Publications

A Study on the Influence of Trading Behaviour on Trading Success in Equity F&O Market with Special Reference to Individual Traders in Bengaluru City

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Abstract

This study attempts to determine whether the trading behaviour of a person has any impact on his/her trading success in the equity F&O market. Data was collected from 52 active equity F&O traders in Bengaluru city using snowball sampling technique. The results of the percentage analysis reveal that 20 to 30% of the traders exhibit good trading behaviour and only 15 to 20% of them are successful in trading the equity derivatives market. The findings of structural analysis reveal that an individual investor's trading behaviour has a huge impact on his/her trading success. 71.1% of variance in trading success is influenced by a person's trading behaviour.

Keywords: Equity F&O, Trading Behaviour, Trading Success, Equity Derivatives.

Introduction

In India, the equity derivatives market is gaining huge popularity. This could be because derivatives are time and again considered as an easy way to make quick money. In fact, it is very tough to

make regular profits in the long run and be a prosperous derivatives trader. It is unusual for the brokerage industry to publish the failure rates of their clients as they are alarmed that the reality will hamper them from attracting fresh clients. Actually, informal estimations put forward that 95% of the day traders fail and retail investors fumble in the dark. But there are no empirical studies to prove this statistics. Though there are a lot of published books, there are hardly few empirical studies that have attempted to understand the characteristics or behaviour of a successful trader in the market.

Success of a trader can be quantitatively measured using his/her Net annual earnings generated from F&O trades and most significantly he/she should be happy with the overall earnings made. It is difficult for a trader to be 100% successful in all his trades but one can make sure that his winning trades are more than his losing trades. Success also can be defined by the trader's competence in cutting his losses small and allowing the profits run. In simple words a successful trader should be able to steadily make profits over an extended period of time.

Review of Literature

Agarwal D.K. (2020) in an article with Economic Times mentioned that the equity traders are a tribe who vary from usual investors in the market. They aggressively participate in the market, using strategies to profit from quick price changes in stocks. A clear focus and complete understanding of the markets, behavioural finance along with personal discipline is what is necessary for success in trading. In other words, education, experience, discipline and dedication are the key ingredients to thrive in stock trading. Jordan, D. J., & Diltz, J. D. (2003) reported that being a successful day trader is more challenging than the industry maintains. Two third of the sample of U.S. day traders lose money in the market. Around 20% of them were more than slightly profitable. The interpretation is that aspiring and novice day traders should give vigilant thought to why they think they will be amongst the 20% of the successful day traders. At least, they should make sure they have sufficient initial capital to tolerate the three- to five-month learning period that the industry endorses is essential to become prosperous.

Linnainmaa, J. (2005) studied the individual day traders in Finnish market and stated that the traders are very hesitant to end their day trades at a loss. They often have a habit of selling other stocks in their portfolio to fund their accidental purchases. Only 3 in every 10 day trades make positive returns in a month.

Hon, T. Y. (2012) examined the actions of small investors in the Hong Kong derivatives market using factor analysis. They studied five factors such as personal background, return performance, risk tolerance, reference group and cognitive style. The results of the study expose that among the factors studied, return performance, reference group and personal background (ascending order of importance) steadily influenced the trading behaviour of small investors in the derivatives market.

Kourtidis, D., et. al. (2017) tried to confirm if personality characters are correlated with stock trading behaviour (including stock trading performance, volume and trading frequency). The findings attained the aim of the study, providing confirmation that personality characters have an influence on investors' trading behaviour and their stock performance.

Objectives of the Study

● To comprehend the trading behaviour of equity F&O traders

● To study how successful individual equity derivative traders are?

● To explore the impact of a person's trading behaviour on his/her trading success in equity F&O contracts

Research Methodology

A pilot survey was conducted among 52 active individual equity derivative traders in Bengaluru city through a self- administered questioner. The respondents were approached based on chain-referral method. The data collected was analysed using simple percentage analysis in spss and PLS Structural Equation Modelling.

Hypothesis to be Tested

H_0 – The trading behaviour of individual equity F&O traders has no influence on their trading success

H_1 – The trading behaviour of individual equity F&O traders has an influence on their trading success

Analysis and Discussion

Successful traders are usually very clear and specific about their trading objectives. Their trading goals are not always just related to making profits. It could also be like researching a new trading method every week, learning a stock market term every day, etc. The most vital quality for a trader is to plan his trades effectively. A trader may make more blunders if he doesn't have a plan. He might tend to give in to his emotions and lose discipline. It is important for a trader to keep track of all the trades, research and ideas in a trading journal and think over it on a daily basis. Doing so will help him to find his strengths and weaknesses and check his growth. The journal can be as simple as a notepad and pen or as sophisticated as a profit and loss graph Excel sheet. The more prepared a trader is, the greater the chances of success. Trading behaviour of an individual equity derivative trader was observed using seven questions as stated below.

Table 1: Trading Behaviour of Individual Trader's in Equity F&O Market

I plan my trades efficiently			
	Frequency	**Percent**	**Cumulative Percent**
Strongly Disagree	6	11.5	11.5
Disagree	5	9.6	21.2
Neutral	12	23.1	44.2
Agree	15	28.8	73.1
Strongly Agree	14	**26.9**	100.0
Total	52	100.0	
I always have well-defined objective of return expectation			
Strongly Disagree	4	7.7	7.7
Disagree	4	7.7	15.4
Neutral	16	30.8	46.2
Agree	16	30.8	76.9
Strongly Agree	12	**23.1**	100.0
Total	52	100.0	
At all times I have a good exit strategy in place for my trades			
Strongly Disagree	4	7.7	7.8
Disagree	6	11.5	19.6
Neutral	9	15.4	35.3
Agree	17	32.7	68.6
Strongly Agree	16	**32.7**	100.0
Total	52	100.0	
I manage F&O trades like any other serious business			
Strongly Disagree	5	9.6	9.6
Disagree	5	9.6	19.2
Neutral	6	11.5	30.8
Agree	17	32.7	63.5
Strongly Agree	19	**36.5**	100.0
Total	52	100.0	
I am a very disciplined trader			
Strongly Disagree	5	9.6	9.6
Disagree	4	7.7	17.3
Neutral	19	36.5	53.8
Agree	11	21.2	75.0
Strongly Agree	13	**25.0**	100.0
Total	52	100.0	
I keep my trading strategy simple			
Strongly Disagree	4	7.7	7.7
Disagree	7	13.5	21.2
Neutral	6	11.5	32.7
Agree	19	36.5	69.2
Strongly Agree	16	**30.8**	100.0
Total	52	100.0	
I keep up a trading journal to introspect my trading behaviour			
Strongly Disagree	7	13.5	13.7
Disagree	7	11.5	25.5
Neutral	13	25.0	51.0
Agree	11	21.2	72.5
Strongly Agree	14	**28.8**	100.0
Total	52	100.0	

Interpretation of Table 1: 27% of traders strongly agree that they plan their trades efficiently, 23% of them always have well-defined objective of return expectation, 32.7% of the traders have a good exit strategy in place for my all their trades, 25% of the traders are highly disciplined, 36.5% of them strongly agree that they consider trading like any other important profession. 30.8% of traders keep their trading strategy simple and 28.8% of the traders keep up a trading journal to introspect their trading activities. It is evident that around 20 -30% of individual traders in the equity F&O market exhibit very good trading behaviour. The table also shows that 1 in every 4 traders strongly disagree or just disagree to have good trading behaviour.

Table 2: Trading Success of Individual Trader's in Equity F&O Market

| My winning trades are greater than my losing trades			
	Frequency	**Percent**	**Cumulative Percent**
Strongly Disagree	5	9.6	9.6
Disagree	7	13.5	23.1
Neutral	16	30.8	53.8
Agree	13	25.0	78.8
Strongly Agree	11	**21.2**	100.0
Total	52	100.0	
I am competent enough to cut losses and let profits run in my F&O trades			
Strongly Disagree	3	5.8	5.8
Disagree	7	13.5	19.2
Neutral	21	40.4	59.6
Agree	10	19.2	78.8
Strongly Agree	11	**21.2**	100.0
Total	52	100.0	
On an average, I am able to steadily make profits over a long period of time in the F&O market			
Strongly Disagree	4	7.7	7.7
Disagree	11	21.2	28.8
Neutral	16	30.8	59.6
Agree	13	25.0	84.6
Strongly Agree	8	**15.4**	100.0
Total	52	100.0	
I am happy with the overall returns that I generate in derivatives trading			
Strongly Disagree	6	11.5	11.5
Disagree	10	19.2	30.8
Neutral	16	30.8	61.5
Agree	13	25.0	86.5
Strongly Agree	7	**13.5**	100.0
Total	52	100.0	

Interpretation of Table 2

21.2% of traders strongly agree that their winning trades are greater than their losing trades and also that they are competent enough to cut down their losses short and let their profits run. Only 15.4% of the traders are able to steadily make profits over a long period of time in the F&O market and

13.5% of them strongly agree that they are happy with the overall returns that they generate in derivative trading.

Figure 1: Relationship between Trading Behaviour and Trading Success
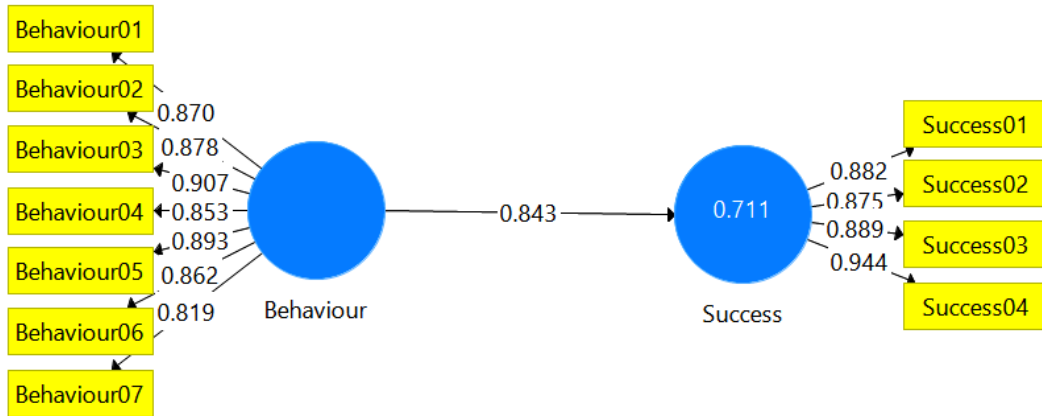
Structural Equation modelling is a broad statistical approach for testing hypotheses about relations among observed and latent variables (Hoyle, 1995). In the above figure, there are 2 latent variables, Trading Behaviour (Independent) and Trading Success (Dependent). Trading behaviour is measured using seven variables and trading success through four

The coefficient of determination, R^2, is 0.711 for the endogenous latent variable "Trading Success". This means that Trading Behaviour of an individual explains 71% of the variance in Trading Success.

Table 3: Measurement Loadings

	Behaviour	Success
Behaviour01	0.87	
Behaviour02	0.878	
Behaviour03	0.907	
Behaviour04	0.853	
Behaviour05	0.893	
Behaviour06	0.862	
Behaviour07	0.819	
Success01		0.882
Success02		0.875
Success03		0.889
Success04		0.944

Interpretation of Table 3

Measurement loadings are the standardized path weights connecting the factors to the indicator variables. From the above table it can be inferred that all the indicators are significant as their values are above 0.85. The value 0.70 is a standard for minimum measurement loadings. Another

rule is that an indicator with a measurement loading in the .40 to .70 range should be dropped if dropping it improves composite reliability (Hair et al., 2014: 103)

Table 4: Test of Reliability

	Cronbach's Alpha	rho_ A	Composite Reliability	Average Variance Extracted (AVE)
Behaviour	0.946	0.95	0.956	0.756
Success	0.92	0.924	0.943	0.807

Interpretation of Table 4

In the above table both Composite Reliability and Cronbach's Alpha are more than 0.9, showing that all the Constructs have very good internal consistency reliability score. To check convergent validity, each latent variable's Average Variance Extracted (AVE) is evaluated. Again from the above table, it is found that all of the AVE values are higher than the acceptable threshold of 0.7, so convergent validity is established.

Table 5: Model Hypothesis Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (| O/STDEV|)	P Values
Behaviour -> Success	0.843	0.844	0.034	24.731	0

From the above table 5, it can be inferred that the above mentioned alternate Hypothesis H1, is accepted. That is the trading behaviour of individual equity F&O traders has an influence on their trading success.

Conclusion

The study shows that around 20 – 30% of traders in the equity derivatives market exhibit very good trading behaviour by strongly agreeing that they consider trading like any other serious business, they are disciplined and always efficiently plan their trades and have a well-defined trade objective. They also have a proper exit-strategy for every trade and always keep their trading approach simple and maintain a journal to introspect their trading behaviour.

15 – 20% of them are successful. The successful traders are those who strongly agree that they are happy with the overall returns that they generate in derivatives trading and their winning trades are usually greater than their losing trades. They are also competent enough to cut their losses short and let profits run. The study also further reveals that the trading behaviour of a person has a huge influence on his/her trading success in the equity F&O market.

Plato says that the "Human behaviour flows from three main sources: desire, emotion, and knowledge". Therefore, further studies can measure the influence of market knowledge and emotional intelligence on trading behaviour and in turn how this impacts trading success.

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A STUDY ON THE DEMOGRAPHIC AND TRADING CHARACTERISTICS OF EQUITY DERIVATIVE (INDIVIDUAL) TRADERS WITH SPECIAL REFERENCE TO BENGALURU CITY

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Abstract
As equity derivatives are gaining huge popularity among the retail traders in India, This study explores the demographic and trading characteristics of the individual participants in the market. A survey was conducted among 52 active equity derivative traders in Bengaluru city and it is found that the market is dominated by men between the age group 26 and 45. Most of the traders have high formal education with an annual income between 5 – 10 lakhs per annum. 60% of the individual participants in the market are there to speculate and make quick-money. Most of them generally track and trade less than 4 stocks and indices. Stock options are their most preferred equity derivative product and 30% of the respondents reveal that they incur an aggregate annual loss by trading equity derivatives and a handful of them manage to make extraordinary profits. The demographic factors except for the trader's annual income have so significant influence on his/her F&O trading performance.

Key words: Equity Derivatives, Behavioural Finance, Demographic factors, F&O trading, Equity F&O, Futures & Options trading, trading behaviour

Introduction
Derivative trades are probabilistic bets against forthcoming events. They are also used for hedging risk arising out of future price uncertainties. Derivatives are contracts, whose value is derived from an underlying asset. The underlying asset could be equity, equity index, commodities, currency, weather, etc. The Equity Derivatives market in India is growing at a rapid pace. This is evident from the fact that the daily turnover in the equity F&O segment of NSE is much higher than the cash segment. According to Futures Industry Association (FIA), a derivatives trade body, National Stock Exchange of India Ltd. (NSE) has developed as the world's No. 1 derivatives exchange in 2019 by amount of contracts traded, exceeding the CME Group and also the 3rd biggest exchange in cash equity segment. Economic times (2018) stated that the individual investors involvement in the equity derivatives market is raising at a quick pace, the daily turnover of retail investors had almost doubled up to Rs. 9 lakh crore from Rs. 4.7 lakh crore through the year 2017. Therefore it is the need of the hour to understand the characteristics of the equity derivative traders. So, that the regulator, exchange, brokers, trainers and all the other stakeholders involved can make informed decisions with regard to individual traders in the equity derivatives market.

Review of Literature
Ryu, D. (2012) studied the success and nature of day trading in the KOSPI 200 futures market, one of the major and most significant index futures markets in the world. By using a high-quality data set that categorizes several investors into a number of important groups and provides complete facts on their distinctiveness, the study found that the domestic individuals face extensive losses from day trading and that individual day traders who trade more often and profoundly are more expected to suffer such losses.
Bhatt, B. K., & Chauhan, M. A. A. (2014) analysed investors' opinion about derivatives as an investment option. The outcome of the study discloses that most of the investors prefer to trade in index derivatives than individual stocks. Their investment and trading decisions are centred on their own knowledge and also assistance from investment advisors and brokers.

Tripathi G. (2014) investigated the investor's perception towards derivatives trading. The results highlight that the demographic factors such as age, gender and education except for income do not have any effect on the derivative investments. The derivatives market is dominated by male traders and 76% of the derivative traders prefer to trade in options because of the financial leverage that it offers. Gautam, I., & Kavidayal, P. C. (2016) analysed the view of BSE/ NSE members on the effect of derivatives trading in the Indian capital market. The outcomes expose that derivatives trading has a positive impact on the capital market in terms of high volume, low volatility and also supporting price discovery. The study also discloses that there is change in the risk perception about derivative products among various age groups of traders. The young traders incline to have higher risk desire than the aged traders who sense that the derivatives are uncertain products to trade.

Gupta (2018) studied the investor's perception about equity and derivatives market and found that the investors are less aware about derivatives products and still considered it as a new and complex investment tool.

Objective of the study
To understand the demographic and trading characteristics of individual equity derivative traders in Bengaluru city

Research Questions
- Is the equity derivatives market dominated by men?
- What are the age group, educational qualification and Annual income of people trading in equity F&O market?
- Is the equity derivatives market dominated by full-time or swing traders?
- What is the purpose of trading in equity derivatives?
- Which is the most preferred F&O product traded by the individual participants in the market?
- Are individual traders in the market more inclined towards only buying call and put options?
- What portion of the annual income is used as trading capital by the individual traders in the market?
- How many stocks/indices are tracked and traded by the individual traders in the market?
- Do the majority of individual traders in the equity derivatives segment lose money in the market?
- Do demographic factors such as age, gender, income, education and occupation of a trader have any influence on F&O returns generate by him/her?
- Do experienced traders earn better returns?

Research Methodology
The research is descriptive in nature that outlines the demographic and trading characteristics of the individual derivative traders. A pilot study using a self-administered questionnaire was conducted among 52 active equity derivative trades in Bangalore city using snowball referencing technique. The data compiled was examined using simple percentage and chi-square analysis and presented in the form of table.

Analysis and Discussion

Table 1: Percentage analysis

Gender	Frequency	Percent	Cumulative Percent
Male	49	**94.2**	94.2
Female	3	5.8	100.0
Total	52	100.0	
Age	**Frequency**	**Percent**	**Cumulative Percent**
18-25	8	15.4	15.4
26-35	20	**38.5**	53.8
36-45	17	32.7	86.5
46-55	7	13.5	100.0

Total	52	100.0	
Marital Status	**Frequency**	**Percent**	**Cumulative Percent**
Single	13	25.0	25.0
Married	39	**75.0**	100.0
Total	52	100.0	
Educational Qualification	**Frequency**	**Percent**	**Cumulative Percent**
High. Secondary	3	5.8	5.8
Diploma	2	3.8	9.6
Graduate	19	36.5	46.2
Post Graduate	28	**53.8**	100.0
Total	52	100.0	
Occupation	**Frequency**	**Percent**	**Cumulative Percent**
IT and IT enabled services	9	17.3	17.3
Accounting and Finance	4	7.7	25.0
Business	14	**26.9**	51.9
Other field of Engineering	1	1.9	53.8
Doctor and field of medicine	1	1.9	55.8
Full time trader in stock market	23	**44.2**	100.0
Total	52	100.0	
Annual Income	**Frequency**	**Percent**	**Cumulative Percent**
Less than 2.5 lakhs	5	9.6	9.6
2.5 lakh - 5 lakh	12	23.1	32.7
5 - 10 lakh	19	**36.5**	69.2
10 - 30 lakh	13	25.0	94.2
above 30 lakh	3	5.8	100.0
Total	52	100.0	
Trading Capital	**Frequency**	**Percent**	**Cumulative Percent**
less than 10%	23	**44.2**	44.2
11-25%	14	26.9	71.2
26 -40%	10	19.2	90.4
41 -60%	2	3.8	94.2
more than 60%	3	5.8	100.0
Total	52	100.0	
Trading Experience	**Frequency**	**Percent**	**Cumulative Percent**
less than a year	9	17.3	17.3
1-3 years	18	**34.6**	51.9
3-5 years	8	15.4	67.3
more than 5 years	17	**32.7**	100.0
Total	52	100.0	
Type of Trader	**Frequency**	**Percent**	**Cumulative Percent**
Full time intra-day trader	24	**46.2**	46.2
Positional or swing trader	28	53.8	100.0
Total	52	100.0	
Trading Purpose	**Frequency**	**Percent**	**Cumulative Percent**
Hedge my risk	5	9.6	9.6
speculate and make short term gains	31	**59.6**	69.2
Make use of arbitrage opportunity	1	1.9	71.2
All of the above	15	28.8	100.0
Total	52	100.0	

Preferred Product	Frequency	Percent	Cumulative Percent
Index Futures	1	1.9	1.9
Index options	7	13.5	15.4
Stock Futures	8	15.4	30.8
Stock Options	21	**40.4**	71.2
All or multiple combinations	15	28.8	100.0
Total	52	100.0	
Preferred Strategy	**Frequency**	**Percent**	**Cumulative Percent**
Long Futures	1	1.9	1.9
Short Futures	1	1.9	3.8
Long Call /Put	12	**23.1**	26.9
Short Call/Put	2	3.8	30.8
Combinations of the above	35	**67.3**	98.1
Long/Short Futures	1	1.9	100.0
Total	52	100.0	
No. of Stocks tracked and traded	**Frequency**	**Percent**	**Cumulative Percent**
Less than 4 stocks and indices	24	**46.2**	46.2
5-10 stocks and indices	14	26.9	73.1
More than 10 stocks and indices	14	26.9	100.0
Total	52	100.0	
Compounded Annual Returns	**Frequency**	**Percent**	**Cumulative Percent**
Less than 0% (loss)	15	28.8	28.8
0 -20%	10	19.2	48.1
20 -40%	18	**34.6**	82.7
41 -60%	6	11.5	94.2
61 - 80%	2	3.8	98.1
more than 100%	1	1.9	100.0
Total	52	100.0	

Interpretation of table 1:

- These days' women are throwing enough competition to men in almost all walks of life but men still continue to dominate the stock trading market. The study finds that 94.2% of the respondents (active equity derivative traders) are men.
- More than 70% of traders in the equity derivatives market are between the age group 26 and 45. Young traders are believed to be extremely aspiring, apprehensive and anticipate swift results. On the other hand they are generally high risk takers; they are technologically shrewd and prefer to spend than invest. Thus it is normal for them to favour trading over investing that gives instantaneous outcome.
- 75% of the active traders are married.
- Majority of the active equity derivative traders have high formal education. 53.8% of the traders hold a postgraduate degree and 36.5% of them are graduates. In reality, winning traders are mostly self-taught and institutional degrees do not assure success.
- Apart from full-time traders, the majority (26.9%) of the swing traders in the market are businessmen and 17.3% of them are from the field of IT ITES and 7.7% are occupied in the field of BFSI.
- 36.5% of traders have annual income between 5 to 10 lakhs and 25% of them have annual income between 10 -30 lakhs. Only 5.8% of them have an annual income above 30 lakhs. So it is evident that not many individual equity derivative traders are High Networth Individuals.

- 44.2% of the traders use less than 10% of their annual income as their trading capital and 26.9% of them use 11 -25% of their annual income to trade in equity derivatives.
- 32.7% of equity derivative traders have more than 5 years of trading experience and 34.6% of them have between 1 and 3 years of trading experience in the market.
- 46.2% of the respondents are full-time day traders and the rest are swing/positional traders
- Almost 60% of the traders in the equity derivatives market are there to speculate and make short term gains. Around 10% of them are there to hedge their risk and only 1% of the individual traders make use of the arbitrage opportunity in the market.
- 40.4% of the traders prefer to trade in stock options and 28.8% of them prefer to trade in all the products like (Stock and index futures and options).
- 67.3% of the traders prefer both short and long futures as well as options. 23.1% of them are very cautious traders who prefer only to buy call and put options.
- 46.2% of the traders regularly track and trade less than 4 stocks and indices. And the rest track more than 5 – 10 stocks or more.
- 28.8% of the traders reveal that they incur negative aggregate returns by trading equity derivatives. 34.6% of the traders make compounded annual returns between 20 and 40%. Handful of them makes extraordinary profits.

Table 2: Chi-square analysis

Chi-Square Test - Age and Compounded Annual Return generated from F&O trades

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.993[a]	15	.603
Likelihood Ratio	14.941	15	.456
Linear-by-Linear Association	.031	1	.861
N of Valid Cases	52		

Chi-Square Test - Gender and Compounded Annual Return generated from F&O trades

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.743[a]	5	.739
Likelihood Ratio	3.880	5	.567
Linear-by-Linear Association	.052	1	.820
N of Valid Cases	52		

Chi-Square Test - Educational Qualification and Compounded Annual Return generated from F&O trades

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.156[a]	15	.741
Likelihood Ratio	12.545	15	.637
Linear-by-Linear Association	2.460	1	.117
N of Valid Cases	52		

Chi-Square Test - Occupation and Compounded Annual Return generated from F&O trades

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.965[a]	25	.580
Likelihood Ratio	24.537	25	.489

Linear-by-Linear Association	.486	1	.486
N of Valid Cases	52		

Chi-Square Test - Annual Income and Compounded Annual Return generated from F&O trades

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34.485[a]	20	**.023**
Likelihood Ratio	25.788	20	.173
Linear-by-Linear Association	10.236	1	.001
N of Valid Cases	52		

Chi-Square Test - Trading Experience and Compounded Annual Return generated from F&O trades

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.659[a]	15	.340
Likelihood Ratio	17.672	15	.280
Linear-by-Linear Association	1.668	1	.197
N of Valid Cases	52		

Chi-Square Test - Preferred trading strategy and Compounded Annual Return generated from F&O trades

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.199[a]	25	.874
Likelihood Ratio	20.097	25	.742
Linear-by-Linear Association	.260	1	.610
N of Valid Cases	52		

Chi-Square Test - No. of stock tracked and traded and Compounded Annual Return generated from F&O trades

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.078[a]	10	.718
Likelihood Ratio	7.486	10	.679
Linear-by-Linear Association	1.966	1	.161
N of Valid Cases	52		

Interpretation of the Chi-square table:

- The chi-square values of all the variables except for annual income is greater than 0.005 therefore it is evident that demographic variables such as age, gender, educational qualification ad occupation of a person has no influence on his trading performance (which is measured using compounded annual returns generated from F&O trades)
- The chi-square value between annual income and compounded returns is .023 which implies that there exist a relationship between the person's annual income and the returns that he/she generates from F&O trades.
- It is also clear that the person's trading experience has no influence on his trading performance. Barber et. al (2017) described that a lot of day-traders are unsuccessful, and many carry on, in spite

of their huge experience of losses in the market. This could be because lot of traders in the market fail to wisely absorb from their past trading mistakes.

- No. of products that he/she tracks and his choice of trading strategy has nothing to do with his returns. Many sources have diverse view about the "ideal" quantity of stocks to be followed. Few traders don't like to track too many stocks at a time as they can't be as clear-minded or concentrated than following just a few stocks. Some traders like to monitor quite a lot of stocks all at once and attempt to pick out the best ones.

Conclusion

Majority of the individual active equity derivative traders in Bengaluru City are married men between the age group 26 and 45 having an average annual income between 5 – 10 lakhs. Most of them have high formal education and set aside less than 10% of their annual Income as trading capital. The most preferred F&O product among the traders is stock options. They generally like to try all combinations in their trading strategy (Buy and Sell futures as well as Call and Put options). Most of them prefer to regularly track and trade less than 4 stocks and indices.

The alarming findings are that the derivatives market is dominated by speculators who look out for making quick money in the market. Less than 10% of the participants in the market are there to hedge their risk. Almost 1 in every 4 traders agrees that they incur aggregate negative returns or losses by trading in the equity derivatives market.

The study also finds that the demographic variables such as age, Gender, educational qualification and occupation have no influence on the performance of an F&O trader. But it is found that the annual income of a trader has an influence on his/her trading performance. Findings of the study also reveals that the no. of years of experience in the F&O market, choice of trading strategy and the no. of products tracked and traded also have no significant influence on the returns made by the trader from his F&O trades.

Scope for further research

Future research can be done on understanding, if the demographic characteristics of a trader have an impact on his/her trading behaviour or trading success.

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