# A STUDY ON AWARENESS ABOUT ANALYTICAL TOOLS AND ITS USE BY RETAIL INVESTOR IN MUTUAL FUNDS INVESTMENT

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## ABSTRACT
*In recent years, the Indian economy has witnessed significant growth in the mutual funds industry, particularly marked by the substantial increase in retail investors through the expansion of SIP (Systematic Investment Plan) contributions. Attracted by the attractive returns generated by mutual funds, Indian investors have flocked to this investment avenue. However, it is crucial for investors to understand the associated risks and the tools available to mitigate them. Numerous tools such as CAGR, IRR, Sharpe Ratio, Treynor's Ratio, Standard Deviation etc. exist for analyzing scheme performance, assessing risks, and conducting comparative analyses. This paper examines the actual usage of these tools by individual retail investors. While the use of these tools is on the rise, there remains a need to educate investors properly with appropriate guidelines. Simply using complex financial terminology is insufficient; understanding, practicing, and correctly applying these concepts can transform fund selection dynamics and significantly enhance the investor experience in mutual fund investments.*

*Keywords – Mutual Funds, Investments, Returns, Risks, CAGR, IRR*

## INTRODUCTION
The world nowadays is seeing a lot more changes in each and every process and investment is no exception. A few decades ago, where we used to follow doctor's prescriptions blindly nowadays patients do not hesitate from googling the medicines. Similarly, when it comes to investment, the retail investors would listen to their advisors straightforwardly nowadays they will probably listen to them on the first note then carry out own study may be using internet then compare and then take final investment decisions. Talking about first scenario when someone takes medicines without consulting doctor, he/ she is tailored to consequences whatever maybe. Similarly, when someone takes financial decisions without consulting a financial advisor or similar expert then he/she is taking risk. In order to minimize risk these investors may take help of some tools which are available for assessment of funds. Not necessarily all investors will do this. Some may listen to advisor, follow the advice, and go ahead with investment decision. Some may listen to advice, verify alongside by using own intuition, knowledge, experience take help of internet and then take decisions. Some investors may actually are keen about their own research and analysis, may take help if AI (Artificial Intelligence) device their own strategy and then take investment decisions.

In Indian capital markets we have observed dynamisms in demographic features of investors and widening participation of retail investors has been a concrete support to our economy in spite of global, geo-political volatilities. In such a scenario, it is interesting to observe the pattern of investments of this not new but now dominant looking category of investors. Periodically, we come across articles in newspapers highlighting the burgeoning growth of the mutual funds industry, with assets under management (AUM) expanding exponentially and systematic investment plan (SIP) enrollments skyrocketing. It's no surprise that investors are lured by the potential returns offered by mutual fund schemes and are willing to take on risks. However, what truly intrigues is examining the intricate process through which these investors are drawn into the industry.

For the majority of investors, it is the hard work of financial advisor, Mutual Funds Distributor or a service providing banker to introduce them to this investment arena. In most cases when investors are not familiar with mutual funds then use of analytical tools the advisors using his expertise suggest schemes and final decision is taken. The advisor may be taking help of financial planning tools, assess the risk-taking capacity of investor and recommend suitable fund. The question here is, are investors capable of following such a tedious process on their own if they have chosen to invest on their own? Even if they are not doing it on their own, whenever advisor mentions such terms, tools to them are they grasping it? Are those tools proving useful, fruitful to the investors?

Let's get talking about these analytical tools now! So, what are these tools, are they easy to understand, easy to use and are beneficial? Or they are just some fancy jargons, absorbed in financial conversations just to impress clients and pick that cheque assuring the money is in the hands of an expert who knows a lot and will result in giving the investor a better return?

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Predictive analytics is talk of the town, and in order to make it simple to understand for a common man with respect to mutual funds investment analytical tools concept is used. These tools are nothing but a part of broader term predictive analytics. In India 44 plus mutual fund houses are operational offering range of schemes in each category, with 2300 plus schemes. Now an investor who has made the decision to invest in a mutual fund will face "Choice Paralysis" a common behavioral bias where they face difficulty in selecting a scheme.

Also, now investors are not only behind good returns but also seek a fund that generates alpha for them. Under the initiative of SEBI, a tagline is very popular which clearly says, "Mutual Funds' investments are subject to market risk" and "Past performance does not guarantee future return". So, choosing the right scheme is not less than taking the right medicine which not only cures but also free of side effects.

So, here we are discussing some of the widely discussed tools or criteria for assessing a fund that will help in the financial decision making of an investor.

**AUM (Asset Under Management) –** It is the total amount of money that a mutual fund scheme holds. The fund manager of the scheme is supposed to invest and manage the entire amount on behalf of investors.

**TER (Total Expense Ratio) –** Mutual Funds are permitted to charge certain operating expenses for managing a mutual fund scheme. These may include administrative, advertising, sales and distribution, investment charges etc. These are called TER which has a direct impact on a scheme's NAV. The lower the expense ratio of a scheme, the higher the NAV.

**Sharpe Ratio –** A financial term used to calculate associate risk and return relationship of a scheme. It is used to compare scheme performance with peer funds and benchmark. The higher the Sharpe Ratio better is performance of the fund.

**Standard Deviation –** Like other statistical measures, deviation helps to identify volatility of returns of a scheme, it uses past data and helps in identifying or predicting further performance. Higher is Standard Deviation higher is volatility of the return generated by the scheme.

**Treynor's Ratio –** Its is measurement yardstick for inter-funds comparison which indicates how much more returns generated by the fund for every unit of excess risk taken. Higher Treynor's ratio indicates good performance of the scheme.

**Exit Load –** It is amount charged on the investor if they exit the fund early, every scheme has it's own % of exit load which is charged if money is withdrawn before stipulated time period.

**Credit Rating (For debt funds) –** For the debt funds as their portfolio consists of debt instruments such as bonds, debentures etc, each security has a rating assigned, so high rating means low credit risk.

**CAGR (Compounded Annual Growth Rate) –** It is a tool for measuring return of lumpsum investment in mutual funds for more than a period of one year. It simply uses backward calculations of returns based on compounding effect. High is CAGR better is the performance of the scheme.

IRR or XIRR (Internal Rate of Return) – It represents the discounting rate at which the net present value of cash flows from an investment becomes equal to the cash outflow. High is IRR, better is return generated by the scheme. Also, the scheme which is less deviation in IRR is less risky as it is generating consistent returns. Hence it is the most important criteria for selecting a fund.

**REVIEW OF LITERATURE**

VG Murugan , V VenkataRao, SK Gurumoorthi and E Gnanaprasuna4 (2024) "An Analysis of Investor Behavior with Regard to Mutual Funds in Chennai City" trying to analyze perception of investors towards mutual funds, state there is need of creating more awareness about mutual fund functioning. Investors are not reviewing their portfolio in regular manner. Creating awareness is need of the hour.

Lavanya V, Dr. Vinoth S, (2024), "A Study on the Mutual Fund Investor Perception" try to analyze risk preference of mutual fund investors states that investor perception about mutual funds is influenced by multiple factors that include level od knowledge and self confidence of investors regarding knowledge about investing. There is need to identify how investors are gaining the knowledge and which tools they are using for analysis and decision making.

Naveen Badhwar, Dr. R. K. Garg, February 2024, "Role of Financial Advisors in Shaping Retail Investors Investment Perceptions" states importance of having financial advisor in financial planning. Even though individual investors can make investments on their own many times, generating better returns is best possible with help of advisor who has more command over analyzing right portfolio for client suiting to their needs.

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Dr. Sunil Karve, Mrs. Hema Deogharkar (2015), "A Study Of Financial Planning Need Analysis" one of the objectives to identify the factors that influence decision making of individual investor with the help of survey through questionnaire, there need for creating more awareness about financial planning process.

It sums up that financial planning is a process that has multiple tasks. And awareness about such tasks is at primary level. In such a scenario very few people can carry out the task of financial analysis. Now out of such a limited population how many of them can carry out analysis proficiently? Are they aware of modern techniques used for analyzing and predicting the future of their investments? Are they going right? Can technology help them to become self-dependent when it comes to financial decision making or they should stick to advisors? Are advisors using any tools for selecting right schemes and make a suitable portfolio? Are they educating investors about such tools? This paper will try to answer these questions by surveying investors.

**RESEARCH METHODOLOGY –**

**Scope pf the study –** This paper is intended to find out the level of integration of modern analytical tools in the life of a common retail investors. Also, it tried to analyze are investors aware of such tools related to mutual funds investments, are they are capable of using the same. It will help to find out how such tools can be promoted to make accurate predictions about investments and help investors generate better returns.

**Objectives –**

To study and understand various analytical tools in mutual funds.

To analyze the level of awareness about predictive analytics tools amongst retail mutual fund investors.

To analyze actual level of use of analytical tools by retail investors while mutual funds related decision making

Primary data – A group of retail investors responded to the questionnaire through the google form.

Secondary Data – Data collected through research papers, newspaper articles, magazines and books and websites. Also, from e-journals.

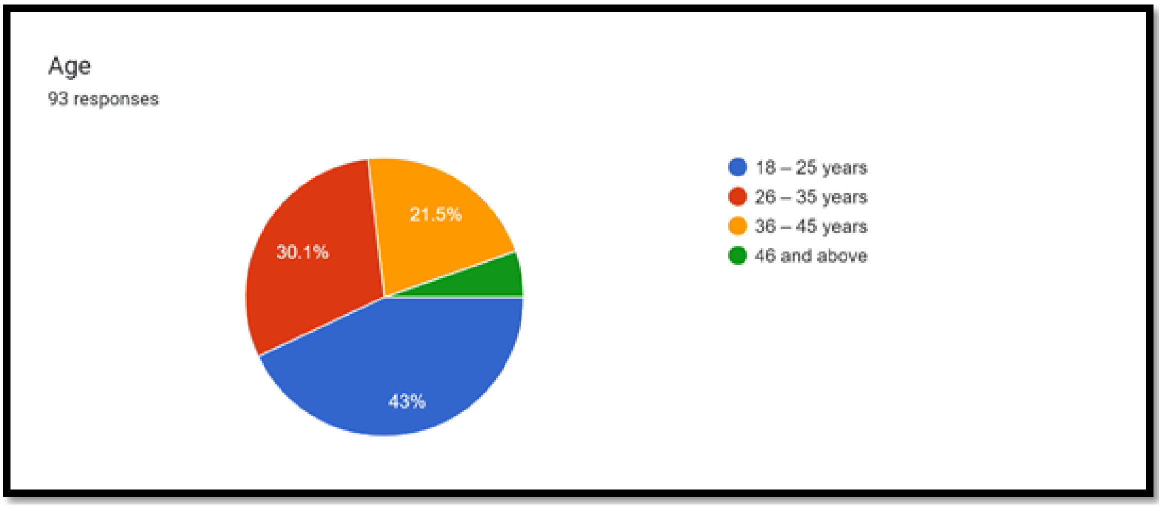
**Limitations of the study –**

Samples collected only from specific region Mumbai and Pune district. Time span of data collection is also limited. Varying these factors may give separate results. Also the analytical tools referred here are restricted to few variables such as Sharpe Ratio, Treynor's Ratio, TER, AUM, Exit Load, Standard Deviation, Credit Rating. For the sake of ease of understanding of common investors complicated variables like risk-o-meter, return calculators, financial planning tools etc. are not considered. Further study using this variable can come up with different results.

**DATA ANALYSIS AND INTERPRETATION –**

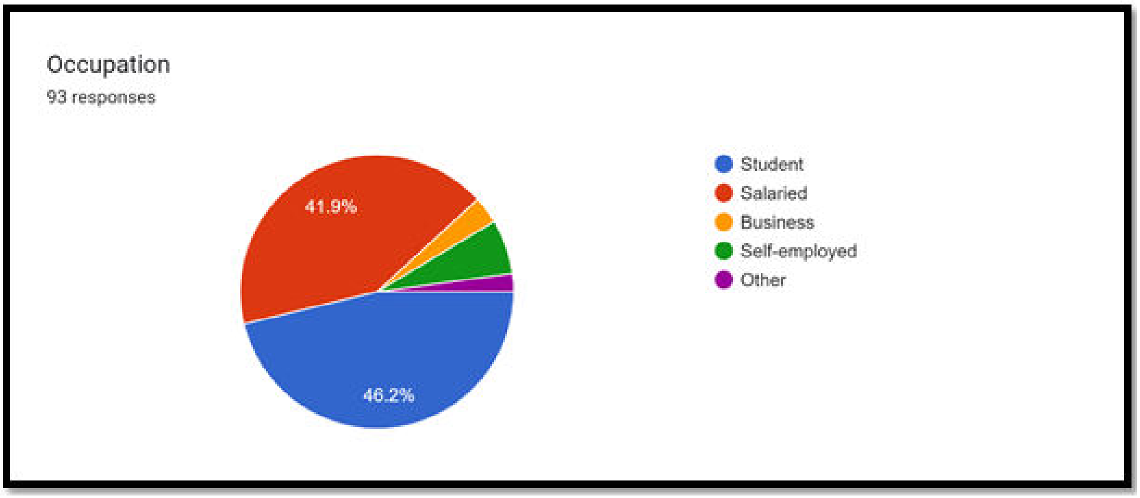
For collecting data google form questionnaire was circulated and 93 responses received. Questions are crafted in a way to make easy for understanding terms and genuine responses will be received.

**Q.1 Age wise classification of investors –**



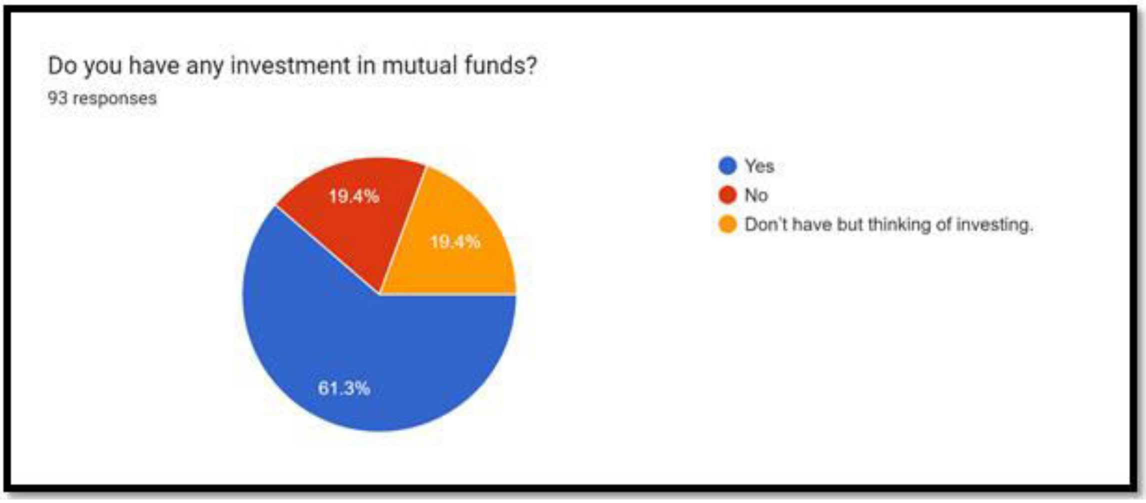

It is observed that 43% of respondents are from age category 18-25 years, 30% belong to 26-35 years and 21% belong to 36-45 years.

**Q.2 Occupation wise distribution of respondents –**



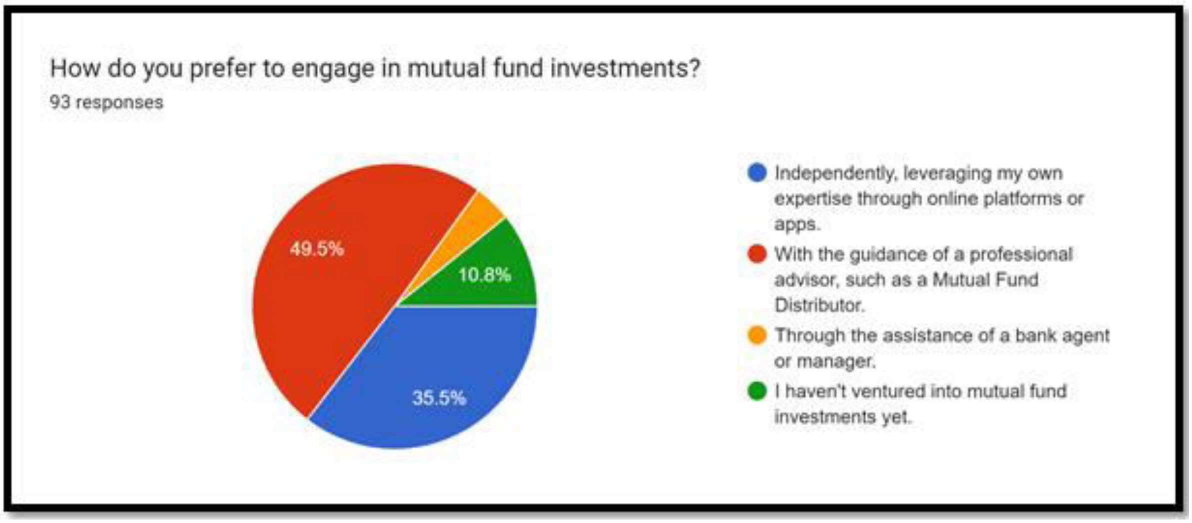

It is observed that 46% of the respondents are students, 41% are salaried people rest are self-employed or businessman.

**Q.3 Mutual Fund Investment Experience –**



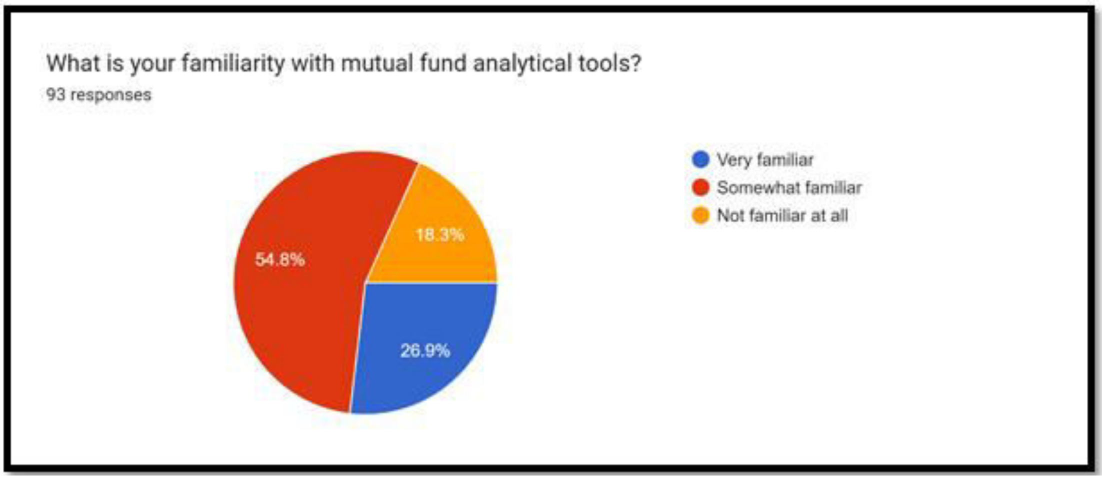

It has been observed that 61% respondents are investing mutual funds, 19% are planning to invest in mutual funds.

**Q.4 Approach of Investment in mutual funds –**



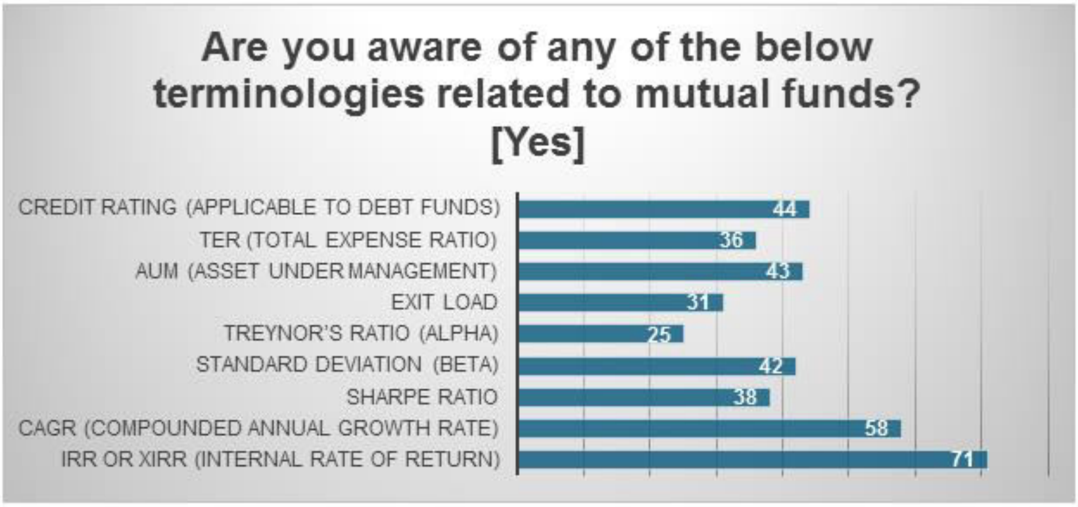
35% of respondents prefer to invest in mutual funds using their own knowledge through online platforms and apps. Whereas 50% of respondents prefer to invest with the help of advisors like Mutual Funds Distributors, 10% have not invested in mutual funds yet.

**Q.5 Familiarity with Mutual Funds tools –**



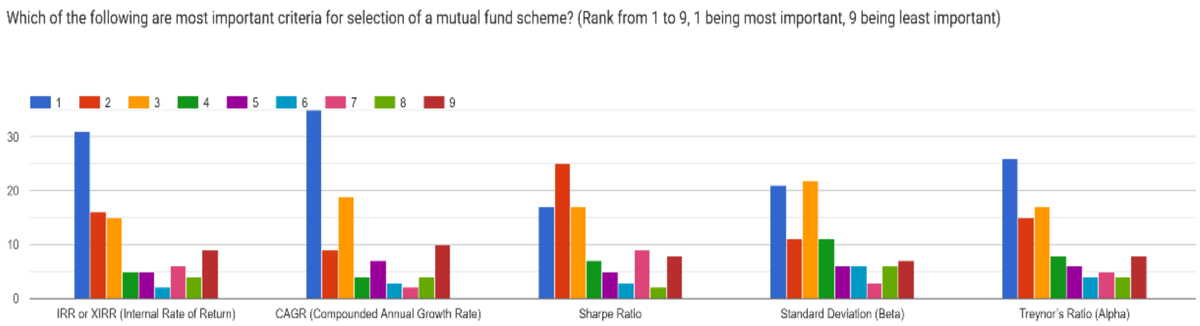

From above diagram it can be observed that 54% respondents are saying they are familiar to some extent with mutual fund analytical tools. 27% of respondents are saying they are very familiar and 18% said they are not familiar.

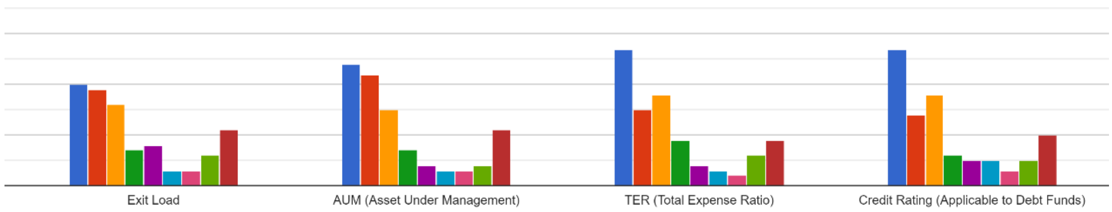
**Q.5 Awareness of Mutual Fund Terminologies –**




It can be observed that more respondents are aware about XIRR, CAGR, which are used to calculate return generated by the fund whereas, concepts like Exit load, Treynor's ratio Sharpe ratio are lesser known, there is somewhat familiarity about standard deviation, AUM, TER.

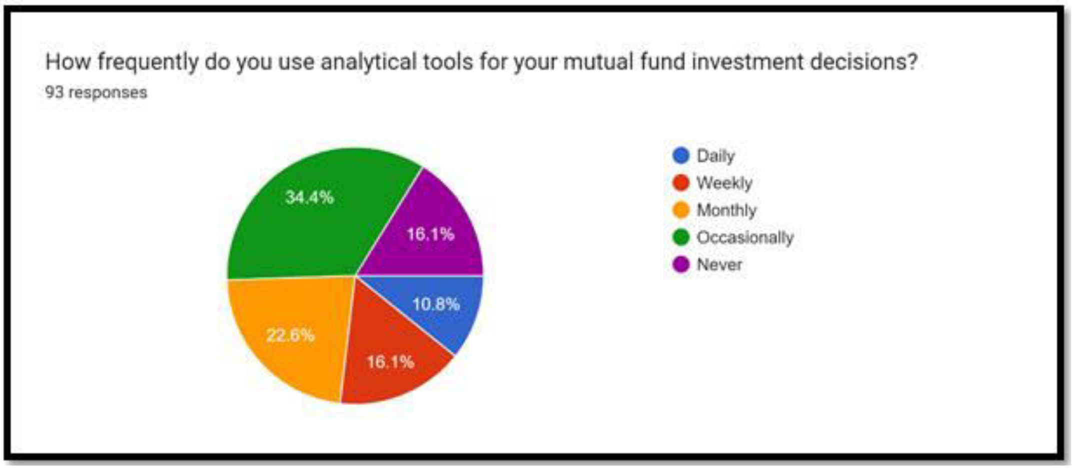
**Q.6 Ranking of Mutual Fund Analytical tools as per respondent's preference –**





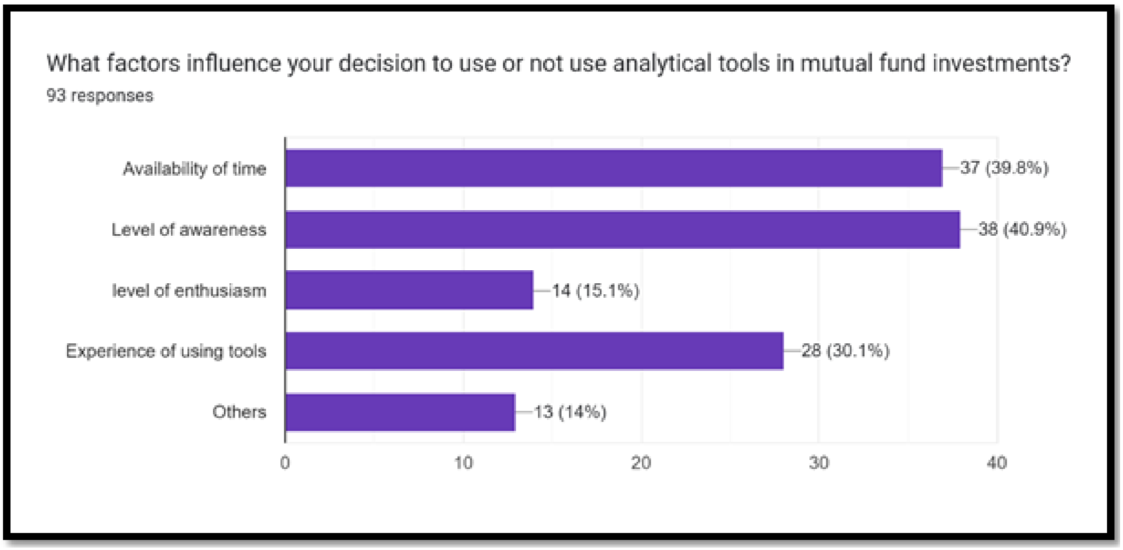

It is observed that IRR, CAGR, Credit Rating are chosen at 1st rank by majority of the respondents, followed by Sharpe Ratio, Treynor's Ratio, AUM, TER, Exit Load, at the same time Standard Deviation gets the least ranks.

**Q.7 Frequency of use –**




It is observed that 34% of the respondents use aforementioned tools occasionally, only 10% use them on daily basis 16% have never used the tools. 16% use on monthly and 22% use on weekly basis.

**Q.8 Factors influencing use of analytical tools –**




It is observed that the most important factors affecting mutual fund tools use are availability of time, lack of awareness, and the followed by experience of using the same and then followed by level of enthusiasm.

**FINDINGS**

From the survey conducted it is visibly seen that retail investors are not yet fully confident about the use of analytical tools. The main reasons behind could be the gap in educating the investors, the medium in which they invest and availability of time and zeal amongst the investors.

## CONCLUSION

In India, investor attitudes towards investment instruments are evolving, with a notable influx into mutual funds indicating a growing willingness among retail investors to embrace risk. It is evident that many of these investments are driven by the prospect of high returns. However, it is important to recognize that not every mutual fund scheme delivers the returns investors hope for. Investors must comprehend all aspects of their investments. Engaging with a seasoned and knowledgeable advisor can mitigate some concerns, but those who prefer to make their own investment decisions must prioritize acquiring the necessary training, knowledge, and access to analytical tools. Using these tools without proper understanding can lead to misguided choices and potential losses.

Asset Management Companies (AMCs) and financial advisors have a responsibility to ensure that investors are well-versed in financial terminologies. Beyond "Investor Awareness Programs" (IAPs), there is a pressing need for comprehensive Investor Training Programs, which should include a prerequisite of adequate advisor training and education. Future studies could explore whether advisors themselves are sufficiently trained to educate investors and whether this education effectively aids investors in making informed decisions.

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## Annexure

Q.1 Name of the investor

Q.2 Age –

18 – 25 years

26 – 35 years

36 – 45 years

46 and above

Q.3 Occupation –

Student

Salaried

Business

Self-employed

Homemaker

Other

Q.4 Do you have any investment in mutual funds?

Yes

No

Don’t have but thinking of investing.

Q.5 How do you prefer to engage in mutual fund investments?

1. Independently, leveraging my own expertise through online platforms or apps.
2. With the guidance of a professional advisor, such as a Mutual Fund Distributor.
3. Through the assistance of a bank agent or manager.
4. I haven't ventured into mutual fund investments yet.

Q.6 What is your familiarity with mutual fund analytical tools?

- Very familiar
- Somewhat familiar
- Not familiar at all

Q.7 Are you aware of any of the below terminologies related to mutual funds?

1. IRR or XIRR (Internal Rate of Return)
2. CAGR (Compounded Annual Growth Rate)
3. Sharpe Ratio
4. Standard Deviation (Beta)
5. Treynor’s Ratio (Alpha)
6. Exit Load
7. AUM (Asset Under Management)
8. TER (Total Expense Ratio)
9. Credit Rating (Applicable to Debt Funds)

Q.8 Which of the following are most important criteria for selection of a mutual fund scheme? (Rank from 1 to 9, 1 being most important, 9 being least important)

1. IRR or XIRR (Internal Rate of Return)
2. CAGR (Compounded Annual Growth Rate)
3. Sharpe Ratio
4. Standard Deviation (Beta)
5. Treynor’s Ratio (Alpha)

6. Exit Load

7. AUM (Asset Under Management)

8. TER (Total Expense Ratio)

9. Credit Rating (Applicable to Debt Funds)

Q.9 How frequently do you use analytical tools for your mutual fund investment decisions?

- Daily
- Weekly
- Monthly
- Occasionally
- Never

Q.10 What factors influence your decision to use or not use analytical tools in mutual fund investments?

Availability of time

Level of awareness

Level of enthusiasm

Experience of using tools