

Vol 4 Issue 7 Jan 2015

ISSN No :2231-5063

International Multidisciplinary Research Journal

Golden Research Thoughts

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Welcome to GRT

RNI MAHMUL/2011/38595

ISSN No.2231-5063

Golden Research Thoughts Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board. Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

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Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.aygrt.isrj.org



INVESTMENT PATTERN FOR SEC A1 – A PILOT STUDY

Sarang S. Bhola¹ and ²Priyanka Zanvar,

¹Associate Professor, Karmaveer Bhaurao Patil Institute of Management Studies and Research, Satara.

²Research Scholar, Karmaveer Bhaurao Patil Institute of Management Studies and Research, Satara.

Abstract:—A behavioral finance perspective is made from behavioral and financial integration, believes that personality or behavior of an individual plays an important role in financial decision making. This article tries to identify the investment instruments preferred by the investors belongs to Socio economic class 'A1'. A Schedule was executed on 35 investors from Socio Economic class A1 in Pune city, Maharashtra state, India.

The study attempts to relate investment pattern with demographic profile, personality and behavior. The demographic profile includes age, Gender, occupation, income, educational qualification. To determine personality and psychographics of sample respondents SRI International's Value and Lifestyles Program (VALS) survey is conducted. Two different models are used to understand behavior of sample respondents. They are: Basic type of investor (BIT) Model and Bailard, Biehl, and Kaiser Five-Way (BB&K) Model. Findings of the study show that there are no differences in investment pattern when analyzed on the basis of Age, Education, Personality and Behavior by using BIT and BB&K Model.

Keywords: Investors Demographics, Investment Pattern, Investors behavior, Bailard, Biehl, and Kaiser (BB&K Model), VALs Survey.

1. INTRODUCTION

One can't predict the future. If one could, it would know precisely how much money need to have for the future. But one can't do this; therefore the need to save money for the future is vital. Saving money means keeping aside a part of income regularly in order to deal with unexpected expenses. And Investment means putting saved money in various products in order to earn returns and grow your wealth. There are various financial instruments available, which propose varying risks, returns, time periods and different combinations of various variables.

Every investor is having different needs and requirements. According to needs and requirements, they prefer different investment avenues. While taking investment decisions only saving are not important but investor's age, income, behavior and personality also play important role. Therefore, this study aims to understand investment pattern of individual investors on the basis of demographic, psychographic, behavioral factors and to understand investment pattern accordingly.

Management Problem

A study was conducted by (Sarang Bhola, Priyanka Zanvar, 2011) aimed to relate demographic profile and investment pattern of SEC A1. While studying the association between demographic variables and investment, insignificant relations were revealed. Demographic factors are not sole determinants for choice of investment avenues. These results serve a lead to explore in other variables which may help to understand investment pattern. Therefore researchers are keen to probe other variables which play important role in investment decision making.

Research conducted by (Barnewall, 1988) focused on the use of psychographics and behavior as the basis of determining an individual's financial service needs and tooks one closer to the truth from the customer's perspective

of need to build a marketing program.

Therefore, this study is a test to study investment pattern on the basis of demographic factors, psychographic factors and behavioral pattern.

Research Methodology:

Present research is inferential descriptive in nature set to test following two hypotheses.

Ho1 - There is no significant difference into investment pattern of individual investor on the magnitude of demographic profile. The demographic profile includes Age, Gender, Occupation, Income, Educational qualification.

Ho2- The different behavioral segment, personality have uniform investment pattern.

Structured Schedule was used to collect primary data. It was divided into five parts. The structures were data about demographic profile, investment pattern, psychographic dimensions, behavioral pattern and information about Socio Economic Class of sample investors.

Stratified convenient sampling technique was used to sample the population. A1 socio economic class was selected for study and from SEC A1, 35 samples from Pune were selected by researcher.

Collected data are classified using electronic spread sheet. For hypotheses testing the statistical tools like ANOVA, Independent sample ‘t’ test, Mann Whitent U test , Kruskal- Wallis test, were used.

Data Analysis and Discussion:

Data of respondents was collected on decided investment instruments i.e. NSC, PPF, Insurance, Bank Deposits, Gold, Shars. Debentures, Bonds, etc. The data is analysed in relation to gender, income group, Age, educational qualification, Personality and behavior of respondents.

Table 1
Descriptive Statistics of Samples

Following table depicts profile of samples taken for study. The tabulation is given with an objective to have overview of samples profile.

S.N	Profile Particulars	Variables	Frequency	Percentage
1	Gender	Male	24	68.57
		Female	11	31.43
2	Age	23-29	3	8.57
		29-35	12	34.29
		35-41	8	22.86
		41-47	9	25.71
		47-53	3	8.57
3	Occupation	Service	35	100.00
4	Education	Graduation/PG General	26	74.29
		Graduation/PG Professional	9	25.71
5	Income	20000-40000	9	25.71
		40000-60000	10	28.57
		60000-100000	16	45.71

Source: (Compiled by Researcher)

Above table depicts profile of samples taken for this study. 35 samples were taken for study. Majority of respondents i.e 69% were male Entire ranges of age groups were given representation in research. The age groups between 29–35 were found to participate in research in more numbers. Majority of respondents i.e.74% respondents are graduate. All income groups were taken for study and it was found that around 45% of respondents were from income group 60000-100000.

Following table depicts investment preferred by sample respondents. The, mean, rank S.D and variance is calculated.

Table 2
Investment Made in Instrument by Samples

Data was collected with the help of Likert scale. On the basis of likert scale data, mean, rank, standard deviation and variance were calculated.

Investment Instruments preferred by sample respondents

S.N	Investment	Mean	Rank	S.D	Variance
1	NSC	4.57	5	0.92	0.84
2	PPF	4.86	1	0.36	0.13
3	Bank Fixed Deposits	4.83	3	0.45	0.21
4	PO Schemes	3.43	12	1.11	1.24
5	Government Securities	4.03	6	1.01	1.03
6	Insurance	4.83	3	0.38	0.15
7	Mutual Funds	4.86	1	0.36	0.13
8	Equity Share Market	3.54	11	1.34	1.79
9	Commodity Market	2.49	15	1.15	1.32
10	NBFC Schemes	1.57	17	0.78	0.61
11	ELSS	2.09	16	1.42	2.02
12	Debentures	1.43	18	0.84	0.71
13	Bonds	3.97	7	1.42	2.03
14	Real Estate	3.40	13	1.38	1.89
15	Gold/ Silver	3.91	8	0.98	0.96
16	Chit Funds	1.11	20	0.47	0.22
17	Company Deposits	1.09	21	0.28	0.08
18	Shares	3.23	14	1.79	3.20
19	Forex Market	1.23	19	0.69	0.48
20	Systematic Investment Plan	3.77	10	1.42	2.01
21	ULIP	3.89	9	1.25	1.57

Source: (Field Data)

It reveals from above table that Mutual fund and PPF with mean value 4.86 are most preferred investment avenues followed by Bank Deposits and Insurance with mean value 4.83. Less preferred investment instruments are Chit Funds and Company deposits with mean value 1.11 and 1.09 respectively.

Hypothesis 1

H01: There is no significant difference into investment pattern of individual investor on the magnitude of demographic profile. The demographic profile includes Age, Gender, Occupation, Income, Educational qualification.

To test the hypotheses Independent sample ‘t’ test, Mann-Whitney Test were used for two variables and for more than two variables ANOVA and Kruskal Wallis Test were used.

Gender and Investment pattern

Hypothesis related to Gender is tested with the help of Independent sample ‘t’ test Following table shows investment in instruments gender wise by sample investors.

Table: 3
Independent Samples Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Gender	Male	24	2.8729	.28047	.05725
	Female	11	2.5518	.22467	.06774

Source: Compiled by researcher

Table: 4
Independent Samples 't' test

Following table shows the independent samples 't' Test between investment pattern and Gender of sample respondents.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Gender	Equal variances assumed	.823	.371	3.330	33	.002	.32110	.09642	.12493	.51726
	Equal variances not assumed			3.620	24.052	.001	.32110	.08869	.13807	.50413

Source: Compiled by researcher

The 't' score calculated to be 3.33 with 33 df. 'p' value is 0.002 at 95% level of significance, the test is significant hence null hypothesis is rejected and alternative hypothesis that there is significant difference into investment pattern of individual investor on the basis of Gender. It means that there is significant difference into investment pattern among male and Female.

Above hypothesis is cross verified with non parametric test. Mann-Whitney Test signed rank test has brought in use.

Table 5
Mann-Whitney Test between investment pattern and Gender of sample respondents

Following table shows the Mann-Whitney Test between investment pattern and Gender of sample respondents

Ranks				
		N	Mean Rank	Sum of Ranks
Gender	Male	24	21.29	511.00
	Female	11	10.82	119.00
	Total	35		

Source: Compiled by researcher

Table 6
Test Statistics

Following table shows the test statistics between investment pattern and Gender of sample respondents

	Gender
Mann-Whitney U	53.000
Wilcoxon W	119.000
Z	-2.810
Asymp. Sig. (2-tailed)	.005
Exact Sig. [2*(1-tailed Sig.)]	.004 ^a

Source: Compiled by researcher

Mann-Whitney U Test shows the 'z' score calculated to be -2.810 and 'p' value is 0.005 at 95% level of significance,

the test is significant hence null hypothesis is rejected and alternative hypothesis that there is significant difference in investment pattern among male and female is accepted.

The results of independent sample 't' test and Mann-Whitney U are similar since the 'p' value is significant directs to reject null hypothesis.

Age and Investment Pattern

Hypothesis related to Age is tested with the help of Independent ANOVA.

Following table shows investment in instruments Age group wise by sample investors.

Table 7
Investment in instruments Age Group wise by sample investors.

Following table shows investment in instruments Age group wise by sample investors.

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
23-29	3	2.9137	.41587	.24010	1.8806	3.9468	2.56	3.37
29-35	12	2.8826	.26154	.07550	2.7164	3.0488	2.50	3.26
35-41	8	2.5819	.26168	.09252	2.3631	2.8006	2.26	2.85
41-47	9	2.7861	.33000	.11000	2.5325	3.0398	2.22	3.15
47-53	3	2.5803	.15011	.08667	2.2074	2.9532	2.41	2.67
Total	35	2.7658	.30199	.05105	2.6621	2.8695	2.22	3.37

Source: (Compiled by Researcher)

It reveals from above table that the mean investment is low in the Age Groups 47-53 and the investment is high in the age group 23-29. The investment is found done by samples from all age Groups.

To test the relation of investment done by different age groups ANOVA is done as follows:

Investment as per Age					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	0.607	4	.152	1.825	.150
Within Groups	2.494	30	.083		
Total	3.101	34			

Source: (Compiled by Researcher)

ANOVA model is not significant at 95% confidence level. The detailed analysis is as follows:
Following table details ANOVA testing on Age groups of entire samples taken for study.

Table- 8
Investment in instruments Age Group wise by sample investors ANOVA

Following table shows investment in instruments Age group wise by sample investors.

Multiple Comparisons						
Age group wise Investment by Samples.						
Tukey HSD						
(I) Age group	(J) Age group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
23-29	29-35	.03108	.18611	1.000	-.5088	.5709
	35-41	.33179	.19520	.449	-.2344	.8980
	41-47	.12756	.19222	.963	-.4300	.6851
	47-53	.33333	.23542	.623	-.3495	1.0162
29-35	23-29	-.03108	.18611	1.000	-.5709	.5088
	35-41	.30071	.13160	.178	-.0810	.6824
	41-47	.09647	.12714	.940	-.2723	.4653
	47-53	.30225	.18611	.494	-.2376	.8421
35-41	23-29	-.33179	.19520	.449	-.8980	.2344
	29-35	-.30071	.13160	.178	-.6824	.0810
	41-47	-.20424	.14010	.597	-.6106	.2021
	47-53	.00154	.19520	1.000	-.5646	.5677
41-47	23-29	-.12756	.19222	.963	-.6851	.4300
	29-35	-.09647	.12714	.940	-.4653	.2723
	35-41	.20424	.14010	.597	-.2021	.6106
	47-53	.20578	.19222	.820	-.3518	.7633
47-53	23-29	-.33333	.23542	.623	-1.0162	.3495
	29-35	-.30225	.18611	.494	-.8421	.2376
	35-41	-.00154	.19520	1.000	-.5677	.5646
	41-47	-.20578	.19222	.820	-.7633	.3518

Source: (Compiled by Researcher)

Above table reveals that the investment done by different age groups is not significantly different. It is concluded that at different age groups and the investment in the instrument done is almost same. To verify the results of ANOVA, Kruskal Wallis Test is also performed.

Table 9
Kruskal Wallis Test for Consistency in Investment Pattern Between Age Groups

Following table shows Kruskal Wallis Test for Consistency in Investment Pattern Between Age Groups.

Ranks			
	Age Groups	N	Mean Rank
Age	23-29	3	21.83
	29-35	12	21.67
	35-41	8	12.69
	41-47	9	19.00
	47-53	3	10.67
	Total	35	

Source: (Compiled by Researcher)

Test Statistics ^{a,b}	
	Age
Chi-Square	5.742
Df	4
Asymp. Sig.	.219

Source: (Compiled by Researcher)

The test indicates that the results are not significant. It means that there is no significant difference between the investments made by different age groups. Hence, **the null hypothesis is accepted** that there is no significant difference into investment pattern of individual investor on the magnitude of Age.

Education and Investment Pattern

Hypothesis related to education is tested with the help of Independent sample ‘ t ’ test

Table: 10
Independent Samples Statistics

Following table shows investment in instruments education wise by sample investors

		N	Mean	Std. Deviation	Std. Error Mean
Education	Graduate	26	2.7642	.24673	.04839
	Post Graduate	9	2.7944	.44213	.14738

Source: Compiled by researcher

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
Education	Equal variances assumed	10.512	.003	-.255	33	.800	-.03021	.11826	-.27082	.21039
	Equal variances not assumed			-.195	9.781	.850	-.03021	.15512	-.37688	.31646

Source: (Compiled by researcher)

The ‘ t ’ score calculated to be -0.255 with 33 df. ‘ p ’ value is 0.800 at 95% level of significance, hence **null hypothesis is accepted** that there is no significant difference into investment pattern of individual investor on the basis of Education.

Above hypothesis supported with non parametric test. Mann-Whitney Test signed rank test has brought in use.

Mann-Whitney Test between investment pattern and Education of sample respondents

**Table 11
Mann-Whitney Test**

Following table shows the Mann-Whitney Test between investment pattern and Education of sample respondents

Ranks				
		N	Mean Rank	Sum of Ranks
Education	Graduate	26	17.62	458.00
	Post Graduate	9	19.11	172.00
	Total	35		

Source: Compiled by researcher

**Table 12
Test Statistics**

Following table shows the test statistics between investment pattern and educational qualification of sample respondents.

Test Statistics ^b	
	Education
Mann-Whitney U	107.000
Wilcoxon W	458.000
Z	-.378
Asymp. Sig. (2-tailed)	.706
Exact Sig. [2*(1-tailed Sig.)]	.725 ^a

Source: Compiled by researcher

Mann-Whitney U Test shows the 'z' score calculated to be -0.378 and 'p' value is 0.706 at 95% level of significance, hence **null hypothesis is accepted** that there is no significant difference in investment pattern among sample respondents on the basis of Education.

Income and Investment pattern

Hypothesis related to Income is tested with the help of Independent ANOVA. Following table shows investment in instruments Age group wise by sample investors.

**Table 13
Investment in instruments income Group wise by sample investors.**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
20000-40000	9	2.5222	.23188	.07729	2.3440	2.7005	2.22	2.81
40000-60000	10	2.6590	.24461	.07735	2.4840	2.8340	2.33	3.00
60000-100000	16	2.9831	.21920	.05480	2.8663	3.0999	2.70	3.37
Total	35	2.7720	.30155	.05097	2.6684	2.8756	2.22	3.37

Source: (Compiled by Researcher)

It reveals from above table that the mean investment is low in the income group 20000-40000 and the investment is high in the income group 60000-100000. The investment is found done by samples from all age Groups.

To find the relation of investment done between two income groups ANOVA is done as follows:

ANOVA					
Income					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.402	2	.701	13.282	.000
Within Groups	1.689	32	.053		
Total	3.092	34			

Source: (Compiled by Researcher)
 ANOVA model is significant at 95% confident level. The detailed analysis is as follows:
 Following table details ANOVA testing on income groups of entire samples taken for study.

Table- 14
Investment in instruments Income Group wise by sample investors ANOVA

Following table shows investment in instruments income group wise by sample investors.

Multiple Comparisons						
Income						
Tukey HSD						
(I) Income	(J) income	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
20000-40000	40000-60000	-.13678	.10557	.408	-.3962	.1226
	60000-100000	-.46090*	.09574	.000	-.6962	-.2256
40000-60000	20000-40000	.13678	.10557	.408	-.1226	.3962
	60000-100000	-.32413*	.09262	.004	-.5517	-.0965
60000-100000	20000-40000	.46090*	.09574	.000	.2256	.6962
	40000-60000	.32413*	.09262	.004	.0965	.5517

Source: (Compiled by Researcher)
 Above table reveals that investment is not similar with all income groups. It is significantly different in between the income group 20000-40000 and 60000-100000 and the income group 40000-60000 with the income group 60000-100000.

In nutshell the significant difference found in between lower and upper income groups. To verify the results of ANOVA, Kruskal Wallis Test is also performed.

Table 15
Kruskal Wallis Test for Consistency in Investment Pattern between Income Groups

Following table shows Kruskal Wallis Test for Consistency in Investment Pattern between Income Groups

Ranks			
	Income	N	Mean Rank
Income	20000-40000	9	9.83
	40000-60000	10	14.20
	60000-100000	16	24.97
	Total	35	

Source: (Compiled by Researcher)

Test Statistics ^{a,b}	
	Income
Chi-Square	14.525
Df	2
Asymp. Sig.	.001

Source: (Compiled by Researcher)

The test indicates that the results are significant. It means that there is significant difference between the investments made by respondents from different income groups.

Hence, the **null hypothesis is rejected** and Alternative hypothesis is accepted that there is significant difference into investment pattern of individual investor on the magnitude of Income.

Hypothesis 2

H02: The different behavioral segment, personality have uniform investment pattern.

Personality and Investment pattern

To determine personality and psychographics of sample respondents SRI International's Value and Lifestyles Program (VALS) survey is conducted. Hypothesis related to personality is tested with the help of ANOVA.

Table 16
Investment in instruments personality wise by sample investors.

Following table shows investment in instruments personality wise by sample investors.

Descriptives								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Innovator	6	2.9817	.19712	.08047	2.7748	3.1885	2.77	3.26
Achiever	11	2.7373	.30143	.09089	2.5348	2.9398	2.26	3.15
Experiencer	10	2.7810	.37802	.11954	2.5106	3.0514	2.26	3.37
Thinker	8	2.6512	.20986	.07420	2.4758	2.8267	2.22	2.85
Total	35	2.7720	.30155	.05097	2.6684	2.8756	2.22	3.37

Source: (Compiled by Researcher)

It reveals from above table that the mean investment is low in the personality Thinker and the investment is high in the Innovators.

To test the relation of investment done by different personality types ANOVA is done as follows:

Personality					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.394	3	.131	1.511	.231
Within Groups	2.697	31	.087		
Total	3.092	34			

Source: (Compiled by Researcher)

ANOVA model is not significant at 95% confident level. The detailed analysis is as follows:
Following table details ANOVA testing on personality types of entire samples taken for study.

Table- 17
Investment in instruments personality type wise by sample investors ANOVA

Following table shows investment in instruments personality type wise by sample investors.

Multiple Comparisons							
Personality							
Tukey HSD							
(I)	VAR00002	(J) VAR00002	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Innovator		Achiever	.24439	.14970	.376	-.1619	.6507
		Experiencer	.20067	.15232	.559	-.2127	.6141
		Thinker	.33042	.15930	.184	-.1019	.7628
Achiever		Innovator	-.24439	.14970	.376	-.6507	.1619
		Experiencer	-.04373	.12888	.986	-.3935	.3061
		Thinker	.08602	.13706	.922	-.2860	.4580
Experiencer		Innovator	-.20067	.15232	.559	-.6141	.2127
		Achiever	.04373	.12888	.986	-.3061	.3935
		Thinker	.12975	.13992	.790	-.2500	.5095
Thinker		Innovator	-.33042	.15930	.184	-.7628	.1019
		Achiever	-.08602	.13706	.922	-.4580	.2860
		Experiencer	-.12975	.13992	.790	-.5095	.2500

Source: (Compiled by Researcher)

Above table reveals that the investment done by different personality types is not significantly different. It is concluded that personality of sample investor and the investment in the instrument done is almost same.

To verify the results of ANOVA, Kruskal Wallis Test is also performed.

Table 18
Kruskal Wallis Test for Consistency in Investment Pattern between personality types.

Following table shows Kruskal Wallis Test for Consistency in Investment Pattern between personality types.

Ranks			
		N	Mean Rank
Personality	Innovator	6	25.25
	Achiever	11	17.14
	Experiencer	10	17.40
	Thinker	8	14.50
	Total	35	

Source: (Compiled by Researcher)

Test Statistics^{a,b}	
	Personality
Chi-Square	4.058
Df	3
Asymp. Sig.	.255

Source: (Compiled by Researcher)

The test indicates that the results are not significant. It means that there is no significant difference between the investments made by different personalities.

Hence, the **null hypothesis is accepted** that the investors with similar personality has similar investment pattern.

Behavior and Investment pattern

Two different models are used to understand behavior of sample respondents. They are: Basic type of investor (BIT) Model and Bailard, Biehl, and Kaiser Five-Way (BB&K) Model.

Both models are used to test hypotheses. Hypothesis related to Behavior type by using BIT Model is tested with the help of Independent sample ‘t’ test

**Table: 19
Independent Sample T-Test**

Following table shows investment in instruments Behavior type- BIT Model wise by sample investors.

Group Statistics					
		N	Mean	Std. Deviation	Std. Error Mean
BIT	Accumulator	16	2.8562	.32979	.08245
	Independent	19	2.7011	.26365	.06048

Source: (Compiled by Researcher)

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
BIT	Equal variances assumed	.905	.348	1.548	33	.131	.15520	.10028	-.04883	.35923
	Equal variances not assumed			1.518	28.590	.140	.15520	.10225	-.05407	.36446

Source: (Compiled by Researcher)

The ‘t’ score calculated to be 1.548 with 33 df. ‘p’ value is 0.131 at 95% level of significance, hence **null hypothesis is accepted** that different behavioral segment have uniform investment pattern.. Above hypothesis supported with non parametric test. Mann-Whitney Test signed rank test has brought in use.

Mann-Whitney Test between investment pattern and Behavior type- BIT Model of sample respondents

Table 20
Mann-Whitney Test

Following table shows the Mann-Whitney Test between investment pattern and Behavior type- BIT Model of sample respondents.

Ranks				
		N	Mean Rank	Sum of Ranks
BIT	Accumulator	16	20.34	325.50
	Independent	19	16.03	304.50
	Total	35		

Source: Compiled by researcher

Table 21
Test Statistics

Following table shows the test statistics between investment pattern and Behavior type- BIT Model of sample respondents

Test Statistics ^b	
	BIT
Mann-Whitney U	114.500
Wilcoxon W	304.500
Z	-1.243
Asymp. Sig. (2-tailed)	.214
Exact Sig. [2*(1-tailed Sig.)]	.217 ^a

Source: Compiled by researcher

Mann-Whitney U Test shows the 'z' score calculated to be -1.243 and 'p' value is 0.214 at 95% level of significance, hence **null hypothesis is accepted** that different behavioral segment have uniform investment pattern..

The results of independent sample 't' test and Mann-Whitney U are similar since the 'p' value is not significant directs to accept null hypothesis.

Behavior and Investment pattern

Hypothesis related to Behavior type by using BB&K Model is tested with the help of ANOVA.

Following table shows investment in instruments Behavior type- BB&K Model wise by sample investors.

Table 22
Investment in instruments behavioral type -BB&K Model wise by sample investors.

Descriptives								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Adventurer	6	2.9817	.19712	.08047	2.7748	3.1885	2.77	3.26
Individualistic	10	2.7210	.26627	.08420	2.5305	2.9115	2.22	3.26
Guardian	8	2.7263	.38378	.13569	2.4054	3.0471	2.26	3.37
Celebrity	8	2.7963	.28188	.09966	2.5606	3.0319	2.33	3.15
Sraight Arrow	3	2.5800	.35384	.20429	1.7010	3.4590	2.26	2.96
Total	35	2.7720	.30155	.05097	2.6684	2.8756	2.22	3.37

Source: (Compiled by Researcher)

t reveals from above table that the mean investment is low in the behavior type Straight Arrow and the investment is high in the Adventurers.

To test the relation of investment done by different behavioral types ANOVA is done as follows:

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.422	4	.105	1.185	.337
Within Groups	2.670	30	.089		
Total	3.092	34			

Source: (Compiled by Researcher)

ANOVA model is not significant at 95% confident level. The detailed analysis is as follows:
Following table details ANOVA testing on behavior type- BB&K Model of entire samples taken for study.

Table- 23
Investment in instruments BB&K Model- behavioral type wise by sample investors ANOVA

Following table shows investment in instruments BB&K Model- behavioral type wise by sample investors

Comparisons						
Multiple Comparison						
Tukey HSD						
(I) VAR00006	(J) VAR00006	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Adventurer	Individualistic	.26067	.15405	.454	-.1862	.7075
	Guardian	.25542	.16111	.518	-.2119	.7227
	Celebrity	.18542	.16111	.778	-.2819	.6527
	Sraight Arrow	.40167	.21095	.337	-.2102	1.0135
Individualistic	Adventurer	-.26067	.15405	.454	-.7075	.1862
	Guardian	-.00525	.14151	1.000	-.4157	.4052
	Celebrity	-.07525	.14151	.983	-.4857	.3352
	Straight Arrow	.14100	.19638	.951	-.4286	.7106
Guardian	Adventurer	-.25542	.16111	.518	-.7227	.2119
	Individualistic	.00525	.14151	1.000	-.4052	.4157
	Celebrity	-.07000	.14916	.990	-.5027	.3627
	Straight Arrow	.14625	.20197	.949	-.4396	.7321
Celebrity	Adventurer	-.18542	.16111	.778	-.6527	.2819
	Individualistic	.07525	.14151	.983	-.3352	.4857
	Guardian	.07000	.14916	.990	-.3627	.5027
	Straight Arrow	.21625	.20197	.820	-.3696	.8021
Straight Arrow	Adventurer	-.40167	.21095	.337	-1.0135	.2102
	Individualistic	-.14100	.19638	.951	-.7106	.4286
	Guardian	-.14625	.20197	.949	-.7321	.4396
	Celebrity	-.21625	.20197	.820	-.8021	.3696

Source: (Compiled by Researcher)

bove table reveals that the investment done by different behavior types is not significantly different. It is concluded that behavior by using BB&K Model of sample investor and the investment in the instrument done is almost same.

To verify the results of ANOVA, Kruskal Wallis Test is also performed.

Table 24
Kruskal Wallis Test for Consistency in Investment Pattern Between behavioral types- BB&K Model.

Ranks			
		N	Mean Rank
BB&K	Adventurer	6	25.25
	Individualistic	10	16.45
	Guardian	8	15.69
	Celebrity	8	18.94
	Straight Arrow	3	12.33
	Total	35	

Source: (Compiled by Researcher)

Test Statistics ^{a,b}	
	BB&K
Chi-Square	4.635
Df	4
Asymp. Sig.	.327

Source: (Compiled by Researcher)

The test indicates that the results are not significant. It means that there is no significant difference between the investments made by different types of behavior- BB&K Model
Hence, **the null hypothesis is accepted** that different behavioral segment have uniform investment pattern.

FINDINGS:

Findings of the study are as below:

- 1.Mutual fund and PPF followed Bank Deposits and Insurance are most preferred investment avenues, As they have been ranked 1st and 2nd respectively. Less Investment instruments like Chit Funds , Company deposits are hardly preferred by respondents,
- 2.There are no differences in investment pattern when analyzed on the basis of Age, Education, Personality and Behavior by using BIT and BB&K Model.
- 3.Researchers found differences in investment pattern when analyzed on the basis of gender and income.

CONCLUSIONS:

The investment choice depends on and is affected by the various factors such as gender, age, income, education, occupation personality, behavior. The Present study has important implications for investment managers as it has come out with certain interesting facts of an individual investor. The individual investor still prefers to invest in financial products which give risk free returns. This confirms that Indian investors even if they are of high income, well educated, salaried, independent are conservative investors prefer to play safe. Females are considered to be less risk-averse hence they prefer keeping their money in bank fixed deposits while males prefer to invest their savings in risky investment avenues.

Above study reveals that investors opted for various investments avenues with different level of risk taking capacity with regard to the choice of investment. People who are risk taker and adventurous tend to invest their money in shares and real estate. Option like government bond and Bank Fixed Deposits are for people who are less risk averse and want fixes cash flow over the year. While taking investment decisions, investors should review the risk associated with investment, obligation it fulfils, time horizon it serves, mode of realization, aspect of taxation add on features if any and the like.

Also, the results of this study could help the Wealth Managers in the Wealth Management process and in building a successful Wealth Management relationship. The analysis of how an investment choice gets affected by the demographic variables, behavior and personality could help the financial advisors to give better suggestions to their clients.

References:

- 1.M.Barnewall, MacGrunder (1988). Examining the Psychological Traits of Passive and Active Investors. Journal of Financial Planning.
- 2.Bhola, S. S, Zanvar P.S. (2013). A Study of Investment Pattern of Socio Economic Class 'A1' . Vishwakarma Business Review , 1 (1).



Priyanka Zanvar,

Research Scholar, Karmaveer Bhaurao Patil Institute of Management Studies and Research, Satara.

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