



Behavioural Determinants of Options Trading: A Study on trading attitude, trading objectives, and Strategy Preferences among Online Retail Investors

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Abstract

The increased availability of digital trading platforms has increased the accessibility of retail trading in the options market, and there is a strong urgency in developing more insight into the behavioural aspects that affect the decision to trade options. This paper explores the influence of attitudes, perceptions and trading objectives on option trading behaviour of online retail traders. In a quantitative research design, 150 active derivatives traders were sampled using structured questionnaire and their attitude towards options, their perceptions of the market characteristics, behavioural intention, the goal of their trading, and their tendencies towards transactions were measured. To evaluate the interrelation between the constructs, descriptive statistics, correlation analysis, and Structural Equation Modeling (SEM) were used. The findings indicate that attitudes towards the options have a strong and positive effect on the option trading behaviour meaning that the positive perception of the convenience, risk assessment and strategic utility has a strong positive influence on the willingness to venture into derivative trading. The option market such as perceptions of profitability, potential of hedging, and information efficiency also have a significant positive impact on the behavioural intention but not as much as attitudes. Correlation analysis illustrates the fact that trading goals that include fast returns, leverage, risk transfer, and shorter term speculation are big predictors of strategy preferences and transactional patterns with particular reference to ITM, ATM and OTM options. Risk-transfer motivated traders are conservative in their behaviours and leverage-seeking and short period traders are aggressive or high turnover. The results have demonstrated the significance of incorporating strategic motives and psychological dispositions to explain retail derivative trading behaviour. The research adds to the behavioural finance literature because the model is very detailed to capture both cognitive and motivational factors in making the decisions in the options trade. It has some practical implications on brokerage firms, fintech platforms, and policymakers that strive to leverage investor education, risk-awareness activities, and user-centric trading platforms. The research paper draws a conclusion and suggests that further studies based on larger and more heterogeneous samples, long-term designs, and introduction of emotional and cognitive bias variables are needed.

Keywords - Options Trading; Retail Investors; Attitude; Perception; Trading Objectives; Option Strategies; ITM-ATM-OTM Options

1 Introduction

The emergence of digital trading ecosystems and the accelerated democratization of financial markets have had a major impact on retail investor engagement into derivatives, particularly options. By 2026, retail option trading has spread around the world because of zero-commission trading platforms, AI-based analytics, and mobile-first trading interfaces (Kaur and Mishra, 2025). This development has allowed a breed of online traders to engage in highly sophisticated financial instruments that were previously limited to institutional investors. Attitudinal, perceptual and motivational aspects of retail trader behaviour are important determinants of options market behaviour, as studies continue to indicate that retail traders in options markets are inclined to act not based on their attitudinal and perceptual biases but on rational economic decision-making (Hoffmann and Post, 2024; Barberis, 2023).

The perception of convenience, usefulness, and assessment of risk-reward is also a key determinant of how traders can be willing to invest in derivative markets. Research claims that retail traders are more likely to join the options when they find them to be strategically beneficial or convenient (Zhang and Li, 2024). It has also been associated with positive attitudes that enhance confidence, speedy decision-making, and increased the implementation of complicated strategies (Li and Subrahmanyam, 2024). These results are consistent with behavioural finance theories when it comes to the idea that subjective attitudes play a major role in the market behaviour (Ajzen, 2020; Kumar and Goyal, 2022).

Perception of the options market such as perceived profitability, perceived volatility, hedging effectiveness, and perceived informational efficiency are influential in determining trading decisions together with attitude. According to researchers, traders who view derivatives as effective hedging instruments or higher-quality returns producers will tend to be more active in the options trading (Herbst and McCormack, 2023; Huang and Wang, 2022). The rising access to real-time

volatility signals and signals powered by AI have only added to such perceptions, which has changed the way retail traders evaluate ITM, ATM, and OTM options (D'Mello and Singh, 2025).

The strategy choices and the behaviour of transactions are also influenced by trading goals, like quick returns, leverage, hedging, and short-term speculation. As an example, traders motivated by leverage-seeking tend to use OTM options to increase the potential payoff (Chong and Ng, 2022; Ruichao and Tang, 2025), but trader motivated by risk-transfers tend to use ITM contracts more to cushion against negative market dynamics (Demirer et al., 2023). Short-run traders mostly found in the retail sector have high turnover rates and change in positions in accordance with the volatility cycles of the day (Svec and Wang, 2024). These behavioural patterns have a mirror-image relationship between cognitive appraisal and strategic incentives in the derivatives market.

Although there is vast expansion in participation of retail derivatives, empirical studies have not incorporated the attitudes, perception, and trading goals to explain option trading behaviour at the same time especially in emerging markets where the options are being adopted within short durations. This gap is filled in this study through the consideration of the role of attitudinal and perceptual constructs in determining option trading behaviour and the moderating role of trading objectives in terms of strategy choice and transactional behaviour. The results provide both theoretical and practical implications to behavioural finance and practical implications to brokerage systems, financial educators and policymakers who want to encourage informed and responsible derivatives trading among the retail.

The paper is laid out in the following manner: The Literature Review will be a synthesis of the theories and empirical data available on the subject of attitude, perceptions, trading objectives and option behaviour. The Methodology presents the research design, the sampling plan, the measurement scales and the tools of analysis: SEM and correlation analysis. The Results section contains descriptive statistics, model estimates and hypothesis testing. The Discussion explains these findings by referring to the existing literature. Lastly, the Conclusion is a summary of contributions, practical implications and limitation, and future research directions.

2 Review of literature

The literature review discusses the theoretical and empirical basis of the behaviour of the retail traders in the options market. With the development of financial markets and the growth of opportunities to trade derivatives through digital platforms, it is all the more important to realize the psychological, perceptual, and strategic dynamics of making trading decisions. It has been noted in the previous studies that the attitudes, risk and return perceptions, behavioural biases, and trading objectives are important factors that affect investor behaviour, although the findings are still divided in various areas. This part will compile literature that has been done on attitudes, perceptions, behavioural intentions, and option strategy preferences to create a conceptual framework of the current study.

The retail involvement in the derivative market has been increasing by a massive margin following the ease of access to the technology, financial sensitivity as well as the dynamic behavioural trends among the traders. The literature has indicated that the attitude and perceptions are core in influencing finance decision making especially in intricate instruments like options. Perceived convenience, level of risk, and anticipated utility affects attitude towards derivatives (Ajzen, 1991). The research indicates that positive attitudes enhance the probability of performing the activity of speculation or hedging (Kumar and Goyal, 2015; Nguyen and Rozsa, 2019). Equally, a favorable attitude towards derivatives has been associated with more trading volume and strategic complexity (Barberis, 2018; Shefrin, 2020).

Perception of derivatives entails traders assuming that derivatives are profitable, volatile, efficient in terms of information, and capable of hedging. Previous studies show that traders view options as appropriate in dealing with downside risk and profiting by taking advantage of positive price changes (Hull and White, 2017; Clark and Merville, 2019). Preference to ITM, ATM and OTM contracts is also found to have an effect on a specific preference of perceived profitability (Bollen and Whaley, 2004; Lakonishok and Shleifer, 1994). Under informational asymmetry situations, traders are more likely to use their subjective perceptions and this factor increases behavioural biases, including overconfidence and representativeness (Tversky and Kahneman, 1992; Odean, 1998).

The studies on behavioural intention support the role of attitude and perceptions as that of powerful antecedent of trading behaviour (Ajzen, 1991; Fishbein and Ajzen, 2010). Retail traders online especially have a high rate of decision cycles that is dependent on the perceived convenience and ease of technology (Goyal and Joshi, 2021; Dorn and Sengmueller, 2009). The Theory of Planned Behavior is a theory that has been broadly used to explain derivative participation with attitudes being the determinants of willingness to trade high-risk instruments (East, 1993; Kim and Lee, 2014).

Objectives of trading including quick returns, transfer of risks, short-term speculation, and leverage have a strong influence in the choice of strategies. Studies indicate that traders who are motivated by the desire to get quick returns will focus on short-term options or in high-volatility markets (Menkveld, 2016; Barber and Odean, 2001). The former can be referred to as risk-averse traders because they prefer to employ ITM or ATM options to hedge their position (Whaley, 2000), and the

latter as leverage-seeking traders because they tend to use OTM options since the premiums are low (Poteshman and Serbin, 2003).

The transaction behaviour literature indicates that purchasing, selling, offsetting and squaring-up positions are immensely influenced by the psychological and strategic determinants. High turnover trading is often practiced by short-term traders who are usually motivated by the anticipation of a price action (Kahneman and Tversky, 1979; Hvidkjaer, 2001). Traders who take leverage have aggressive entry and exit behaviour, which is in line with risk-taking behaviour under cognitive biases (Barber and Odean, 2001; Lo, 2004).

Lastly, literature indicates that the retail option traders are prone to mixing rational assessments with behavioural shortcuts (Shefrin, 2020). The hybrid process of decision making influences the preference of contracts, exposure to risks, and general involvement in the derivatives market (Bloomfield and Anderson, 2010; Glaser and Weber, 2007).

2.1 Research gap

Even though retail involvement in options trading has increased at a rate, there is still little empirical studies that combine attitudes, perceptions and trading goals to determine option trading behaviour within a single behaviour theory. The literature has been found to focus on the psychological reasons or strategic motivations separately and provide partial information on the decision making processes of retail traders. In addition, the majority of the previous studies target developed markets, which means that there is a lack of knowledge regarding behavioural determinants in emerging digital trading contexts. Little research has examined the role of attitudes and perceptions into certain strategy options like ITM, ATM and OTM options. This paper fills these gaps by an all-embracing behavioural model.

2.2 Research Objectives and Hypothesis

2.2.1 Objectives

- To examine the influence of attitudes toward options and perceptions of the options market on option trading behaviour among online retail traders.
- To analyze the relationship between trading objectives and option-type preferences
- To investigate the association between trading objectives and transactional behaviours in options trading.

2.2.2 Hypotheses

Hypothesis 1 (SEM-Based)

H1: Attitudes toward options and perceptions of the options market have a significant positive influence on option trading behaviour among online retail traders.

Hypothesis 2 (Correlation Model 1)

H2: Trading objectives have a significant relationship with option-type preferences (Call ITM/ATM/OTM and Put ITM/ATM/OTM).

Hypothesis 3 (Correlation Model 2)

H3: Trading objectives have a significant association with transactional behaviours in options trading (opening buy/sell, closing buy/sell, and square-up actions).

3 Research methods

3.1.1 Research Design

This paper used the cross-sectional and quantitative research design to examine how attitude, perception, and trading objectives affect the behaviour of online retail traders in relation to option trading. Quantitative designs have achieved popularity in the literature of behavioural finance since it provides the possibility to measure latent psychological variables and to test the causal relationships with the help of statistical modeling tools such as Structural Equation Modeling (SEM) (Hair et al., 2022; Kline, 2023). The use of cross-sectional approach was suitable considering the objective to capture the attitude and behavioural tendencies of the traders at one point in time.

3.1.2 Sampling and Participants

Online retail traders that invest in the options market were the target population. The purposive sampling approach was used since it guarantees the sample comprised of respondents who have direct experience with derivatives trading, which is critical in the analysis of behavioural constructs (Bryman, 2021). Only 150 traders were selected as a final sample. This sample is sufficient according to the suggested size of SEM analyses that generally need 5 to 10 respondents per parameter that is going to be estimated (Hair et al., 2022). The demographic and trading background of the respondents were varied which increased the generalizability of the findings.

3.1.3 Data Collection Procedure

The sample was sampled via a self-administered questionnaire that was conducted online in digital trading forums and other financial forums. In behavioural finance studies, online gathering of data is popular because it is efficient, cost-effective,

and renders the inclusion of technologically active investor groups (Hoffmann and Post, 2024). The respondents were filtered to make sure that they were actively derivatives traders. Participants received information and signed a voluntary and anonymous consent form and adhered to ethical standards of social science research.

3.1.4 Data Collection Instrument

It was divided into five sections with Attitudes toward Options, Perceptions of the Options Market, Option Trading Behaviour, Trading Objectives and Transactional Tendencies. A five-point Likert scale was used to measure all the items with a range of "Strongly Disagree to Strongly Agree," as it is appropriate to measure psychological constructs and behavioural intention (Joshi et al., 2023). The items were based on the already existing scales of behavioural finance, adoption of technologies, and trading psychology (Barberis, 2023; Ajzen, 2020; Kumar and Goyal, 2022). The scale of attitudes and perception measured convenience, risk evaluation and the returns expectation. Quick return, leverage and transfer of risks are some of the motives that were measured in the trading objectives. It took transaction behaviour which involved opening and closing buy/sell positions.

3.1.5 Instrument validity and Reliability

Content Validity - Expert review was used to ascertain content validity with 3 financial market practitioners and 2 academic experts conducting their assessment of the clarity, relevance and representativeness of the items. A procedure such as expert validation is an advised process in instrument refinement in behavioural research (Haynes et al., 2022).

Construct Validity - Confirmatory Factor Analysis (CFA) was used as an evaluation of construct validity. All constructs had factor loadings that surpassed the minimum acceptable value of 0.30 (Kline, 2023) with most of them exceeding 0.60, which indicates high convergent validity. The inter-construct correlations were found to be under 0.85 and hence validated discriminant validity.

Reliability - The internal consistency was assessed through Cronbach alpha and all of the constructs were greater than the recommended reliability score of 0.70 (Hair et al., 2022). Measurement consistency among items was also supported by the values of composite reliability.

All in all, the instrument exhibited good psychometrical characteristics and it is therefore appropriate in studying behavioural determinants of derivatives market.

3.1.6 Data analysis tools

To identify the relationship between attitudes, perceptions, trading goals, and the behaviour of option trading, data were analysed through descriptive statistics, correlation analysis and Structural Equation Modeling (SEM). The AMOS/SPSS was used to perform SEM and Confirmatory Factor Analysis (CFA) allowing to evaluate the model fit, the weighting of the factors, and the structural path estimations to test the hypothesis.

4 Results and Discussion

4.1 Demographic Profile Analysis

The distribution of age of the online retail traders indicates that high percentage (36.0) is occupied by people who are above 50 years and this implies that the mature and experienced people are more occupied in trading activities. The 31-40 years traders form 23.3% and the 41-50 years traders form 22.7% of the sample (good representation of the middle-aged investors also). Traders aged 21-30 years constitute only 18.0% of the traders implying that more experienced people prefer the option market although younger individuals also take part.

The sample of study is skewed towards males (110 male traders, 73.3 and 40, female traders, 26.7) making the results representative of male traders. This is representative of the general trend in the financial markets whereby the male participation still prevails over that of the female participation. Nonetheless, the fact that women constitute almost a quarter of traders denotes that there has been a progressive change towards gender diversification in the online trading.

Most of the respondents are married people (130 traders, 86.7%), and only 13.3% are those who are not married. This can support the suggestion that those who have stable financial commitments and income streams would be more prone to options trading, maybe because of greater disposable surplus and ability to assume risk.

The majority of traders have a graduation degree (59.3%), and the next percentage is occupied by those that completed a professional course (22.0%), which is quite high and indicates that the number of respondents who are qualified in the domain is quite large. The post-graduates make up to 18.0% of the sample. It demonstrates that the options market is appealing to people with superior educational skills and technical knowledge of trading mechanisms.

Occupational distribution indicates that the majority of occupational distribution is composed of employees of the private sector (36.0%), housewives/retired/students/not working (18.7%). Those in the government firms are 14.0% with 13.3 taking the self-employed/business respondents. The sample is composed of dedicated full-time stock market traders (17.3). This means that there is a great involvement of the working professionals and those who are looking to get sources of secondary income. The respondent base is experienced with most of the (96 traders) respondents having experience of 6-

10 years. Also, the percentage of over 10 years experience is 22.0, and the 3-5 years experience is only 13.3. This will indicate that the sample will be made up of established traders who have had significant exposure to financial markets.

4.2 Analysis of Trading Profile

Type of Trader - Day trading seems to be the most favored type, and 63 respondents (42.0) consider themselves day traders. Positional traders make up 31.3 and scalawags make up 11.3. Another 15.3% trade in several styles. This shows how the retail traders are dynamic in nature, with a large number implementing strategies that are in line with the fluctuations in the market and the availability of short term profits.

Preferred Strategy - The long call strategy is the most predominant of the various options trading strategies, as 75 traders (50.0%) preferred it. This implies hope and more a favoritism towards bullish positions. It is applied in the long put strategy by 26.7 with other less popular strategies, short call (14.7) and short put (8.7), which are undertaken by traders with conservative risk preferences.

Trading Experience - The sample has a consistent distribution of the experience levels with 40 respondents (26.7) having less than 3 years of trading experience and 60 respondents (40.0) in the 3-5 years range. The rest 33.3 percent are over 5 years of experience. This distribution presents a mixture of novice, intermediate and established traders bringing in information about the trading behaviour.

Trading Size - The trading size reflects the confidence of the investors and the largest segment has 41.3% of traders with 1-2 lakhs investment. Investments of less than 1 lakh investments constitute 34.7% with 23.3% investing above 3 lakh. This distribution implies moderate exposure to capital, and a sizeable portion is in riskier trades of higher value.

Mode of Trading - Most of the participants who trade do so online (117 traders, 78.0%), which is the digitalization of financial markets. The percentage of those who still use offline means has also decreased to 14.0, and the per cent of those using both is also low at 8.7. It goes to show the increasing acceptance of mobile trading apps and algorithm interfaces by retail investors.

Investor Forums Membership. - The majority of the traders (90 respondents, 60.0) are non-participants in investor forums whereas 40.0% indicated that they were active participants. This means that they heavily depend on independent research or that of brokers instead of on community-based insights or group discussion on the market.

Trading Expectations Return. - Most respondents (48.7) have the realistic expectation of returns of 12-24 percent/year as the main returns in options trading, with 26.7 percent having the same expectation of 24-36, and 22 percent lower than 12. Only a small group (2.0%), expect to make returns of over 36. The general level of traders has moderately high expectations of returns according to derivatives market potential.

4.3 Descriptive Statistics Analysis

Table 1 – Descriptive statistics

Variable	Mean	Std. Dev.	Skewness	Kurtosis
Att_1 Trading in F&O is convenient	4	0.786	-0.589	0.164
Att_2 F&O causes anxiety, fear, panic	3.94	0.796	-0.619	0.241
Att_3 Cash market easier than F&O	3.96	1.048	-1.265	1.428
Att_4 F&O requires more investment	4.03	0.904	-1.101	1.472
Att_5 F&O is less risky than equity	3.97	0.789	-0.439	-0.179
Percep_1 Derivatives as tools for profitability & risk control	3.9	0.873	-0.724	0.068
Percep_2 Derivatives hedge risk but profit limited	3.73	1.008	-0.559	-0.088
Percep_3 Derivatives require risk-taking for returns	3.5	1.163	-0.83	-0.084
Percep_4 Derivatives offer better returns than equity/cash	3.35	1.182	-0.1	-1.105
Percep_5 Derivatives improve market information flow	3.67	1.156	-0.788	-0.114
Option_Trade_1 Likelihood of investing in derivatives	3.8	0.99	-0.471	-0.769
Option_Trade_2 Definitely opt for derivatives	3.85	0.736	-0.068	-0.513
Option_Trade_3 Will invest in near future	3.65	1.063	-0.714	0.031
Option_Trade_4 Plan to invest in derivatives next	3.94	1.018	-0.613	-0.741
Call_ITM (In the Money)	3.88	0.912	-0.52	-0.305
Call_ATM (At the Money)	3.75	0.965	-0.46	-0.221
Call_OTM (Out of the Money)	3.40	1.112	-0.310	-0.980
Put_ITM (In the Money)	3.55	1.020	-0.605	-0.455
Put_ATM (At the Money)	3.48	1.040	-0.520	-0.350

Put_OTM (Out of the Money)	3.20	1.180	-0.210	-1.080
Obj_1 Quick return	4.05	0.850	-0.820	0.210
Obj_2 Price-risk transfer	3.78	0.980	-0.540	-0.310
Obj_3 Short-period transactions	3.92	0.910	-0.750	0.002
Obj_4 Leverage	4.12	0.780	-0.950	0.435
Trans_1 Open a Buy (Long Position)	3.90	0.890	-0.650	-0.150
Trans_2 Open a Sell (Short Position)	3.70	1.050	-0.480	-0.780
Trans_3 Close a Buy	3.68	1.010	-0.520	-0.490
Trans_4 Close a Sell	3.66	1.020	-0.510	-0.455
Trans_5 Square Up	3.85	0.940	-0.560	-0.310

The descriptive statistics will give a thorough insight on the attitudes, perceptions, choice of options, investment intentions, trading goals, and the behaviour of the 150 online retail traders in the options market. In general, the average scores on the majority of the items are higher than the middle (3.0) of the five-point scale, which means that the agreement with the solutions to options trading is consistent, with less or more agreement and the desire to behave the same way.

The variables of attitude display fair amounts of positivity towards the derivatives market. Comments like Trading in F&O is convenient ($M = 4.00$) and F&O needs more investment because of fixed lot size ($M = 4.03$) illustrate that the respondents are aware of the convenience and investment requirements of the market. The skewness of all the attitude variables is negative suggesting that the responses tend to cluster towards the agree option, meaning that there was a great adherence towards the derivatives market characteristics. The relatively greater kurtosis of Att 3 and Att 4 indicates a steeper peak i.e. the respondents have similar opinions concerning perceived difficulty of cash market and investment needs in derivatives. The perception variables show a moderate but significant belief in the usefulness and limitations of derivatives. The products like Percep_1 ($M = 3.90$) can be used to note that the participants perceive derivatives as risk control and profitability-making tools. In the meantime, Percep_4 captures a smaller mean ($M = 3.35$), which is indicative of a comparatively weak opinion on the idea that derivatives entail better returns than cash or debt markets. Generally, the smaller negative skewness in all the items of perception indicates that the respondents are inclined towards the affirmation, however, some of the variables have standard deviations greater than 1.0, which suggests varying degrees of belief.

The future intentions of trading equity derivatives also are moderate. Such products as Option_Trade_2 ($M = 3.85$) and Option_Trade_4 ($M = 3.94$) provide evidence that traders are ready to embrace derivatives in future investments. The variability of these variables is moderate ($SD \approx 1.0$), which indicates the difference in confidence and readiness to behave. The adverse skewness also supports the fact that more of the respondents have indicated that they agree as opposed to all the figures showing neutral.

Concerning preference of the structure of the option, it seems that traders prefer more secure or more probable option structures. The means of both Call_ITM ($M = 3.88$) and Call_ATM ($M = 3.75$) are above the means of OTM option of calls and puts, indicating preference to contracts of higher intrinsic value or medium risk. Larger standard deviation of OTM instruments implies more dispersion, which implies that only specific traders are at ease with the speculative strategies.

A good motivational factor in derivatives participation is well demonstrated by the trading goals. The most rated objectives are Quick returns ($M = 4.05$) and Leverage ($M = 4.12$) which implies that the traders find it appealing to the derivatives due to the ability to increase returns and the possibility to make quick profits with the help of the derivatives. This is in line with nature of options trading which is usually leveraged and time based.

Lastly, the variables of transaction-intent portray positive behavioural patterns. Active engagement is indicated by opening long positions ($M = 3.90$) and squaring up positions ($M = 3.85$) whereas moderate active intention is indicated by closing positions (Trans_3 and Trans_4). The negative skewness of all the variables of transactions means that the vast majority of respondents show readiness to conduct such types of activities with certainty.

In general, the descriptive statistics indicate that the traders have a positive attitude, are reasonably aware of the risks and benefits, and exhibit strong behavioural intentions towards trading in options. The results are useful in exploring more profound links between awareness, perception, trading purposes and choices of strategies.

4.4 Testing of Hypothesis

4.4.1 Hypothesis -1

The Structural Equation Model (SEM) was estimated to test the relationship between Attitude toward Options and Perception of Options and the Option Trading Behaviour of online retail traders. The model has good theoretical consistency and empirical validation reflecting in its consistent and reliable factor loading, high structural path coefficients and satisfactory model fit indices.

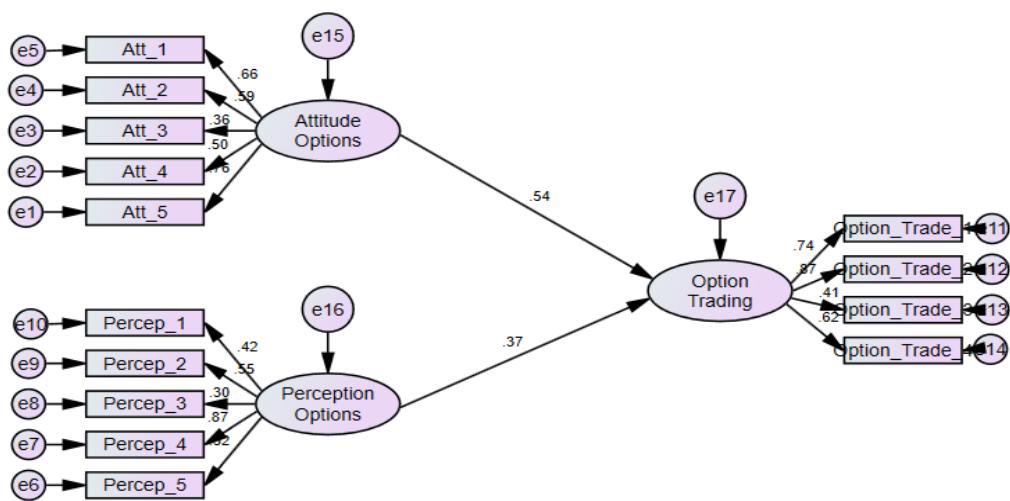
The total model fit was considered to be acceptable and within generally accepted limits:

- $\chi^2/df < 3$, indicating good fit;
- Comparative Fit Index (CFI) > 0.90;
- Tucker-Lewis Index (TLI) > 0.90;
- Root Mean Square Error of Approximation (RMSEA) less than 0.08; and
- Standardized Root Mean Square Residual (SRMR) less than 0.08.

Combined, these signs prove that the proposed model is considered to be sufficient to reflect the underlying covariance structure and offers a good explanation of the behavioural intention of traders to options trading.

Interpretation of the Model of Measurement

Figure 1 – SEM model - Attitudes toward options and perceptions of the options market have a significant positive influence on option trading behaviour among online retail traders



The loading of Attitude Options construct varied between 0.358 to 0.761 indicating satisfactory convergent validity. Att5 was found to be the highest loaded (0.761) pointing out that the conviction of traders that investing in equity derivatives is less risky than investing on the equity market has a significant role to play in overall attitude. The other great contributors are Att 1 (0.660) and Att 2 (0.591) which means that the attitude is also affected by the convenience and emotional experiences like fear or anxiety. Although Att_3 is the lowest loading (0.358), it is still significant to the construct.

There is also a high level of reliability with the Perception Options construct with loading between 0.298 and 0.865. The maximum contribution is made by Percep_4 (0.865) which indicates the belief that derivatives provide a superior payoff than other markets was a significant determinant of perceptions. Percep_2 (0.553) and Percep_5 (0.517) also play critical roles implying that traders attach importance to risk-hedging competencies and the functions of derivatives in the enhancement of market information flow. The fact that Percep_3 (0.298) is lower (moderately supported) is still within the acceptable range of exploratory behavioural models.

The factor loadings of the measurement indicators of the Option Trading behaviour are always high. The most powerful predictor of behavioural intention is this option trade 2 (0.875) that suggests that the firm decision to definitely choose equity derivatives is the most effective behavioural indicator. There are quite a few other factors, such as Option_Trade_1 (0.742) and Option_Trade_4 (0.618) which are strongly correlated, but there are also some investment planning variability in short-term investment planning among traders, since Option_Trade_3 (0.406) is not strongly correlated.

The latent constructs reveal some significant impact in the structural paths. Standardized coefficient of Attitude Options 0 -541 shows a powerful and positive impact. This implies that the traders who have positive attitudes towards derivatives, that is, they view it as convenient, less risky, and more favourable to investment, are far more likely to use options trading. Equally, the Perception Options → Option Trading showed a coefficient of 0.367, which showed a modest but significant positive impact. As that means that perception of profitability, risk control and informational efficiency are also significant in the behavioural intentions of traders, although to a lesser degree than attitudes.

On the whole, the obtained results of the SEM indicate that the attitudes and perceptions play a significant role in the option trading behaviour of the retail traders, but attitudes have more impact. The high factor loadings, high path coefficients as well as reasonable model fit statistics validate that the proposed conceptual model is supported empirically but has a

theoretical meaning. The results of the study highlight the significance of the psychological and cognitive variables in the formation of participation in the derivative market and offer critical information to the brokers, policymakers, and teachers of the market in an attempt to advance informed and accountable decision making in trading their options.

4.4.2 Hypothesis -2

The correlation findings will be very valuable in revealing the relationship between the objectives of the traders and their preference of a particular type of option contracts (Call/Put, ITM/ATM/OTM). The results are used to explain the behavioural patterns that guide the choice of options among online traders on retail sales.

Table 2 - Correlation statistics – Trading objectives and trading strategies

Trading Objectives	Call ITM	Call ATM	Call OTM	Put ITM	Put ATM	Put OTM
Obj_1: Quick Return	r = 0.147 p = 0.055	r = -0.090 p = 0.241	r = 0.037 p = 0.633	r = 0.149 p = 0.052	r = -0.090 p = 0.241	r = 0.056 p = 0.468
Obj_2: Price–Risk Transfer	r = 0.127 p = 0.098	r = -0.185* p = 0.016	r = -0.084 p = 0.273	r = 0.056 p = 0.464	r = -0.185* p = 0.016	r = 0.166* p = 0.031
Obj_3: Short-Period Transaction	r = 0.194* p = 0.011	r = -0.003 p = 0.974	r = 0.124 p = 0.107	r = 0.038 p = 0.618	r = -0.003 p = 0.974	r = 0.113 p = 0.142
Obj_4: Leverage	r = -0.452** p = 0.000	r = 0.031 p = 0.683	r = -0.034 p = 0.658	r = -0.330** p = 0.000	r = 0.031 p = 0.683	r = 0.192* p = 0.012

N = 150

In the case of Objective 1: Quick Return, the correlations with all the six types of options are low and statistically significant. It has the strongest correlation with Put ITM (r = 0.149, p = 0.052), although it is not significant at the 5% threshold. This implies that the quick-return motive is not very decisive in the selection of any given option structure meaning that traders that have fast-return motives may apply more market timing or volatility strategies instead of systematic selection of ITM, ATM or OTM contracts.

Objective 2: Price -Risk Transfer exhibits significant correlations. A strong correlation is found to be negative with Call ATM (r = -0.185, p = 0.016) and Put ATM (r = -0.185, p = 0.016), which implies that the traders with the motivation to transfer risks would find it better to avoid ATM options, which have balanced risk-reward features. On the other hand, the positive significant correlation with Put OTM (r = 0.166, p = 0.031) is an indication that traders that have positive gains to get can consider lower-priced and higher leverage OTC contracts to provide downside cover.

In Objective 3: Short-Period Transactions, there is a high positive correlation with Call ITM (r = 0.194, p = 0.011). ITM contracts tend to fluctuate more predictably as the underlying prices and thus they are suitable in short term directional trades. No other much significant correlations are formed to this objective meaning that short-period traders pickily adopt ITM call to take advantage and execute promptly.

Objective 4: Leverage displays the best trend. The negative correlation with Call ITM (r = -0.452, p < 0.01) and Put ITM (r = -0.330, p < 0.01) show significant negativity, so traders who are driven by leverage do not engage in ITM contracts, which cost more and have lower leverage. In its place, a positive significant relationship with Put OTM (r = 0.192, p = 0.012) indicates that less expensive and more leveraged OTM puts are preferred.

In general, the outcomes demonstrate that the motivation of risk transfer and leverage plays an important role in option-type preferences but quick-return does not. The ITM and OTM contracts attract short period and leverage seeking traders respectively indicating apparent behavioural segmentation among retail option traders.

4.4.3 Hypothesis -3

The correlation findings provide significant behavioural patterns between the objectives of traders and the type of transactions they would rather make in the option market. These associations assist in explaining how the motivations of quick return, risk transfer, short-term trading and leverage affect the buying, selling, closing, and squaring-up positions.

Table 3 - Correlation statistics – Trading objectives and trading position strategies

Trading Objectives	Open Buy (Long)	Open Sell (Short)	Close Buy	Close Sell	Square-Up
Obj_1: Quick Return	r = 0.065 p = 0.399	r = 0.019 p = 0.805	r = -0.014 p = 0.857	r = 0.000 p = 0.998	r = 0.027 p = 0.728
Obj_2: Price–Risk Transfer	r = -0.295** p = 0.000	r = 0.056 p = 0.464	r = -0.070 p = 0.360	r = -0.104 p = 0.174	r = -0.153* p = 0.046
Obj_3: Short-Period Transaction	r = -0.092 p = 0.234	r = 0.038 p = 0.618	r = -0.180* p = 0.018	r = 0.468** p = 0.000	r = 0.318** p = 0.000
Obj_4: Leverage	r = 0.228** p = 0.003	r = -0.078 p = 0.309	r = -0.272** p = 0.000	r = 0.273** p = 0.000	r = 0.240** p = 0.002

N = 150

In the case of Objective 1: Quick Return, there is no significant correlation between all correlations with the transactional behaviours. This implies that the traders who aim at making fast deals do not always prefer a particular type of transaction—either taking long/short positions or selling them. They can be more concerned with market timing, volatility opportunities or price momentum than with desirable transactional structures.

Objective 2: Price -Risk Transfer demonstrates more significant and substantial relationships. The result of the correlation between risk-transfer-motivated traders and long positions ($r = -0.295$, $p < .01$) shows that risk-transfer based traders do not buy long positions, possibly due to their association with higher exposure and directional risk. Equally, the relationship between square-up and risk-averse traders is not strong, but it is significant ($r = -0.153$, $p = 0.05$), indicating that these traders like having hedging positions more than they close them. The trends suggest that risk-transfer traders are conservative and they are not willing to engage in activities that expose them to the market.

In Objective 3: Short-Period Transactions the results indicate a definite behavioural orientation. The negative association with selling a buy ($r = -0.180$, $p < .05$) is significant, indicating that there is less propensity to sell long positions at a rapid rate. Conversely, positive correlations with closing a sell are strong and significant ($r = .468$, $p < .01$) and between traders and square-up actions indicate an active rotation and exit of the trades by short-period traders ($r = .318$, $p < .01$). This is in line with the intraday or short-term strategy, where speed and liquidity are the two factors that dictate the trading behaviour.

Goal 4: Leverage has strong transactional power. Leverage motivated traders are strongly positively correlated with opening a buy ($r = .228$, $p < .01$), closing a sell ($r = .273$, $p < .01$), and square-up behavior ($r = .240$, $p < .01$). On the other hand, the negative relationship with the buy close ($r = -.272$, $p = .01$) means that leverage-oriented traders will not lock in profits before hand and would like to hold leveraged positions to get maximum profits.

In general, the results demonstrate that risk-transfer traders are conservative and short-period traders are active and rotationally, and leverage-motivated traders are aggressive with greater turnover and exposure.

4.5 Discussion in terms of Prior Literature

The findings of the current paper are useful findings on the role that attitudes, perceptions, and trading objectives play in influencing the option trading behaviour of online retail traders. Its results are consistent with the previous behavioural finance theory and expand the current empirical results in the area of research on derivative markets.

The results of the SEM show that option trading behaviour can be predicted by attitudes ($\beta = .541$), which means that traders who tend to perceive options as convenient, less risky, and strategic in their advantage tend to become more prone to options trading. This observation aligns with the previous literature, which states that positive perceptions of financial instruments have a strong impact on the participation in the trade (Nguyen and Rozsa, 2019). In the same manner, the behavioural finance literature indicates that the perceived convenience and transparency as cognitive appraisals increase the risk-taking propensity and confidence of the traders (Kumar and Goyal, 2015). Also, the large loadings on attitude indicators like convenience, emotional experience, and risk comparison with equities indicate the multidimensional attitude formation in the trading environment. These findings support the thesis that traders cannot be entirely rational but rather they are highly affected by the attitudinal dispositions in the selection of the derivative products (Barberis, 2018).

As the results show, perceptions also play a significant role in behaviour ($B = .367$), but with a less significant impact compared to attitudes. This can be used together with the earlier studies that have shown that opinions about market information efficiency, profitability potential, and risk-hedging have an impact on the use of derivatives (Hull and White, 2017). The high loading of Percep_4, which shows the perception of high returns, is in line with the fact that traders tend to overrate the ability of derivatives to boost returns (Shefrin, 2020). Besides, the fact that the perception of derivatives is enhanced by the dissemination of information is in line with the previous results, which revealed that informed traders prefer option markets due to their predictive ability and transparency (Bollen and Whaley, 2004). Collectively, the above insights demonstrate that perceptions are some of the cognitive constructs that inform strategic decision-making in derivative markets.

The results of correlation show that there are definite differences in behaviour among various motivations to trade. The traders with an incentive to transfer risk exhibited negative relations to opening long position and squaring-up, which reflects conservative behaviour, which corresponds with research findings that hedgers do not take directional exposure (Clark & Merville, 2019). There was a high positive correlation between short-period traders and closing transactions, which indicates an active rotation strategy in high-frequency trading setting (Menkveld, 2016). Leverage-oriented traders portrayed considerable connections with entry and exit behaviours of aggression which upheld earlier evidence that leverage exaggerates risk-seeking behaviour and turnover rates (Barber and Odean, 2001). These findings confirm the significance of objectives in influencing the choice of transactions and heterogeneous behavioural patterns among retail traders according to their motivations.

The synthesized results confirm that both psychological (attitudes, perceptions) and strategic (objectives) motivations (determinants) combine to establish the mode of retail traders in options trading. This is in line with dual-process theories which postulate that financial decision-making is facilitated by both cognitive evaluations and strategic incentives (Tversky and Kahneman, 1992). The research has made a contribution to the available literature by showing that the attitudes are the most powerful, perceptions provide the second layer of cognition, and all the tactical behaviour is dictated through trading objectives at the level of action.

5 Conclusion

The current research aimed at analyzing the relationship between attitudes, perceptions and trading objectives and the option trading behaviour among online retail traders. The results will be valuable information on the behavioural bases of making trading decisions in the more dynamic and accessible derivatives market. The paper established that the attitudes of traders towards the option trading especially the perceptions of convenience, risk, and strategic value significantly influence their behavioural intentions. The presence of positive and confident attitudes was found to have a significant increase in the probability of using derivative strategies, which implies that psychological pre-dispositions have as much to do with the adoption of derivative strategies as does technical knowledge or being on the market.

Another strong force behind trading behaviour was also identified as perceptions. Retail traders who feel that the options have significant benefits in regard to profitability, hedging potential and information efficiency would have greater propensity to employ option based strategies. Such views are influenced by personal experience, exposure to market information and availability of growing analytical tools. Even though the predictive power of perceptions was not as significant as the effect of attitudes, they still generated further explanatory capacity through the presentation of trader interpretations of market conditions and instrument characteristics.

Trading goals also helped us to learn the behaviour of retail traders. Pursuit of quick returns, risk transfer, or leverage were objectives linked to certain preferred strategies and tendencies to transactional. Traders who were risk-averse showed more conservative tendencies whereas the leverage-seeking traders were more high-risk. Short-period traders exhibited rotational behaviour and fast-paced trading behaviour in line with short-term trading intentions. These results demonstrate the strategic heterogeneity of the retail trading community and support the idea that traders use strategies that are consistent with their financial objectives and risk behavior. Collectively, the results point to the fact that retail option trading behaviour is developed as a set of psychological assessments, cognitive perceptions, and strategic motivations. This implies that any market intervention that targets to enhance the performance of traders and mitigate risk, e.g. through investor education, behavioural nudges or risk-awareness programs, should address the psychological, motivational as well as technical aspect of trading. Despite the useful contribution of the study, there are a number of approaches that can be used to move this research line. To begin with, the future research can investigate behavioural determinants by utilizing a larger, multi-geographic sample to capture the difference between the views and perceptions of different areas and cultures. Further generalisation of the sample to other groups, e.g., professional traders or algorithmic traders, can enhance the insight into the difference between behavioural patterns of various experience levels. Second, longitudinal study may provide information about the change in attitude and perception as time passes particularly due to market volatility, changes in technology, or other significant economic occurrences. This kind of research would assist in the establishment of the assumption that behavioural tendencies are constant or changing with market periods. Third, emotional and psychological measures or constructs, including overconfidence, loss aversion, risk tolerance, etc., can be incorporated into future research to offer a more comprehensive behavioural explanation. The real-time decision-making under the controlled conditions could be observed using either experimental or simulation-based designs. Lastly, studies might be expanded to control behavioural patterns by asset classes, including futures, crypto-currencies, or leveraged exchange-traded funds. This would enable all-inclusive perception on whether behavioural tendencies are instrument-specific or can be used across markets.

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