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**OBJECTIVES** 

**HYPOTHESES** 

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**RESULTS & DISCUSSION** 

**FINDINGS** 

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CONCLUSIONS

SCOPE FOR FURTHER RESEARCH

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• Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, KurukshetraUniversity, Kurukshetra.

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#### A STUDY ON FACTORS AFFECTING THE RISK PERCEPTION OF MUTUAL FUND INVESTORS

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#### **ABSTRACT**

Desire for exceptionally high returns with minimal risk has been the foremost priority of a human being whenever he faces dilemma among investment avenues. Among the several financial avenues prevailing in India, mutual funds have been admitted as the preferred choice because being flexible security it suits the self-designed boundaries of investors. Intensified competition and involvement of private players in the race of mutual funds have forced professional managers to bring innovation in mutual funds. Thus, mutual funds industry has moved from offering a handful of schemes like equity, debt or balanced funds to liquid, money market, sector specific funds, index funds and gilt edged funds. Mutual funds comprise of the strongest band of Indian financial market but have not attracted much attention, despite their efforts to continuously design new schemes. Thus, the prime concern of this research is to identify how truly mutual fund investors appreciate this investment including identification of factors that fosters gap in investors' expectations from security returns and actual portfolio management by mutual funds.

#### **KEYWORDS**

mutual funds, risk perception, investment decision.

#### INTRODUCTION

utual funds are recognized as a mechanism of pooling together the investment of unsophisticated investors and turn it in the hands of professionally managed fund managers for consistent return along-with the capital appreciation. This is the reason that over the time Indian investors have started shifting towards mutual funds instead of traditional financial avenues. The active involvement of mutual funds in economic development can be witnessed from dominant presence of mutual funds in the world- wide capital and money market. During the last two decades mutual funds have entered into a world of exciting innovative products. These products are now tailor made to suit the specific needs of the investors.

Although mutual funds are coming up with many new diversified faces and as a result Indian mutual fund industry has been growing exceptionally well on the back of country's booming economy but still mutual funds need to create more lucrative solutions to suit investors' expectations. Risk and return are the two prime concerns for selecting any mutual fund, yet investors also consider sale charges, fund manager's reputation, fund history, management fees, clarity in disclosure, and recommendation from media before finalizing their investment decision. Investors mainly rely on advertised strategies of fund managers, while investing their fund and are tempted by the overpromising tendency of agents to attract more investors. So an organized and robust system is required that can restrict AMCs to deviate from their committed and advertised promises. Thus, for making mutual funds more successful, AMCs should endeavor to access the risk an individual investor is willing to take and make certain that the collection of assets fulfill their expectations.

Presence of rationality in human behavior always allows for acceptance of a minimum risk whereby Random Walk Hypothesis (RWH) suggests that markets have random movements which can not be predicted. Thus, crucial decision for mutual fund AMCs is to use the available information and translate that information using their skills so that investors' trust can be maintained. Indian capital market has shown a spurt in growth with financial innovations becoming a regular feature leading to change in investors' preferences for new fangled financial innovations. Mutual funds industry has already entered into the world of exciting innovations where AMCs are coming up with new financial products, aligning them with customer expectations. Although mutual funds are responding very rapidly in understanding the mystery of consumer's mind, yet they are following this race in their endeavor to differentiate their product and to respond to market volatility. Thus, the study has been conducted on selected mutual fund investors to examine the factors that affect their risk perception and ultimately finalize their decision regarding investment in mutual funds.

#### **RELATED WORK**

Risk attitude of individual investor have got growing attention from behavioral finance because investors differ in their investment decision with reference to their social base and opportunities available in the financial markets. Investors generally have a wide range of choice while making investment decision (Kida, Moreno, and Smith [2010]), and they adopt different parameters to finalize their investment decision that may involve risk but although more options may provide extensive choice to investors but simultaneously increases the complexity of investment decision that may lead to "decision paralysis" (lyenger and Lepper [2000]). Kahneman and Tversky [1979] proposed Prospect Theory, in which they explained investors' behavior on how they make choices in the decisions that involve risky alternatives. They concluded that people underweight outcomes that are merely probable in comparison with outcomes that are obtained with uncertainty and discard the component which is shared by all the alternatives under study. Although investment decisions involve a complex situation in which investors undergo a detail study on parameters that may suit their demographic behavior, as a general rule investors avoid extremities and follow a simple rule of thumb to adopt median opportunity in order to avoid risk (Simonson and Tversky [1992], Benartzi and Thaler [2002]). Investors' decision to select mutual funds as an investment decision because of their tendency to offer calculated risk along with professionally managed funds is supported by these studies. Existing literature provides that investors consider historical data as important determinants in investment decisions involving risky choices (Kane, Santini, and Aber [1990], Patel, Zeckhauser, and Hendrick [1992], De Bondt [1993]). Sjoberg [2000], however, provided that attitude, risk sensitivity, and specific fear are explanatory variables of constructive risk perception. Although investment decisions may involve a long range of parameters, the final level of risk assumed by any individual varies significantly with demographic features such as gender (Slovic [1996], Grable and Lytton [1998], Byrnes, Miller, and Schafer [1999], Olsen and Cox [2001]), age (Morin and Suarez [1983], Bodie, Merton, and Samuelson [1992], Palsson [1996], Heaton and Lucas [2000], Christiansen, Joensen, and Rangvid [2008]), income (Blume [1978], Cicchetti and Dubin [1994], Bernheim, Skinner and Weinberg [2001]), and marital status (Roszkowski, Snelbecker, and Leimberg [1993], Lazzarone [1996]). Studies by Haliassos and Bertaunt [1995], Schooley and Worden [1999], and Al-Azmi [2008] have also highlighted that educated investors are less risk averse than uneducated investors. The present study endeavors to examine the factors that affect the risk perception of individual investors. It was hypothesized that individual investors' social character may influence their risky choices.

#### **PROCEDURE**

A well- structured questionnaire was designed that seek to obtain information regarding investors' perception and risk ambiguity (N=400) within Punjab. Designed questionnaire was duly validated and further, its reliability was also measured for consistency. Reliability of questionnaire was found to be significant for perception gap ( $\alpha$ = 0.834), mutual funds working ( $\alpha$ = 0.8153) and risk ambiguity ( $\alpha$ = 0.801). The study primarily used exploratory research design for obtaining information on investors' risk perception and ambiguity regarding working of mutual fund AMCs. Demographic information of investors was collected and they were debriefed about the core objective of the study. Finally collected data was analyzed through SPSS 17.0 using appropriate statistical measures.

#### **RESULT AND DISCUSSION**

A well-structured questionnaire based survey was administered to experienced investors(N=400) of Punjab. As the endeavor was to comprise a sample of random investors, they were picked arbitrarily from the source list provided by the brokers. The participants of study comprise of investors from different age group who have already experienced the working of mutual funds by investing their savings with mutual funds. These included: aggressive investors ( $\leq 30$  years,  $n_1=170$ ), active investors ( $> 30 \leq 50$  years,  $n_2=165$ ) and reflexive investors (> 50 years,  $n_3=65$ ). Out of the complete data set collected majority of investors were male (77%) and females comprised of 23% of the total respondents. In addition to this it was revealed that majority of investors investing in mutual fund are married investors (n=279) and profession wise majority of respondents were found to be salaried individuals (n=263). All the respondents were provided with questionnaire that included 44 statements which were used to interpret the risk behavior of investors using SPSS 17.0 version. The respondents were required to answer their experiences with reference to disclosure practices and working philosophy of mutual funds on 5 point likert scale where range was constructed from strongly agree to strongly disagree. The complete detail of sample break down is presented in Table 1.

TABL	EI:	SAME	LE D	ETAILS
------	-----	------	------	--------

Particulars	N	%				
Age						
Aggressive investors (≤ 30 years)	170	43				
Active investors (> 30≤ 50 years)	165	41				
Reflexive investors (>50 years)	65	16				
Marital status						
Married	279	70				
Unmarried	121	30				
Income						
Basic investors (< 1.5 lakhs)	69	18				
Low tax payers (1.5-3 lakhs)	133	33				
High tax payer(3-5 lakhs)	161	40				
Wealthy investor (> 5lakhs)	37	9				
Profession						
Businessmen	75	19				
Salaried	263	66				
Professional	62	15				

The present research has been initiated with an objective to identify the factors responsible for creating gap in investors' risk perception. For this reason it was mandatory to find out the investment objectives with which investors invest in Mutual funds. Investment objective of any investor depends upon his future obligations, thus, demographic features of any individual are mainly responsible for determining the investment objective of investors. Analysis of data provides that 34.3% of respondents (n=137) explained tax saving as their investment objective, whereas 11.8% investors (n=47) provided that they invest to earn retirement benefits. Further, 15% investors (n=60) revealed contingency and fear of future uncertainty is what lures him towards investment, 22% investors (n=88) explained capital appreciation and 17% investors (n=68) described that they save for education and marriage of their children. These investment objectives can also be interpreted as among the total investors 66% investors were salaried class and their core preference to invest in mutual funds is because of the tax benefits offered by fund schemes.

TABLE II: INVESTMENT OBJECTIVES

	Tax saving	Retire	Contingency	Capital Appreciation	Children		Test Results
Group					education/		
					Marriage		
	N	N	N	N	N	Total	
	(%)	%	%	%	%		
Age							
Aggressive investors(< 30 Years)	66	12	22	56	14	170	Chi^2=77.106*
	(16.5)	(3)	(5.5)	(14)	(3.5)	(42.5)	(df:8)
Moderate investors	53	13	25	26	48	165	Linear association=0.062
(30-<50 years)	(13.3)	(3.3)	(6.3)	(6.5)	(12)	(41.3)	p=0.001
Conservative investors(> 50 Years)	18	22	13	6	6	65	
	(4.5)	(5.5)	(3.3)	(1.5)	(1.5)	(16.2)	
Total	137	47	60	88	68	400	
	(34.3)	(11.8)	(15)	(22)	(17)	(100)	

Table II provides the category wise summary of investment objectives of investors. An analysis of this table reveals that majority of aggressive investors have tax reduction or capital appreciation as main investment objective. Although, majority of moderate investors (n=53) opined tax saving as their investment objective, significant number of investors (n=48) from this category also described children education and marriage as their investment objective. In contrast, the main investment objective of conservative investors (n=22) is to get retirement benefits in the future. Next choice of even conservative investors is tax reduction which is similar to aggressive and moderate investors. Thus, the detail of investment objectives compiled in this table provides a clear insight on differences in investment objectives which they set in accordance of their age group. Chi^2 =77.106, (p=0.001) is significant which indicates a strong association between age and investment objective.

Perception of mutual fund investors has been judged for quality of services provided by mutual fund AMCs. Responses of investors were obtained on 5 point likert scale about their experience with mutual fund service providers both before investment and after investment. Average Perceived Score (APS) of investors and Average Experienced score (AES) are calculated to find out perception gap. Table III depicts the perceptual gap which investors actually experience once they invest in mutual funds. Actual experience of investors which they realized through difference in mutual fund services through their post-sale behavior has been measured using five parameters viz. transparency, responsiveness, communication, commitment and assurance. Negative results of perception gap on all these parameters highlight the level of dissatisfaction among investors which signify that investors believe mutual funds have different orientation towards customer services once the investment deal is finalized.

TABLE III: ANALYSIS OF PERCEPTUAL GAP						
Variable	Average Perceived score(APS)	Standard deviation	Average Experienced score(AES)	Standard deviation	Perceptual Gap	
Transparency	4.03	0.97	3.34	1.08	-0.69	
Responsiveness	4.20	0.88	3.15	1.02	-1.05	
Communication	4.3	0.834	2.99	1.02	-1.31	
Commitment	4.24	0.85	2.65	1.07	-1.59	
Assurance	4.24	0.83	2.42	1.04	-1.82	

Analysis of these score clearly show that for all the parameters of service quality of mutual funds AES< APS which highlights that investors are lured by highly promising results with extreme service quality offered by mutual fund AMCs, while their actual experience does not provide satisfactory results. These results explain that although with regard to transparency significant gap is not reflected with AES= 3.34, but significant gap which investors encounter are in term of assurance (AES=2.42), and commitment (AES= 2.65).

To understand the interrelationship among a large number of variables and to explain these variables in terms of their common underlying dimensions factor analysis has been applied. Factor analysis technique of data reduction has been applied with principal component analysis (Varimax rotation) and Kaiser Normalization. Factor analysis has resulted in six factors as presented in Table IV.

Factor analysis on investors' perception identifies six factors viz.

- 1. Risk management and confidence
- 2. Disclosure practices
- 3. Capability and Investor's expectations
- 4. Performance
- 5. Risk Insight
- Market Volatility

These six factors account for total variance of 59.64%. Risk management and Confidence factor that includes willingness to assume risk (0.553), AMCs ability to estimate risk (0.791), AMCs ability to control risk (0.740), credibility of mutual fund advertisements (0.573), investors' confidence in AR (0.821) and TR (0.833) from mutual funds emerges as an important factor and explains 20.876% variance. The results provide that investors have trust in the working of AMCs for risk estimation (M= 3.18) and risk control (M=3.14). Investors' also reveal their moderate degree of confidence in AR (M= 3.21) and TR (M= 3.30).

Disclosure practice has emerged as the second most important factor which accounts for total variance of 14.895%. The major elements of this factor are disclosure of fundamental risk in mutual funds (0.644), disclosure of entry/exit load (0.768), disclosure of portfolio content (0.739), disclosure of guaranteed returns (0.526), disclosure about maturity/liquidity (0.504), and disclosure about % portfolio allocation (0.702). Mean score ranging from 3.11 to 3.92 for all the disclosure practices reveals that investors do not agree that mutual funds disclose complete information to them.

#### TABLE IV: FACTOR ANALYSIS

Factor Name	Eigen Value	%of variance	Item Name	Item Loading	Mean	S.D
Risk management and Confidence	5.219	20.876	Level of risk	0.553	2.95	1.07
			Risk estimation by AMC	0.791	3.18	1.13
			Risk control by AMC	0.740	3.14	1.18
			Credibility of MF Claims	.573	2.83	0.92
			Confident about AR	.821	3.21	1.01
			Confident about TR	.833	3.30	1.04
	3.724	14.895	Disclosure or risk	0.644	3.70	1.09
Disclosure practices			Disclosure of load	0.768	3.11	1.21
			Disclosure of portfolio content	0.739	3.29	1.25
			Disclosure about guaranteed return	0.526	3.77	1.09
			Disclosure about maturity/liquidity	0.504	3.92	1.18
			Disclosure of % fund allocated	0.702	3.14	1.31
Capability & investor's expectations	1.882	7.527	ignore investor's objective	0.603	2.16	0.95
			Agents are not informed	0.773	2.10	0.94
			AMCs inability to protect investor's interest	0.755	2.19	0.96
			MF do not possess strong network	0.659	2.24	1.04
Performance	1.568	6.273	Actual return v/s expected return	0.785	1.87	0.88
			poor response to volatility	0.607	2.05	0.97
			High hidden cost	0.505	1.92	0.93
Risk Insight	1.423	5.691	Willingness to take risk	0.640	2.13	0.84
			Worried about risk	0.661	2.90	1.05
			Probability of lose in MF	0.758	2.90	0.968
100			Overall risk in MF	0.563	3.40	0.99
Market volatility	1.099	4.395	Uptrend in stock market and expected gain	0.714	4.02	0.90
,			Downtrend in stock market	0.642	3.81	1.09

Capability of mutual funds and investors' expectation has been recognized as third important factor that account for 7.527% variance. The major factors comprising this factor include mutual funds ignore investors' objective (0.603), agents are not informed (0.553), AMCs inability to protect investors' interest (0.755), mutual funds do not possess strong network (0.659). The mean scores of these variables ranging between 2.10 to 2.24 highlight that investors' agree with incompetence possessed by mutual funds.

Next factor that emerges from factor analysis is performance of mutual funds that account for 6.273% variance. The major elements of this factor are mutual funds do not deliver expected returns (0.659), mutual funds are poor to respond to market volatility (0.785), high hidden cost (0.505). Actual returns from mutual funds do not match with expected returns provides M=1.87 which reveals that investors agree that mutual funds do not perform professionally in order to deliver expected returns. Similarly, M=2.05 for mutual funds poor response to volatility expose the fact that investors believe in professional incompetence on the part of mutual funds. Last component of this factor has M=1.92, which provides that investors believe mutual funds have high hidden costs.

Risk Insight has emerged as another component of factor analysis that account for 5.691% variance. Major elements of this factor include willingness to take risk (0.640), worried about risk (0.661), probability of lose in mutual fund (0.758), overall risk in mutual fund (0.563). Mean scores of investors' responses on how

much worried they are about risk in mutual funds (M=2.90) and probability of lose in mutual fund (M=2.90) reveal moderate degree of apprehensions but M= 3.40 for overall risk in mutual funds provide that investors rate mutual funds as somewhat risky investment.

Last factor has been identified as market volatility which account for 4.395% of variance. This factor comprises of two components, i.e., gain in mutual funds due to uptrend in stock market (0.714) and loss in mutual funds due to downtrend in mutual funds (0.642). Mean score of these results reveal that investors are more optimistic about high returns from mutual funds due to uptrend in stock market (M= 4.02) whereas they also anticipate high risk from mutual funds due to downtrend in stock market (M=3.81).

#### CONCLUSION

In present study an attempt has been made to understand the risk perception of mutual funds' investors. The survey not only aimed at understanding investors' risk perception but also identified the factors that contribute to investors' expectations. The findings of the study have revealed that investors consider mutual funds as risky investment. Moreover, the factors that influence this decision as identified in the present study are: investors' age, knowledge, income, worries, probability to lose. It has also been revealed that investors admit mutual funds' performance is subject to trend in the stock market and fund managers do not possess specialized skills to protect them from loss during downtrend. Although investors have a different degree of risk tolerance for their investment but the factors that contribute to their risk perception include investors' confidence in the working style of mutual funds, performance of mutual funds AMCs in terms of their disclosure practices and risk insight.

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