

## INVESTIGATING MEDIA AND COMMUNICATION CHANNEL SEARCH BEHAVIOUR OF RETAIL INVESTORS FOR INVESTMENT DECISION IN EMERGING FINANCIAL MARKETS

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### ABSTRACT

The purpose of this study aims at investigating the major sources of information which drives the investor's behaviour in investment decisions in Indian Financial Markets. Diverse source are classified into three categories, that is, financial advice, word-of-mouth communication and specialised press to investigate their effects on investment behaviour of investors. A total of 258 investors filled a survey on a questionnaire in National Capital Region of India by using purposive sampling method. For analysis of data PLS-SEM was applied on the software version 3.2.9. The key outcome of the study revealed that financial advice was considered as first choice ( $\beta = 0.265$ ,  $p < 0.000$ ) to build their investment decision primarily on weekly basis followed by word-of-mouth communication ( $\beta = 0.154$ ,  $p < 0.05$ ). Lastly, the mutual fund investors prefer financial newspapers and financial reports published by mutual fund regulatory body and there companies in India to do mutual funds investment. This study proposed a conceptual model in the literature of information search behaviour for mutual funds and contributes significantly to the mutual fund companies and investment agencies to market financial products in an effective manner for investors.

**Keywords:** Mutual Fund; Financial Advice; Word-of-Mouth Communication; Specialised Press; PLS-SEM.

### 1. INTRODUCTION

The economic growth of any country can be investigated by the growth and development of its financial sector (Nazir, 2018). The financial sector growth is an indicator that resources are utilised efficiently and under good governance of an economy and India has been one of the country with record phenomenon growth in the last decade (Bhadury et al. 2021). The financial intermediaries like mutual funds, equity markets, insurance sector, which channelize the savings of households are performing at its best, where Mutual Fund industry's Assets Under Management (AUM) has reached to record 376.73 billion US\$ by October 2019

from 156.82 billion US\$ and total first year life insurance premium has touched 30.72 US\$ in the financial year 2019 (IBEF, 2019). In India, mutual funds are considered to be an important and preferred innovative financial product of the recent times.

The report of Assets Management Fund of India (AMFI) reported that under management of Indian Mutual Fund Industry average investments are all time high of Rupees 27.23 trillion on February 29, 2020 from the value of Rupees 7.67 trillion in the last decade (AMFI Report, 2020). Another report by Economic Times revealed the fact the financial intermediary like Mutual Funds

nearly 63 percent of the equity schemes have outperformed their respective benchmarks and in some cases like small cap funds have provided 20.87 Compound annual growth rate (CAGR) followed by mid cap funds with 18.45 percent CAGR returns (Economic Times Report, 2019). In addition to this, large cap funds recorded 13.61 CAGR returns and the least by ELSS category with 12.74 percent returns. The mutual fund industry recorded on an average CAGR of 15.25 percent in the last one decade and it is anticipated that AUM investor accounts will cross 130 million by 2025 (IBEF, 2020). This shows that in emerging economies of the world, India is trusted to be a preferred destination for investment globally.

There is lot of research on mutual funds in recent decades especially in developed nations, where researchers focussed on MF effectiveness (Golec and Stark, 2004), MF returns (Hoepner et al., 2011; Ferreira et al., 2013; Mansor et al., 2015), fund performance across diverse financial markets (Ramasamy and Yeung, 2003; Jank, 2012; Kopsch et al., 2015). However, research on mutual fund in this efflorescing economy conducted on fund performance (Banegas et al., 2013; Sapar and Madava, 2003; Afza and Rauf, 2009; Sipra, 2006), mutual fund fees and expenses (Lamphun and Wongsurawat, 2012), fund characteristics and fund-level factors (Angelidis et al., 2013; Bialkowski and Otten, 2011; Cuthbertson et al., 2012; Howell, 2001; Nguyen and Nguyen, 2019; Ramasamy and Yeung, 2003). However, with the growing trust in Indian financial markets and the growth story of Indian Economy, little research is conducted to investor's behaviour towards the mutual funds information acquisition along with actual investment decision making process especially in the globalised financial markets with wide availability of international investors (Lamphun and Wongsurawat, 2012).

Although, mutual fund investors base their decisions on factors like fund manager, fees and type of fund, fund age, board size, economic growth and country's governance (Nguyen & Nguyen, 2019; Ramasamy and Yeung, 2003; Salganik-Shoshan, 2017; Oehler et al., 2018; Sharma and Paul, 2014; Zhongzhi et al., 2018; Tauni et al., 2017), but other factors like sourcing information about mutual funds

can be important resource to be duly researched for in present times (Alexander et al., 1998; Loibl and Hira, 2006; Capon et al., 1996; Wilcox, 2003; Kaur, 2018; Kaur and Kaushik, 2016). The main purpose of this study with research gap is

RQ: To investigate whether various sources of information sources about mutual funds can be an important determinant about the investors' investment behaviour in emerging financial markets like India and other south-east Asian countries?

The paper is divided into following sections ahead: In section 2 -Theoretical Framework and Conceptual Model is discussed whereas in section 3 Research Methodology is explained followed by section 4 which includes data analysis and interpretation. Lastly, in section 5 discussion and managerial implications are discussed along-with limitations.

## **2. PREVIOUS RESEARCH**

### **2.1 Theoretical Framework**

The investor behaviour in a financial market can be evaluated on various counts and measures which are strongly based on established theories. One such theory is (TRA) that stands for Theory of Reasoned Action, (Fishbein and Ajzen, 1975), where intention is a strong antecedent of actual behaviour. This study was advanced by (TPB) i.e Theory of Planned Behaviour where attitude and subjective norms are guiding the intention of an individual (Ajzen, 1991). Furthermore, TPB gave an extension to TRA in terms of adding perceived behavioural control (PBC), that is, the skills, ability and knowledge required to perform an action, whereas subjective norms describes the individual's perception about the behaviour of other individuals important to them.

Another established theory by Davis (1989) on Technology Acceptance Model (TAM) clearly explained the concept of actual behaviour of an individual. Based on these critical theories of human behaviour, in the present study, we are try to investigate various sources of information available in diverse ways to the investors for incorporating their actual investment decisions in mutual funds in a financial market.

## **2.2 Conceptual Model and hypotheses development**

**2.2.1 Financial Advice.** Retail investors tend to seek advice from the experts for their financial advice while taking their investment decisions (Mugerman et al., 2021; Jones, 2005). In this context taking financial advice by investors considered as an important factor and leads increase in trading frequency (Goyal et al., 2021; Tauni et al., 2016). Studies on mutual funds have indicated that information sources like financial advice from financial advisors are critical source for accessing the mutual fund investment decisions (Alexander et al., 1998; Loibl and Hira, 2006; Kaur, 2018; Kaur and Kaushik, 2016). The said criterion is primarily based on the education and financial knowledge of the investors (Capon et al., 1996; Alexander et al., 1998,2001; Frinjis et al., 2006; Wilcox, 2003), and research shows that an investor with low financial knowledge depends heavily upon the financial advisors for determining their portfolio choice and selection (Calcagno and Monticone, 2015; Monti et al., 2014). However, there are many studies which revealed that even an experienced and knowledgeable investor preferred to take advice of brokers (Alexandera et al., 1998, 2001). Based on these studies, the study posits the following hypothesis:

**H1: Financial Advice positively leads to higher investor trading frequency of investors in mutual funds.**

**2.2.2 Word of Mouth Communication.** Retail investors at times get the information about investment in mutual funds based upon their personal sources and social groups (Alexander et al., 1998; Loibl and Hira, 2006; Kaur, 2018; Kaur and Kaushik, 2016). In some of the instances it is observed that risk loving investors prefers non marketing based source of information like information from friends, family as a reliable one (Bloch et al., 1986; Price and Feick, 1984; Gilly et al., 1998; Lulz and Reilly, 1973; Roselius, 1971). Investors with objective product knowledge are more prone to word of mouth communication towards investment in mutual funds in comparison to investors with idiomatic awareness of mutual funds (Coupey et al., 1988; Dodd et al., 2005; Fodness and Murray, 1998). These studies guided the present study to base the next hypothesis:

**H2: Word-of-mouth-communication absolutely influences the trading frequency of investors in mutual funds.**

**2.2.3 Specialized Press.** The third aspect of information search for investment in mutual funds depends on specialised media like financial newspaper, media, social media, analyst reports and print media (Baker and Haslem, 1973; Tauni et al., 2016; Loibl and Hira, 2011; Shanmugham and Ramya, 2012). Media and press related exclusively to Business and corporate house are more visible in the market to entice the prospective investors to invest in mutual funds (Jonsson and Buhr, 2011). Diverse studies proposed that publications meant for financial information floated on print media, internet and social media has a significant impact on the investment decisions of investors (Islamoglu et al., 2015; Jidong, 2007; Poshakwale and Mandal, 2014; Zhao and Ahmad, 2015; Chandra and Kumar, 2012; Wheale and Amin, 2003; Cen, Chu and He, 2019; Farooq and Hassan, 2019; Costa and Aziz, 2019). These critical findings on use of specialised media towards investors' trading frequency for investment posits following hypothesis:

**H3: Specialized Media positively influences the trading frequency of investors in mutual funds.**

### **2.2.4 Control Variables in the study**

The demographic variables of investors are significant contributors for their investment decisions and also determine their perceived risk towards financial services like mutual funds (Falk and Matlulich, 1976; Mitchell and Greatorex, 1993). The characteristics of investors like gender, age, education, literacy level of investors, occupation, income greatly influence the investment decisions about mutual funds in any financial market (Prathap and Rajamohan, 2013; Kumar and Rajkumar, 2014; Parihar et al., 2009; Subramanya and Murthy, 2013; Rathnamani, 2013; Kaur, 2018; Kaur and Kaushik, 2016). In some cases education of investors are positively related to awareness levels of mutual funds (Ranganathan, 2006; Rathnamani, 2013; Subramanya and Murthy, 2013), whereas in some case education is not related to awareness levels of mutual funds (Parihar et al., 2009; Das, 2012; Mehta and Shah, 2012). In some cases, gender has significant relationship

on decision making behaviour of investors in mutual funds (Badumenko, 2009; Keller and Siegrist, 2006; Booth and Nolen, 2009). Risk taking behaviour is also directly related to personal characteristics of investors like gender and education (Wang, 2009; Bailey et al, 2012; Frinjns et al., 2006; Mishra and Kumar, 2012; Sachse et al., 2012; Schmidt, 2010). Based on these findings, the study includes personal characteristics and risk aversion abilities of investors are control variables in the study.

In the light of above discussion and hypotheses so framed, the study proposed the conceptual model as mentioned in Figure 1.

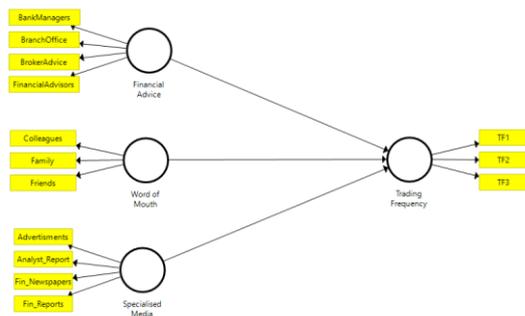
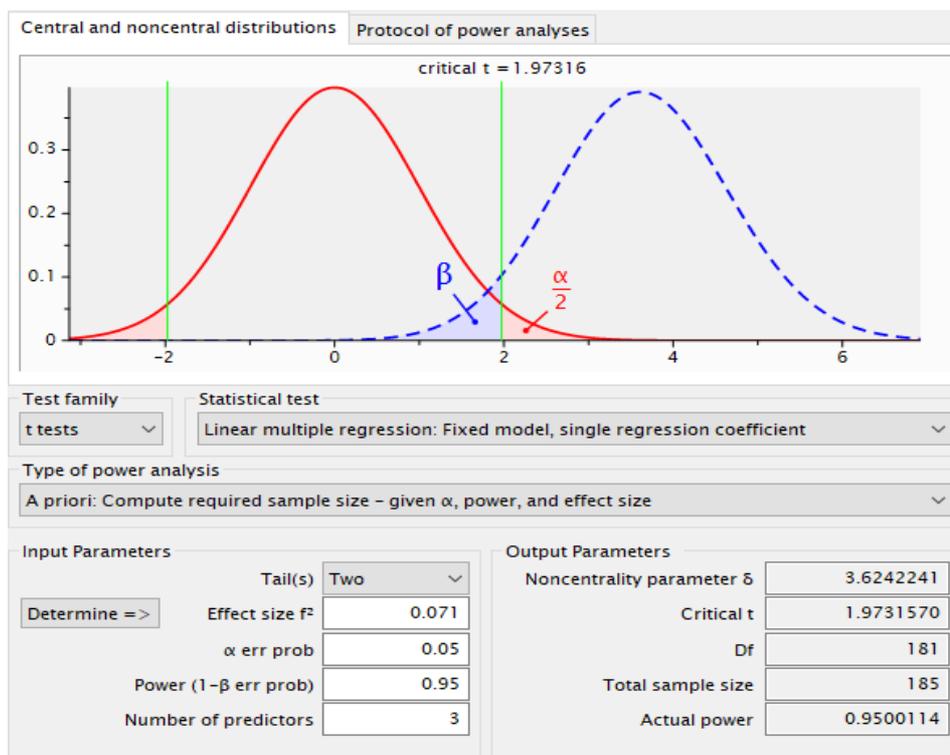


Figure1: Proposed Conceptual Model

### 3. RESEARCH METHODOLOGY

The data collected for this research was from the investors of Delhi and National Capital Region (NCR) of India, who were actively engaged in investment decision of Mutual Funds. As mentioned in Appendix - 1 survey is conducted with the help of questionnaire. Around 300 respondents were circulated to the investors and after data validation checks and response rate of 86 percent, but for analysis a total of 258 responses were finally used .To study the Minimum sample size (Faul et al., 2009) we used G Star Power Analysis. Minimum sample size of 185 responses are proposed by analysis whereas our study used 258 sample size as reported in below figure 2.

By sampling method a cross-sectional survey over a period of 6 months (October 2020 - March 2021) was used in the present study. The study explored the sources of information required to make investment in mutual funds, thus to explore this relationship variance based PLS-SEM was applied on Smart PLS Software 3.2.3 version for the complex models which offers high elasticity and highly accepted multivariate analytical method with least sample sizes (Hair et al., 2017; Hair et al.,



Source: Authors' Calculations on Power Analysis

Figure - 2

2019; Nitzl et al., 2016; Richter et a., 2016; Rigdon, 2016; Ringle et al., 2014; Ringle et al. 2015; Hair et al., 2020; 2022). Finally, common method bias was investigated by Harman' single factor analysis method, whereby all statements reveal 32.39 percent variance which were loaded to one factor, which is considered to be less than highest limit of 50% with no similar method in current study (Babin et al., 2016; Podsakoff et al., 2003; Schwarz et al., 2017).

#### 4.2 Measurement Model Assessments

This study checks the internal staunch and proposed outer model requirements in PLS-SEM model. It used auxiliary composite analysis (CCA), whereby the internal staunch checks were proposed over Cronbach's Alpha and correlations of items which exceeding the limit of 0.70 (Hair et al., 2019; 2020). The Cronbach's alpha of financial advice (0.807), word of mouth communication (0.780), specialized press (0.802) and trading frequency (0.743) are over 0.70 and so does the

Table 1: Sample demographics (N=258)

Age	Frequency	Percent	Educational Qualification	Frequency	Percent
Less than 30	68	26.4	Graduate	64	24.8
30 - 39	107	41.4	Post Graduate	119	46.1
40 - 49	54	21.0	Professional	75	29.1
50 and above	29	11.2		258	100
	258	100			
			<b>Experience in trading (in years)</b>		
<b>Sex</b>			Below 6	114	44.2
Male	192	74.4	6 to 10	69	26.7
Female	66	25.6	Above 10	75	29.1
	258	100		258	100
<b>Income (per month)</b>			<b>Risk</b>		
Less than 30000	113	43.80	Averse	119	46.1
30000 to 50000	110	42.64	Lover	139	53.9
More than 50000	35	13.56		258	100
	258	100	<b>Savings</b>		
<b>Wedded Status</b>			Less than 10%	56	21.7
Married	128	49.61	11% to 20%	98	38.0
Unmarried	130	53.39	21% to 30%	68	26.3
	258	100	Above 30%	36	14.0
				258	100

Source: Author's Calculations

## 4. RESULTS

### 4.1 Demographic Profiles of Investors

Table 1 represents the demographic profiles of the respondents in this survey had positive sense regarding their investment in mutual funds. The population based figures shows that most of them are males, well-educated and experienced in investing money in mutual funds. The results are somewhat similar to previous studies on mutual funds where the majority of investors were young and educated, where majority of investors are males, married, have higher trading experiences and with the savings rate close to 25% of total income (Kaur and Kaushik, 2016; Ramasamy and Yeung, 2003; Kaur, 2018).

correlation of items. In addition to this, proposed effectiveness was also established with the composite staunch above the minimum limit of 0.70. The Composite Reliability of financial advice (0.873), word of mouth communication (0.872), specialized press (0.871) and trading frequency (0.851) are all above 0.70, thereby the results hold high internal consistency reliability (Hair et al., 2017). The validity of constructs was evaluated by average variance extracted threshold score of 0.50 and above, where financial advice (0.632), word of mouth communication (0.694), specialized press (0.628) and trading frequency (0.655) met the

criterion. Table 2 represents convergent validity and reliability of the model.

The study further finds out the discriminant efficacy with the hand of Fornell and Larcker's Criterion (1981) whereby the square root of AVEs of the constructs on the diagonal was maximum than correlation of inter-item values. Table 3 exhibits the establishment of distinct property of one construct with the other.

Validity of discriminant was established with investigating Heterotrait-Monotrait (HTMT) with a maximum ratio of correlation 0.85 (Henseler et al., 2015), 0.90 (Gold et al., 2001). The correlation of HTMT in this study was less than 0.85, thereby establishing the uniqueness according to the empirical standards of all constructs represented in Table 4.

**Table 2: Internal Consistency Reliabilities and Convergent Validities**

Latent Construct	Items	Internal staunch		Proposed Validity		
		Cronbach's Alpha	Item-total correlation	Factor Loading	Composite Reliability	Average Variance Extracted
Finance Advice	Bank Managers	0.807	0.793	0.799	0.873	0.632
	Branch Office		0.803	0.740		
	Broker Advice		0.825	0.810		
	Financial Advisors		0.762	0.828		
Word of Mouth Communication	Colleagues	0.780	0.847	0.826	0.872	0.694
	Family		0.853	0.84		
	Friends		0.800	0.833		
Specialized Media	Advertisements	0.802	0.791	0.752	0.871	0.628
	Analyst Report		0.808	0.792		
	Financial Newspapers		0.782	0.820		
	Financial Reports		0.788	0.803		
Trading Frequency	TF1	0.743	0.821	0.843	0.851	0.655
	TF2		0.839	0.835		
	TF3		0.775	0.747		

Source: Author's Calculations

**Table 3: Discriminant Validity**

Latent Constructs	Financial Advice	Specialized Media	Trading Frequency	Word of Mouth Communication
Financial Advice	<b>0.795</b>			
Specialized Media	0.378	<b>0.792</b>		
Trading Frequency	0.35	0.293	<b>0.81</b>	
Word of Mouth Communication	0.241	0.401	0.266	<b>0.833</b>

Source: Author's Calculations

**Table 4: Heterotrait-Monotrait Ratio**

Latent Constructs	Financial Advice	Specialized Media	Trading Frequency
Specialized Media	0.466		
Trading Frequency	0.436	0.362	
Word of Mouth Communication	0.300	0.505	0.332

Source: Author's Calculations

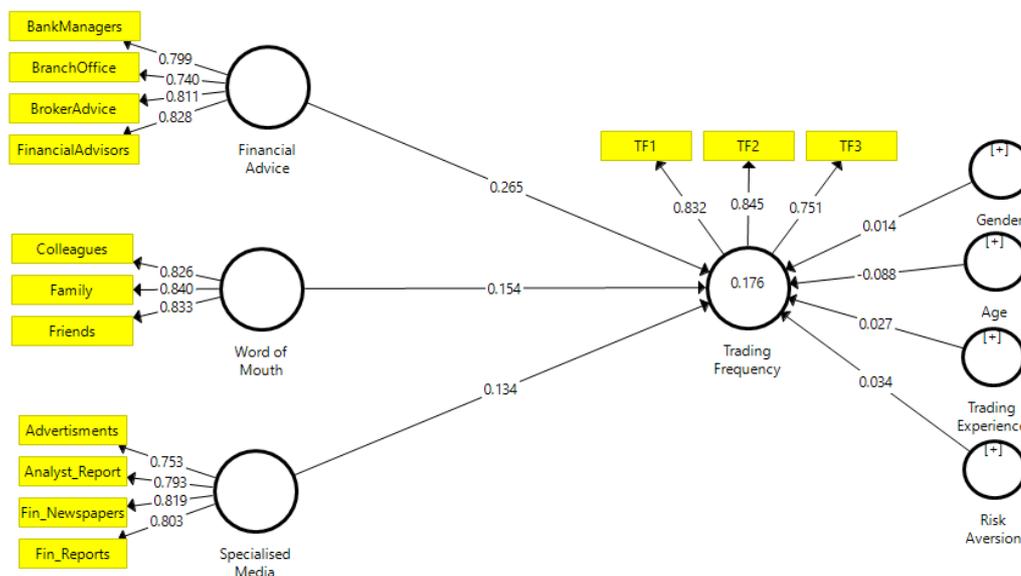


Figure 3: Factors and consequences with control variables

#### 4.3 Structural Model Assessments

The hypotheses testing between the constructs and their predictive relevance was incorporated by applying variance based SEM (Hair et al., 2022; Saari et al., 2021). The bootstrapping process with recommended values without any change in signs of 5000 for evaluating p - values were obtained in SmartPLS software (Hair et al., 2020).

The study incorporate two models whereby in model 1, the impact of sources of information was investigated on the trading frequency in mutual funds without the control variables and model 2 contained the control variables. Figure 3 represented the model with control variables in the study. The model has slightly low predictive relevance on account of 17.6 percent variation in trading frequency of mutual funds accounted by the sources of information alone. The standardised root mean square residual (SRMR) as a model fit was used. This results show that value of 0.073, 0.063 in model 1 and model 2 and is below the threshold value of 0.085 to point out that model in this study has good analytical power (Henseler et al., 2016). Research with PLS -SEM Models in this current time with global model like SRMR fit index is important to evaluate the goodness of it model (Hair et al., 2020). The hypothesis testing results are explained in Table 5.

As represented in Table 5, the findings revealed that financial advice is the most important feature which is sourced by respondents positively to make investment decision in mutual funds ( $\beta=0.265$ ,  $p<0.001$ ), thereby supporting H1. Subsequently source reported by the investors was word of mouth communications whereby friends, colleagues and family members significantly influence the decision in mutual fund trading ( $\beta=0.265$ ,  $p < 0.001$ ), to support H2. Lastly, the respondents followed specialized press and media to source their information for mutual funds investment decisions ( $\beta=0.134$ ,  $p<0.001$ ) and supported H3.

VIF which stands for Variance Inflation Factor found all values to be less than 5 (Diamantopoulos et al., 2008). The Inner VIFs were below the point limits with financial advice (1.18), specialized media (1.324) and word of mouth communication (1.205) were under the specified limits that there are no inline issues that involved (Hair et al., 2017). The proposed model application and significance were tested by ( $f^2$ ) and ( $Q^2$ ). The impact on endogenous constructs because of exogenous constructs in  $R^2$  is (small effects) 0.02, (moderate effects) 0.15 and (large effects) 0.35 (Cohen, 1988). Although it shows weak effect size of all the factors, whereas for explaining endogenous variable ( $f^2=0.071$ ) financial advice is the important factor

Table 5: Structural Model Assessments

Hypotheses	Relationship	Beta ( $\beta$ )	Model 1 without control variables	Beta ( $\beta$ )	Model 2 with Control Variables
H1	Financial Advice -> Trading Frequency	0.264***	Supported	0.265***	Supported
H2	Specialized Media -> Trading Frequency	0.133**	Supported	0.134**	Supported
H3	Word of Mouth -> Trading Frequency	0.149**	Supported	0.154**	Supported
	Gender -> Trading Frequency			0.014	Not Supported
	Age -> Trading Frequency			-0.088	Not Supported
	Trading Experience -> Trading Frequency			0.027	Not Supported
	Risk Aversion -> Trading Frequency			0.034	Not Supported
	R - square		0.171		0.176
	Adjusted R - Square		0.161		0.153
	SRMR		0.073		0.062

Source: Authors' Calculations; \*  $p < 0.01$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$

responsible of trading frequency. A weak predictive relevance  $Q^2$  Stone-Geisser's found to 0.10 (Geisser, 1975; Stone, 1974), whereas to generalise result value can be used is above 0.02 to show minimum predictive relevance (Richter et al., 2016).

### 5. Discussion and Managerial Implications

The study investigated investors used the diverse sources of information to make good investment decisions in trading (Shiva et al. 2020). The study found that Indian investors prefer to use financial advice as the first source of information to base their investment decisions. This research is in line with findings of Alexander et al. (1998), Loibl and Hira, (2006), Kaur, (2018), Kaur and Kaushik, (2016). Even in the construct of financial advice, the investors prefer the advice of financial advisors followed by the broker advice and match with the findings of Alexander et al. (1998, 2001), Calcagno and Monticone (2015) and Monti et al. (2014). The second most preferred source used by investors was personal sources and social groups, where family and friends were the most reliable options exercised to invest in mutual funds and were found with the studies of Bloch et al. (1986), Price and Feick, (1984), Gilly et al., (1998), Lulz and Reilly, (1973), Roselius, (1971). Lastly, investors preferred specialized media to base their investment decisions in mutual funds primarily on account of financial newspapers and financial reports published by the

recognized agencies, companies (Islamoglu et al., 2015; Jidong, 2007; Poshakwale and Mandal, 2014; Zhao and Ahmad, 2015; Chandra and Kumar, 2012; Wheale and Amin, 2003; Cen, Chu and He, 2019; Farooq and Hassan, 2019; Costa and Aziz, 2019). The findings of the study is that investors don't largely rely on social media platforms on the factors like fake news.

The study has significant managerial contributions to the Investment management companies, financial institutions to gain the attention of investors interested in mutual funds as the way they prefer. The mutual fund companies can take strategic decisions on advertising their financial products through proper training and development of financial advisors and brokers. The branch office of mutual funds can be channelized effectively to attract prospective investors to deposit their savings especially in Indian financial markets, where it is observed that nearly 25 percent of the savings are invested by the investors in financial products like mutual funds. The mutual fund companies and the regulatory bodies governing mutual funds in India like (SEBI) which stands for Securities and Exchange Board of India and (AMFI) which stands for Association of Mutual Funds in India to run investor awareness and guidance programs to enhancing knowledge of investors. These awareness programs can be effective to spread positive information through word-of-mouth communication in the

market, which this study also provides where family and friends are considered as reliable sources of information to invest in mutual funds.

## 6. LIMITATIONS OF THE STUDY

The present study is conducted in the National Capital Region of India and was comprised of 258 respondents by using purposive sampling method to conduct the study on investors engaged in mutual funds investment decisions in Indian financial markets. The results can be different in different zones of India where different personal characteristics are there with diverse decision making process. The predictive analytics of the study were also found to be low and thus require more constructs to cover the trading behaviour of investors. Although, the main focus of this study was to find only the critical sources of information responsible for investor behaviour, but there are other factors also in terms of fund factors, fees and types of funds, fund age, board size of asset management company, economic development of a nation and country's governance factors responsible for attracting investors from global markets into Indian financial sector. Thus, it is suggested to frame and appropriate structural model based upon these factors in addition to sources of information along with the control variables considered in this study.

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