Project paper on

Trader characteristics, usage of technology and Herding Behavior in the Stock Market of Bangladesh

Supervisor

Dr. Md. Mohan Uddin
Professor

School of Business & Economics

United International University

Prepared by

Mohona Tasnim

ID: 111 141 052

Letter of transmittal

To

Dr. Md. Mohan Uddin
Professor
School of Business & Economics
United International University

Subject: Submission of project on the "trader characteristics, usage of technology and Herding Behavior in the Stock Market of Bangladesh"

Dear Sir,

It gave me pleasure in presenting this project, which was assigned to. In this paper I try my best to carry out all the requirements of a research.

I consider myself very privileged to prepare under your guidance. This has been great opportunity for me to learn how to prepare a project. It has provided me with a great scope of applying and knowledge on How likely does technology affect small investors herding behavior and their level of confidence. I must mention here that I am extremely thankful to you for your guidance.

I would like to draw your attention particularly on the matter that there is necessary as now and when needed

Yours sincerely,

Mohona tasnim

ID: 111 141 052

Acknowledgement

All the praise is for Allah, the most merciful and beneficent, who bless us with knowledge, gave me the courage and allowed me to accomplish this task. As my project topic was to prepare a project on “trader characteristics, usage of technology and Herding Behavior in the Stock Market of Bangladesh”. I try to do my best to make this report and I also made a survey to complete my research. And lastly, I’m so much thankful to my teacher Dr. Md. Mohan Uddin to give me the opportunity.

Abstract

We all know that Herding behavior refers to how individual decisions are influenced by group behavior. Herding behavior most occurs in financial market, stock market, and in case of trade imbalance and also investor's decision varies on herding behavior. In this paper researcher try to find some Empirical evidence related to herding behavior from china stock market, Indian stock market and japan stock market. In this chapter researchers will discuss about how collect samples by which method they surveyed. How researcher prepares their questionnaire how can researcher record all the information first? In that time Researcher visited lots of brokerage house. At first in to their office and asked them are they interested in fill up a question which is related to their work. After completing survey researcher prepared data by using Microsoft office word and Microsoft excel etc. At first make a survey questionnaire in a word file after that converted into PDF file. Mainly researcher try to find out that in this paper, how like Does technology affect small investors herding behavior.

Contents

Chapter 1: Introduction

1.1. Background

1.1.1. Bangladesh economy

We all know that economy of Bangladesh is one of the fastest growing economies in the world which is market-based. Economy of Bangladesh is the 41st largest in the world in nominal terms, and 30th largest by purchasing power parity; it is classified among the Next Eleven emerging market middle income economies and a Frontier market. According to the IMF, In 2016 Bangladesh's economy become a second fastest growing major economy with a rate of 7.1%.In Bangladesh Dhaka and Chittagong are the principal financial which being known as Dhaka Stock Exchange and the Chittagong Stock Exchange . The financial sector of Bangladesh is the second largest in the subcontinent.

In 2004, Bangladesh averaged a GDP growth is 6.5% that has been largely driven by its exports of readymade garments, remittances and the domestic agricultural sector. The country has pursued export-oriented industrialization, with its key export sectors include textiles, shipbuilding, fish and seafood, jute and leather goods. It has also developed self-sufficient industries pharmaceuticals, steel and food processing. In telecommunication industry has witnessed rapid growth over the years, receiving high investment from foreign companies. Bangladesh also has substantial reserves of natural gas and is Asia's seventh largest gas producer. The government promotes the Digital Bangladesh scheme as part of its efforts to develop the country's growing information technology sector. Bangladesh's economic freedom score is 55.6. Its overall score has increased by 0.5 point, with higher scores on factors including property rights and government integrity countering declines in investment freedom and fiscal health. Bangladesh is ranked 27th among 43 countries in the Asia–Pacific region, and its overall score is below the regional and world averages.

Nevertheless, Bangladesh still grapples with poor infrastructure, endemic corruption, insufficient power supplies, and slow implementation of economic reforms.

1.1.2. capital market :

capital market is a market where long-term debt or equity and securities are bought and sold. It's a wealth of savers to those who can use it to long-term productive use, such as companies or governments making long-term investments. Financial regulators like the Bank of England (BoE) and the U.S. Securities and Exchange Commission (SEC)

In modern capital markets are almost invariably hosted on computer-based electronic trading platforms; most can be accessed only by entities within the financial sector or the treasury departments of governments and corporations, but some can be accessed directly by the public. As an example, in the United States, any American citizen with an internet connection can create an account with Treasury Direct and use it to buy bonds in the primary market, though sales to individuals form only a tiny fraction of the total volume of bonds sold. In case of private company various private companies provide browser-based platforms that allow individuals to buy shares and sometimes even bonds in the secondary markets. There are many thousands of such systems, most serving only small parts of the overall capital markets. Physically, the systems are hosted all over the world, though they tend to be concentrated in financial centers like London, New York, and Hong Kong. Capital markets are composed of primary and secondary markets.

accessed directly by the public. As an example, in the United States, any American citizen with an internet connection can create an account with Treasury Direct and use it to buy bonds in the primary market, though sales to individuals form only a tiny fraction of the total volume of bonds sold. In case of private company various private companies provide browser-based platforms that allow individuals to buy shares and sometimes even bonds in the secondary markets.

Capital market efficiency: Capital Market Efficiency which is relates to capital markets where share prices all times reflect all available relevant information. From the above, we can deduce that if a market is efficient, any new information available in the market which relates to a security of a particular firm will be incorporated into the share price speedily and rationally.

Perfect Capital Market

Perfect capital market assumes a complete market, perfect rationality of investors with many of them being price takers, and availability of information at no cost to participants, and instantaneous and costless transactions where taxes are non-existent.

1.2.3. Efficiency of Capital Market

In real life, all the assumptions given under the perfect capital market may not be realistic. Rarely would you find a truly perfect capital market, and this is mainly because of transaction costs. An efficient capital market is more realistic, and we take three assumptions from the perfect capital market to form our efficient capital market theory. These assumptions are:

- Participants or investors are rational and would adjust security prices rapidly to reflect the effect of new information.
- Participants are price takers and prices are determined as a result of competition and movement in the demand and supply of a security as result of new and available relevant information about the security.
- New information regarding securities is available at no cost, and security prices adjust to all new information

1.2. Objective of the study

1. To examine the existence of herding behavior in Bangladeshi stock market.
2. To understand and analyze the presence of herding in financial market.
3. To identify the effect of technology usage and level of confidence of the small investors on their herding behavior.

Chapter 2: literature review

2.1 Definition of herding behavior

Herding behavior refers to how individual decisions are influenced by group behavior. Another definition of herding behavior is the behavior of individual in group acting collectively without centralized direction. ***Braha, D (2012).***

2.2. Where herding behavior does occur

Herding behavior most occurs in financial market, stock market, and in case of trade imbalance and also investor's decision varies on herding behavior.

2.2.1. Financial market: In financial market economist and other people influenced by herding behavior. They choose herding behavior because of behavioral effect on stock price. And also, it may affect their own return and risk both.

. Stock market: In stock market herding behavior take place in three forms

- Information based
- Reputation based
- Compensation based

- **Information based:** It may happen when every people act the same way to announce information.

- **Reputation based:** It occurs because of respected investor and also their trading posture.

- **Compensation based:** It's a way that corporations and organizations use stoke options to reward employees.

In trade market herding behavior happens when traders notice a trade imbalance. Trade imbalance means the difference between the monetary value of nation's exports and imports over a certain period. ***(Victoria Duff)***

2.3. Reasons of herding behavior: Herding behavior

occurs in various reasons. That's are

2.3.1 Following the crowd: It means that investor who likes to invest them follow the crowd. Maybe they don't know the whole think but they consciously or unconsciously follow what other investors are doing in the market.

2.3.2 Deference to professionals: It means to given respects to others. If any advisor takes any decision, we think that they must know what they are doing. So consciously or unconsciously they believe and follow.

2.4. Types of herding behavior: Herding behavior is

mainly rational and irrational based

2.4.1 Rational herding: Rational herding reacts on the basis of information about the behavior of market agents and participants. It happens in the market because investor believes that others are the best informer than themselves.

2.4.2 Irrational herding: Irrational herding reacts on the non-basis of information.

2.5. Empirical evidence related to herding behavior

2.5.1. Herding behavior in Chinese stock market: Herding is good or bad it depends on market condition we see that in Chinese market herding behavior is grater when market is falling and the trade value is high. **(*PauloLao*)**

2.5.2. Herding behavior in Indian stock market: We already told that herding is good or bad it depends on market condition but it occurs in Indian market during up swings in market. **(HarminderSingh)**

2.5.3. Herding behavior in Japanese stock market: Japanese stock market traded in Tokyo stock exchange. In Tokyo stock exchange market herding behavior occurs when market movements increase in extreme level. **(Daniel O. Cajueiro)**

Chapter 3: Methodology

3.1 Introduction

In this chapter researchers will discuss about how collect samples by which method they surveyed. How researcher prepares their questionnaire how can researcher record all the information first? All the information related to methodology of the study will be here.

3.2 Surveys: In this survey sample of the study are15 based on convenience of the researcher.

3.3. Variables: The lists of variables are given below:

Table 3.1: list of variables

Dependent variable	1. Follow co-traders trading action. 2. Colleagues of own company are main sources of information for share business. 3. People other than colleagues of own companies are main sources of information for share business. 4. Would buy/sell a stock based on friend's suggestion. 5. Would buy/sell a stock based on broker's suggestion.
Independent variable	1. Trade 2. Trade on computer 3. Trade vie telephone 4. Trade by sitting in the brokerage house 5. Fundamental analysis 6. Technical analysis 7. Use own unique strategy

	8. Go for similar trade 9. Share market investment performance is better than that of other share market investors 10.Economics news is not surprising 11. Having more knowledge of the stock market 12. Technology has given more knowledge related to share market 13.Rely on the telephone to get the share market update 14. Internet provides more information related to share business
Control variable	1. Age. 2. Gender .3. Educational qualification. 4. Subject area. 5. Year of experience. 6. Current position in the organization.

3.4 Questionnaire: Based on the literature review the author has identified questionnaire which is related to this study. The author has been adopted questionnaire from various researchers' paper and took those are related to their variables. The questionnaire is attached in the appendix.

3.5 Data collection: Researcher visited lots of brokerage house. At first in to their office and asked them are they interested in fill up a question which is related to their work. But some people were not interested to give my question answer. Researcher saw that they are very frustrated. Maybe they face loss and also met some people who answer all questions. Some people share their opinion with researcher about stock market. In this survey sample size is too small because all the people were not cooperated with researcher.

3.6 Data record: prepared data by using Microsoft office word and Microsoft excel etc. At first make a survey questionnaire in a word file after that converted into PDF file. After completing my survey, I entered into excels and makes a table in row and Colum based

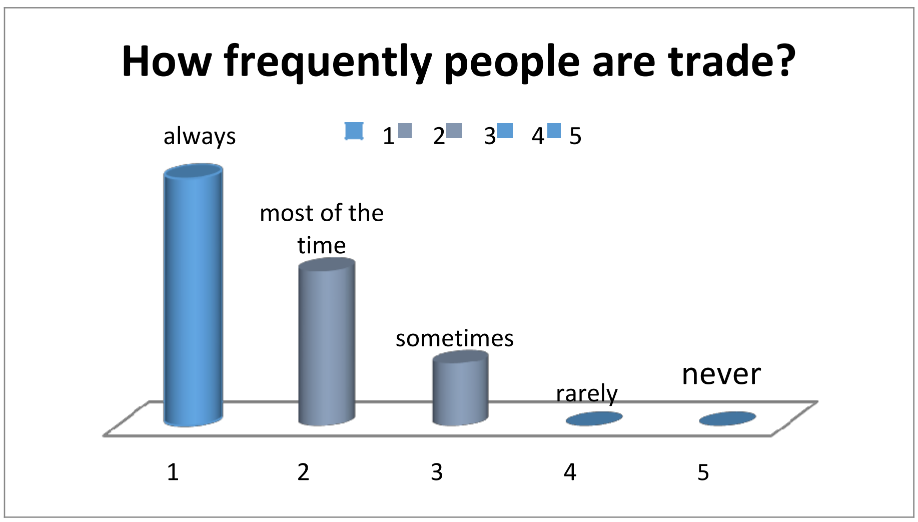
Chapter 4: Findings and discussion

4. Findings and discussion

4.1. Descriptive analysis

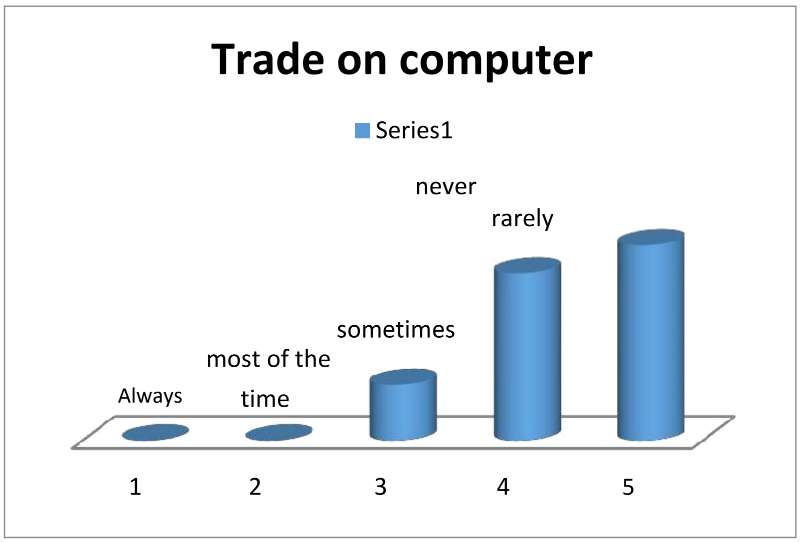
1 A. How frequent do you trade?

In this graph we see that more than half of the people are traded always. On the other hand, more than 30% people frequently traded most of the time. And 0% people responded as a rarely and never.



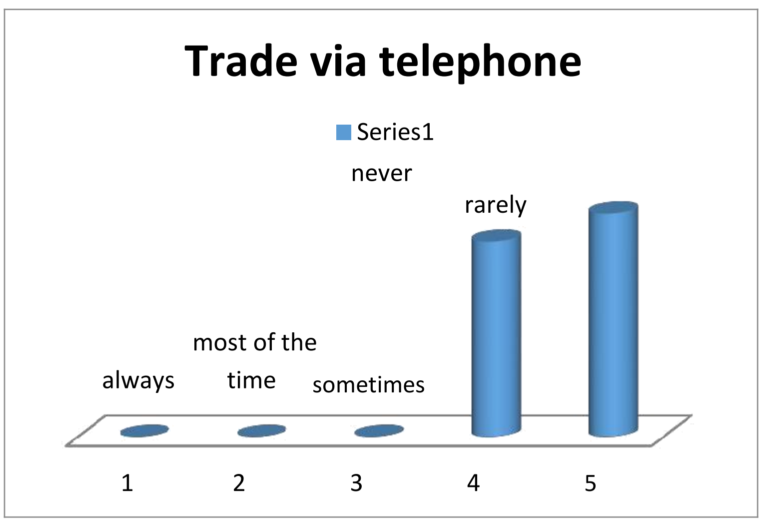
4.1 : Frequency of trading

2 B. Traded on computer: From this question we try to find out that how many people are traded on computer and in this graph, we see that 50% people responded that they never use computer for trading. And on the other hand, we see that 40% people responded that they rarely use computer for trading. So, we conclude that most of the people are not use computer for trading.



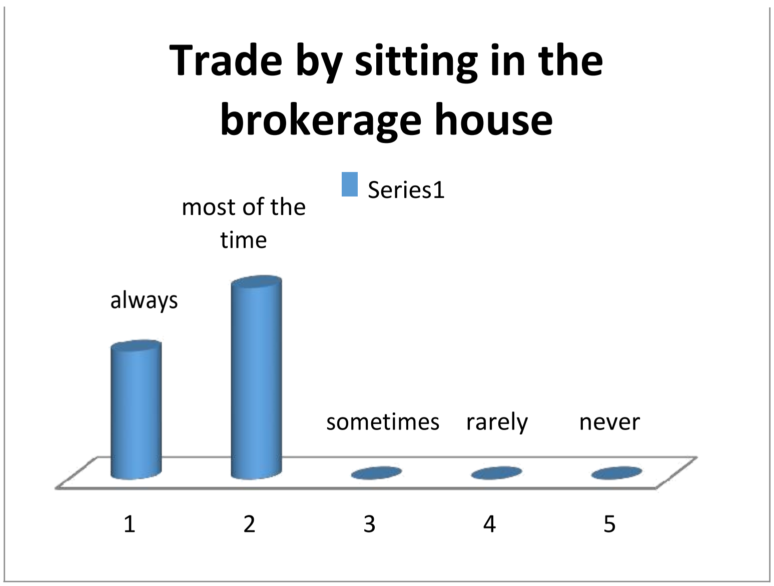
4.2 : Trading on computer

3 C. Trade vie telephone: From this question we try to find out that how many people are traded on vie telephone and in this graph, we see that more than 50% people responded that they never use telephone for trading. And on the other hand, we see that more than 45% people responded that they rarely use telephone for trading. So, we conclude that most of the people are not use telephone for trading.



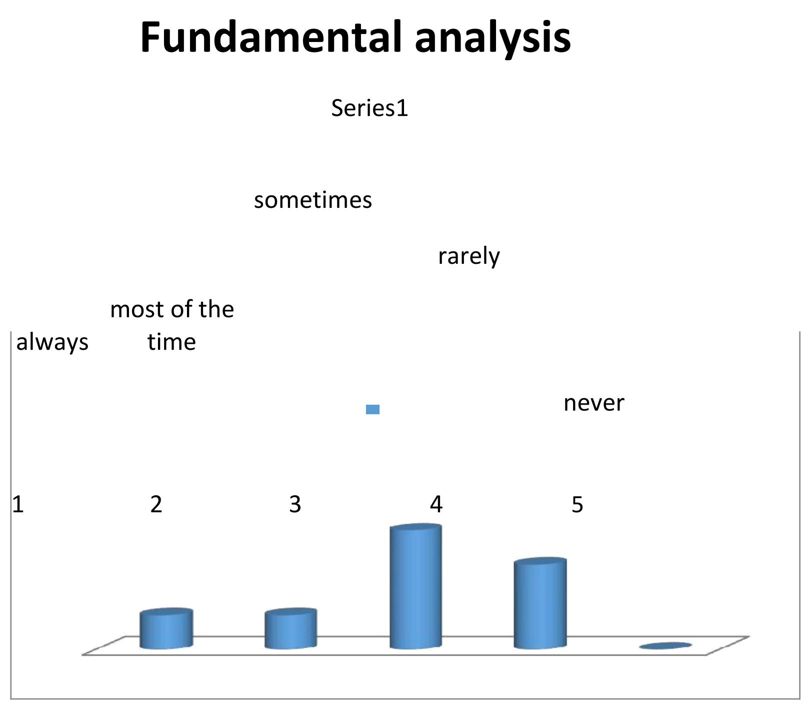
4.3 : Trading vie telephone

5 E. Fundamental analyses: Fundamental analysis is a method of measuring a security's many people are traded by sitting in the brokerage house and in this graph, we see that more than 50% people responded that they most of the time traded by sitting in the brokerage house. And on the other hand, we see that more than 40% people responded that they always traded by sitting in the brokerage house. So, we conclude people more like traded by sitting in the brokerage house rather than other option.



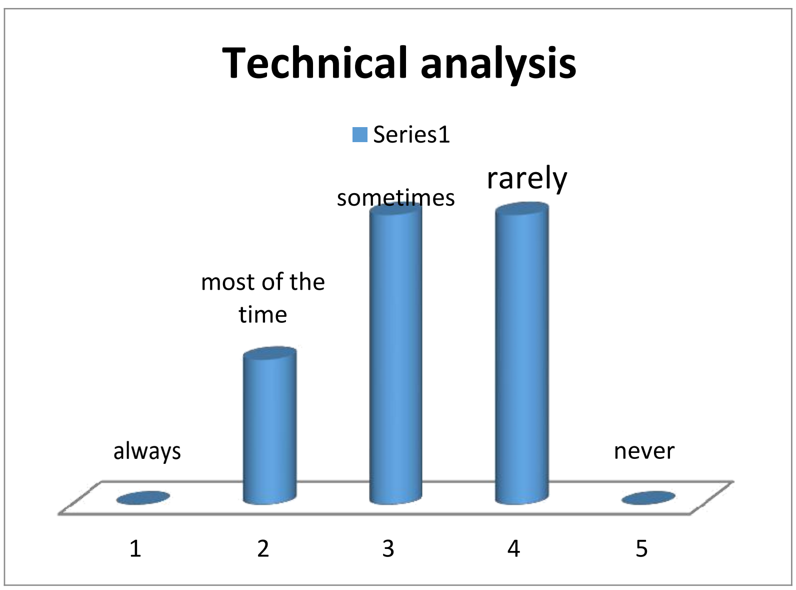
4.4 : Trading by sitting in the brokerage house

4 D. Trade by sitting in the brokerage house: From this question we try to find out that how intrinsic value by examining related economic and financial factors. From this question we try to find out that how many people are use fundamental analysis for the purpose of their buying and selling stock and in this graph, we see that more than 50% people responded that they sometimes use fundamental analyses. And on the other hand, we see that more than 30% people responded that they rarely use fundamental analyses. And more than 10% people responded that always and most of the time option.



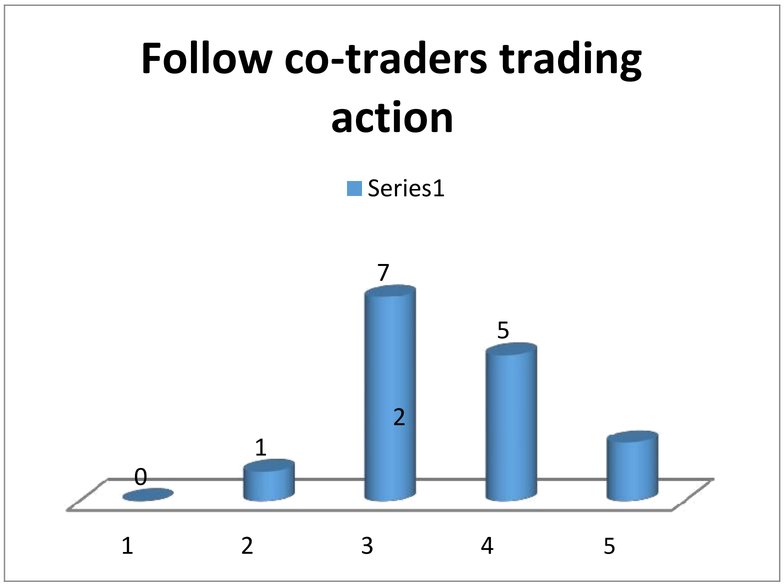
4.5: Fundamental analysis

6 F. Technical analyses: Technical analysis is a trading discipline employed to evaluate investments and identify trading opportunities in price trends and patterns seen on charts. From this question we try to find out that how many people are use technical analysis and, in this graph, we see that 40% people responded that they sometimes and rarely use technical analyses. And on the other hand, we see that only 10% people responded that they most of the time use technical analyses.



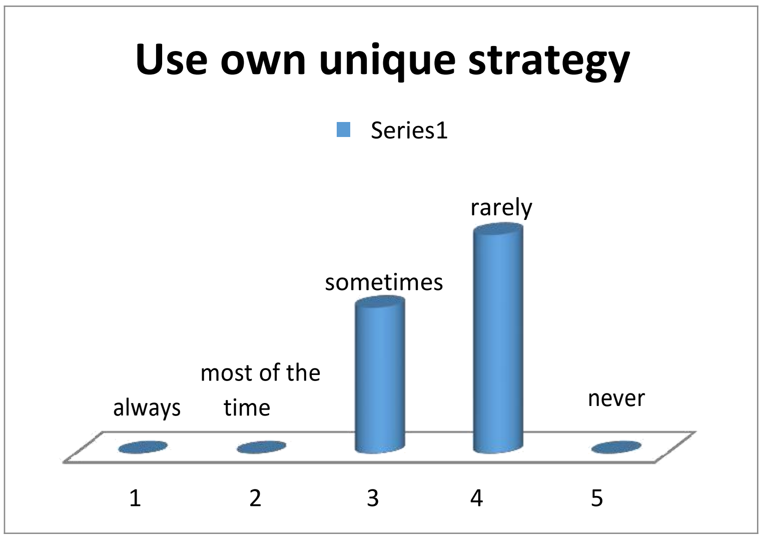
4.6 : Technical analysis

7 G. Follow co-traders trading action: From this question we try to find out that how many people are follow their co-traders and, in this graph, we see that more than 40% people responded that they sometimes follow their co-traders. And on the other hand we see that more than 30% people responded that they rarely follow their co-traders action.



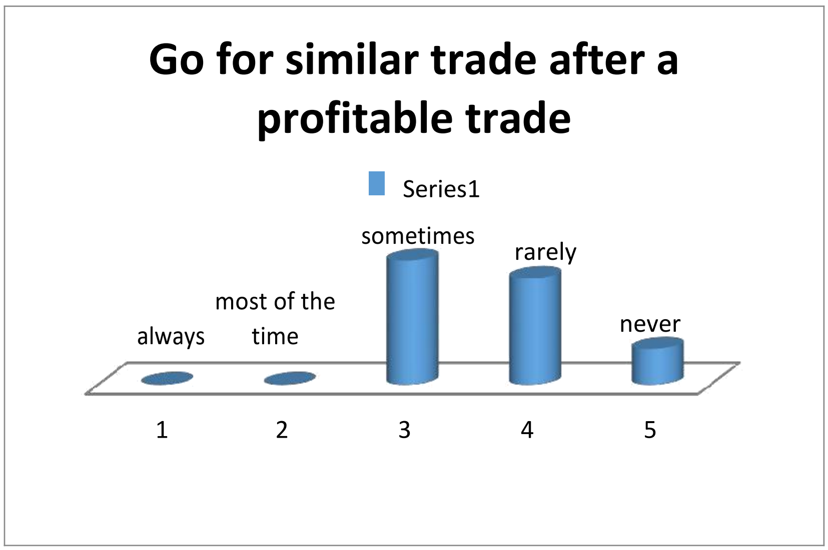
4.7 : Co-traders trading action

8.H. Use your own strategy: From this question we try to find out that how many people are use their own unique strategy and, in this graph, we see that more than 60% people responded that they rarely use their unique strategies. And on the other hand, we see that more than 50% people responded that they sometimes use their unique strategy.



4.8 : Unique strategy

9. I. Go for similar trade after a profitable trade: From this question we try to find out that how many people are go for similar trade after a profitable trade and in this graph, we see that 50% people responded that they sometimes go for similar trade after a profitable trade. And on the other hand, we see that 40% people responded that they rarely go for similar trade after a profitable trade.



4.9 : trading after profitable trade

In this research paper researcher find out that herding behavior most occurs in financial market, stock market, and in case of trade imbalance and also investor’s decision varies on herding behavior. From the questionnaire’s maximum result researcher conclude that people are follow what other people do that’s called herding behavior.

Questionnaire	Maximum result
1. How frequently do they trade?	Always
2. How frequently do they trade on computer?	Never
3. How frequently do they trade via telephone?	Never
4. How frequently do they trade by sitting in the brokerage house?	Most of the time
5. How frequently do they use fundamental analysis?	Sometimes
6. How frequently do they use technical analysis?	Sometimes
7. How frequently do they follow their co-traders trading action?	Sometimes
8. How frequently do they use their own unique strategy?	Rarely
9. How frequently do they go for similar trade after a similar trade?	Sometimes
10. Share market investment is better than that of other share market investors.	Neutral
11. The majority of economics news is not surprising for me.	Neutral
12. Colleagues of my own company are main sources of information.	Agree
13.people other than colleagues of my own company are my	Strongly agree
14. I would buy/sell a stock based on a friends suggestion	Neutral
15. I would buy/sell a stock based on my brokers suggestion	Agree
16. Having more knowledge of the stock market dynamics affects my confidence	Neutral
17.Technology has given me more knowledge related to share business	Strongly agree
18.I rely on the telephone to get share market update	Neutral
19. The internet provides me with more access to more information related to share business	Strongly agree

Table 4.2 summary of descriptive result

4.2. Results of correlation analysis

4.2.1 Age and following co-traders

	fcotrad8g	*age1*
fcotrad8g	1	-0.26171
age1	-0.26171	1

We see that here r=-0.2617 and it indicates that there is a negative correlation between two variables. People follow their co-traders or not it's their own choice. It not depends on their age.

4.2.2 Education and following co-traders

	fcotrad8g	*edu3*
fcotrad8g	1	0.38
edu3	0.38	1

Here we can see that r = 0.38 and it indicates that there is a positive correlation between following co-trades and the person's level of education. Because educated people are more interested to know and follow their co-traders.

4.2.3 Experiences and following co-traders

	fcotrad8g	*exp5*
fcotrad8g	1	0.44
exp5	0.44	1

Here we can see that *r* = 0.44and it indicates that there is a positive correlation between following co-trades and the person's work experience. From this relation we found that experienced people more interested to follow their co-traders.

4.2.4 Current position in the organization and following co-traders

	fcotrad8g	*curposi6*
fcotrad8g	1	-0.21
curposi6	-0.21	1

Here we can see that *r* = -0.21 and it indicates that there is a negative correlation between following co-traders and the person's current position in the organization. Negative because people are not following their co-traders depends on their current position in the organization. People's current position never decided that they follow their co-traders or not.

4.2.5 How frequent do they trade and following co-traders

	fcotrad8g	*tra8a*
fcotrad8g	1	-0.21
tra8a	-0.21	1

Here we can see that r= -0.21. And it indicates that there is a negative correlation between how frequently do people follow their co-traders and how frequent do they trade.

4.2.6 How frequent do they trade on computer and following co-traders

	fcotrad8g	*tracom8b*
fcotrad8g	1	0.039
tracom8b	0.039	1

Here we can see that r = 0.039 and it indicates that there is a positive correlation between following co-trades and how frequent do the person trade on computer.

4.2.7 How frequent do they trade on telephone and following co-traders

	fcotrad8g	*tratele8c*
fcotrad8g	1	-0.21
tratele8c	-0.21	1

Here we can see that *r*= -0.21. And it indicates that there is a negative correlation between how frequently do people follow their co-traders and how frequent do they trade on telephone.

4.2.8 How frequent do they trade by sitting in the brokerage house and following co-traders

	fcotrad8g	*trabrok8d*
fcotrad8g	1	0.54
trabrok8d	0.54	1

Here we can see that *r* = 0.54 and it indicates that there is a positive correlation between following co-trades and how frequent do the person trade by sitting in the brokerage house. Both variables are increase that’s why it’s a positive correlation.

4.2.9 How frequent do they use fundamental analysis and following co-traders

	fcotrad8g	*fundana8e*
fcotrad8g	1	0.60
fundana8e	0.60	1

Here we can see that r = 0.60 and it indicates that there is a positive correlation between following co-trades and how frequent do the person use fundamental analysis.

4.2.10. How frequent do they use technical analysis and following co-traders

	fcotrad8g	*techana8f*
fcotrad8g	1	0.27
techana8f	0.27	1

Here we can see that r = 0.27 and it indicates that there is a positive correlation between following co-trades and how frequent do the person use technical analysis.

4.2.11. How frequent do they use their unique strategies and following co-traders

	fcotrad8g	*unistra8h*
fcotrad8g	1	0.034
unistra8h	0.034	1

Here we can see that *r* = 0.034and it indicates that there is a positive correlation between following co-trades and how frequent do the people use their unique strategy. Both variables are increase that’s why it’s a positive correlation.

4.2.12. How frequent do they go for similar trade and following co-traders

	fcotrad8g	*simitra8i*
fcotrad8g	1	-0.04
simitra8i	-0.04	1

Here we can see that *r*= -0.04. And it indicates that there is a negative correlation between how frequently do people follow their co-traders and how frequent do they go for similar trade.

4.2.13. People share market investment performance and following co-traders

	fcotrad8g	*Per for better 9a*
fcotrad8g	1	0.21
Per bett oth9a	0.21	1

Here we can see that r = 0.21and it indicates that there is a positive correlation between following co-trades and people share market investment performance. Both variables are increase that's why it's a positive correlation.

4.2.14. The economics news that is not surprising and following co-traders

	fcotrad8g	*econews9b*
fcotrad8g	1	-0.23
econews9b	-0.23	1

Here we can see that r= -0.23. And it indicates that there is a negative correlation between how frequently do people follow their co-traders and the economics news that is not surprising

4.2.15. Having more knowledge of the stock market dynamics affects my confidence and following co-traders

	fcotrad8g	*morknow9g*
fcotrad8g	1	0.40
morknow9g	0.40	1

Here we can see that r = 0.40and it indicates that there is a positive correlation between following co-trades and people knowledge about stock market. Both variables are increase that’s why it’s a positive correlation.

4.2.16. Technology has given me more knowledge related to share business and following co-traders

	fcotrad8g	*tech know9h*
fcotrad8g	1	-0.05
tech know9h	-0.05	1

Here we can see that r= -0.05. And it indicates that there is a negative correlation between how frequently do people follow their co-traders and the technology give more knowledge about share business.

4.2.17. I rely on the telephone to get share market update and following co-traders

	fcotrad8g	*tele9i*
fcotrad8g	1	-0.70
tele9i	-0.70	1

Here we can see that *r*= -0.70. And it indicates that there is a negative correlation between how frequently do people follow their co-traders and the telephone to get share market updates.

4.2.18. The internet provides me with access to more information related to share business and following co-traders

	fcotrad8g	*internet provides9 j*
fcotrad8g	1	-0.08
internet provides9 j	-0.08	1

Here we can see that *r*= -0.08. And it indicates that there is a negative correlation between how frequently do people follow their co-traders and the internet provides more information about share market.

4.2.19. Colleagues of my own company are my main sources of information needed for share business and age

	colle sug9c	*age1*
colle sug9c	1	0
age1	0	1

Here we can see that *r*= 0. And it indicates that there is no correlations between colleagues are main sources of information for share business and age.

4.2.20. Colleagues of my own company are my main sources of information needed for share business and education

	colle sug9c	*edu3*
colle sug9c	1	0.22
edu3	0.22	1

Here we can see that *r* = 0.22and it indicates that there is a positive correlation between colleagues are main sources of information for share business and the people's education level.

4.2.21. Colleagues of my own company are my main sources of information needed for share business and education

	colle sug9c	*exp5*
colle sug9c	1	0.038
exp5	0.038	1

Here we can see that *r* = 0.038 and it indicates that there is positive correlations between colleagues are main sources of information for share business and the people's work experiences.

4.2.22. Colleagues of my own company are my main sources of information needed for share business and current position in the organization

	colle sug9c	*curposi6*
colle sug9c	1	-0.22
curposi6	-0.22	1

Here we can see that *r*= -0.22. And it indicates that there is negative correlations between colleagues are main sources of information for share business and the people's current position in the organization.

4.2.23. Colleagues of my own company are my main sources of information needed for share business and how frequent do they trade?

	colle sug9c	*tra8a*
colle sug9c	1	-0.19
tra8a	-0.19	1

Here we can see that r= -0.19. And it indicates that there is negative correlations between colleagues are main sources of information for share business and how frequent people do trade. People traded on the market or not it's their own choice.

4.2.24. Colleagues of my own company are my main sources of information needed for share business and how frequent do they trade on computer?

	colle sug9c	*tracom8b*
colle sug9c	1	0.031
tracom8b	0.031	1

Here we can see that r = 0.031 and it indicates that there is positive correlations between colleagues are main sources of information for share business and trade on computer. If people collect information from their colleagues that they use computer for trading then they also interested trade on computer.

4.2.25. Colleagues of my own company are my main sources of information needed for share business and how frequent do they trade via telephone?

	colle sug9c	*tratele8c*
colle sug9c	1	-0.22
tratele8c	-0.22	1

Here we can see that *r* = -0.22 and it indicates that there is negative correlations between colleagues are main sources of information for share business and trade vie telephone. People are not secure to trade via telephone. But some company trade their share vie telephone.

4.2.26. Colleagues of my own company are my main sources of information needed for share business and how frequent do they trade by sitting in the brokerage house?

	colle sug9c	*trabrok8d*
colle sug9c	1	0.13
trabrok8d	0.13	1

Here we can see that r = 0.13 and it indicates that there is positive correlations between colleagues are main sources of information for share business and trade by sitting in the brokerage house. People are more interested traded by sitting in the brokerage house.

4.2.27. Colleagues of my own company are my main sources of information needed for share business and how frequent do they use fundamental analysis?

	colle sug9c	*fundana8e*
colle sug9c	1	0
fundana8e	0	1

Here we can see that r= 0. And it indicates that there is no correlations between colleagues are main sources of information for share business and use fundamental analysis.

4.2.28. Colleagues of my own company are my main sources of information needed for share business and how frequent do they use technical analysis?

	colle sug9c	*techana8f*
colle sug9c	1	0.18
techana8f	0.18	1

Here we can see that *r*= 0.18. And it indicates that there is positive correlations between colleagues are main sources of information for share business and use technical analysis.

4.2.29. Colleagues of my own company are my main sources of information needed for share business and how frequent do they use their own unique strategies?

	colle sug9c	*unistra8h*
colle sug9c	1	0
unistra8h	0	1

Here we can see that $r = 0$. And it indicates that there are no correlations between colleagues are main sources of information for share business and use own unique strategies.

4.2.30. Colleagues of my own company are my main sources of information needed for share business and how frequent do they go for similar trade after a profitable trade?

	colle sug9c	*simitra8i*
colle sug9c	1	-0.31
simitra8i	-0.31	1

Here we can see that $r = -0.31$. And it indicates that there are negative correlations between colleagues are main sources of information for share business and go for similar trade after a profitable trade.

4.2.31. Colleagues of my own company are my main sources of information needed for share business and Share market investment performance is better than that of other share market investors?

	colle sug9c	*perfor better9a*
colle sug9c	1	0.22
perfor better9a	0.22	1

Here we can see that r = 0.22 and it indicates that there are positive correlations between colleagues of own companies are main source of information and share market investment performance is better than that other share market investor. In case of investment people follow their main source of information.

4.2.32. Colleagues of my own company are my main sources of information needed for share business and Economics news is not surprising?

	colle sug9c	*econews9b*
colle sug9c	1	0.19
econews9b	0.19	1

Here we can see that r = 0.19 and it indicates that there are positive correlations between colleagues of own companies are main source of information and economics news is not surprising for us.

4.2.33. Colleagues of my own company are my main sources of information needed for share business and having more knowledge of the stock market?

	colle sug9c	*morkno9g*
colle sug9c	1	0.35
morkno9g	0.35	1

Here we can see that r = 0.35 and it indicates that there are positive correlations between colleagues of own companies are main source of information and more knowledge of the stock market.

4.2.34. Colleagues of my own company are my main sources of information needed for share business and Technology has given more knowledge related to share market?

	colle sug9c	*tech kno9h*
colle sug9c	1	0.41
tech kno9h	0.41	1

Here we can see that r = 0.41 and it indicates that there is positive correlations between colleagues of own companies are main source of information and technology has given more knowledge related to share business.

4.2.35. Colleagues of my own company are my main sources of information needed for share business and Technology has given more knowledge related to share market?

	colle sug9c	*tele9i*
colle sug9c	1	-0.37
tele9i	-0.37	1

Here we can see that r = -0. 37and it indicates that there is negative correlations between colleagues of own companies are main source of information and on the telephone to get share market update.

4.2.36. People other than colleagues of own companies are main sources of information for share business and age?

	people sug9d	*age1*
people sug9d	1	-0.36
age1	-0.36	1

Here we can see that r = -0. 36 and it indicates that there is negative correlations between people other than colleagues of own company are main sources of information and age.

4.2.37. People other than colleagues of own companies are main sources of information for share business and education?

	people sug9d	*edu3*
people sug9d	1	0.10
edu3	0.10	1

Here we can see that r = 0.10 and it indicates that there is positive correlations between people other than colleagues of own companies are main sources of information and education.

4.2.38. People other than colleagues of own companies are main sources of information for share business and experience?

	people sug9d	*exp5*
people sug9d	1	-0.42
exp5	-0.42	1

Here we can see that r = -0. 42 and it indicates that there is negative correlations between people other than colleagues of own company are main sources of information and experience.

4.2.39. People other than colleagues of own companies are main sources of information for share business and current position in the organization?

	people sug9d	*curposi6*
people sug9d	1	0.051
curposi6	0.051	1

Here we can see that r = 0.051and it indicates that there is positive correlations between people other than colleagues of own company are main sources of information and current position in the organization.

4.2.40. People other than colleagues of own companies are main sources of information for share business and how frequent do they trade?

	people sug9d	*tra8a*
people sug9d	1	0.32
tra8a	0.32	1

Here we can see that r = 0.32and it indicates that there are positive correlations between people other than colleagues of own company are main sources of information and how frequently they do trade.

4.2.41. People other than colleagues of own companies are main sources of information for share business and how frequent do they trade on computer?

	people sug9d	*tracom8b*
people sug9d	1	-0.18
tracom8b	-0.18	1

Here we can see that r = -0. 18 and it indicates that there is negative correlations between people other than colleagues of own company are main sources of information and how frequent they do trade on computer.

4.2.42. People other than colleagues of own companies are main sources of information for share business and how frequent do they trade on telephone?

	people sug9d	*tratele8c*
people sug9d	1	0.36
tratele8c	0.36	1

Here we can see that r = 0.36and it indicates that there is positive correlations between people other than colleagues of own companies are main sources of information and how frequently they do trade vie telephone.

4.2.43. People other than colleagues of own companies are main sources of information for share business and how frequent do they trade by sitting in the brokerage house?

	people sug9d	*trabrok8d*
people sug9d	1	0.16
trabrok8d	0.16	1

Here we can see that r = 0.16and it indicates that there are positive correlations between people other than colleagues of own companies are main sources of information and how frequently they do trade by sitting in the brokerage house.

4.2.44. People other than colleagues of own companies are main sources of information for share business and how frequent do they use fundamental analysis?

	people sug9d	*fundana8e*
people sug9d	1	0.16
fundana8e	0.16	1

Here we can see that *r* = 0.16and it indicates that there is positive correlations between people other than colleagues of own companies are main sources of information and the use of fundamental analysis.

4.2.45. People other than colleagues of own companies are main sources of information for share business and how frequent do they use technical analysis?

	people sug9d	*techana8f*
people sug9d	1	-0.41
techana8f	-0.41	1

Here we can see that *r* = -0. 41 and it indicates that there is negative correlations between people other than colleagues of own company are main sources of information and the use of technical analysis.

4.2.46. People other than colleagues of own companies are main sources of information for share business and how frequent do they use their own unique strategy?

	people sug9d	*unistra8h*
people sug9d	1	-0.16
unistra8h	-0.16	1

Here we can see that r = -0. 41 and it indicates that there is negative correlations between people other than colleagues of own company are main sources of information and the use of unique strategies.

4.2.47. People other than colleagues of own companies are main sources of information for share business and how frequent do they go for similar trade?

	people sug9d	*simitra8i*
people sug9d	1	0.07
simitra8i	0.07	1

Here we can see that r = 0.07and it indicates that there is positive correlations between people other than colleagues of own companies are main sources of information and go for similar trade after a profitable trade.

4.2.48. People other than colleagues of own companies are main sources of information for share business and Share market investment performance is better than that of other share market investors?

	people sug9d	*perfor better9a*
people sug9d	1	0.41
perfor better9a	0.41	1

Here we can see that $r = 0.41$and it indicates that there is positive correlations between people other than colleagues of own companies are main sources of information and share market investment is better than of other share market investment.

4.2.49. People other than colleagues of own companies are main sources of information for share business and Economics news is not surprising

	people sug9d	*econews9b*
people sug9d	1	-0.06
econews9b	-0.06	1

Here we can see that $r = -0.\ 06$ and it indicates that there is negative correlations between people other than colleagues of own company are main sources of information and the economics news is not surprising for us.

4.2.50. Would buy/sell a stock based on friend's suggestion and age?

	frns sugg9e	*age1*
frns sugg9e	1	0.094
age1	0.094	1

Here we can see that r = 0.094and it indicates that there is a positive correlation between would buy/sell a stock based on friends' suggestion and age.

4.2.51. Would buy/sell a stock based on friend's suggestion and education?

	frns sugg9e	*edu3*
frns sugg9e	1	-0.016
edu3	-0.016	1

Here we can see that r= -0.016. And it indicates that there is a negative correlation between would buy/sell a stock based on friends' suggestion and education.

4.2.52. Would buy/sell a stock based on friend's suggestion and experience?

	frns sugg9e	*exp5*
frns sugg9e	1	0.225
exp5	0.225	1

Here we can see that r = 0.225and it indicates that there is a positive correlation between would buy/sell a stock based on friends' suggestion and experience.

4.2.53. Would buy/sell a stock based on friend's suggestion and current position in the organization?

	frns sugg9e	*curposi6*
frns sugg9e	1	0.13
curposi6	0.13	1

Here we can see that r = 0.13and it indicates that there is a positive correlation between would buy/sell a stock based on friends' suggestion and people current position in the organization.

4.2.54. Would buy/sell a stock based on friend's suggestion and how frequent do they trade?

	frns sugg9e	*tra8a*
frns sugg9e	1	0.53
tra8a	0.53	1

Here we can see that r = 0.53 and it indicates that there is a positive correlation between would buy/sell a stock based on friends' suggestion and how frequently do they trade.

4.2.55. Would buy/sell a stock based on friend's suggestion and how frequent do they trade on computer?

	frns sugg9e	*tracom8b*
frns sugg9e	1	-0.23
tracom8b	-0.23	1

Here we can see that r= -0.23. And it indicates that there is a negative correlation between would buy/sell a stock based on friends' suggestion and how frequently do they trade on computer.

4.2.56. Would buy/sell a stock based on friend's suggestion and how frequent do they trade on vietelephone?

	frns sugg9e	*tratele8c*
frns sugg9e	1	-0.103
tratele8c	-0.103	1

Here we can see that r= -0.103. And it indicates that there is a negative correlation between would buy/sell a stock based on friends' suggestion and how frequently do they trade via telephone

4.2.57. Would buy/sell a stock based on friend's suggestion and how frequent do they use technical

analysis?

	frns sugg9e	*techana8f*
frns sugg9e	1	0.460
techana8f	0.460	1

. Here we can see that r = 0.460 and it indicates that there is a positive correlation between would buy/sell a stock based on friends' suggestion and how frequently do they use technical analysis.

4.2.58. Would buy/sell a stock based on friend's suggestion and how frequent do they use technicalanalysis?

	frns sugg9e	*perfor better9a*
frns sugg9e	1	-0.373
perfor better9a	-0.373	1

Here we can see that *r*= -0.373. And it indicates that there is a negative correlation between would buy/sell a stock based on friends' suggestion and share market investment performance is better than that other share market.

4.2.59. Would buy/sell a stock based on friend's suggestion and Economics news is not surprising?

	frns sugg9e	*econews9b*
frns sugg9e	1	0.231
econews9b	0.231	1

Here we can see that *r* = 0.231 and it indicates that there is a positive correlation between would buy/sell a stock based on friends' suggestion and the majority of economics news is not surprising for us.

4.2.60. Would buy/sell a stock based on friend's suggestion and having more knowledge of the stock market?

	frns sugg9e	*morkno9g*
frns sugg9e	1	-0.063
morkno9g	-0.063	1

Here we can see that *r*= -0.063. And it indicates that there is a negative correlation between would buy/sell a stock based on friends' suggestion and more knowledge of the stock market dynamics affect my confidence.

4.2.61. Would buy/sell a stock based on friend's suggestion and Technology has given more knowledge related to share market?

	frns sugg9e	*tech kno9h*
frns sugg9e	1	0.265
tech kno9h	0.265	1

Here we can see that *r* = 0.265 and it indicates that there is a positive correlation between would buy/sell a stock based on friends' suggestion and technology has given us more knowledge related to share business.

4.2.62. Would buy/sell a stock based on friend's suggestion and Rely on the telephone to get the share market update?

	frns sugg9e	*tele9i*
frns sugg9e	1	0.328
tele9i	0.328	1

Here we can see that r = 0.328 and it indicates that there is a positive correlation between would buy/sell a stock based on friends' suggestion and I rely on the telephone to get share market update.

4.2.63. Would buy/sell a stock based on friend's suggestion and Internet provides more information related to share business?

	frns sugg9e	*internet provides9j*
frns sugg9e	1	0.326
internet provides9j	0.326	1

Here we can see that r = 0.326 and it indicates that there is a positive correlation between would buy/sell a stock based on friends' suggestion and the internet provides me with access to more information related to share business.

4.2.64. Would buy/sell a stock based on broker's suggestion and age?

	bro sugg9f	*age1*
bro sugg9f	1	-0.294
age1	-0.294	1

Here we can see that *r*= -0.294. And it indicates that there is a negative correlation between would buy/sell a stock based on broker's suggestion and age.

4.2.65. Would buy/sell a stock based on broker's suggestion and education?

	bro sugg9f	*edu3*
bro sugg9f	1	-0.012
edu3	-0.012	1

Here we can see that *r*= -0.012. And it indicates that there is a negative correlation between would buy/sell a stock based on broker's suggestion and education.

4.2.66. Would buy/sell a stock based on broker's suggestion and how frequent do they trade on computer?

	bro sugg9f	*tracom8b*
bro sugg9f	1	0.221
tracom8b	0.221	1

Here we can see that *r*= 0.221. And it indicates that there is a positive correlation between would buy/sell a stock based on broker's suggestion and how frequent do they trade on computer.

4.2.67. Would buy/sell a stock based on broker's suggestion and how frequent do they trade by sitting in the brokerage house?

	bro sugg9f	*trabrok8d*
bro sugg9f	1	0.227
trabrok8d	0.227	1

We can see that *r*= 0.227. And it indicates that there is a positive correlation between would buy/sell a stock based on broker's suggestion and how frequent do they trade by sitting in the brokerage house.

4.2.68. Would buy/sell a stock based on broker's suggestion and how frequent do they trade use technology?

	bro sugg9f	*techana8f*
bro sugg9f	1	-0.199
techana8f	-0.199	1

Here we can see that *r*= -0.199. And it indicates that there is a negative correlation between would buy/sell a stock based on broker's suggestion and the use of technical analysis.

4.2.69. Would buy/sell a stock based on broker's suggestion and Share market investment performance is better than that of other share market investors?

	bro sugg9f	*perfor better9a*
bro sugg9f	1	0.546
perfor better9a	0.546	1

Here we can see that *r*= 0.227. And it indicates that there is a positive correlation between would buy/sell a stock based on broker's suggestion and how frequent do they trade by sitting in the brokerage house.

4.2.70. Would buy/sell a stock based on broker's suggestion and having more knowledge of the stock market?

	bro sugg9f	*morkno9g*
bro sugg9f	1	0.0744
morkno9g	0.0744	1

Here we can see that *r*= 0.0744. And it indicates that there is a positive correlation between would buy/sell a stock based on broker's suggestion and having more knowledge of the stock market dynamics affects their confidence.

4.2.71. Would buy/sell a stock based on broker's suggestion and Technology has given more knowledge related to share market?

	bro sugg9f	*internet provides9j*
bro sugg9f	1	-0.093
internet provides9j	-0.093	1

Here we can see that *r*= -0.093. And it indicates that there is a negative correlation between would buy/sell a stock based on broker's suggestion and the internet provides me with access to more information related to share business.

Dependent variable		Positive, negative or no relation
Follow co-traders trading action.	Age	Negative
	Educational qualification	Positive
	Experiences	Positive
	Current position on the organization	Negative
	Trade	Negative
	Trade on computer	Positive
	Trade vie telephone	Negative
	Trade by sitting in the brokerage house	Positive
	Fundamental analysis	Positive
	Technical analysis	Positive
	Use own unique strategy	Positive
	Go for similar trade	Negative
	Share market investment performance is better than that of other share market investors	Positive
	Economics news is not surprising	Negative
	Having more knowledge of the stock market	Positive
	Technology has given more knowledge related to share market	Negative
	Rely on the telephone to get the share market update	Negative
	Internet provides more information related to share business	Negative

Colleagues of own company are main sources of information for share business.	Age	No correlation
	Educational qualification	Positive
	Experiences	Positive
	Current position on the organization	Negative
	Trade	Negative
	Trade on computer	Positive
	Trade vie telephone	Negative
	Trade by sitting in the brokerage house	Positive
	Fundamental analysis	No correlation
	Technical analysis	Positive
	Use own unique strategy	No correlation
	Go for similar trade	Negative
	Share market investment performance is better than that of other share market investors	Positive
	Economics news is not surprising	Positive
	Having more knowledge of the stock market	Positive
	Technology has given more knowledge related to share market	Positive
	Rely on the telephone to get the share market update	Negative
	Internet provides more information related to share business	Positive
People other than colleagues of own companies are main sources of information for share business.	Age	Negative
	Educational qualification	Positive

	Experiences	Negative
	Current position on the organization	Positive
	Trade	Positive
	Trade on computer	Negative
	Trade vie telephone	Positive
	Trade by sitting in the brokerage house	Positive
	Fundamental analysis	Positive
	Technical analysis	Negative
	Use own unique strategy	Negative
	Go for similar trade	Positive
	Share market investment performance is better than that of other share market investors	Positive
	Economics news is not surprising	Negative
	Having more knowledge of the stock market	Positive
	Technology has given more knowledge related to share market	Negative
	Rely on the telephone to get the share market update	Negative
	Internet provides more information related to share business	Negative
Would buy/sell a stock based on friend's suggestion.	Age	Positive
	Educational qualification	Negative
	Experiences	Positive
	Current position on the organization	Positive
	Trade	Positive
	Trade on computer	Negative
	Trade vie telephone	Negative
	Trade by sitting in the brokerage house	Positive
	Fundamental analysis	Negative
	Technical analysis	Positive
	Use own unique strategy	Negative
	Go for similar trade	Positive
	Share market investment	Negative

	performance is better than that of other share market investors	
	Economics news is not surprising	Positive
	Having more knowledge of the stock market	Negative
	Technology has given more knowledge related to share market	Positive
	Rely on the telephone to get the share market update	Positive
	Internet provides more information related to share business	Positive
Would buy/sell a stock based on broker's suggestion.	Age	Negative
	Educational qualification	Negative
	Experiences	Negative
	Current position on the organization	Negative
	Trade	Negative
	Trade on computer	Positive
	Trade vie telephone	Positive
	Trade by sitting in the brokerage house	Positive
	Fundamental analysis	Positive
	Technical analysis	Negative
	Use own unique strategy	Positive
	Go for similar trade	Negative
	Share market investment performance is better than that of other share market investors	Positive
	Economics news is not surprising	Negative
	Having more knowledge of the stock market	Positive
	Technology has given more knowledge related to share market	Negative

	Rely on the telephone to get the share market update	negative
	Internet provides more information related to share business	

Table 4.2.Summary of co-relation analysis

Conclusion:

In this paper, Researchers find out that how like Does technology affect small investors herding behavior. Herding behavior most occurs in financial market, stock market, and in case of trade imbalance and also investor's decision varies on herding behavior. To examine the existence of herding behavior in Bangladeshi stock market researcher found that, to understand and analyze the presence of herding in financial market. To identify the effect of technology usage and level of confidence of the small investors on their herding behavior. In financial market economist and other people influenced by herding behavior. They choose herding behavior because of behavioral effect on stock price. And also, it may affect their own return and risk both. Stock market: In stock market herding behavior take place in three forms those are Information based, Reputation based, Compensation based. In trade market herding behavior happens when traders notice a trade imbalance. Trade imbalance means the difference between the monetary value of nation's exports and imports over a certain period.

References

1. https://www.google.com/search?client=firefox-b-d&q=fundamental+analysis+definition
2. https://www.google.com/search?client=firefox-b-d&q=bangladesh+economy
3. https://www.heritage.org/index/country/bangladesh
4. https://www.investopedia.com/terms/c/capitalmarkets.asp
5. https://en.wikipedia.org/wiki/Capital_market
6. http://www.gemanalyst.com/capital-market-efficiency-efficient-market-hypothesis/
7. https://www.google.com/search?q=herding+behavior+in+stock+market&oq=herding+behavior+in+&aqs=chrome.5.69i57j0l7.15348j1j7&sourceid=chrome&ie=UTF-8
8. https://www.sciencedirect.com/science/article/pii/S0927538X07000236
9. https://www.dhakatribune.com/uncategorized/2013/05/20/how-herding-behaviour-deters-capital-market-price-efficiency-in-bangladesh

Anonymous Survey of Capital Market Investors in Bangladesh

Your response will be kept confidential and used only for academic purpose. The purpose of this survey is to learn your views on investment and behavior pattern in stock market.

1. **Age** *

Mark only one oval.

- 15-25
- 26-35
- 36 or above

2. **Gender** *

Mark only one oval.

- Male
- Female

3. **Educational qualification** *

Mark only one oval.

- S.S.C or equivalent
- H.S.C or equivalent
- Bachelor
- Masters or above

4. **Subject area** *

Mark only one oval.

- Science/Enginering
- Arts/Humanities
- Business/Economics

5. **Year of experiences** *

6. **Current position in the organization** *

Mark only one oval.

- Entry level
- Mid level
- Top level

8. **How frequent do you** *

Mark only one oval per row.

	Always	Most of the time	Sometimes	Rarely	Never
trade?					
trade on computer?					
trade via telephone?					
trade by sitting in the brokerage house ?					
use fundamental analysis?					
use technical analysis?					
follow yours co-traders trading action?					
use your own unique strategy?					
go for similar trade after a profitable trade?					

9. **Your agreement with the following statement** *

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My share market investment performance is better than that of other share market investors.					
The majority of economics news is not surprising for me.					
Colleagues of my own company are my main source of information needed for share business.					
People other than colleagues of my own company are my main source of information needed for share business.					
I would buy/sell a stock based on a friend's suggestion					
I would buy/sell a stock based on my broker's suggestion.					
Having more knowledge of the stock market dynamics affects my confidence.					
Technology has given me more knowledge related to share business.					
I rely on the telephone to get share market update.					
The internet provides me with access to more information related to share business.					