Showing calculation of Garrets Mean Score and Rank.

		Rank Scale Value	I	II	III	IV	V	Total Score	Garrets Mean Score	Mean Rank
Sl. No	Factors	x	75	60	50	40	25			
1	Job Satisfaction	f	144	5	8	3	0	160	72.62	IV
		fx	10800	300	400	120	0	11620		
2	Curriculum Adaptability	f	146	6	3	3	2	160	72.68	III
		fx	10950	360	150	120	50	11630		
3	Placement	f	144	8	5	2	1	160	72.72	II
		fx	10800	480	250	80	25	11635		
4	NCVT Certification	f	143	7	6	1	3	160	72.25	V
		fx	10725	420	300	40	75	11560		
5	Skill And Quality Enhancement	f	147	5	5	2	1	160	73	I
		fx	11025	300	250	80	25	11680		

CONCLUSION

The survey conducted in Howrah district, India, provides valuable insights into the role of ITIs in skill development and employment generation. ITIs have emerged as a crucial platform for enhancing skills and employability among individuals of various age groups and social backgrounds. Women's participation in ITIs has also increased significantly, contributing to their empowerment. To better understand the factors influencing respondents' choices, Garrett's Ranking Technique was employed. The results showed that the primary reason for choosing ITIs was skill and quality enhancement, followed by placement, curriculum adaptability, job satisfaction, and NCVT certification. Furthermore, the study reveals that ITIs are perceived positively by respondents, with a focus on high-paying jobs, quality lab training, and government employment opportunities. Skill and quality enhancement emerged as the primary motivator for choosing ITIs, reflecting the institutions' success in fulfilling their core objectives.

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