

**INVESTMENT BEHAVIOR OF SALARIED CLASS  
INDIVIDUAL INVESTORS TOWARDS PENSION PLANS FOR  
RETIREMENT PLANNING- A COMPARATIVE STUDY OF  
NCR AND NON-NCR OF HARYANA STATE**

Thesis Submitted for the Award of the Degree of

**DOCTOR OF PHILOSOPHY**

**in**

**COMMERCE**

**By**

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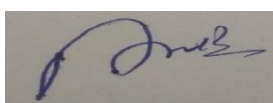


**LOVELY PROFESSIONAL UNIVERSITY, PUNJAB  
2022**

## DECLARATION

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I, hereby declared that the presented work in the thesis entitled **“Investment Behavior of Salaried Class Individual Investors towards Pension Plans for Retirement Planning- A Comparative Study of NCR and Non-NCR of Haryana State”** in fulfilment of degree of **Doctor of Philosophy (Ph. D.)** is outcome of research work carried out by me under the supervision Dr. Mahesh Kumar Sarva, working as professor, in the Mittal School of Business of Lovely Professional University, Punjab, India. In keeping with general practice of reporting scientific observations, due acknowledgements have been made whenever work described here has been based on findings of another investigator. This work has not been submitted in part or full to any other University or Institute for the award of any degree.



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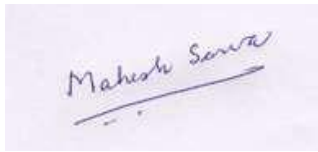
Lovely Professional University,

Punjab, India

## CERTIFICATE

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This is to certify that the work reported in the Ph. D. thesis entitled **“Investment Behavior of Salaried Class Individual Investors towards Pension Plans for Retirement Planning- A Comparative Study of NCR and Non-NCR of Haryana State”** submitted in fulfillment of the requirement for the reward of degree of **Doctor of Philosophy (Ph.D.)** in the Mittal School of Business, Lovely Professional University, Phagwara, Punjab is a research work carried out by Anita Taneja, (41800149), is bonafide record of his/her original work carried out under my supervision and that no part of thesis has been submitted for any other degree, diploma or equivalent course.

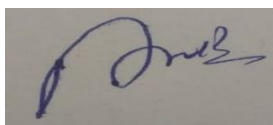
A handwritten signature in blue ink that reads "Mahesh Sarva". The signature is written in a cursive style and is underlined with a single horizontal line.

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## ACKNOWLEDGEMENT

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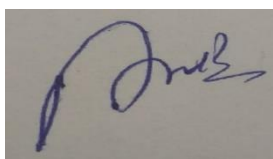


Anita Taneja

## DEDICATION

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This Ph.D. thesis work is dedicated to my father late. Sh. Raj Kumar Taneja. He had strong belief that I should complete my doctorate degree. His trust in me and constant encouragement made me to attempt genuine research. It is his blessings that bestowed on me, for which today I could able to complete an authentic research work.



Anita Taneja

## LIST OF TABLES

| <b>Table No.</b> | <b>Title</b>                                                                                |
|------------------|---------------------------------------------------------------------------------------------|
| 1.1              | Elderly Population in India                                                                 |
| 1.2              | Age wise Classification of Indian Population                                                |
| 1.3              | Life Expectancy at 60 years of Indian Population                                            |
| 4.1.1            | Categorization of Respondents in accordance with Gender                                     |
| 4.1.2            | Categorization of Respondents in accordance with Age                                        |
| 4.1.3            | Categorization of Respondents in accordance with Marital Status                             |
| 4.1.4            | Categorization of Respondents in accordance with Educational Qualification                  |
| 4.1.5            | Categorization of Respondents in accordance with Nature of Employment                       |
| 4.1.6            | Categorization of Respondents in accordance with Nature of Job Work                         |
| 4.1.7            | Categorization of Respondents in accordance with Job Experience                             |
| 4.1.8            | Categorization of Respondents in accordance with Annual Income                              |
| 4.1.9            | Categorization of Respondents in accordance with Type of family                             |
| 4.1.10           | Categorization of Respondents in accordance with Number of Family Members                   |
| 4.1.11           | Categorization of Respondents in accordance with Number of Dependent Family Members         |
| 4.2.1            | Test of Reliability for Social Security Conditions                                          |
| 4.2.2            | Number of Persons in Family save for Old Age other than Salaried Class Individual Investors |
| 4.2.3            | Percentage to save for old age from Annual Income                                           |
| 4.2.4            | Social Security Arrangements for the old age                                                |
| 4.2.5            | Test of KMO and Bartlett's Test for Social Security Conditions                              |
| 4.2.6            | Factor Loading and Variance Explained for Investment regarding Social Security Conditions   |

|        |                                                                                                                                              |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------|
| 4.2.7  | t- test for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of gender                           |
| 4.2.8  | ANOVA for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of Age                                |
| 4.2.9  | t- test for difference in Social Security Condition of Salaried Class Individual Investors on the basis of Marital Status                    |
| 4.2.10 | ANOVA for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of Educational Qualification          |
| 4.2.11 | t- test Statistics for difference in Social Security Condition of Salaried Class Individual Investors on the basis of Nature of Employment   |
| 4.2.12 | ANOVA for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of Nature of Job Work                 |
| 4.2.13 | ANOVA for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of Job Experience                     |
| 4.2.14 | ANOVA for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of Annual Income                      |
| 4.2.15 | t- test for difference in Social Security Condition of Salaried Class Individual Investors on the basis of Type of Family                    |
| 4.2.16 | ANOVA for difference in Social Security Conditions of Salaried Class Individual Investors Number of Family Members                           |
| 4.2.17 | ANOVA for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of Number of Dependent Family Members |
| 4.3.1  | Test of Reliability for the Perception towards Investment in Pension Plan                                                                    |
| 4.3.2  | Thinking about Retirement                                                                                                                    |
| 4.3.3  | Think to Retire at Desired Age                                                                                                               |
| 4.3.4  | Test of KMO Value and Bartlett's Test for Perception towards Investment in Pension Plan                                                      |

|        |                                                                                                                                  |
|--------|----------------------------------------------------------------------------------------------------------------------------------|
| 4.3.5  | Factor Loading and Variance Explained for Perception towards Investment in Pension Plan                                          |
| 4.3.6  | t- test difference in Perception of Salaried Class Individual Investors on the basis of Gender                                   |
| 4.3.7  | ANOVA for difference in Perception of Salaried Class Individual Investors on the basis of Age                                    |
| 4.3.8  | t- test for the difference in Perception of Salaried Individual Investors on the basis of Marital Status                         |
| 4.3.9  | ANOVA for the difference in Perception of Salaried Class Individual Investors on the basis of Educational Qualification          |
| 4.3.10 | t- test for the difference in Perception of Salaried Class Individual Investors on the basis of Nature of Employment             |
| 4.3.11 | ANOVA for the difference in Perception of Salaried Class Individual Investors on the basis of Nature of Job work                 |
| 4.3.12 | ANOVA for the difference in Perception of Salaried Class Individual Investors on the basis of Job Experience                     |
| 4.3.13 | ANOVA for the difference in Perception of Salaried Class Individual Investors on the basis of Annual Income                      |
| 4.3.14 | t- test for the difference in Perception of Salaried Class Individual Investors on the basis of Type of Family                   |
| 4.3.15 | ANOVA for the difference in Perception of Salaried Class Individual Investors on the basis of Number of Family Members           |
| 4.3.16 | ANOVA for the difference in Perception of Salaried Class Individual Investors on the basis of Number of Dependent Family Members |
| 4.4.1  | Test of Reliability for Factor Influencing Investment in Pension Plans                                                           |
| 4.4.2  | Advice for the Selection of Pension Plan for Investment                                                                          |
| 4.4.3  | Test of KMO value and Bartlett's Test Factor Influencing towards the Investment in Pension Plans                                 |

|        |                                                                                                                                  |
|--------|----------------------------------------------------------------------------------------------------------------------------------|
| 4.4.4  | Factor Loading and Variance Explained for Factor Influencing Investment in Pension Plans                                         |
| 4.4.5  | t- test for the difference in Factors Influencing of Salaried Class Individual Investors on the basis of Gender                  |
| 4.4.6  | ANOVA for the difference in Factors Influencing of Salaried Class Individual Investors on the basis of Age                       |
| 4.4.7  | t- test for the difference in Factors Influencing of Salaried Class Individual Investors on the basis of Marital Status          |
| 4.4.8  | ANOVA for the difference in Factors Influencing of Salaried Class Individual Investors on the basis of Educational Qualification |
| 4.4.9  | t- test for the difference in Factors Influencing of Salaried Class Individual Investors on the basis of Nature of Employment    |
| 4.4.10 | ANOVA for the difference in Factors Influencing of Salaried Class Individual Investors on the basis of Nature of Job Work        |
| 4.4.11 | ANOVA for the difference in Factors Influencing of Salaried Class Individual Investors on the basis of Job Experience            |
| 4.4.12 | ANOVA for the difference in Factors Influencing of Salaried Class Individual Investors on the basis of Annual Income             |
| 4.4.13 | t-test for the difference in Factors Influencing of Salaried Class Individual Investors on the basis of Type of Family           |
| 4.4.14 | ANOVA for the difference in Factors Influencing of Salaried Class Individual Investors on the basis of Number of Family members  |
| 4.4.15 | ANOVA for the difference in Factors Influencing of Salaried Class Individual Investors on the basis of Dependent Family Members  |
| 4.5.1  | Test of Reliability for Satisfaction Level towards the Investment in Pension Plans                                               |
| 4.5.2  | Understanding about the Benefits of Pension Plans by Respondents                                                                 |
| 4.5.3  | Test of KMO value and Bartlett's Test for Satisfaction Level towards the Investment in Pension Plans                             |

|        |                                                                                                                                               |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 4.5.4  | Factor Loading and Variance Explained Satisfaction Level towards the Investment in Pension Plans                                              |
| 4.5.5  | t- test for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Gender                                    |
| 4.5.6  | ANOVA for difference in Statistics for to Satisfaction level of Salaried Class Individual Investors on the basis of Age                       |
| 4.5.7  | t- test for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Marital Status                            |
| 4.5.8  | ANOVA for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Educational Qualification                   |
| 4.5.9  | t- test for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Nature of Employment                      |
| 4.5.10 | ANOVA for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Nature of Job work                          |
| 4.5.11 | ANOVA for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Job Experience                              |
| 4.5.12 | ANOVA for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Annual Income                               |
| 4.5.13 | t- test for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Type of Family                            |
| 4.5.14 | ANOVA for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Number of Family Members                    |
| 4.5.15 | ANOVA for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Number of Dependent Family Members          |
| 4.6.1  | Number of Respondents of NCR and Non-NCR area of Haryana State                                                                                |
| 4.6.2  | t- test for difference between the Social Security Conditions of Salaried Class Individual Investors of NCR and Non-NCR area of Haryana state |
| 4.6.3  | t- test for difference in the Perception of Salaried Class Individual                                                                         |

|       |                                                                                                                                                                                                       |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Investors towards the Investment in Pension Plans for Retirement Planning of NCR and Non-NCR area of Haryana state                                                                                    |
| 4.6.4 | t- test for difference between the Factors Influencing Salaried Class Individual Investors towards Investment in Pension Plans for Retirement Planning of NCR and Non-NCR area of Haryana state       |
| 4.6.5 | t- test for difference between the Satisfaction Level of Salaried Class Individual Investors towards the Investment in Pension Plans for Retirement Planning of NCR and Non-NCR area of Haryana state |

## LIST OF FIGURES

| <b>Figure No.</b> | <b>Title</b>                                                                                   |
|-------------------|------------------------------------------------------------------------------------------------|
| 1.1               | Age wise Classification of Indian Population                                                   |
| 1.2               | Life Expectancy at 60 years of Indian Population                                               |
| 1.3               | Dependency Ratio in India                                                                      |
| 1.4               | Fertility Rate in India                                                                        |
| 1.5               | Retirement Planning Process                                                                    |
| 3.1               | Research Model                                                                                 |
| 4.1.1             | Categorization of Respondents in accordance with Gender                                        |
| 4.1.2             | Categorization of Respondents in accordance with Age                                           |
| 4.1.3             | Categorization of Respondents in accordance with Marital Status                                |
| 4.1.4             | Categorization of Respondents in accordance with Educational Qualification                     |
| 4.1.5             | Categorization of Respondents in accordance with Nature of Employment                          |
| 4.1.6             | Categorization of Respondents in accordance with Nature of Job Work                            |
| 4.1.7             | Categorization of Respondents in accordance with Job Experience                                |
| 4.1.8             | Categorization of Respondents in accordance with Annual Income                                 |
| 4.1.9             | Categorization of Respondents in accordance with Type of Family                                |
| 4.1.10            | Categorization of Respondents in accordance with Number of Family Members                      |
| 4.1.11            | Categorization of Respondents in accordance with Number of Dependent Family Members            |
| 4.2.1             | Anti-Image Correlation Matrices for Social Security Conditions                                 |
| 4.3.1             | Anti-Image Correlation Matrices for Perception Investment in Pension Plan                      |
| 4.4.1             | Anti-Image Correlation Matrices for Factor Influencing Investment in Pension Plans             |
| 4.5.1             | Anti-Image Correlation Matrices for the Satisfaction Level towards Investment in Pension Plans |
| 4.6.1             | Number of Respondents of NCR and Non-NCR area of Haryana State                                 |

## LIST OF APPENDICES

| Sr. No. | Appendices | Item                          | Particular                                                                                                   |
|---------|------------|-------------------------------|--------------------------------------------------------------------------------------------------------------|
| 1       | Appendix 1 | Questionnaire                 | Survey Instruments                                                                                           |
| 2       | Appendix 2 | List of Abbreviations         | Abbreviations                                                                                                |
| 3       | Appendix 3 | List of Publications          | Contains articles published in journals, book chapters published                                             |
| 4       | Appendix 4 | Journal Article 1             | Factor Influencing the Investors' Behaviour towards the Retirement Planning and Selection of Pension Plans   |
|         |            | Journal Article 2             | Social Security Status and Retirement Planning of Salaried Class Investors: A Study of Haryana State         |
|         |            | Journal Article 3             | A Study of Retirement Planning Behaviour of Individuals                                                      |
|         |            | Edited Book Chapter Article 4 | National Pension Scheme in India                                                                             |
|         |            | Edited Book Chapter Article 5 | Investment in Pension Plans: Relationship of Age and Information Sources                                     |
|         |            | Edited Book Chapter Article 6 | Gender Differentiation: Factors Discouraging the Investment in Pension Plans for the Retirement Preparation. |
|         |            | Edited Book Chapter Article 7 | Role of Financial Literacy in Retirement Planning in India                                                   |
| 5       | Appendix 5 | List of Conferences           | Contains proceedings of conferences where papers were presented                                              |

|   |            |                   |                                                                                                               |
|---|------------|-------------------|---------------------------------------------------------------------------------------------------------------|
| 6 | Appendix 6 | Conference 1      | Salaried Class Investors Satisfaction Level towards the Investment in Pension Plans: A Study of Haryana State |
|   |            | Conference 2      | Managing Retirement: Perception of Salaried Class Investors towards the Pension Plans                         |
|   |            | Conference 3      | Retirement Planning: Issues and Challenges                                                                    |
|   |            | Conference 4      | Investment in Pension Plans: Relationship of Age and Information Sources                                      |
|   |            | Conference 5      | Indian Pension System: Need, Challenges and Reforms                                                           |
| 7 | Appendix 7 | List of Workshops | Contains workshops attended                                                                                   |
| 8 | Appendix 8 | Workshop 1        | Research Methodology                                                                                          |
|   |            | Workshop 2        | Research Methodology                                                                                          |
|   |            | Workshop 3        | Research Tools: Google Scholar, Zotero and Publons                                                            |
|   |            | Workshop 4        | Financial Literacy and Awareness for Professionals                                                            |
|   |            | Workshop 5        | Retirement Benefits and National Pension System (NPS)                                                         |

## TABLE OF CONTENTS

| Sr.<br>No. | Title                                                                                                                                                                                                                                                                                                                                                                      | Page No.    |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>1</b>   | <b>Chapter 1: Introduction</b>                                                                                                                                                                                                                                                                                                                                             | <b>1-24</b> |
| 1.1        | Social Security                                                                                                                                                                                                                                                                                                                                                            | 1-2         |
| 1.2        | Social Security in India                                                                                                                                                                                                                                                                                                                                                   | 2-3         |
| 1.3        | Need of Sound Pension System in India <ul style="list-style-type: none"> <li>• Rapid Ageing in India</li> <li>• Rise in life expectancy</li> <li>• Increase in Dependency Ratio</li> <li>• Decline in Fertility Rate</li> <li>• Lower Family Support</li> </ul>                                                                                                            | 3-7         |
| 1.4        | Social Security through Pension System in India <ul style="list-style-type: none"> <li>• Civil Service Scheme</li> <li>• Employee's Provident Fund Organization Schemes (FPFO)</li> <li>• Public Provident Fund</li> <li>• National Pension Scheme</li> <li>• National Old Age Pension Scheme</li> <li>• Occupational Pension Schemes</li> <li>• Micro Pensions</li> </ul> | 8-15        |
| 1.5        | Types of Pension Schemes <ul style="list-style-type: none"> <li>• Defined Benefited Pension Scheme</li> <li>• Defined Contribution Pension Scheme</li> </ul>                                                                                                                                                                                                               | 16-17       |
| 1.6        | Retirement Planning                                                                                                                                                                                                                                                                                                                                                        | 17-18       |
| 1.7        | Retirement Planning Process <ul style="list-style-type: none"> <li>• Decide the Income after Retirement</li> </ul>                                                                                                                                                                                                                                                         | 18-20       |

|          |                                                                                                                                                                                                                                                                                                                                                                                                     |              |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
|          | <ul style="list-style-type: none"> <li>• Calculate the Total Receivable</li> <li>• Selection of a Retirement Plan</li> <li>• Start Investing</li> </ul>                                                                                                                                                                                                                                             |              |
| 1.8      | Benefits of Retirement Planning <ul style="list-style-type: none"> <li>• Financial Readiness for Emergencies</li> <li>• Beating the Inflation</li> <li>• Tax Savings</li> <li>• Peace of Mind and Stress-free Life</li> <li>• Cost Savings</li> <li>• Legacy Opportunities</li> <li>• Financial Independence/Zero Family Burden</li> </ul>                                                          | 20-21        |
| 1.9      | Challenges in Retirement Planning in India <ul style="list-style-type: none"> <li>• Health Care Cost</li> <li>• Longevity</li> <li>• Less Participation of Private Sector</li> <li>• Lack of Financial Knowledge</li> <li>• Role of Professional Advisor</li> <li>• Changing Social System</li> <li>• Inflation</li> <li>• Financial Fraud</li> <li>• Mindset</li> <li>• Debt Management</li> </ul> | 21-24        |
| 1.10     | Need of the Study                                                                                                                                                                                                                                                                                                                                                                                   | 24           |
| <b>2</b> | <b>Chapter 2: Review of Literature</b>                                                                                                                                                                                                                                                                                                                                                              | <b>25-59</b> |
| 2.1      | Social Security and Pension System                                                                                                                                                                                                                                                                                                                                                                  | 25-30        |
| 2.2      | Perception towards Investment in Pension Plans                                                                                                                                                                                                                                                                                                                                                      | 30-36        |

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| 2.3      | Factors Influencing Investment in Pension Plans                                                                                                                                                                                                                                                                                                                                                                                  | 36-42        |
| 2.4      | Satisfaction Level for Investment in Pension Plans                                                                                                                                                                                                                                                                                                                                                                               | 42-46        |
| 2.5      | Demographical Factors and Retirement Planning Behaviour                                                                                                                                                                                                                                                                                                                                                                          | 46-53        |
| 2.6      | Contribution of Researchers in the Specific Area of Social Security, Pension System and Retirement Planning                                                                                                                                                                                                                                                                                                                      | 54-57        |
| 2.7      | Summary of Literature                                                                                                                                                                                                                                                                                                                                                                                                            | 57-58        |
| 2.8      | Research Gap                                                                                                                                                                                                                                                                                                                                                                                                                     | 59           |
| <b>3</b> | <b>Chapter 3: Research Methodology</b>                                                                                                                                                                                                                                                                                                                                                                                           | <b>60-74</b> |
| 3.1      | Introduction                                                                                                                                                                                                                                                                                                                                                                                                                     | 60           |
| 3.2      | Objectives of the Study                                                                                                                                                                                                                                                                                                                                                                                                          | 60-61        |
| 3.3      | Research Model                                                                                                                                                                                                                                                                                                                                                                                                                   | 61           |
| 3.4      | Hypothesis                                                                                                                                                                                                                                                                                                                                                                                                                       | 62-66        |
| 3.5      | Research Design<br>3.5.1 Population of the Study<br>3.5.2 Type of data used for the Study<br>3.5.3 Sampling<br>3.5.4 Sampling Method<br>3.5.5 Sampling Element<br>3.5.6 Sampling Area<br>3.5.7 Sample Size<br>3.5.8 Data Collection<br>3.5.9 Questionnaire Design<br>3.5.10 Data Analyze Techniques<br><ul style="list-style-type: none"> <li>• Reliability</li> <li>• Validity</li> <li>• Percentage</li> <li>• Mean</li> </ul> | 67-74        |

|          |                                                                                                                                                                                                                                                                                                                               |                |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
|          | <ul style="list-style-type: none"> <li>• Factor Analysis</li> <li>• t-test</li> <li>• One Way ANOVA</li> </ul>                                                                                                                                                                                                                |                |
| 3.6      | Pilot Study                                                                                                                                                                                                                                                                                                                   | 74             |
| <b>4</b> | <b>Chapter 4: Analysis and Interpretation of Data</b>                                                                                                                                                                                                                                                                         | <b>75-188</b>  |
| 4.1      | Socio-Economic Demographical Profile of the Respondents                                                                                                                                                                                                                                                                       | 75-89          |
| 4.2      | Analysis of Social Security Conditions for Retirement                                                                                                                                                                                                                                                                         | 90-109         |
| 4.3      | Analysis of Perception towards Investment in Pension Plans for Retirement                                                                                                                                                                                                                                                     | 110-132        |
| 4.4      | Analysis of Factors Influencing Investment in Pension Plans for Retirement                                                                                                                                                                                                                                                    | 133-152        |
| 4.5      | Analysis of Satisfaction Level towards Investment in Pension Plans for Retirement                                                                                                                                                                                                                                             | 153-170        |
| 4.6      | Comparison of the investment behaviour of salaried class individual investors of NCR and Non-NCR area of Haryana state through analysing social security conditions, perception towards investment in pension plans, factors influencing investment in pension plans, satisfaction level towards investment in pension plans. | 171-176        |
| 4.7      | Result of Hypothesis Testing                                                                                                                                                                                                                                                                                                  | 177-188        |
| <b>5</b> | <b>Chapter 5: Findings, Conclusion and Limitations</b>                                                                                                                                                                                                                                                                        | <b>189-207</b> |
| 5.1      | Introduction                                                                                                                                                                                                                                                                                                                  | 189-190        |
| 5.2      | Findings:<br>5.2.1 Findings of Socio-Economic Demographical Profile of the Respondents<br>5.2.2 Findings of objective no. 1: Social Security Conditions for Retirement<br>5.2.3 Findings of Objective no. 2: Perception towards                                                                                               | 190-199        |

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                        |                |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
|     | Investment in Pension Plans for Retirement Planning<br>5.2.4 Findings of objective no. 3: Factors Influencing<br>Investment in Pension Plans for Retirement Planning<br>5.2.5 Findings of objective no. 4: Satisfaction Level towards<br>the Investment in Pension Plans for Retirement Planning<br>5.2.6 Findings of Comparison of the Investment Behavior of<br>Salaried Class Investors of NCR and non-NCR area of<br>Haryana state |                |
| 5.3 | Conclusion                                                                                                                                                                                                                                                                                                                                                                                                                             | 199-202        |
| 5.4 | Implications/Outcomes/Suggestions of the Study<br>5.4.1 Theoretical Implications<br>5.4.2 Managerial Implications                                                                                                                                                                                                                                                                                                                      | 202-206        |
| 5.5 | Scope for further Study                                                                                                                                                                                                                                                                                                                                                                                                                | 206-207        |
| 5.6 | Limitations of the Study                                                                                                                                                                                                                                                                                                                                                                                                               | 207            |
|     | <b>References</b>                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>208-225</b> |

**“Investment Behavior of Salaried Class Individual Investors towards  
Pension Plans for Retirement Planning- A Comparative Study of  
NCR and Non-NCR of Haryana State”**

**ABSTRACT**

**Introduction:**

The conception of social security was developed in America in the early 1930s. Social security includes the social and economic assistance provided by the society, family, other organizations and social groups to an individual from the birth time to death. Hence, it becomes a big challenge for every country to provide the social security to its public. “In broader sense social security is becoming an important concern for countries as the benefits of employees after retirement has significant impact on the overall social and economic activities of nation” (Mengesha, 2015). Every country has its own social security system to secure its citizens financially and socially. India also has its own system to impart social security. In India, the social security problem has been a matter of serious attention since 1927. India is a developing country which has no particular sound arrangements of social security to protect the elderly population of the country. In India, there is a high rate of poverty and unemployment, so protection of elderly people is necessary and pension is a way forward to protect the old age population. In India, British Government started the pension system in 1871 with the enforcement of the Indian Pension Act, 1871. It was started by the British Government to facilitate their native employees to meet their expenses of living after retirement. With the consideration of inflation, British government increased the pension in 1921 to compensate the rise in rates after the First World War. After that the government decided to give dearness allowance to cope up with the inflation. The Government of India made further amendments in provisions in 1935. These amendments were made to facilitate the whole working population of public sector with retirement benefits. After Independence, many amendments have also been made to protect the workers of private sector. Now, major retirement benefits are available in India like medical benefits, Provident Fund, Gratuity and

pension schemes. Following are some schemes in India which provide social and financial security to the elderly population:

- Civil Service Scheme
- Employee's Provident Fund Organization Schemes (EPFO)
- Public Provident Fund
- National Pension Scheme
- National Old Age Pension Scheme
- Occupational Pension Schemes
- Micro Pension

People have to think of their own selves for the old age security and invest in these pension plans. They have to start planning for retirement in time. The purpose of retirement planning is quite different from financial planning, as the objective of retirement planning is not only to get the financial objective but the people also wish to live healthy and happy life in old age. Retirement planning is a process to think about future when a worker retires from employment after working for a long tenure. Retirement planning makes life more comfortable and all depends upon the personal and financial attitude and prospect of an individual towards the retirement life. The saving and investment decisions for old age depend upon the demographics and financial knowledge of an individual. To make the retirement decisions successfully, it is necessary that the people have the proper knowledge regarding the retirement programs and plans provided by the employer, government and various pension fund managers. Without adequate and accurate information about the pension plans and retirement plans, people may take the inappropriate and inaccurate decisions and make investment in wrong or insignificant investment options, thereby not being able to get the retirement objectives. Financial literacy is must so that people may be able to know about when to retire from current employment, when to take lump sum payment from pension plan or annuitized the pension and how to manage the investment for retirement. Nowadays government and employers make changes in the pension policies which encourage the people to plan for retirement by own self

through investment in private pension plans. So, financial knowledge is important to take sound financial decisions to achieve the retirement objectives.

### **Need of the Study:**

India is an emerging economy. It continuously fights with poverty, inequalities and corruption. It struggles for growth, reduction in inequalities, corruption removal and maintain the living standard of the population. Many people wish to sustain the similar living standard at retirement age as they had in working life. Retirement is indeed a very important stage of a human being's life because in retirement life a person has no source of regular income and depends upon the children and family members. In present era, it is not sure if the family will provide assistance at retirement stage because children migrate from native place for jobs. The retirement gap will further extend because of rise in life expectancy. So, self-efficacy is necessary for satisfactory life after retirement. It is essential for the government to impart social and economic security to the elderly population of the nation. "It is also estimated that in 2050, Indian old age population will be increased up to 316759 thousand and it will be 17 percentage of the total population of India" (CRISIL, 2019). As such government has to reform pension system and it is also mandatory for the population to improve the saving habits and increase their wealth by saving in various pension plans which is called retirement planning. Retirement planning is very important for every generation and knowledge of various pension plans is very useful in the preparation for retirement. Therefore, this study is an effort to increase the social understanding about planning for retirement in advance and to put suggestions on the basis of results which would definitely be useful for society to solve the problem of financial insecurity in life after retirement.

### **Objectives of the Study:**

The primary objective of this study is to know:

“Investment Behavior of Salaried class Individual Investors in Pension Plans for Retirement Planning- A Comparative Study of NCR and Non-NCR of Haryana State”

To achieve the primary objective, the following objectives are framed in this study: -

- To identify the social security conditions for retirement.
- To ascertain the perception towards investment in pension plans for retirement planning.
- To examine the factors influencing investment in pension plans for retirement planning.
- To analyze the satisfaction level towards investment in pension plans for retirement planning.

After assessing the investment behavior of the salaried class individual investors in pension plans for retirement planning, then investment behavior towards the pension plans have also been assessed on comparative dimension between the salaried class investors of NCR and Non-NCR area.

### **Hypothesis:**

#### **Hypothesis 1:**

Social security conditions of the salaried class individual investors are significantly different based on socio-economic demographics like gender, age, marital status, educational qualification, nature of employment, nature of job work, job experience, annual income, type of family, number of family members, number of dependent family members.

#### **Hypothesis 2:**

Perception of the salaried class individual investors towards investment in pension plans is significantly different based on socio-economic demographics like gender, age, marital status, educational qualification, nature of employment, nature of job work, job experience, annual income, type of family, number of family members, number of dependent family members.

#### **Hypothesis 3:**

Factors influencing to the salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on socio-economic demographics like gender, age, marital status, educational qualification,

nature of employment, nature of job work, job experience, annual income, type of family, number of family members, number of dependent family members.

**Hypothesis 4:**

Satisfaction level of the salaried class individual investors towards investment in pension plans is significantly different based on socio-economic demographics like gender, age, marital status, educational qualification, nature of employment, nature of job work, job experience, annual income, type of family, number of family members, number of dependent family members.

**Hypothesis 5:**

Investment behavior including social security conditions, perception, factors influencing and satisfaction level towards investment in pension plans of the salaried class individual investors of NCR and Non-NCR area of Haryana state is significantly different.

**Research Design:**

This study has been done to find investment behavior towards investment in pension plans of the salaried class individual investors of NCR and Non-NCR area of Haryana state through the comparative dimension. To fulfil this purpose, data was collected from the salaried class individual investors. So, purposive sampling method was used which is non-probability sampling method. Quota sampling method was used to compare the results of investors' behavior. 50% quota was fixed for NCR and 50% quota was fixed for Non-NCR area's respondents of Haryana state. Sample size was 500. Primary and secondary, both types of data had been used in this study. Primary data collected through using the structured questionnaire. Various published sources such as newspapers, journals, books, websites, and articles of previous researches were used for the collection of secondary data. Questionnaire consisted of five parts. First part included the demographical profile of respondents; second part included social security conditions; third part included perception of respondents towards investment in pension plans; fourth part consisted of factors influencing investment in pension plans and fifth part included the satisfaction level of respondents towards investment in pension plans. Questions were set up on the 5 point "Likert Scale" and

some questions were also designed in dichotomous form i.e. “Yes” or “No”. 1 = No and 2 = Yes. After the collection of data, percentage, mean, factor analysis, t-test, ANOVA statistical tests were used to analyse the data.

## **Conclusion**

This study concluded that the salaried class investors have a strong social security condition as they have good and sound property to secure their old age. Their family members are also supportive in their retirement life and they are willing to spend their old age with their spouse and children. For investment to secure the old age, traditional investment avenues are more preferable than modern avenues till now and males do more investment than females. Investors between the age group of 35-45 years are more risk averse than the investors who belong to the below 25 years age group. It means that the young generation has started investing money now in modern avenues. Unmarried people do more investment in pension plans than married ones. Investors who have secondary education do more investment in traditional avenues than other categories of educated people. Government sector employees do more investment for old age than private sector employees. People who are doing job other than academic, professional, managerial and technical, do more investment. People who have the job experience between the 15-20 years do more investment than others and those who have the income between 15-20 lakhs do more investment in traditional investment avenues and those who have the income upto 5 lakhs do more investment in modern investment avenues. This indicates that people with high level of income are investing in traditional avenues which consists of the real estate and precious metals which creates a large amount of money, whereas people who have low level of income invest in modern investment avenues. Investors belonging to the nuclear family do more investment in traditional avenues and investors who belong to the joint family do more investment in modern avenues. Investors who have two family members and two dependent family members do more investment for future than other categories of investors, which indicates that they have enough money to save for future after consumption. Investment in pension plans is more preferred by males who are unmarried and under the age of 25 years, are posted in government

services have the job experience upto 10 years with annual income upto 5 lakhs and belong to joint family with two dependent family members.

In the case of perception, majority of employees are willing to retire at 60 years. It means that they wish to work for long life and earn more money. They start thinking about the retirement but only to some extent and they are not yet serious about the retirement. Perception towards investment in pension plans is found on the basis of facilities and services given by the pension fund providers, safety and security of money and retirement life, and return on investment. Females prefer the facilities and services which are given by the pension fund providers and safety of retirement life and their dependents. However males prefer those pension plans which provide better return on investment. Investors who belong to the age of above 55 years have high level of perception towards the pension plans and consider the service of pension plan providers and security of retirement life and dependents. Unmarried investors prefer the safety and security of invested money and retirement life through saving in pension plans. On the other hand, married investors have the perception that pension plans provide good return on investment and good services one provided by the pension plan providers, postgraduate people highly prefer to the investment in pension plans. Investors belonging to joint family consider that pension plans provide better services and the investors belonging to the nuclear family consider that pension plans provide good return and safety of money. Investors with job experience between 15-20 years consider that pension plans provide better services and investors with job experience above 25 years consider that pension plans provide good return and safety of money. Safety and security of invested money and retirement life are more important parameters to invest money in pension plans on the basis of gender, marital status, nature of employment, nature of job work, job experience, annual income, type of family, number of family members and number of dependent family members which indicates employees give preference to the pension plans for the safety and security of invested money and save their retirement life by investing money in pension plans.

Investment in pension plans is affected by the advice of variety of persons like professional advisors, colleagues, friends, relatives, print media and electronic media.

All the investors take advice and use information which is available through various information sources which make their decision better and they are able to invest money in good pension plans. To take the decision for investment in pension plans is also influenced by many factors which may be motivational factors or discouraging factors. Males are more interested in investing money in pension plans than females, married are more interested than unmarried; investors belonging to the nuclear families are more interested to invest in pension plans in comparison of those living in joint family. Investors belonging to the age group between 45-55 years, who have the income between 15-20 lakhs, prefer to invest in pension plans. Investors who are in managerial jobs are most influenced to do investment in pension plans. Investors having two family members are more influenced than other investors. Investors having one dependent family member mostly prefer to invest in pension plans. Fear of fraud influence the salaried class individual investor negatively, but after the removal of these discouraging factors people do investment in pension plans. Financial awareness should be spread among the investors for clear understanding about the financial terms and they should be made aware of the importance of taking a good investment decision.

In terms of satisfaction level, approximately 50% investors of pension plans are able to say that they can understand about the benefits available by investing the money in pension plans. Males are more satisfied than females; married and unmarried both are satisfied in financial terms but satisfaction level towards the services provided by pension fund providers is more for married than unmarried investors, government employees are more satisfied than private employees; investors on managerial posts are more satisfied than other categories, investors having the job experience of 15-20 years are more satisfied for services than other investors; investors of nuclear family are more satisfied than those of joint family for services; investors having two family members, and investors having three dependent family members are more satisfied with services. On the basis of age, investors belonging to the age between 35-45 years have more financial satisfaction and investors belonging to 45-55 years age group are more satisfied with services provided by pension fund providers. Investors of pension plans having annual income between 15-20 lakhs are more financially satisfied, but the investors having the annual income above 20 lakhs are more satisfied with

services provided by the pension fund providers. These results suggest that government has to start the pension plans which will give more benefits in financial terms for the early retirement planners and service factor is the prime factor for the middle age group investors in pension plans to attract the people for investment in pension plans.

As stated by the findings of investment behavior of the salaried class individual investors for investment in pension plans of NCR and Non-NCR area of Haryana state through social security conditions, perception towards investment in pension plans, factors influencing investment in pension plans and the satisfaction level for investment in pension plans, it is concluded that investors of NCR area are more interested in investing in traditional avenues and investors of Non-NCR area are doing more investment in modern avenues. Investors of NCR area prefer to invest in pension plans for the services provided by the pension fund providers and good return on investment but the investors of Non-NCR area prefer to invest in pension plans due to safety and security of invested money and retirement life. Investors of NCR area are more influenced to invest in pension plans than the investors of Non-NCR area. Investors of NCR area are more satisfied by financial terms and Non-NCR area investors are more satisfied with the services provided by the pension fund providers. The pension fund providers should start the different pension plans which fulfil the requirements of the investors of a particular area. So, government needs to spread more financial knowledge in the Non-NCR areas by conducting the financial awareness programs by preparing the pension plans as per their requirements and by making them feel that their money will be secure by investing in pension plans and that their retirement life will be safe.

# **CHAPTER 1**

## **INTRODUCTION**

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**“The higher use of capital is not to make more money, but to make money do more for the betterment of life”**

**-Henry Ford**

### **1.1 Social Security:**

The conception of social security was developed in America in the early 1930s. Social security is also named as “Social Protection” and Social Services”. In earlier days, public thought that they can survive only on the basis of social security when they will retire and have no source of income. Social security includes the social and economic assistance provided by the society, family, other organizations and social groups to an individual from the time of birth to death and it all depends up on the life expectancy. Nowadays life expectancy is on increasing trend. With increase in life expectancy, people shape the life in two situations. In first situation, people spend their life with good health and economical security. Second situation is when people live in poverty with lack of resources, and ill health. In many developed countries, people are able to enjoy good health and all this depends upon the support system provided to them. So, they consumed everything what they earn and do not need to save for the future. But in developing countries, people live with lack of resources and ill health. Hence, it becomes a big challenge for every country to provide the social security to its citizens. “In broader sense social security is becoming an important concern for countries as the benefits of employees after retirement have significant impact on the overall social and economic activities of action” (Mengesha, 2015). Every country has its own social security system to secure its citizens financially and socially. But there is lack to provide social security in spite a lot of improvements in social security. So, it is necessary to provide them social security. “Social security provides the protection to the persons in the case of disability, poverty, unemployment and in post-retirement age” (Jha & Bhattacharyya, 2010). It is used specifically in the matter of providing financial security to the needy persons because small earners are

not able to survive by their own ability. So, it is cause of concern for the government to intervene for providing the social security to its citizens as the government may believe that the individual has not so much knowledge of his own self-interest. It is an extremely difficult economic situation for the developing and poor countries. Social security is provided by the way of family allowance, insurance, food facility, medical facility, transportation, unemployment allowance and allowance for old age survival to them and their family members. Thus, government provides the protection by developing some special plans and schemes through various agencies. For the progress of social security schemes, the support of society and the collusion of employer and employee is must. The main purpose of these schemes is providing benefits to the employees which includes the benefits provided by an employer to its employees through improving their working conditions and increase the standard of living. Employees feel more secure in financial terms and their working efficiency goes increasing. Employer provides the financial protection to the organized sector of society and government control the employers for providing the benefits to employees. Government should make plans and schemes for the unorganized sector laying on more emphasis. Because poor and needy people have no regular source of income in old age. There is one positive effect that it can support the people to make demand and indirectly it can help in the upliftment of economy with the “social and financial security” or “social and financial protection” and affects the social economic conditions of an individual. They feel more protected in the terms of socially and economically in society.

## **1.2 Social Security in India:**

The social security problem has been a matter of attention since 1927. Workmen's Compensation Act, 1923 was also came in the force to give the social security to the industrial workers. Lumpsum amount was paid under the Compensation Act but it was not satisfactory because workers spent the amount of compensation as they received. In 1931, Royal Commission on Labour recommended the Sickness Insurance Program. In 1948, the State Insurance Act was passed which gives the medical services in the case of employee's injury or death and maternity benefits as well as cash benefits are also provided. After that a separate Old Age and Survivor

Saving Legislation came into force in 1952 under the Employees Provident Fund Act. The first social security program came into force on February 24, 1952. The constitution of India includes the provisions of social security. On the recommendations of these provisions, central government and state governments have to make many provisions to protect the citizens of the nation. Social and economic protection of each citizen is the prime duty of the government by providing adequate sources of living, equal distribution of wealth, equal pay for equal work, employment opportunities for everyone, making appropriate provision to maintain healthy environment for workers, ensuring participation of workers in management, promoting education among all the sections of society. The Indian social security system includes a variety of schemes and plans which are controlled by the central government. But main problem of Indian social security system is that all these benefits are accessible to the workers of the organized sector only where the employers provide all these facilities to their employees. But people of unorganized sector do not have the advantages of these schemes. But some pension plans are offered by government in general like pension on disability, widow pension, children pension, orphan's pension, unemployment allowance and old age pension in the terms of social security.

### **1.3 Need of Sound Social Security and Pension System in India:**

“India is a developing country, it is facing the challenge to secure the old age population as it is estimated that in 2050, Indian old age population will be increased up to 316759 thousand and it will be 17 percent of the total population of India. India's elderly people potentially face significant economic insecurity” (CRISIL, 2019). This shows that elderly population will expand many times in next three decades in India. Due to uncertainty in health expenditure is also a big reason that elderly population may face prospectively economic insecurity. Nowadays, family and society become weaker to provide social support and save keeping of elderly population.

So, India needs a sound pension system because of following reasons: -

- **Rapid Ageing in India:**

Due to a good demographic dividend, India has become a young country. In 2015 total 44% of population is working but the proportion of old age population is increasing day by day. “It is estimated that in 2050, Indian old age population will be increased up to 316759 thousand and it will be 17 percentage of the total population of India” (CRISIL Report, 2019)

**Table No. 1.1: (elderly population in India (in thousands))**

| Sr. No. | Year  | Population |
|---------|-------|------------|
| 1       | 2015  | 116761     |
| 2       | 2050P | 316759     |

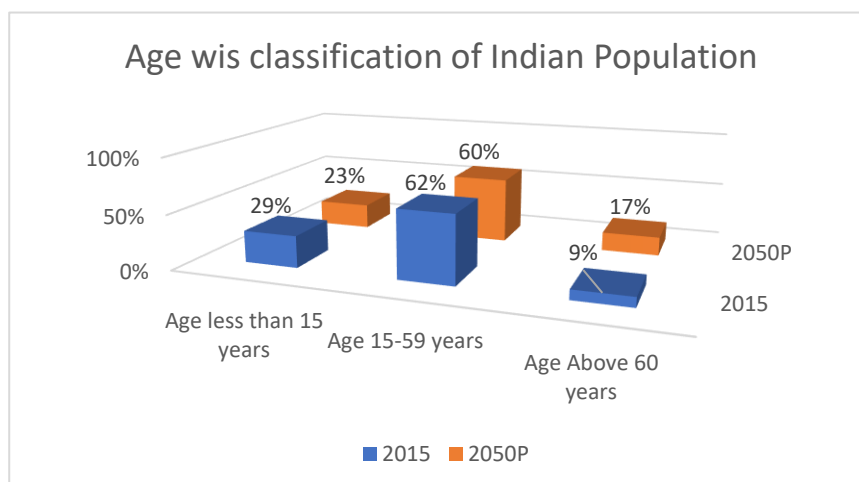
(Source: UN Population estimates, CRISIL Research 2019) (P=Projections)

**Table No. 1.2: Age wise classification of Indian Population**

| Population Distribution | 2015 | 2050P |
|-------------------------|------|-------|
| Age less than 15 years  | 29%  | 23%   |
| Age 15-59 years         | 62%  | 60%   |
| Age Above 60 years      | 09%  | 17%   |

(Source: UN Population estimates, CRISIL Research 2019) (P = Projections)

**Figure No. 1.1: Age wise classification of Indian Population**



Total share of elderly population is 9% of the total population in 2015 and it is expected to raise up to 17% in 2050 that leads the government to think about the security of the elderly people and their social economic protection.

- **Rise in life expectancy:**

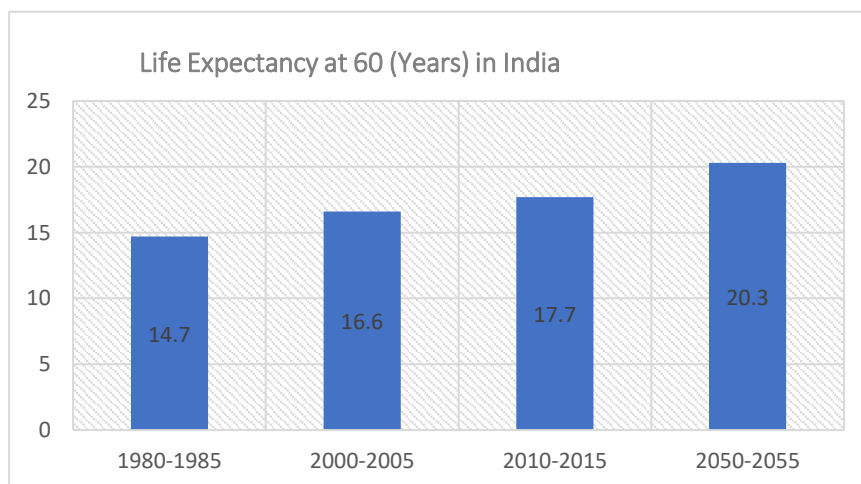
Life expectancy is average number of years of life of a human being expect to live. Due to rise in life expectancy, it is very important to plan for old age people to meet the needs of life. In the mid of life, people are busy in other financial planning and not think about the future and save a little for the old age purpose.

**Table No. 1.3: Life Expectancy at 60 years of Indian Population**

| Years     | Life Expectancy at 60 (Years) in India |
|-----------|----------------------------------------|
| 1980-1985 | 14.7                                   |
| 2000-2005 | 16.6                                   |
| 2010-2015 | 17.7                                   |
| 2050-2055 | 20.3                                   |

(Source: “Organization for Economic Co-operation and Development”, UN Estimates, CRISIL Research, 2019)

**Figure No. 1.2: Life Expectancy at 60 years of Indian Population**

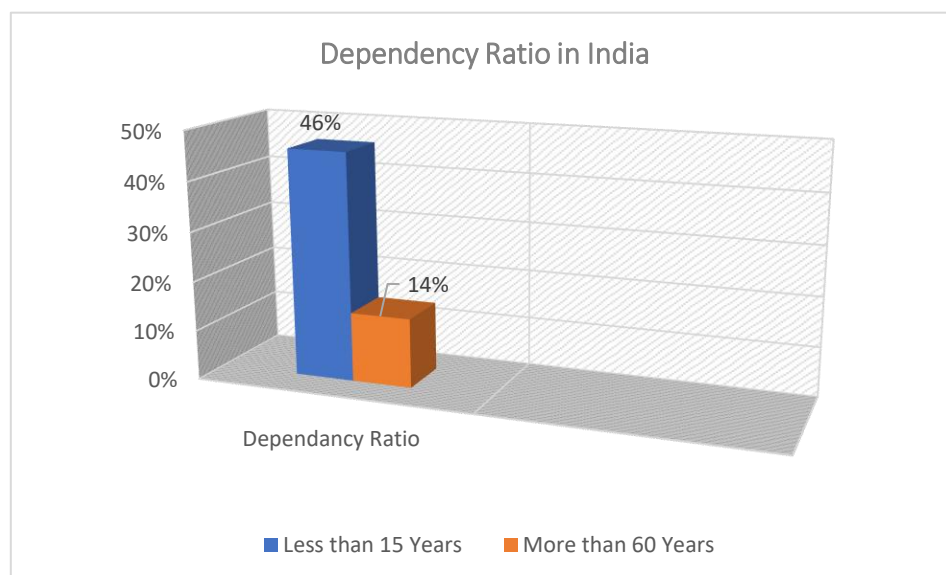


As per the UN report, the life expectancy is on increasing trend, in 2010-2015 the life expectancy was 17.7 years at the age of 60 years and it is estimated to be 20.3 years in 2050-2055. So, it is the time to think of the requirements for old age people by the public and government regarding the requirement of sound formal system to provide financial protection to elderly population.

- **Increase in Dependency Ratio:**

Developing countries like India are characterizing by features like poverty and unemployment. Most of the people are dependent on their children in the old age but due to migration of children from native place to another place in search of job and increasing trend of nuclear family, the old age people are enforced to live independently and bear their living expenses on their own. So, there is a major requirement of sound formal pension system in India to provide the social and financial protection to old age people so that they can live with dignity and independently.

**Figure No. 1.3: Dependency Ratio in India**

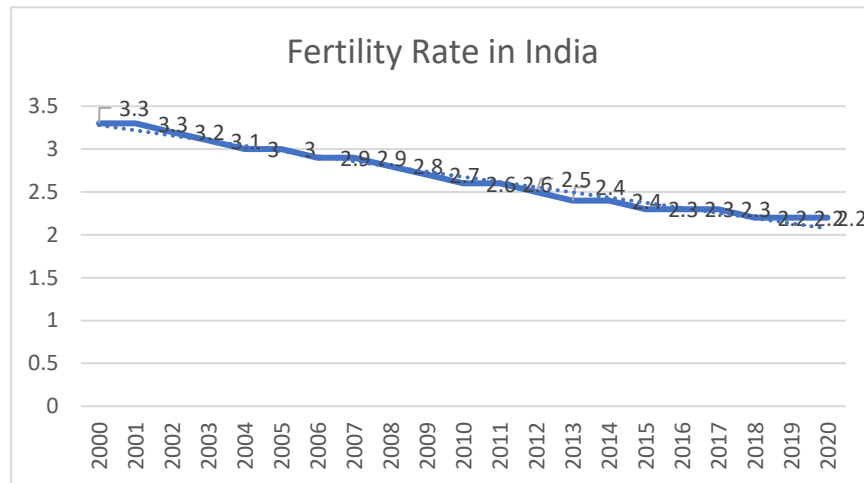


(Source: UN Population estimates, CRISIL Research 2019)

- **Decline in Fertility Rate:**

Increase in higher education, late marriage, financially independent women and mobility leads to declining fertility rate.

**Figure No. 1.4: Fertility Rate in India**



(Source: UN Population Prospects, Macrotrends)

In 2000, the fertility rate was 3.3 with the decreasing trend. It is now 2.2 as per data in 2020. So, government needs to plot the policies for the people who live away from their children as India needs to have a sound formal pension system to provide the protection to the elderly population.

- **Lower Family Support:**

In India, there is a tradition of Joint Hindu family and all the members are dependent on each other and it is the way of social security, but this trend is now changing. “Family and community which were the strong sources of social support and care for the elderly in India are becoming weaker in recent times” (Kumar & Kumar, 2019) Now nuclear family concept has developed and the children are staying away from their parents. So, the elderly parents need the support and protection to survive independently. As such, a sound formal pension system to protect the old age population is the need of the hour.

#### **1.4 Social Security through Pension System in India:**

India is a growing nation, which has no particular arrangements of social security to protect the elderly population of the country. In India, there is a high rate of poverty and unemployment. So, protection of elderly people is necessary and pension is a solid way forward to protect the old age population. The pension system was started in India by British Government in 1871 with the enforcement of the Indian Pension Act, 1871. It was started by the British Government to facilitate their native employees to meet their expenses of living after retirement. With the consideration of inflation, British government increased the pension in 1921 to compensate the rise in rates after the first world war. After that government decided to give dearness allowance to cope up with the inflation. Government of India made further amendments in provisions in 1935. These amendments were made to facilitate retirement benefits to whole working population of public sector. After independence many amendments were also made to protect the workers of private sector also. Now, major retirement benefits are available in India like medical benefits, Provident Fund, Gratuity and pension schemes. Pension is paid on monthly basis and lumpsum payment is made under the Provident Fund and Gratuity. In Provident Fund employees contribute 10-12% of their earnings and get the lumpsum payment at the time of retirement with interest. In addition to that the government and the private sector employees both get the benefits of gratuity also. Gratuity is paid on completion of atleast five years of services. Employees are paid monthly pension after their retirement. There are also various central and state government social assistance programs to provide the protection to elderly population. Most of the benefits of social assistance programs are given from the age of 60 and above but only 10-15% population is covered under the old age protection schemes like “National Old Age Pension” (NOAP) and “National Social Assistance Programs” (NSAP). After the Civil Pension Scheme for organized sector and NOAP and NSAP for unorganized sector in 2004, the Government of India started a new pension scheme named National Pension Scheme which is defined contributory in nature. At first, it was started for the workers of organized sector, but from 1 May, 2009 it was applied to the unorganized sector also on voluntary basis. Today, many pension plans are running,

including the Pension Scheme started by the British Government in 1871 to current National Pension Scheme (NPS) and various other occupational and micro pension plans provided by different pension fund managers for providing the social and financial security to old age population. But till now “In India the pension system coverage is very small by handling Employees’ Provident Fund (EPF) and Public Provident Fund (PPF), NPS” (Vinamalar & Joseph, 2018). Section 366 (17) of Indian Constitution explains the importance of the pension. There are some schemes in India to provide the social and financial security to elderly population:

- Civil Service Scheme
- Employee’s Provident Fund Organization Schemes (EPFO)
- Public Provident Fund
- National Pension Scheme
- National Old Age Pension Scheme
- Occupational Pension Schemes
- Micro Pensions
- **Civil Service Schemes:**

Civil service pension scheme is applicable on the central and state government employees. It is defined benefit scheme. The employees get the retirement benefit on the basis of salary which they earned during their career. It is popularly known as “Pay as You Go” scheme. At first, in India British government started pension system in 1871 to provide the benefit to its native employees. After that from time to time many amendments were made by the British government before the independence and the government of India made amendments after independence. In 1919, the Government of India passed an act, according to that people were given a choice to retire with the pension who joined the services before 1920. The pension was proportionate as per their length of service. But on the recommendations of the Royal Commission, it was cancelled. In 1924, the Royal Commission recommended an increase in the rate of pension. The Civil Service Pension Act was also passed in

1935. Many amendments were made like Central Civil Service Rule 1972, General Provident Fund Rules 1960, Workmen's Compensation Act 1923, Commutation of Pension Act, 1981. Civil Service Pension Scheme is unfunded scheme or defined benefit scheme under which employees do not contribute anything but receives a fixed periodical amount of pension after the retirement. It is a form of income which is provided by the government to its employees for survival when they are no longer working. It is paid on the completion of qualifying service i.e., 10 years. Full amount of pension is paid on the completion of 33 years of services. The amount of pension is fixed on 50% of the average salary drawn in last ten months of service and the amount of the pension is automatically adjusted with the revision in pay. Pension is paid on monthly basis but Gratuity and Provident Fund payment is made as lumpsum. Gratuity is paid after the completion of qualifying service i.e., 5 years. Gratuity is also further classified into retirement gratuity, service gratuity and death gratuity. Many governments are doing experiment with their existing pension system. The Indian government also reformed the existing pension system into New Pension Scheme on 1 January, 2004. This New Pension Scheme is Defined Contribution (DC) pension scheme and implemented on the entire public sector' employees appointed after 1 January, 2004 but defense sector is continuing with the Old Pension Scheme or Civil Service Scheme.

- **Employee Provident Fund Organization (EPFO) Schemes:**

Employee Provident Fund is a regulatory body which came into force on 15 November, 1951 and was converted into Employee Provident Fund Act, 1952. Some private organizations' provident funds were managed by the first Provident Fund Act, 1925. Due to its limited scope, in 1929 Royal Commission recommended to formulate Provident Funds Scheme for institutional workers. In the last month of 1951, Employee's Provident Fund ordinance came into force and then Employee Provident Fund Act, 1952 was passed. It is the largest social security organization of the world. EPFO supervises the numerous contributory provident funds, insurance schemes and pension fund applied on working population of organized sector of India. It is open for both private and public sector organizations. Any organization having atleast 20 employees are required, to give the benefit of EPF to its employees.

This act is applied on electrical, cement, mechanical, steel, textiles and all other types of industries. The administration of EPFO is conducted by the Central Board of Trustees including the representatives of Central and State government, employers and employees. The Union Labour and Employment Minister of India is the chairperson of this board. The purpose of these saving schemes is to enhance the habit of saving among the salaried class people and to create a big amount of retirement corpus. Under these schemes, a fund is built with the contributions of both employer and employee. Both the parties (employer and employee) contribute each month 12% of the employee's monthly salary. Interest is fixed at pre fixed rate by the EPFO on the contribution made by the both parties (employer and employee). Contribution towards the EPF is exempted U/s 80 C of "Income Tax Act, 1961". Employee can get the lumpsum payment including interest at the time of retirement which is fully tax free. There is also an Emergency Corpus Fund. An employee can withdraw the corpus for emergency fund as and when he requires. In the financial year 2019-20 the EPFO decreased the rate of interest to 8.50% from 8.65% due to fiscal deficit.

A Universal Account Number (UAN) of 12 digits is allotted to the subscriber of EPF. The UAN remain same throughout the whole life of an individual and is not changeable with the change of job. An individual can withdraw and transfer the money online or offline from Provident Fund with the help of UAN (Universal Account Number).

EPFO cover the following three schemes: -

I. "Employees' Provident Fund Scheme, 1952"

II. "Employees' Deposit Linked Insurance Scheme, 1976"

III. "Employees' Pension Scheme, 1995"

- **Public Provident Fund (P.P.F.):**

Public Provident Fund (P.P.F.) is a voluntary saving and investment option introduced in India in 1968 by the National Saving Institute of Finance Ministry. The main purpose of the P.P.F. account is to enhance the small savings and invest these savings to secure the post retirement life. Any Indian citizen can open the P.P.F. account but only one account is allowed under his/her name. In 2018, the central government

made an amendment in the Public Provident Act, 1968 that non-residents and H.U.F.s are not allowed to open the new P.P.F. account. However, they can continue their already open account for 15 years. Before 2018, they were allowed to open the new account. P.P.F. account can be opened in nationalized banks and post offices only. But nowadays private banks like Axis, HDFC and ICICI also offer the services of P.P.F. account. The P.P.F. account can be created by depositing the minimal amount of Rs. 500/- and maximum amount of Rs. 150000/- annually. The main benefit of P.P.F. account is that it is fully guaranteed by the central government. The balance of P.P.F. account is not attached under any order of honorable court but the income tax authorities and other government authorities can attach the balance of P.P.F. account for the recovery of due taxes. Loan facility is also available on P.P.F. account which is applicable from 3<sup>rd</sup> financial year to 6<sup>th</sup> financial year from opening of the account. The loan can be availed up to 25% of the investment balance which is available on the ending of 2<sup>nd</sup> financial year from starting of account. The second loan can be availed but only after the payment of first loan completely. Total period of P.P.F. account is for 15 years. After 15 years account holder can withdraw the entire amount of P.P.F. account or extend the subscription of account for next 5 years. P.P.F. account can be transferred from one branch to another branch on the application of account holder. No pre mature withdrawal is allowed to the account holder except in the case of higher education of minor account holder and medical treatment of self and family. But for the pre mature withdrawal, the documents like medical bills or in the case of higher education fees receipts have to be submitted by the account holder.

Interest on P.P.F. account is charged on quarterly basis on the minimum balance from the 5<sup>th</sup> day to last day of the month. But the interest credited in the account of subscriber on annually basis on 31 March every year. Interest rate is fixed by the finance ministry of India. In the financial year 2021 the interest rate is 7.1% p.a. An account holder can get the benefits of tax deduction for the deposit in P.P.F. account upto Rs. 150000/- u/s 80C of "Income Tax Act 1961". The latest amendments are made in P.P.F. scheme by the government of India in December, 2019. P.P.F. scheme is very beneficial scheme for any individual who wish to save for the retired life.

- **National Pension Scheme (NPS):**

Indian government started a new pension scheme named National Pension Scheme (NPS) and it came into existence by the Act of Parliament of India. In December, 2003, the Government of India notified the New Pension Scheme (NPS) applicable to all the employees of central and state government who are appointed after 1 January, 2004 except defense sector. Pension Fund Regulatory and Development Authority (PFRDA) regulate, control and conduct the administration of NPS. Work of NPS is done by the NPS Trust which safeguards the subscribers' interests. Central Record Keeping Agency maintains all the records. Pension fund managers provide the investment options and manage the investment of subscribers. At present, seven pension fund managers are operating in India i.e., "LIC Pension Fund", "Aditya Birla Sun Life Pension Management Limited", "HDFC Pension Management Company Limited", "UTI Retirement Solutions Limited", "SBI Pension Fund Pvt. Ltd.", "ICICI Prudential Pension Fund Management Company Ltd.", "Kotak Mahindra Pension Fund Ltd." These pension fund managers issue the guidelines for the diversified portfolio which includes the government bonds, equity and debentures. Return on investment depends upon the contribution in the funds. Point of Presence (POP) are the branches of pension fund managers which are directly associated with subscribers and resolve their problems. At present, employees contribute the 14% of their basic salary and dearness allowance in NPS account and government also contribute the same amount in this account. Employees have no choice to select the pension fund managers, government decides the investment of funds of employees by its own and invest in - "LIC Pension Fund", "SBI Pension Fund" and "UTI Retirement Solutions". Government invests 33% in "LIC Pension Fund", 33 % in "SBI Pension Fund" and 34% in "UTI Retirement Solutions". Subscribers can get the tax deduction upto Rs. 150000/- under section 80C and upto Rs. 50000/- u/s 80 CCD(1B) of "Income Tax Act, 1961". Employees can also get the tax deduction benefit on the contribution of employer in NPS account up to 10% of basic pay and dearness allowance under section 80CCD (2). In NPS, subscriber can open two types of accounts, Tier-I and Tier-II. Tier – I is the prime account and a pension account and the employee is restricted to withdraw the corpus amount from this account. All the government

employees' NPS account is covered under the Tier – I account. Employees can withdraw 40% amount of total corpus and purchase the annuity for the remaining 60%, at the time of retirement. On May, 2009 the Central government opened the NPS for all the citizens of India on voluntary basis and it is called NPS – Lite or Swavalamban Yojana. People of unorganized sector within the age of 18 to 65 years can open the NPS account with the contribution of Rs. 1000/- monthly and thus save for old age and secure their future. On voluntary basis subscribers can open the account in Tier – II. Tier – II account holder can withdraw the amount on pre maturity only upto 25% of total corpus and have to purchase the annuity of remaining 75% with the fulfilment of specific conditions.

A 14 digits “Permanent Retirement Account Number” (PRAN) is allotted to all the account holders. PRAN remains the same for whole life. It is not changeable with the change of job.

- **National Old Age Pension Scheme (NOAPS):**

National Old Age Pension Scheme (NOAPS) was launched on 19 November, 2007 by the Ministry of Rural Development under the National Social Assistant Programme. It is also called Indira Gandhi National Old Age Pension Scheme. The main aim of this scheme was to provide the social and financial protection of old age population who attained the age of 65 years and above and was covered under the Below Poverty Line (BPL). But now the person who attains the age of 60 and above is also eligible to receive the pension. It is a non-contributory pension scheme means beneficiary of pension does not have to contribute the money in the pension fund. It is funded by the Government of India. Beneficiaries receive an amount of Rs. 200/- p.m. who attain the age 60 – 79 years and the persons who are of 80 years and above receive the sum of Rs. 500/- p.m. as pension. This amount is contributed by the Central Government of India and the share of state is varies from one state to state. The payment of pension is given to the beneficiaries in cash at the bank branch at the address mentioned or deposited in their bank account.

- **Occupational Pension Schemes:**

Occupational Pension Schemes were started as per Civil Service Scheme and these are provided by the private employer to its employees for their benefit. Occupational pensions are defined benefit or defined contributory, funded or unfunded. Most of Occupational Pension schemes are funded and a separate fund is created with the contribution of employer and employee. And pension to the employee is paid on his retirement out of this fund. Apart from retirement benefits, these pension schemes can provide the benefits at time of death of employee in service or after retirement. An employee's dependents can get the benefits after the death of employee.

- **Micro Pensions:**

In developing countries like India, there is high rate of poverty and unemployment and people have low level of income, especially at retirement age. The large part of pension system is restricted to cover the organized sector's employees. The workers of unorganized sector have not a good amount of pension to survive in old age as they did not retire from the formal sector. So, Micro Pensions are the system to provide the financial security in old age with low income. Micro pension is not provided by the employer and government. Concept of micro pension was developed in India with the development of Micro Finance Institutions (MFIs) and NGOs. Micro Finance Institutions are the specific individual groups or communities which provide the micro pensions in old age in exchange of micro contribution to savings. The best example of Micro Pension Schemes is Self Employed Women's Association (SEWA) started in 1972 due to the women, labour and co-operative movements to struggle for social justice and fair treatment in society. It is developing rapidly. In 2009, 50000 self-employed women joined the Micro Pension Scheme of SEWA. It has been growing rapidly since 2000, from 318000 members to 1.75 million in 2012. SEWA's main objective is to provide the employment and social security to women employees of unorganized sector.

## **1.5 Types of Pension Schemes:**

- **Defined Benefited Pension Scheme:**

Employers provide the defined benefited pension schemes under which the retirement benefits are calculated by a particular formula. Number of years served by an employee, salary of employee at the time of retirement and these are multiplied by the accrual rate are the main basic points to calculate the benefits under defined benefit pension scheme. Employee's age at the time of superannuation is also a major factor to determine the amount of benefit. The benefit may be paid monthly or lump sum on retirement, but usually it is paid on monthly basis. Defined benefit pension schemes may be funded or unfunded. In funded schemes, fund is contributed by the employer (i.e., government or company) but no fund contribution is required from employee for the matching of the benefits. Future Return of Investment (ROI) and benefits are not pre-determined. So, there is no guarantee to receive such amount to meet the retirement benefits given to the employees. In unfunded defined pension plans, fund is contributed by the employer (i.e., government or company) but there are no assets set aside for the future earning to meet the retirement benefits given to the employees. To determine the cost of defined benefited pension scheme is a very difficult task. Most of the countries have unfunded defined pension schemes and fund arrangements are made by the government.

- **Defined Contribution Pension Scheme:**

Defined contribution pension schemes are basically employee funded schemes. In these schemes, employees contribute some fund and many employers also contribute matching amount in the pension fund. These schemes are also known as 401(K) schemes. In these pension schemes, employees decide the amount of investment and choose the investment avenues which are available under particular pension scheme. Employees invest as per their return-on-investment objective and risk tolerance capacity and create their own portfolio and invest in such investment avenues. There is no control of employer and employees on the performance of the pension fund and no guarantee is there to get the benefit matching with the contribution because the investment is made in market linked securities and profit on these securities depends upon the fluctuating market conditions. As per the return on investment, the amount is

credited in individual subscriber's account which may be profit or loss. Many service providers are associated with the defined contribution pension schemes such as trustees, custodian, administrator, recordkeeper, pension fund manager etc. Many countries are adopting defined contribution pension schemes instead of defined benefited pension schemes. India has also adopted the defined contribution pension schemes for its employees.

### **1.6 Retirement Planning:**

Retirement is significant and intricate stage of any individual's life. The purpose of retirement planning is quite different from financial planning as objective of retirement planning is not only to get the financial objective but the people also wish to live healthy, happy and independent life in old age. Retirement planning is a process to think about future when worker retires from employment after working for a long tenure. Retirement planning is to save for the old age when people have no fixed source of earning but wish to survive and live independently. So, money saved for the future is very helpful. Retirement planning has become an issue of grave concern particularly for developing countries. Decrease in fertility rate, increase in mortality rate, rise in dependency ratio and rapid rise in ageing population are main reasons for a government to secure the elderly population socially and financially. This problem is increasing rapidly around the world but specially in developing countries. India is also facing the problem to secure the old age or post retirement age of its population. The Government of India has developed various social security and pension plans for the workers of organized sector. But very low percentage of unorganized sector population is covered under the pension plans. So, people have to think about their own self and secure their future. With the change in the economy, inflation, financial market, capital market and increase in the medical care expenditure the retirement planning by everyone is the need of the hour. Though retirement planning makes the life more comfortable, it all depends upon the personal and financial attitude and prospect of an individual towards the retirement life. Usually, retirement planning is taken as negative concept as it makes the people feel old. Some people make their life full of boredom and troubles in old age but some people who think smartly, enjoy the retirement life with full of enthusiasm and live

every moment happily. People who do the retirement planning, live happily. They save for the future and live independently without putting the burden on others. When people start work at young age is the best timing to plan for retirement. The saving and investment decision for old age depends upon the demographics and financial knowledge of individual. To make the retirement decisions successfully, it is necessary that the people have the proper knowledge regarding the retirement programs and plans provided by the employer, government and various pension fund managers. Without adequate and accurate information about the pension plans and retirement plans, people may take the inappropriate and inaccurate decisions and make investment in wrong or insignificant investment options and are not able to get the retirement objectives. Young generation does not plan for retirement on time due to inadequate knowledge about significance of savings for retirement. Financial literacy is must so that people may be able to know about when to retire from current employment, when to take lump sum payment from pension plan or when to annuitized the pension and how to manage the investment for retirement. Nowadays, the government and employers make changes in the pension policies which encourage the people to plan for retirement by own self through investing in private pension plans. So, financial knowledge is important to take the sound financial decisions to achieve the retirement objectives.

### 1.7: Retirement Planning Process:

**Figure 1.5: Retirement Planning Process**



Source: “Shailesh Singh Thakur” and “Dr. SC Jain” (2017)

- **Decide the Income after Retirement:**

On the basis of previous literature, it is found that no particular standard amount is fixed for the expenditure which is expected to occur after retirement. These

significantly vary from individual to individual. Most of the Indian retirees take the loan on the housing while in service and more is spent on education of children and their marriage so as to settle their children and maintain standard and reputation in the society. Basically, expenditure on housing, health care, food, transportation, entertainment, clothing and social relation is accrued by the people but after retirement more expenditure is incurred on housing, medical and health care, transportation and food.

- **Calculate the Total Receivable:**

Various types of incomes are provided by the employer to the retiree at the time of retirement in the term of pension, death cum retirement gratuity, leave encashment, share of general provident fund, commutation of the pension, payment of employees group insurance scheme and travelling allowance to settle at a station after the retirement. Receivable amounts vary from individual to individual. Amount of all these receivables is calculated as per the length of service of an employee, age, pay scale and contribution in these funds.

- **Selection of a Retirement Plan:**

After comparing the income which will be received on retirement and expenditure which will be incurred in post-retirement period, if there is requirement of investment in pension plans to save for future then people choose the pension plan to invest. Nowadays, there is a serious concern to select the best pension or retirement plan. In the market, various types of pension plans are available like immediate annuity, deferred annuity plans, plans with life cover and without life cover National Pension Scheme provided by various pension fund managers such as LIC (Life Insurance Corporation), State Bank of India, ICICI, HDFC and so on. But main problem is to choose the best plan as per the requirements for old age. Basically, pension plan is selected with the consideration of inflation adjusted return value, flexibility, guarantee income option, guarantee pension for individual and spouse and other benefits associated with pension plans. Professional financial advisor helps to choose the best pension plan to achieve the financial goals for the post retirement period.

- **Start Investing:**

People start investing after selection of suitable pension plan for achieving the retirement security. Many important points like retirement budget, risk bearing aptitude, determination of retirement age, value of corpus required etc. should be considered while investing in pension plans. Financial literacy is must to determine the parameters for the investing money in pension plans.

### **1.8. Benefits of Retirement Planning:**

- **Financial Readiness for Emergencies:**

Future is unpredictable. No one can ascertain anything about it. In the situation when one is no longer working, if unpredictable event creates the emergencies, then it becomes crucial to face these situations in an efficient manner. In such situations, it is best to prepare before time. Retirement planning solves this problem and ensures to protect the individual and his family during such financial emergencies.

- **Beating the Inflation:**

With time, price of goods and services rises. Cost of living increases and value of money decrease due to increase in prices. To maintain the standard of living becomes very difficult and expensive with the increase in prices. In retirement planning, the inflation rate is also considered and provide the corpus amount which will be required at the time of retirements provided for the survival of living. Thus, planning for retirement gives the benefit to beat inflation.

- **Tax Savings:**

Retirement planning also helps to save the tax due to investment in various tax incentives saving instruments like PPF, Mutual Funds and NPS under the various provisions of “Income Tax Act, 1961”. These retirement planning saving avenues provide the tax benefits and create a sound retirement life for the old age people. Tax benefits which are available through retirement planning, enable an individual to reduce the investment expenses also.

- **Peace of Mind and Stress-free Life:**

The most significant outcome of the retirement planning is a peaceful and stress-free life. The main purpose of retirement planning is to invest the money to get regular income during retirement life which leads to peace of mind and relaxation regarding the retired life when the individual has no regular source of income. Individuals can enjoy the financial independence without sacrificing their dreams and fulfil all their needs.

- **Cost Savings:**

Retirement planning can also help in the cost savings. When a person starts the planning for retirement at a young age, then long term investment plan gives good return at the time of retirement. With the investment part done at early stage of life, it reduces the investment related risks, and increases the period of investment and decreases the cost.

- **Legacy Opportunities:**

Some people have the goal to save for their heirs. They are trying to save large amount of money in the form of legacy. So early planning for retirement also fulfils this objective as an individual wishes for future.

- **Financial Independence/Zero Family Burden:**

Retirement planning helps the individuals to save for future as required at the time of retirement and they will be able to fulfil their all dreams without putting burden on others. So, during the retirement, one should not be dependent on the children or relatives. Financial dependency on the family members decreases the self-respect and dignity of an individual.

### **1.9 Challenges in Retirement Planning in India:**

- **Health Care Cost:**

Generally, people think they will stay safe and healthy for a long time and thus underestimate the expenditure on health care after retirement. With the increasing age, health issues also increase such as surgeries, therapies, and wellness supplies as well as and visits to doctors. The medical care is required for ownself and spouse. But due

to underestimation of medical and health care cost, people face the challenge to meet the old age expenditure of health care.

- **Longevity:**

People live longer than their expectations. As such, old age population is on increasing trend. Major part of old age population is living with healthy life style physically and emotionally. Living longer is a big challenge for the retirement planning.

- **Less Participation of Private Sector:**

Workers of organized sector get the retirement benefits on their superannuation. Government and employer secure their retirement life. But workers of unorganized sector have no guarantee of retirement benefits. They have to do their retirement planning by their own. Government took some initiatives and launch some retirement plans on voluntary basis. But private sector has very less participation to provide the retirement plans. This is a problem for the people, as they do not have efficient retirement plans to do the investment for future.

- **Lack of Financial Knowledge:**

People have less financial knowledge regarding the retirement planning. They don't know for the vesting age, how much to invest, what is the parameter to determine the inflation index, how to manage their portfolio, determine the rate of return, which plan is beneficial for them. Women are less aware about the financial product than men. There is a serious need to provide the financial knowledge to the people at early stage of life as they can plan for retirement on time.

- **Role of Professional Advisor:**

Generally, the concept of insurance agent is well accepted, but people do not use the advice of professional investment advisor and retirement advisor. They take the advice of friends and relatives for taking financial decisions. A professional advisor always advises better than relatives and friends about the financial products. But, the role of professional advisor is underestimated.

- **Changing Social System:**

Social system is changing day by day. In the past, people used to live in joint families. They were cooperative and depending on each other for their living. Nowadays family members are less supportive. So, people are now used to living independently and do not want to put burden on others. As such, it is a challenge for the government to secure socially and financially the huge part of elderly population.

- **Inflation:**

Prices of goods and services increase on annual basis. It is called the inflation rate which is increasing day by day. Rate of inflation is determined approximately at 4-6% annually. If today the expenditure of living is Rs. 20000/-per month, it will increase 3-4 times after 20 years. So, determination of the exact value of corpus required at the time of retirement is a very difficult task.

- **Financial Fraud:**

Fears of financial frauds is the main problem in retirement planning. People having low financial literacy become the target of the fraudulent companies. Many fake retirement planning companies try to impress with impressive retirement plans and make them target.

- **Mindset:**

Majority of people think that their salary is low and therefore they will start saving for retirement if their salary gets increased. They fail to manage their funds in an adequate manner within the current expenditure of living and are unable to save for the future security. They mismanage their funds and most of their income is spent on the daily consumption. This is a challenge to create the habit of saving for future among the people.

- **Debt Management:**

Nowadays people get less financial support from their family. They spend majority of their earnings on the education of children, building of house, and marriage of children. Most people take a loan to fulfil all these purposes. A huge part of their

salaries is used for the payment of the installments of such loans and they are not able to save for the retirement life.

#### **1.10 Need of the Study:**

India is an emerging economy. It fights continuously with poverty, inequalities and corruption. It struggles for growth, reduction in inequalities, corruption removal and maintaining the living standard of the population. Many people wish to sustain the similar living standard at retirement age as they had in working life. Retirement is indeed a very important stage of a human being's life because in retirement life a person has no source of regular income and depends upon the children and family members. In present era, it is doubtful that family will provide assistance at retirement stage, because children migrate from native places for jobs. The retirement gap will further extend because of rise in life expectancy. "It is also estimated that in 2050, Indian old age population will be increased up to 316759 thousand and it will be 17 percent of the total population of India" (CRISIL, 2019). So, self-efficacy is necessary for the satisfactory life after retirement. It is essential for the government to secure socially and economically the elderly population of the nation. Therefore, Government of India needs to reform pension system. It is also mandatory for the population to improve the saving habits and increase their wealth by saving in various pension plans which is called retirement planning. Retirement planning is very important for every generation and knowledge of various pension plans is very useful in the preparation for retirement. Therefore, this study is an effort to increase the social understanding about planning for retirement in advance and put suggestions on the basis of results which would definitely be useful for society to solve the problem of financial insecurity in life after retirement.

## CHAPTER 2

### REVIEW OF LITERATURE

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#### 2.1 Social Security and Pension System:

- Beattie (1998) studied about the future of pension system in Asia-Pacific. The researcher found that existing pension scheme should be extended to the all categories of employed persons and framed the plans in which contribution should be made by the government and individual.
- Goswami (2002) studied about the problems faced by Indian pension system and how to reform it. The researcher found that Indian Pension System was influenced by other developing countries with same conditions. Investment constraints and financial problems to manage the public pension plans (unfunded) are the main reasons of underperformance of provident fund schemes and low coverage level. Government did reforms in pension system in past but these were unsustainable and needs further reforms.
- Kumar (2003) studied about economic security provided to the elder people in India. The researcher found that social security system was shifted from traditional support system to state based formal social security system. Many retirement benefits were provided to the organized sector's workers by the government old age pension is implemented for unorganized sector also. Various defined contribution and defined benefit pension plans were implemented.
- Alam (2004) studied about old age people's need of multiple income security. The researcher found that three major income security plans to strengthen social assistance programme, guaranteed income in reformed pension policy and plan for long term investment options with high yield.
- Attanasio *et. al.* (2007) studied about demographic trends and social security system with the two-region model (South and North) of the world economy as closed economy and open economy. The researchers found that any person who is interested in fiscal variables like tax, needs to do investment in fully funded system.

- Barr and Diamond (2009) studied that pension plans should be framed with the consideration to avoid excessive implicit taxes and unsustainable pension promises need to be addressed. The researcher found that different pension systems affected men and women differently and level of funding affected differently on the basis of generation. Various tests were occurred to analyse the pension system like incomplete analysis of implicit pension debt., improper use of first best analysis, etc. and there was no single best pension plan.
- Chaudhuri and Roy (2009) analysed the living arrangements of Indian old age population on the basis of gender. 52<sup>nd</sup> round of National Sample Survey Organisation of India conducted a survey and data was collected from this survey for the study. It was found by the researcher that old age female was more pleased to live alone than old age male, despite control the socio-economic features, health status, financial self-dependency and ownership of property. Physical immobile old age women were willing to live alone if they have son in place of daughters. Physical immobile old age men were also not willing to live with children.
- Bloom *et. al.* (2010) examined the elderly population's economic security arrangements. Indian government and some Indian states started to provide economic security by giving them health insurance programs. The researchers found that formal sector of India is more facilitated with the economic security arrangements than the informal sector, especially women were more economically insecure than men and researcher suggested that Indian govt. should start various pension plans which were implemented by various other countries in the terms conditions and private sector should have some space in this arena.
- Jha and Bhattacharyya (2010) comparatively analyzed the social security system of India and OECD countries. In India, the pension system lacks the professionalism, diversification and pension funds can also treated as an asset for the investors. In India, there was partiality between social security provisions for organized and unorganized sector. Financial security in old age for unorganized sector depends upon the voluntary savings. NPS was also a saving scheme for retirement but it had also not clarity about the provision for poor people. Indian social security system was far behind the OECD countries. India was closer to the OECD countries only in the low-income class for men.

- Beshears *et. al.* (2011) studied the economic behavior towards the public sector pension plans. Any no choice was available in public sector defined contribution plans such as what was the amount to be contributed in pension fund and the assets of employees were allocated according to the pension fund providers. Due to limited choice in public pension plans, people shifted to the private pension plans because of financial literacy, postpone and time inconsistency of instant consumption satisfaction. Public defined contribution pension plans were more complicated than private pension plans due to multiple supplemental plans offered by public pension plan providers.
- Shankar and Asher (2011) studied about the social security in India by analysing the importance of micro pension plans. This study had been done on the basis of two case studies related to micro pension plans in India which gave the emphasis on the research in the field of micro pension. The researcher concluded that micro pension plans played very important role to provide the social security to the Indian and it should be promoted.
- Barrientos (2012) analysed the importance of social security plans and other non-contributory pension plans in Asia. This study focused on the incentives and budget, poverty reduction and shift from non-contributory pension plans to contributory pension plans and identified the various old age income security schemes specially the social pension.
- Pandiyan and Aranganathan (2012) analysed the factor influencing the saving and investment behavior of salaried class investors. This study had been done on Cuddalore district. 520 salaried class investors were the sample size. Multistage and simple random sampling techniques are used in this study. Percentage and canonical correlation were used to analysed the data. The researcher concluded that majority of investors were investing their money for the emergency requirement, education of children and save for future. They saved mostly in bank deposits, insurance, real estate, bullion and provident fund.
- Singh *et. al.* (2015) examined the need of universal pension to solve the problem of ageing in India. The researchers concluded that Indian pension system is not so

much extended to protect the entire old age Indian population. Around 70 percent of the employed people were not covered under any pension plan or social security plan. Main objective to provide the social security was to remove the poverty, help in longevity, easy to consumption. They stressed that the Universal pension scheme will provide the economic security in the large extend to elderly population of India.

- Manoli and Weber (2016) analyzed the retirement decision of old age worker which was affected by early retirement age in Australia. Researchers found that old age workers were remaining in job for long time if the early retirement age increases.
- Dhanalakshmi (2016) examined the retirement pension plans provided by private sector and public sector banks in Krishna district in Andhra Pradesh. The researcher concluded that the bank' selling insurance products like retirement plans and pension plans had not caught up the attention of major customers. Attention of investors could be created by enhancing the corporate image, bonus pay out, liquidity, rate of return, extra coverage, brand name, tax incentives. These factors were important to shift the investment in insurance products from the non-insurance products. Benefits of insurance product should be spread in rural area with the help of professional advisor. The insurer along with banking services at their branches, pleased the customers to invest in insurance corporations in the form of buying pension plans provided by private sector and public sector banks.
- Dreze and Khera (2017) studied about five programs of social security in India: social security system, child care services, school meals, food subsidies, employment guarantee. The researchers found that Indian social security was still in developing state in international scenario.
- Whitley *et. al.* (2018) analyzed the association between the socio-economic conditions and the successful aging and it varied and commutative during the life course. Sample size was 1733 Scottish people consisted of two age groups around 57 and 76 years. The researcher found that there was strong relationship between social economic position varied with the life course and successful aging.

- Goli *et. al.* (2019) examined the Indian social security system and how elderly population become the economic independent. They found and suggested that India has to do a lot to set up a robust social security system because a large portion of India's elderly population lacks adequate social and financial security. By providing employment opportunities to older people which gave them the financial stability and decrease the dependency on others, strengthen the social security and pension system by providing health and insurance facilities. Special policies for elderly women and actually needed people should be framed because women had more life expectancy than men and also suffered higher rate of disabilities, especially in the case of single or widowed women.
- Roy *et. al.* (2019) studied about status of demographic changes, pension plans governed by government in U.K. Researchers concluded in the report that increase in old age population, increase in longevity, low level of savings and strict regulations of pension plans were the major challenges for the retirees and pension fund providers institutions of U.K. checked the performance of defined benefit pension schemes and defined contribution pension schemes. Defined contribution schemes had performed well. Government tried to provide better future for the current and future retirees. People also contributed in way as not when they were young because they are experienced now.
- Kumar and Kumar (2019) comparatively analyzed the economic dependency and living arrangements of EAG and non EAG group of states of India. Stratified multistage sampling was used. Sample size was 27245 persons of household above the age of 60 years. Binary logistic regression was used. Living arrangements was classified into two categories "Living with others" and "Living Alone". Economic dependency was classified into two categories "Not dependent" and "Partially or Fully Dependent". The researchers found that education, expenditure quintile, number of surviving children, per capita consumption and income, marital status also affected the living alone. Gender was main determinant of the economic dependency. Males were more independent than females in India. Education, and age also affected the economic dependency. Illiterate people were more dependent than literate persons. People who aged 70-

79 and above 80 were more financially dependent than 60-69 elderly aged people. It was also found that economic dependency was more in non-EAG states than EAG states.

- Hessel *et. al.* (2020) studied about association between coverage of disability and social security among old age population in five Latin American countries (Paraguay, EL Salvador, Chile, Uruguay and Colombia) and preset inequalities level and its predictors. Multivariate logistic regression was used to find the association between socio-demographic features and disability and pension or social security coverage as well healthcare. The researchers found that there was no relationship between disability and pension coverage and healthcare in EI Salvador but there was negative relationship between the disability and pension coverage and healthcare in Paraguay, Chile, Uruguay and Colombia nor does it explain educational inequalities in disability.
- Ganapathy (2021) analyzed the importance of pension and how can make pension plans more effective to challenges faced by the elderly population. The researcher explored the causes of increase in ageing population at global level and Indian level. The researcher concluded that solution of this problem by providing the social security to the elderly population. There was need to provide the health care services and pension to old age population to meet their needs. There was also need of awareness regarding the health management and pension plans especially voluntary pension schemes and promoted the people at the young age to save for the old age and can live with dignity in old age. Defined contribution pension plans can also do to make the pension system more effective. Health care services also provided to meet the health maintenance costs.

## **2.2 Perception towards Investment in Pension Plans:**

- Smith (2004) studied about the perception of midlife workers towards volunteering in retirement. Relationship of control variables, continuity variables and retirement planning variables with perception of midlife workers regarding retirement planning was found with the help of Logistic Regression. Control variables include income adequacy, gender, educational level, age, health, continuity variables include salience of volunteer role, self-esteem, currently

volunteering, religious activity attendance, retirement planning includes close to retirement. Data was collected from 258 respondents between the age of 50 to 64 years. The researcher found that workers having greater income level and women were likely to step forward as a part of a perfect retirement. Silence of volunteer role and religious work participation are positively associated to stepping forward for the perfect retirement life style and nearer than 5 years to expected retirement age was negatively associated with, this perception.

- Szinovacz and Davey (2005) studied about the choice of retirement as ‘forced’ rather than ‘wanted’. The researchers concluded that approximately one third employees had the perception towards the retirement as forced and restricted to job displacement, care obligations and job tenure, assets, marital status, benefits, and off time retirement was other predictors of perception.
- Worthington (2008) studied about the knowledge and perception of private pensions (superannuation) in Australia on the basis of demographic, socio-economic and financial factors. Knowledge about the superannuation was analyzed with variables superannuation fees, taxation, employer contribution, employee contribution, Superannuation statements. The researcher found that knowledge about superannuation was low in females, those who had low educational level and people who were less than thirty years age. University educated, persons with age above 40 years and professionals had more knowledge about superannuation.
- Clark and Strauss (2008) analysed the impact of socio-demographic features on selection of pension plan and affect the risk perception. They found that participants of pension plan did not seem to be aware regarding risk associated with various pension plans and retirement saving plans. They further found that age, gender, and income of respondents affected the risk attitude and spousal pension can also important outcome for risk preferences of household.
- Dalen *et. al.* (2010) studied the perception about the pension savings adequacy and expectations about the pension savings adequacy of married workers. Dutch and American workers have approximately same perceived saving adequacy. The

adequacy of savings was influenced by three factors: trust in pension fund organizations, social forces and psychological factors. The researcher also found that behavior of workers towards the financial planning and future prospective also played a key role in the perception about the savings adequacy in United States. The Dutch workers were more confident in their pension fund and serious about retirement planning.

- Kotecha *et. al.* (2011) studied about the perception of people towards the income requirement after retirement. The researchers found that people who were non planner typically opted into an occupational pension scheme and did not plan for further but planner do actively in planning for their retirement. Factors like level of income during working life, financial risk of pension plan, stability during career attempting a balance saving for retirement with everyday living costs influenced the behavior of people. The investment choice of people also depended upon the life style they wanted to live after retirement namely “Basic”, “Comfortable” and “Wealthy”. People were also calculating the threats for their financial well-being in the terms of income and assets.
- Bhambure (2013) studied about the customer preferences regarding pension and retirement products affected by some selected insurance companies. The researcher found that the shift from defined benefit pension plans to defined contribution pension plans was not desirable from the view point of customer because defined benefit schemes were generally non-contributory schemes and there was uncertainty about the quantum of the actual pension at the time of retirement. There must be requirement of reform in the Pension Fund Regulatory and Development Authority.
- Shukla (2013) studied about awareness towards retirement planning done by the female faculty members of Banasthali University, Rajasthan. A questionnaire was used and data collected from 50 respondents. The researcher found that unmarried females were less aware and saved less for retirement than married females. It was also found that females were risk conservative and less interested to invest in risky investment.

- Perera *et. al.* (2013) studied about perceptions of medical professionals regarding retirement. The researchers found that medical professionals shared four key points regarding perception towards retirement like organization was interested to get the economic benefits, experienced professionals have higher value than less experienced persons, retirement was the personal matter of employee and personal responsibility. But medical professionals faced many challenges for retirement. To face the challenge, three main actions were taken by them- increase the individualization and flexibility in transition for retirement, organizations should be involved in retirement planning, active policy should be framed and financial education should be given to the employees.
- Osuji (2014) studied about perceptions and attitudes towards the retirement of school teachers. The researcher found that school teachers had positive attitude and high perception towards the retirement. They thought retirement was mandatory and this positive attitude might be affected by the high perception regarding the contributory pension system.
- Njogu (2014) studied about the perception of employees about the new defined contribution pension scheme which was shifted from defined benefited scheme. The targeted population was employees of occupational pension schemes offered by public sector which were registered by Retirement Benefit Authority (RBA). Mean, percentage and standard deviation was used in this study. The researcher found that move from defined benefit pension schemes to defined contribution pension schemes affected the perception of employees in public sector occupational pension scheme. The Employees were not opposed to defined contribution pension schemes because defined benefit schemes fulfilled their expectations and they knew the benefits of defined benefit pension plans.
- Dicenzo (2014) studied about the employees' retirement choices, perceptions and understanding towards retirement in U.S. The researcher found that the perception is positive and negative approach. Only some individuals took the responsibility to secure future and contributed in pension plans and some did not know they were contributing to a retirement plan. Due to conservative approach workers choose only few options of investment which were manageable by them. With the

positive aspect, workers were ready to save for retirement in defined contribution plan (401 K).

- Mengesha (2015) studied about the employees' perception towards the new private organization employees' pension scheme in Clinton health and studied the various factors that affected the perception of employees. Structured questionnaire and interview were used for study. The researcher found that lack of adequate information and explanation on the contents of new pension scheme affected to the employees' perception towards the new pension scheme. Some other factors like individual experience, life style, situation and peers had also its own share on employees' perception towards the new pension scheme. The finding of the study suggested that awareness campaign should be organized by government and other employer organizations and government should work on other factors also which influenced the perception of employees.
- Singh and Kumar (2015) studied about the investors' attitude towards the investment in pension plans and factors affecting attitude towards investment in pension plans. The researchers found that investors had positive attitude towards investment in pension plans. They feel their money is secure in pension plans and it gives them good return. Many other socio-economic variables like gender, age, qualification, income, occupation also affected the investors' attitude towards the investment in pension plans but saving variables did not affect their attitude.
- Gupta and Hershey (2016) studied about retirement goals of the working people of India and the United States in comparative dimension. They found that most of such goals were similar among employees of India and United States. Indians were concentrated on self-related goals and financial stability whereas the Americans were concentrated on exploration and leisure time. The difference and the similarities in current retirement system may lead to some aspects of future goals but not the goal content.
- Saeed and Sarwar (2016) studied about the perception towards socio-financial issues of post retirement of academicians of public sector universities in Lahore of Pakistan. This study had been undertaken to find the retirement goals, investment

objectives, and investment avenues. The researchers found that two broad categories of social and financial issues. Goal clarity, optimism, preparation, future position, proximity, and investment beliefs etc. were main elements of financial issues. There were 61.06% variances in financial issues and 64.835% variation in social issue with the components like economic trends, financial worries, retirement roles, adjustment, predictions, expectations, change in responsibilities of life and financial advice.

- Mahanti *et.al.* (2017) studied about the perception to accept the new pension scheme. Multiple regression was used with the support of t-test and ANOVA. The perception to accept the new pension scheme was analyzed on the basis of six variables named investment, NPS, participation satisfaction, benefit and incentives. Researcher found that perception towards the acceptability was statistically significant towards the NPS. It was also recommended to design the sound investment and pension policy and provides the benefits to the investors. The systematic mechanism was developed to minimized the difficulties for the implementation of NPS by government of Odisha.
- Foster (2017) studied about the attitude of young people towards the pension planning in U.K. and how to motivate them for retirement planning. The researcher found that young people lacked knowledge about the pension plans. They had lack of trust on pension fund providers and lack of proper advice to investment in pension plans. they had no flexible and transparent financial literacy program to give them proper guidance for pension planning.
- Thakur *et. al.* (2017) studied about perception towards retirement planning not associated with investment plans for retirement and relationship between the financial advice for investment for retirement goals. The researchers found that mostly people were willing to get retirement in upcoming 20 years. More are ready to invested for retirement planning and financial advised on saving and investment for retirement planning also impact significantly.
- Guillen (2018) studied about the perception and determinants of choosing the private pension fund institutions in Peru. A questionnaire was used and data was

collected from 514 respondents. The researcher found that socio-economic variables were irrelevant to choose the private pension fund institutions. However, some factors like leadership of private pension fund and return-on-investment portfolio were significant to choose the private pension fund institutions. SEM model was used to compare the perception of investors between the two periods of time between 2009 and 2016. Researcher found that perception of investors was different to choose the private pension fund institution between these two periods.

- Reyers (2018) studied about the perception regarding the adequacy of retirement savings. This study focused on how South African workers were confident about their income adequacy in future after retirement and the behavior of workers depends upon the perceptions of retirement readiness. The researcher used the data from a national survey conducted on South Africans who were sure about their retirement preparedness. It was found that financial risk tolerance, good financial behavior, self-assessed financial knowledge and future time perspective were positively related with respondents' retirement confidence.
- Ketkaew *et. al.* (2020) studied about the financial and retirement planning behavior of urban and rural citizen of China in comparative dimension. The researchers found that individual investment behavior was related with the health status, financial goal attainment capacity, retirement benefits and urban citizens and rural citizens thought differently towards the perceived parental burden and retirement benefit sufficiency.

### **2.3 Factors Influencing Investment in Pension Plans:**

- Woerheide (1995) analysed the desirability of Defined Contribution (DC) plans instead of Defined Benefit (DB) plans affected by inflation, growth in salary, age of employee and career length. The researcher found that high growth rate of salary and age of employee lead defined benefit pensions. Longer career leads to defined contribution pension plans, high rate of inflation leads to defined contribution plans. This study was beneficial for the people who had multiple job offers with defined benefit and defined contribution plans.

- Mutran *et. al.* (1997) studied about the factors affecting the attitude towards retirement. Sample data was collected from the area of Raleigh-Durham Chapel hill metropolitan from the people between the 58 to 64 years age. The researchers found that the workers who continue to work had less positive attitude towards the retirement than the worker who retired by 1994. The workers who were retired in 1992, were influenced by expectation of pension, social background expected retirement time, self-concept and workers' identity. Workers retired in 1994, were influenced by the expectation of pension at the time of retirement, earlier retirement attitudes, and self – esteem. The workers who continued to work were influenced by self - esteem, earlier retirement planning and pension expectation.
- Bodie and Crane (1997) analysed the investing pattern of respondents' total assets of holdings for wealth maximization and not for retirement. Individual asset allocations were based on the advice of experts. The respondents of this survey hold the investment in cash and near cash assets as increase in wealth. They saved in assets that not for retirement. They appeared to increase their wealth and maximize the tax benefits but were not keen on managing the retirement.
- Alexander *et. al.* (1998) studied about the investors' knowledge and source of information towards the mutual fund. The sample size was 2000 respondents selected on random basis who were mutual fund investors. Questions were asked on demographical, financial, and fund ownership features of mutual fund investors' knowledge about cost and risk in mutual fund investment and source of information regarding cost and risk. The researchers suggested that there was a requirement of financial literacy among the investors towards the mutual fund.
- Somansundaram, (1999) analyzed the saving and investment model of salaried people of Coimbatore in order to find out the awareness level, attitude, and factors influencing to the investors regarding saving and investment, pattern of saving and investment. The researcher found that along with the expectations, savers and investors were facing many problems. Without implementing necessary directions, these problems could not be solved.

- Murphy and Gerrans (2001) studied about the resources used by the Australian for the retirement saving decisions. This study provided the information on the knowledge of a university superannuation fund's members who were solicited to select the Defined Benefit (DB) plans or one of four accumulated accounts and examined on the bases of gender. Women were more risk averse in retirement saving decision and education played a very important role for selecting the information source.
- Duflo and Saez (2002) studied about role of peer group for investment decisions to choose the Mutual Fund company to invest for retirement and participation in Tax Deferred Account (TDA). The employees of a large university were the sample element of this study. The researcher found that there was an important role of colleagues and peer group in investment decisions for retirement plan.
- Bailey *et. al.* (2003) studied about major factors influence the employee retirement investment decisions. Social influence and peer group affect and psychological biases. The researchers found that the policy makers could make better retirement plans with the consideration of the factors influencing the employee decision.
- Jacobs-Lawson and Hershey (2005) examined the effect of “financial knowledge”, “future time perspective” and “financial risk tolerance” on the retirement saving behavior. Total sample size was 270 respondents taken from the working population. Regression was used to analysed the data. The researchers found that all the three variables: “financial knowledge”, “future time perspective” and “financial risk tolerance” affected the retirement saving behavior and influenced to each other also. The result of the study suggested that counselling should be provided on all these three dimensions.
- Pettigrew *et. al.* (2007) studied about the behavior of young people about the pension and factors that influence their saving behavior towards the retirement planning. The researcher found that saving behavior of young people were influenced by the parents, partners and media rather than the government or financial service industry. The employer who contributed in the pension scheme

was influenced the behavior and encouraged the employees to contribute in pension and join a scheme. Most important influencer was the life stage. The result of the study also suggested that people should start retirement planning at early stage of life and should have the knowledge about the financial terms and benefits of pension plans. government should also plan for this.

- Hira *et. al.* (2009) studied about factors affecting the retirement planning behavior on the basis of age. The researcher found that important variables like age, source of financial information and investor's activity to predict ownership and saving activity, income, employment, review of investment performance, planning for the future and financial information review through mail are responsible factors to predict maximization in retirement contribution.
- Dash (2010) studied about the factors influencing to investment decision of population or citizens of India and also examined the factors influence to "risk tolerance" and "decision-making process" on the basis of age and gender. The researcher found that age and gender significantly affected the financial behavior and risk-taking capacity of investors.
- Lee *et. al.* (2012) analysed the factors affecting the choice of consumers towards pension fund among Newzeland's consumers about Kiwi Saver pension scheme with the factors like "attitude to financial risk", "perceived time until retirement", recommendations of colleagues, family members and friends, and information provided by media for investing. Least important factors were "involvement of financial products", "ethical concerns" and "other assets". Most influencing factors included attitude to financial risk, advice from colleagues, friends and family. The information provided by media, employer, government and pension fund manager also influenced the consumers' choice regarding pension fund. This paper suggested that the pension scheme provided the satisfaction towards the needs of consumers.
- Mazzonna and Peracchi (2012) studied about relationship between ageing, cognitive abilities and retirement with the help of SHARE model. The researchers

found that education played a significant role in describing heterogeneous factor in the level of cognitive abilities of the respondents.

- Coile (2015) analysed the economic determinants which affected the workers' retirement decisions. The researcher found that in recent decades govt. shifted the pension system from defined benefited to defined contribution in some extent. "Wealth and savings", "health and health insurance", "public and private pensions" and "labour demand" were some economic determinants to take the retirement decision.
- Wata *et. al.* (2015) studied about determinants of employee's attitude towards the retirement with the case of pipeline company of Kenya. Stratified random sampling method was used. Data was analyzed on the basis of regression, mean, correlation, standard deviation and percentage. The researcher found that occupational factors, economic factors, environment factors, social factors influenced the attitude of employees towards the retirement planning. The researchers suggested that the employer should educate the employees to plan for retirement at early stages of their career and invest in pension plans.
- Nguyen *et.al.* (2017) studied about the factor affecting the personal savings behavior in Vietnam through "actual financial knowledge" and "perceived financial knowledge" and "financial risk tolerance". Logistic regression was used. The researchers found that "actual financial knowledge" was positively related with regular pension savings. But "perceived financial knowledge" and "financial risk tolerance" were not important factors related with regular personal savings.
- Vyas (2017) studied about influence of financial literacy on retirement saving behavior of households with aspects like impact of investment information sources, and financial objectives, and preference of various investment options and retirement planning attitude. The researcher found that there was moderate financial literacy among household people. They invested in bonds, debentures, equity, shares, preference shares, mutual funds, derivatives and insurance products to fulfil the objectives like future expenses, improve the life cycle during retirement to minimize the tax liabilities and achieve growth in investment and the

demographical factors made a significant impact on literacy and retirement saving attitude of household.

- Singal and Manrai (2018) studied about factors affecting the investment in mutual fund, and investors' perception towards the investment in mutual fund. They found that fundamental factors and investor perception played a very important role towards the investment decision making process.
- Nolan and Doorley (2019) studied about influence of financial literacy on retirement preparation in Ireland. Multivariate regression was used to analyze the data. Researcher found that men with high level of education, awareness and self-employed had the financial literacy at high level. Financial literacy helps to increase the total household wealth, lower financial stress and higher level of expected income after retirement. It was also found that those who had financial literacy at high level, invest only in pension plans for retirement with the financial literacy. Income and education were other important determinants for retirement preparedness.
- Clark *et. al.* (2019) studied about retirement planning behavior's determinants in the terms of risk and time preferences. The researchers found that time preference was more relatively correlated with retirement planning in comparison to risk preference. They also found that financial literacy was also required to make preparedness about retirement.
- Lee *et. al.* (2019) examined the factors influencing the financial planning of the young working adults. Sample area of this study was from Kuala Lumpur, Malaysia. Multiple regression and Chi-square were used to analyse the data. Financial literacy, socio-demographics, financial attitude and financial planning were the main factors of this study. The researchers found that financial literacy, socio-demographics, financial attitude and financial planning positively influenced the financial behavior of young working adults.
- Kumar *et. al.* (2019) studied about barriers which arise in planning for retirement. The researchers found that barriers like income, gender, marital status, education,

number of financial dependents, financial literacy, financial dependency, goal clarity, cultural and psychological factors influenced the retirement planning.

- Shariff and Isah (2019) studied about the retirement saving attitude of young working generation of Malaysia of various age groups, income levels, education levels, and various factors influencing the behavior of these working individuals and the association of these factors with the attitude towards the saving for retirement. A questionnaire was used and data was collected from more than 200 respondents. Factor analysis, t-test, ANOVA, regression models were applied to examine the data. The researchers found that income, attitude for retirement, and future expectation influenced the retirement saving behavior among young working individuals in Malaysia. The young working generation was more concerned about saving for retirement.

#### **2.4 Satisfaction Level for Investment in Pension Plans:**

- Elder and Rudolph (1999) studied about the relationship of retirement planning and satisfaction level towards retirement. 1781 were the sample size. Regression was used to analyse the data. The researchers found that retirement planning and satisfaction level towards retirement were positively correlated. It was also found that decisions for retirement planning were mandatory (either through employers' compulsion or because of health problems).
- Sundali *et. al.* (2008) analyzed the eminence of fixed income sources for retirement and prospective results of shift of Defined Benefit (DB) to Defined Contribution (DC) pension plans. In this study, relationship between capabilities (health, wealth, income, education and income stability), expectations and well-being were investigated. The researchers found that employees were less satisfied with defined contribution pension plans than defined benefit pension plans. If the option was given to the employees by the employer between the defined benefit or defined contribution plans. They may prefer defined benefit pension plans, but then shift from defined benefit pension plans to defined contributory pension plans as it is mandatory for all to opt defined contribution pension plans.

- Patel and Patel (2012) analyzed the behavioral pattern of salaried class working people of private sector towards investment and what was the perception of these people towards the investment in various investment alternatives. The researchers found that traditional investment options like post office savings and fixed deposits were not only the way of investment. Young generation was well informed about the investment options and they were liking to invest in mutual fund, real estate and invest not only the purpose of safety and security but also to get the benefit of tax. Females were more interested to invest in gold. As traditional sources did not provide the tax benefit, so the young generation was interested to save in another investment plans.
- Haris and Said (2012) examined the decision of workers towards the early retirement on the basis of pension scheme of public sector. Logistic regression was used to find the social security benefits for two separate age groups – early retirement age and compulsory retirement age. Data was collected for two variables named: social security accrual and social security wealth. Both variables were studied with other factors like gender, educational level, marital status, age, experience with the help of logistic regression. The researchers found that income effect was positively related with early retirement but substitution effect was negatively related with early retirement. It was also found that the present benefits from existing pension schemes were not enough to motivate the workers to get early retirement.
- Jebaraj (2013) analyzed the investment pattern of salaried class investors with the purpose to examine awareness level, purpose of investment, factors influencing investment decisions and investors' satisfaction for their investment and difficulties faced by them while they investing. The researcher found that awareness level, satisfaction level and attitude in investment behavior were correlated with demographical factors.
- Umamaheshwari and Kumar (2014) studied about the salaried class investors' attitude awareness, expectations and satisfaction level regarding their investments. This study was done in Coimbatore, Tamilnadu in India. Random sampling was used. Mean, percentage, standard deviation, t-test, Chi-square was used to analyse

the data. Data was analyzed on demographical factors like gender, marital status, age, residential status, employment, income scale, investment. Sample size was 1000 respondents. The researchers found that on the basis of demographical variables, awareness, attitude, expectations there was significant difference. But the satisfaction level was different on the basis of marital status, age, employment and investment. However, it was not different based on gender, residential status and income scale.

- Bresser and Soest (2015) studied about relationship between expectations from retirement and satisfaction with retirement pension provisions. The researchers found that expectations from pension provisions had positive relationship with satisfaction level and those who change their expectation level were more satisfied with their pension provisions.
- Eronimus (2015) studied about the NPS in India. The data was collected through questionnaire in the four districts of Tamilnadu state. The research concluded that maximum of the respondents opined that 100 percent social security is not possible through the NPS as promised. They also felt that a minimum amount of pension must be guaranteed by the government. Majority of respondents opined that the pension contribution should not be invested in the stock market as they think that it was very risky. The study showed that most of the respondents had low level of financial literacy and more awareness had to be created among the employees about NPS. Majority of respondents were not satisfied with the NPS and were willing to join the old pension scheme.
- Amudhan *et. al.* (2016) studied about factors influencing the decision of investment and satisfaction level of investment in existing investment schemes. The researchers found that Individual investors of Salem district were well aware of the importance of preparing good investment decisions and highly preferred bank deposits and LIC schemes.
- Jayapriya and Chandni (2016) investigated the awareness level, preferences and satisfaction level of policy holders regarding LIC of Malappuram district. Convenient sampling was used. 100 was the sample size of this study. Percentage,

weighted rank and chi-square test were used to analyse the data. The researchers found that most of the policy holders were satisfied with their existing insurance plan but were not pleased with the services provided by the insurance agents and claim settlement procedure was also not satisfactory. Most of the policy holders were not aware of the various insurance policies and they took the policies only to get the tax benefit. Pension plan was the second preferable investment avenue by the policy holders.

- Kamath and Patil (2017) defined the cost benefit analysis of national pension scheme by collected the data of 4 age groups of investors (25 years, 35 years, 45 years and 55 years). The researchers used the case study technique to analyse data based on age, processing charges, investment period, and taxation policies of govt. and concluded that NPS was a special pension system and provided a lot of benefits to the investors in form of extra Rs. 50000/- deduction u/s 80CCD (1B) of the Income Tax Act, 1961 for the additional investment from their taxable income.
- Sisodiya (2018) studied about the employee welfare schemes provided by the private and public sector educational institutes to its employees. This study was conducted in Madhya Pradesh and data was collected through a questionnaire. The researcher concluded that employee welfare schemes empower employees to live a brighter and higher satisfying life. In the organization, employee welfare amenities affected the performance of the employees as well as the productivity of the organization. So, welfare amenities should be provided by the organization to its employees.
- Shrivastava (2018) studied about the investment behavior of government employees towards the various financial products. The researcher found that most of employees did the investment in traditional options like bank deposits and post office deposits etc. Because they were not aware about other financial products available in the market and were conservative and unwilling to take the risk so they were not satisfied with their present investment.
- Farrar *et. al.* (2019) studied the retirement planning behavior in U.K. the researchers found that gender was an important determinant in the retirement

planning when expectational and attitudinal were considered as independent variables. Retirement planning did not significantly affected by financial literacy.

- Karunakaran and Shilpa (2020) studied about the effect of occupational pensions and social protection in Kasaragod district of Kerala. Sample size was 60 of respondents. Percentage was used to analyse the data. The researchers found that most of the pensioners had at least one dependent member on them. It created financial load for them, even after retirement. This finding stressed the need of attention of government to increase the social protection in the terms of finance as even social protection and occupational pensions fulfil the financial and emotional need of old age people.
- Jun (2020) studied about Korean social security system and its relationship with retirement decision. Data from 2006-2016 through survey was used in this study. The researcher found that pension benefits significantly affect the decision of retirement. Older wage workers worked longer and continued to work to earn additional income and to increase their pension benefits instead of increasing the financial benefits from greater pension wealth. Transfer of children, low fertility rate were main determinants to provide the pension stability.
- Shanmugapriya and Saravanan (2020) analyzed the behavior and satisfaction level of rural investors who were investing in financial saving schemes of Post Office. 150 respondents were the sample size. Random Sampling Technique was used. Percentage, ANOVA, chi-square, ranking analysis, cluster analysis was used to analyse the data. The researchers found that various schemes were offered by Post Office in terms of long-term investment, middle term investment and short-term investment. Most of the respondents invested in short term investment.

## **2.5 Demographical Factors and Retirement Planning Behavior:**

- Jacobs-Lawson *et. al.* (2004) analyzed the effect of demographical and psychological variables on the retirement planning based on gender differences, how they may make efforts and time spent on retirement planning. they found that females consumed less time and did less efforts for planning than men. The researchers suggested that there should be separate plans for men and women.

- Ameriks and Zeldes (2004) analyzed the relation between the age and invested portfolio choice specially in stock market. The researchers studied about the main problems which prevent unrestricted age estimation, cohort and time effect. Main purpose of the researchers was to explore the important characteristics of investors' behavior like heterogeneity in allocation choices, importance of non – stock ownership and infrequency of active portfolio allocation changes. They found that most of the investors wanted no active change in their portfolio allocation and age had no effect in portfolio allocation. Some older individuals shifted from stock market at the time of annuitization.
- Njuguna and Otsola (2011) studied predictors of finance literacy among the occupational pension schemes' members in Kenya. The researchers mentioned age, gender, educational level, marital status, management level, job experience, income as the predictors of pension financial literacy. They used a questionnaire for data collection from 395 active members of 1308 pension schemes from the eight cities and the questionnaire included six questions. The conclusion of this research was that 58.6% respondents were males who invested in pension schemes and were between the age of 30-35 years. The level of financial literacy was significantly dissimilar based on age, level of education, length of service, income, pension plan, management level, participation in earlier financial plans. This study suggested that policy maker needed to plan for pension literacy programs.
- Murthy (2012) studied about the behavior towards the retirement planning among Malaysian working individuals and wanted to find the association between demographical variables with retirement planning. The researcher found that working individuals belonging to the various age groups had different perspective for the behavior towards retirement planning. Young working individuals had better perception towards the planning for retirement. Behavior towards the retirement was influenced by the demographical factors also.
- Griffin *et. al.* (2012) studied about utility of theory of planned behavior variables in retirement planning. The researchers found that retirement planning behavior is different among males and females. Males were interested in planning but females

were facing greater difficulties in financing for their retirement because of less knowledge of finance, lower salaries and being more employed on part-time jobs and lack of confidence. The researchers suggested that there was a need to increase the knowledge of finance among females and to build their confidence.

- Sireesha and Laxmi (2013) studied about the correlation of the demographics with income and savings. They also ranked the purpose of saving, and analyzed the factors affecting the investment decision. The researchers found that risk bearing attitude at medium level, return and security were the main reasons to invest money. Income and savings affected the investment decision.
- Palanivelu and Chandrakumar (2013) examined the preferred investment avenues among the salaried class investors of Namakkal Taluk, Tamilnadu. The researchers found that education, age of investors and knowledge about the current financial system made a significant impact about the choice of the investment avenues.
- Chawla (2014) studied about behavior of individual investors for the investment in mutual fund based on demographics. Main parameters of this study were creditability and different characteristics of the fund. The researcher found that mutual fund issuing affected company's performance. Growth fund with capital appreciation and tax saving fund were the important factors for the consideration among the investors of mutual fund. Most of the respondents wanted to earn higher return with tax saving at low risk.
- Rushdi (2014) studied about impact of psychological and demographical factors on Indian salaried investors' investment behavior. The researcher found that psychometric factors influenced the various characteristics of investment behavior but other demographic factors not affected like psychometric factors.
- Clark *et. al.* (2015) studied about the advice taken by the defined contribution pension plan investors from agents. This study had been done on context of age, gender, salience of issue, and the size of bet effect. 2004-2013 was considered as the study period. Inquiry method and the frequency and size of contact made by the defined contribution investors to get the advice of agent was considered as

main factor for this survey. The researchers found that most of the respondents did not take advice while they were investing. It was also found that females took more advice than males, old people took more advice than young, larger balance account holder took more advice than short balance account holder, long experienced persons took more advice than those having short experience.

- Jamaludin and Gerrans (2015) studied the saving behavior of the employees of Provident Fund of Malaysia towards the retirement saving and investment avenues. The researcher found that gender and marital status were important predictors for the investment in Unit Trusts but religion was not an important factor.
- Kannadhasan (2015) studied about demographical variables like gender, age, marital status, occupation, income, and risk-taking behavior of retail investors. The researcher found that demographical factors were significant to differentiate the Risk-Taking Behavior (RTB) category of retail investors.
- Chattopadhyay and Dasgupta (2015) examined the impact of demographical variables like gender, marital status, age, level of education, number of dependents, employment status, saving pattern and investment amount, future financial planning, return on investment on the risk tolerance attitude of investors. Sample size of this study was of 200 respondents, who were investing in the Indian stock markets. The researchers found that aged investors were less risk prone in comparison of younger investors while of those who were unexperienced had no significant difference in risk attitude. Married investors who had dependent persons were less risk prone in comparison to unmarried investors. High education level, high income and saving, higher investment and high return on investment increase the risk tolerance attitude. This study also found that women were more risk prone in comparison of their male counterparts. Educational qualification, number of dependents, employment status had no impact on risk tolerance attitude of the investors.
- Chard *et. al.* (2016) studied about the knowledge of people about the social security and what was the impact of this social security knowledge on retirement

planning behavior. The researchers found that social security knowledge had more impact than demographical factors on saving and retirement planning.

- Imthiyas (2016) studied the investment behavior of professional individual investors of Chennai. A questionnaire was used and data was collected from 621 respondents from six top IT firms having business in all over the world. ANOVA, correlation, regression, t-test, discriminant analysis, factor analysis, cluster analysis, SEM were used to analyse the data. The researcher found that various desirable variables like appreciation, safety, prestige, liquidity, utility etc. and some non-needed variables like operational difficulty, defective services, low rate of return and unreliability etc. were the main factors which influenced the investment decision. Investors can learn about these factors through knowledge, experience and information. Investment decision also influenced by the perception, awareness, behavioral biases. Researcher suggested that government and financial institutions should spread the awareness about investment related aspects.
- Curtis *et. al.* (2017) analysed the aggregate household saving in Japan, China and India with reference to demographics in comparative dimensions. The researchers found that age distribution affects the saving habits of household persons across all these three countries. Increase in dependent children leads to the saving rate in China and India, but in Japan, saving rate is decreasing since mid-1970s due to increase in retirement aged population.
- Priyadarshini (2017) studied about the association of investment behavior of salaried individuals with tax planning along with the aspects to know the awareness level, problems faced in tax planning, investment pattern and factors influencing the investment behavior of the salaried individuals. The researcher found that there was high level of awareness among salaried class people and most of them invested to reduce the tax liability and liked to invest in NSC/ NSS, provident fund, postal saving, bank deposit, insurance, mutual fund, pension scheme and real estate.

- Halilbegovic and Mehanovic (2018) studied about the impact of age on retirement investment habits. The researchers found that age had significantly affected the saving and investment habits for retirement.
- Foster and Heneghan (2018) studied about the gender difference for pension planning in the U.K. The researchers found that pension knowledge, confidence in decision making were different in males and females.
- Joseph (2018) studied about retirement planning of working individuals of Chennai city to find out the relationship of demographical factors with investment pattern, and to find the investment made in various avenues based on marital status. The researcher found that investment behavior has not related to demographical factors except on the basis of monthly income. Investment made in various avenues was also not related to marital status. Married working individuals invested differently in avenues in large basis regarding their retirement life as compared to the unmarried investors.
- Jiménez *et. al.* (2019) analyzed the financial planning for retirement on the basis of age among the Spanish workers. The researchers found that young people had the greater level of financial planning for retirement as they have high level of education.
- Afthanorhan *et. al.* (2020) studied the retirement planning behavior of youth by evaluating the impact of social influence, saving attitude, financial literacy, and goal clarity of youth for retirement planning and the effect of demographics like gender, marital status, age, income and level of education were also checked upon by putting them as moderating variable between the relationship of social influence, saving attitude, financial literacy, and goal clarity with retirement planning behavior. A questionnaire was used and data was collected from 323 respondents. Systematic random sampling technique was used. The researchers found that relationship between social influence, financial literacy, saving attitude, and goal clarity with retirement planning was significant and positive and all moderating demographical variables affected the relationship. They also

suggested that the government should frame the retirement planning policies with respect to demographical features of the investors also.

- Sekar and Uma (2020) analyzed the awareness level and investment pattern of salaried class investors of Neyveli Lignite Corporation (NLC) of India. Data was collected from 578 respondents through a structured questionnaire. Percentage, mean, chi-square and coefficient of variation statistical tools were used to analysed the data. It was found by the researcher that respondents were highly aware about return-on-investment but the awareness level was low regarding the investment in stock market and proper timing of investment in mutual funds and NAV.
- Madaan and Singh (2020) investigated the investment influences of individual investors. This study had been reviewed based. The researchers explored that individual investors were influenced by a number of factors like investment objectives, risk and return expectations, perceptions, attitudes. They took the four factors into account, namely demographic, financial, market related and behavioral factors. They found and suggested that with the implementation of adequate investment policies and proper investment planning helped the investors to get good return and minimize the risk in their investment.
- Hauff *et. al.* (2020) studied the retirement financial behavior of the Swedish citizens based on financial literacy, age, gender, income, education. The researchers found that subjective and fact-based financial literacy, age, gender, income, education significantly affect the retirement financial behavior on the basis of three dimensions - retirement planning, saving and investment.
- James *et. al.* (2020) analyzed about people's thinking level towards the retirement life and how they dealt with it by taking the savings in workspace in pension. The study had been done through interviews of 42 full time employees between the age of 20 to 50 years in the U.K. The researchers found that most of respondents did not have adequate thinking about their retirement life, even who were investing the money. They were not saving for future as they had more current demands on their immediate income over savings for future.

- Shreevastava and Brahmabhatt (2020) investigated the effect of demographical variables like age, gender, income, education on the retirement planning behavior of generation Y. Convenience Sampling was used and data was collected from 394 respondents. Sample element was between 26-40 years age group people. The researchers found that males were more positively concerned towards retirement planning than females. Persons with high level of income and high level of education were also positively correlated with retirement planning but the age was negatively related with this.
- John and Namchaisawadwang (2020) analyzed the relationship of retirement planning and attitude for retirement planning, financial literacy level and goal clarity in Thai people. Demographic factors were taken as moderator. Data was collected from 151 respondents. Random Sampling was used. Hypothesis tested by using the regression model. The researchers found that retirement planning was positively correlated with attitude towards the retirement planning, goal clarity and level of financial literacy. Attitude towards retirement planning was positively influenced by income also. The Thai Citizens had high level of financial literacy and goal clarity. They were mostly invested in pension plans, annuities, insurance, and mutual funds.
- Safari and Njoka (2021) studied the importance of financial literacy in retirement planning of the public sector employees of BUKAVU city. Purposive and stratified sampling techniques were used. Data was collected through questionnaire from 396 public sector employees. This study was descriptive in nature. Hypothesis was tested by Logistic Regression. The criteria to analyse the financial literacy was financial knowledge, financial education, computation capability, and risk attitude. The researchers found that computation capability and financial knowledge influenced the retirement planning significantly and risk attitude did not influence the retirement planning. They recommended the need of increased financial literacy among the public sector employees and the need of arranging the training to increase the financial literacy by the policy makers.

## 2.6 Contribution of Researchers in the Specific Area of Social Security, Pension System and Retirement Planning

- **Mukul G. Asher**

Analyzed the social security system and pension schemes in developing countries of Asia. Some studies had been done specially on India. The purpose of the researcher was to find the present position of social security systems and need to reform in it. Researcher found that most of the developing countries in Asian region had the objective to reduce the poverty, but their social security and pension system at initial stage, they are continuously reforming in it but it is not adequate. Due to continuously expand in elderly population, it is a challenge to secure the elderly population socially and financially, to save their retirement life and the benefits are not adequate for the old age people. It is a matter of concern for them. The researcher indicated that there is a need to reform the social security in the Asian developing countries such as minimum guarantee provided to old age population, social protection, maintain the adequate data of beneficiaries, increase the public and private pension and to include health care services in it, to start a course at the graduation level regarding the social security, to give financial education to the investors, to provide technical assistance to the members, to prepare the social security system as per the financial requirement of elderly population without biasedness of gender and age and to make proper policies for the informal sector of economy also. All these improvements will create the extra financial burden on the government. To solve these problems, the government should check the performance of pension programs and provident fund organizations, should obtain the funds from conventional and non-conventional sources for budgetary revenues, should decrease the administrative and management costs, should enhance the professionalism in operations, should reform in capital and financial market to diversify the portfolio and increase the return, should improve the social security system with the consideration of economic, political and financial conditions, should focus on defined contributory schemes, should start budget financial universal social pension and should provide good return and should establish the world class research center to strengthen the pension system in India.

- **David E. Bloom**

Analyzed the problems of aging population which is increasing due to change in demographics. Due to increase in longevity, many health problems are also increasing in elderly population. Supply of labour is also affected by health status. If the health is good then people desire to increase the retirement age and proportionately decrease in savings. Health problems and longevity also affects the retirement saving behavior. Saving for retirement is necessary to bear the health expenditure. Expected longevity also affect the wealth accumulation along with the retirement decision. Increase in the survival probability leads to increase in wealth without affecting the length of working life. So, there is a need of social security and pension system for those who do not have sufficient savings for survival in old age. The purpose of pension system should be to reduce the poverty and to provide adequate income to old age people, to decrease the risk of investment and to promote the quality in men and women in retirement security, and to treat according to the life expectancy. So, the government and the policy makers should design the pension system that provides optimum coverage of elderly people to get the social security benefits.

- **Robert L. Clark**

Analyzed the importance of financial education and information provided in the various financial educational seminars for retirement planning decisions. Most of the studies which had been done in U.S. failed to produce any result. Due to inadequate knowledge, people take improper decisions. Researcher's aim was to know how the financial awareness programs were beneficial for the investors who were investing for retirement and how they managed the investment risk for retirement. Due to global financial crisis, there is a need to examine and adjust the institutions and retirement programs with the purpose to providing sufficient return on the invested money for retirement purpose. So, to manage the investment risk, there is a requirement of financial education, and financial advice for the investment in retirement plans. financial literacy programs help the investors to understand the complex financial instruments and important characteristics of these plans, thereby changing the mind

set about the retirement programs, income goals, improve the retirement saving process, decide the retirement age, manage the investment on the basis of time preferences. So, with the purpose of raising the financial knowledge and education, government and retirement plan providers should arrange the financial literacy programs and seminars to educate the people in financial terms and make them able to do good investment for retirement.

- **So-Hyun-Joo**

Analyzed the financial security behavior for the retirement, perception and factors influencing the retirement financial behavior especially financial advice. The researcher explored that the generation of both millennials and the baby boomers, take the aging as “Ease of Daily Life”, “Personal Growth”, Social and Psychological wellbeing”, however the millennials took the “Personal Growth” as more important factor. Larger elderly population was more likely to save even if they belong to the developing country or developed country. Financial security of the people of developing countries was more influenced by public pension and other old age security policies. All these factors lead to increase in rate of savings and financial security of old age population. The researcher also explored those men who were working, young, had high level of income, high level of education, optimistic financial attitude and behavior, low risk aversion perspective they had the higher level of retirement confidence. Financial education had also affected the retirement planning behavior and increased the retirement confidence. Many people sought the advice from professionals/ friends/ colleagues/ other sources when they were taking the retirement decision.

- **Douglas A. Hershey**

Analyzed the behavior towards the retirement planning based on demographical and psychological variables. Behavior towards retirement planning included the future time outlook, goal clarity for retirement, perceived financial knowledge, perceived saving adequacy, planning for retirement, future risk tolerance, parental financial values. The researcher found that the psychological and demographical variables were

associated with retirement planning behavior. Perceived financial situation and age were the important predictors for both men and women. Married women were less knowledgeable than married men. Income adequacy played an important role. Increasing age, income and educational qualification were also important variables. Future time outlook was also associated at the individual level. It differed from individual to individual. Financial knowledge also had great impact on the retirement planning perception and behavior. Through financial knowledge, people were able to understand the perspective of the need of future retirement income. The shortfall in expected retirement income was positively related with income and age. Women had larger level of discrepancies than men. Single women had greater shortfall than single men, whereas married men and women both had shortfall in income. So, more educational seminars should be organized to decrease the shortfall in expected retirement income.

## **2.7 Summary of Literature:**

Social and financial protection of elderly population is very important, especially in developing countries, because developing countries are facing the problem of increasing old age population day by day and they have no sound social security system for them. The government is continuously reforming the social security and pension system. It has “Implemented various Define Benefit (DB) and Defined Contribution (DC) pension plans” (Kumar, 2003), “but these are unsustainable and need to make further reforms” (Goswami, 2002). “There is need of major income security plans such as strengthen to social assistance program, guaranteed income in reformed pension policy and plan for long term investment options with high yield” (Moneer, 2004), “health and insurance assistance should also be included in economic security arrangements” (Bloom, 2010; Goli, 2019; Ganapathy, 2021; Hessel, 2020). “Government should plan the pension system for smoothing of consumption, mitigation of longevity risks and elimination of poverty” (Singh et. al. 2015), because at the time of retirement, individuals have no regular source of income. People have two choices for the survival in old age: first is to do work for long time and be on job, second is to save for future and to take retirement. “If they choose the first option,

then the early retirement age increases, aged people remain for long time in job” (Manoli & Weber, 2016). But due to health issues, they are not able to do work for the long time. So, they have to choose the second option, which is to save for the future for easy and smooth survival in old age and to maintain the living standard which they had in working life. Saving for retirement is personal phenomena and it differs from individual to individual. Perception towards the retirement planning also depends on the demographical variables. “Greater income level and women are liking to volunteering as a part of an ideal retirement” (Deborah, 2004). “Age, gender and income level also affect the risk attitude and spousal pension can also significant outcome for risk preferences” (Clark & Strauss, 2008), “gender is the main determinant of economic dependency, men are more independent than women” (Kumar & Pillai 2019), and “age also effect the economic independency, illiterate persons are more dependent than literate” (Kumar & Pillai 2019). “Men are more aware than women, unmarried women are less aware than married women” (Shukla, 2013). “Young generation is more aware about the investment” (Patel & Patel, 2012). Various factors affect the retirement planning behavior of investors. Level of awareness for finance is one of the most influential factors which give positive direction towards the saving for retirement. Through the financial education, people would be able to understand the complex financial instruments and important characteristics of these plans. Thereby changing the mind set about the retirement programs, income goals, improving the retirement saving process, deciding the retirement age, and managing the investment on the basis of time preference. After investing in the pension plans, the satisfaction is a must. “Investors take the decisions of the investment on the mandatory basis” (Elder & Rudolph, 1999). “They prefer defined benefit pension plans, but shift from defined benefit to defined contributory pension plans, it is mandatory for all to opt the defined contribution pension plans” (Bresser & Soest, 2015). To get satisfaction level, investors have to change either their satisfaction level or government and policy makers have to take reforms in social security and pension system.

## **2.8 Research Gap:**

The researcher collected the literature from various sources to find out gap between the related studies which has already been done and to find out the problem. There is always scope for further research in the area of investment patterns for retirement planning.

Most of the literature reviewed on retirement planning behavior and pension plans, it shows that significant researches had been done on pension plans and retirement planning behavior. It is found that most of these studies were done by the foreign research scholars and only few studies were done in India. On reviewing the literature, the researcher found there is a scope to do this research in Haryana State as it is financially sound state of India, literacy rate is also high. So, according to researcher, combination of employment, finance and literacy makes that it is an appropriate region to do research. The researcher was unable to find any study on the “comparison of the NCR and the Non- NCR area of Haryana state on investment behavior of salaried class individual investors towards pension plans for retirement planning”. This study was undertaken with the purpose to fill the research gap by throwing light on the aspects of retirement planning and investment in pension plans for the future by salaried class individual investors. With the comparative examination of the NCR and the Non-NCR areas of Haryana state, this study examined the social security conditions, perception towards investment in pension plans for retirement planning, factors influencing the decision of investors to invest in pension plans for retirement planning, and satisfaction level towards investment in pension plans for retirement planning on the basis of socio-economic demographics.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

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#### **3.1 Introduction:**

Research is a systematic and scientific investigation to increase or revise current knowledge by discovering new facts. Enquiry about new facts leads to validating the existing postulates. Research includes specify a problem, construct a hypothesis, collect, systematize and analysis the data to find the solution of the constructed problem and conclude to detect if it is suitable with constructed hypothesis. “Research is performing a methodical study in order to prove a hypothesis or answer a specific question” (Shukla, 2013).

This chapter includes objectives of the study and the research methodology adopted to achieve the objectives and find the results. Research methodology represents the procedure to do the research with justification of numerous methods used in the research. In this chapter, research methodology included objectives of the study, research model, hypothesis, research design, and pilot study. Research design included the population of study, data used for study, sampling method, sampling elements, sampling area, sample size, data collection, questionnaire design, data analyze techniques.

#### **3.2 Objectives of the Study:**

##### **Objectives of the Study:**

The primary objective of this study is to know:

“Investment Behavior of Salaried Class Individual Investors in Pension Plans for Retirement Planning- A Comparative Study of NCR and Non-NCR of Haryana state”

To achieve the primary objective, the following objectives are framed in this study: -

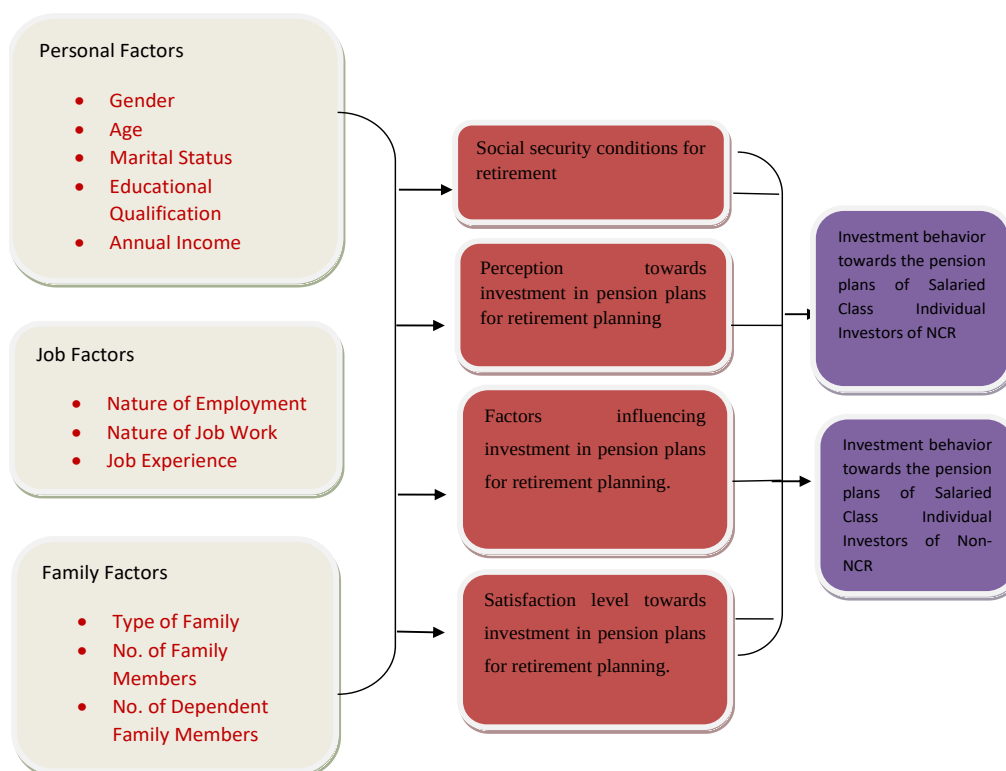
- To identify the social security conditions for retirement.
- To ascertain the perception towards investment in pension plans for retirement planning.

- To examine the factors influencing investment in pension plans for retirement planning.
- To analyze the satisfaction level towards investment in pension plans for retirement planning.

After assessing the investment behavior of the salaried class individual investors in pension plans for retirement planning, then investment behavior towards the pension plans had also been assessed on comparative dimension between the salaried class investors of NCR and Non-NCR area.

### 3.3 Research Model:

**Figure No. 3.1: Research Model**



To assess the investment behavior of salaried class individual investors towards pension plans for retirement planning through ascertain the social security conditions for retirement, perception towards investment in pension plans for retirement planning, factors influencing investment in pension plans, satisfaction level towards

investment in pension plans. Further assess the difference between the investment behavior of salaried class individual investors of NCR and Non-NCR area of Haryana State towards investment in pension plans for retirement planning.

### **3.4 Hypothesis:**

#### **Hypothesis 1:**

Social security conditions of the salaried class individual investors are significantly different based on socio-economic demographics like gender, age, marital status, educational qualification, nature of employment, nature of job work, job experience, annual income, type of family, number of family members, number of dependent family members.

**H1a:** Social security conditions of salaried class individual investors are significantly different based on gender.

**H1b:** Social security conditions of salaried class individual investors are significantly different based on age.

**H1c:** Social security conditions of salaried class individual investors are significantly different based on marital status.

**H1d:** Social security conditions of salaried class individual investors are significantly different based on educational qualification.

**H1e:** Social security conditions of salaried class individual investors are significantly different based on nature of employment.

**H1f:** Social security conditions of salaried class individual investors are significantly different based on nature of job work.

**H1g:** Social security conditions of salaried class individual investors are significantly different based on job experience.

**H1h:** Social security conditions of salaried class individual investors are significantly different based on annual income.

**H1i:** Social security conditions of salaried class individual investors are significantly different based on type of family.

**H1j:** Social security conditions of salaried class individual investors are significantly different based on number of family members.

**H1k:** Social security conditions of salaried class individual investors are significantly different based on number of dependent family members.

**Hypothesis 2:**

Perception of salaried class individual investors towards investment in pension plans is significantly different based on socio-economic demographics like gender, age, marital status, educational qualification, nature of employment, nature of job work, job experience, annual income, type of family, number of family members, number of dependent family members.

**H2a:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on gender.

**H2b:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on age.

**H2c:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on marital status.

**H2d:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on educational qualification.

**H2e:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on nature of employment.

**H2f:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on nature of job work.

**H2g:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on job experience.

**H2h:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on annual income.

**H2i:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on type of family.

**H2j:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on number of family members.

**H2k:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on number of dependent family members.

**Hypothesis 3:**

Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on socio-economic demographics like gender, age, marital status, educational qualification, nature of employment, nature of job work, job experience, annual income, type of family, number of family members, number of dependent family members.

**H3a:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on gender.

**H3b:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on age.

**H3c:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on marital status.

**H3d:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on educational qualification.

**H3e:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on nature of employment.

**H3f:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on nature of job work.

**H3g:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on job experience.

**H3h:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on annual income.

**H3i:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on type of family.

**H3j:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on number of family members.

**H3k:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on number of dependent family members.

**Hypothesis 4:**

Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on socio-economic demographics like gender, age, marital status, educational qualification, nature of employment, nature of job work, job experience, annual income, type of family, number of family members, number of dependent family members.

**H4a:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on gender.

**H4b:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on age.

**H4c:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on marital status.

**H4d:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on educational qualification.

**H4e:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on nature of employment.

**H4f:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on nature of job work.

**H4g:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on job experience.

**H4h:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on annual income.

**H4i:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on type of family.

**H4j:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on number of family members.

**H4k:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on number of dependent family members.

**Hypothesis 5:**

Investment behavior including social security conditions, perception, factors influencing and satisfaction level towards investment in pension plans of salaried class individual investors of NCR and Non-NCR area of Haryana state is significantly different.

**H5a:** Social security conditions of salaried class individual investors of NCR and Non-NCR area of Haryana state are significantly different.

**H5b:** Perception of salaried class individual investors towards investment in pension plans for retirement planning of NCR and Non-NCR area of Haryana state is significantly different.

**H5c:** Factors influencing to salaried class individual investors to do investment in pension plans for retirement planning of NCR and Non-NCR area of Haryana state are significantly different.

**H5d:** Satisfaction level of salaried class individual investors towards investment in pension plans for retirement planning of NCR and Non-NCR area of Haryana state is significantly different.

### **3.5 Research Design:**

#### **3.5.1 Population of the Study:**

Population of the study included salaries class individual investors of NCR and Non-NCR area of Haryana state.

#### **3.5.2 Type of Data used for the Study:**

Primary and secondary data had been used in this study. Primary data collected through using the structured questionnaire. Various published sources such as newspapers, journals, books, websites, and articles of previous researches were used for the collection of secondary data.

The survey method was used for collection of the primary data. The study was done on the entire population based on sample drawn from the population.

#### **3.5.3 Sampling:**

Sampling is a simple procedure used to analyze the pre decided number of observations that are chosen from a large population and learning about the population. In sampling, only a part of the population is studied instead of every unit of the population, and the conclusion is drawn on this basis for the entire population. Since, the area of study is very large, so selected samples had been taken for the study.

#### **3.5.4 Sampling Method:**

The prime purpose of this study was to access the investment behavior of salaried class individual investors of Haryana state towards the investment in pension plans for retirement planning. To fulfil this purpose, it was required to collect the data from salaried class investors. So, purposive sampling method was used, which is non-probability Sampling method. Purposive sampling is also known as judgement or selective sampling. In judgement sampling, the selection of sample depends on the researcher's knowledge and professional judgement means researcher choose sample which he feels to be the best representative of the population with the attributes or characteristics under investigation.

Quota sampling technique was also used to compare the results of investors' behavior towards the investment in pension plans by salaried class individual investors of NCR and Non-NCR area of Haryana state. 50% quota was fixed for NCR and 50% quota

was fixed for Non-NCR area's respondents of Haryana state to maintain the balance responses between two regions.

#### **3.5.5 Sampling Element:**

For this study, the sampling element was salaried class individual investors with the comparison of NCR and Non-NCR area of Haryana state.

#### **3.5.6 Sampling Area:**

The sampling area was the NCR and Non-NCR area of Haryana state with a comparative dimension.

#### **Haryana Overview:**

Haryana is one of the most economically and wealthiest states of India and South Asia also. It is on fifth rank for per capita income in the country since 2000, and more than double of national average per capita income. Haryana is the state with the largest number of rural crorepatis in India. Due to the developed state of India, Haryana provides more and more employment to the people as there is a large number of educational institutions (universities, colleges, schools, and technical education institutes), hospitals and health centres, post offices, banks, transportation offices, training institutes, communication and information technology companies and so on. It is the focal point of industrialization. It is also the attraction centre of foreign direct investment. Many cities of Haryana are famous for industrialization such as Faridabad, Panchkula, Gurugram, Ambala, Mahendergarh, Hisar and Panipat. Faridabad is the eighth fastest growing city in the world and third in India. Gurugram ranks 1<sup>st</sup> in India in IT sector growth rate and number two in startup ecosystem. Hisar is also called Steel city due to the large production of steel. Owing to all these factors, Haryana is placed at the 7<sup>th</sup> position among Indian states by Human Development Indexing Rank. All these development factors increase the employment in Haryana. A total number of 12,10,414 people are employed in Haryana as per the 2019-20 Statistical Abstract of Haryana. Employment enhances the income level. People have money to invest for the future after maintaining the current expenditure of living. In Haryana the literacy rate is 75.55% whereas the national literacy rate is 74.00%. A combination of employment and literacy makes the people economically sound and make them aware about retirement planning. They save for their future out

of their current income. Hence their retirement life is secure and financially independent. So as per the researcher's point of view, it is an appropriate region to do the research. Hence, Haryana has been taken as the study area in this research work.

**NCR of Haryana includes the following districts-**

Bhiwani (including Charkhi Dadri), Faridabad, Gurugram, Jhajjar, Jind, Karnal Mahendergarh, Mewat (Nuh), Palwal, Panipat, Rohtak, Rewari, Sonipat.

**Non-NCR of Haryana includes the following districts-**

Ambala, Fatehabad, Hisar, Kaithal, Kurukshetra, Panchkula, Sirsa, Yamunanagar.

**3.5.7 Sample Size:**

Following formula suggested by (Nargundkar 2003) was used to calculate the sample size.

Formula to calculate the sample size:

$$n = p (1-p) (Z^2/e^2)$$

$$n = 0.50(1-0.50)(1.96^2/.05^2)$$

$$n = 384$$

n = n is sample size.

Z = Z is value for confidence level taken which is wanted by the researcher for the study. The value of Z is 1.96 taken from the standard normal distribution table at 95% confidence level in this study.

p = p is chances of occurrence of something indicated as a portion (0.50)

e = e is tolerance error. Researcher has assumed tolerance error is 5% (0.05) in this study.

In this study, calculated sample size was 384.

With the consideration of cost, time and accuracy or reliability of data, the sample size was determined 500. Factor analysis was also run with the help of SPSS software which also indicated the adequacy of sample size. Data was collected through google form and questionnaire was circulated via online mode. Data was collected from 512 respondents who responded properly are taken for study.

### 3.5.8 Data Collection:

Primary data collected through using the structured questionnaire. Questionnaire contained five parts. First part included the socio-economic demographics of respondents. Second part included the social security conditions, the third part included the perception regarding investment in pension plans for retirement planning, the fourth part included the factors influencing the decision regarding investment in pension plans for retirement planning and lastly, the fifth part deal with satisfaction level towards investment in pension plans for retirement planning.

**Independent Variables:** socio-economic demographics of respondents (salaried class individual investors).

**Dependent Variables:** social security conditions, perception, factors influencing, satisfaction level towards investment in pension plans for retirement planning.

### 3.5.9 Questionnaire Design:

Structured questionnaire was used to find investment behavior of salaried class individual investors towards investment in pension plans for retirement planning. Questionnaire consisted of basically close ended questions. Questionnaire was classified into five parts as follows:

**First part** related to the socio-economic demographical profile of the respondents such as gender, age, marital status, educational qualification, nature of employment, type of job work, job experience, annual income, type of family, number of family members, number of dependent family members.

**Second part** included the information about the social security conditions of respondents. Questions related to the saving part of annual income and number of family members save for old age also included. 5-point “Likert Scale” was used to find out the annual investment level for future of respondents. 1= the annual investment from Rs. 0-50000, 2 = the annual investment from Rs. 50,000-1,00,000, 3 = the annual investment from Rs. 1,00,000-1,50,000, 4 = the annual investment from Rs. 1,50,000-2,00,000 and 5 = the annual investment from above Rs. 2,00,000. Questions were also designed in dichotomous form means “Yes” or “No”. 1 = No and 2 = Yes.

**Third part** included the information about the perception of respondents about investment in pension plans with the help of 5-point “Likert Scale” from 1 to 5. 1 = “strongly disagree”, 2 = “disagree”, 3 = “neutral”, 4 = “agree”, 5 = “strongly agree”. Questions related to the thinking about retirement and about the retirement age also includes in this part.

**Fourth part** consisted of the information or questions about the factors influencing the behavior of respondents about investment in pension plans. Questions set on the 5-point “Likert Scale” from 1 to 5. 1 = “strongly disagree”, 2 = “disagree”, 3 = “neutral”, 4 = “agree”, 5 = “strongly agree”. Questions related to the informational sources were also included with the option of “Yes” or “No”. 1 = No and 2 = Yes.

**Fifth part** included the information about the satisfaction level of respondents towards investment in pension plans. Questions were set on the 5-point “Likert Scale” from point 1 to 5. 1 = “Highly Dissatisfied”, 2 = “Dissatisfied”, 3 = “Neutral”, 4 = “Satisfied”, 5 = “Highly Satisfied”.

#### **3.5.10 Data Analysis Techniques:**

- **Reliability:**

Reliability means to check the internal consistency among the items of a construct of an instrument i.e., questionnaire. It means the instrument scale provides the same results on the repeatedly measurement. Internal consistency was measured on the basis of correlation of a particular set of items. Reliability minimizes the subjectivity as much as possible and estimate errors in measurement and provide the suggestions to improve the test and minimize the errors.

In this study, Cronbach alpha measurement tool was used to check the internal consistency or reliability. Cronbach alpha was developed by the Lee Cronbach in 1951. This is the most popular and widely used technique to check the reliability. The value of Cronbach alpha always lies between the 0 to 1. “The rule of thumb to describe the internal consistency in items is 0.9 or more is excellent, between 0.8 to 0.9 is good, 0.7 to 0.8 is acceptable, between 0.6 to 0.7 is questionable, between 0.5 to 0.6 is poor and less than 0.5 is not acceptable” (Hotwani, 2018). Reliability was checked through the SPSS software for each construct and for the whole

questionnaire. Value of Cronbach Alpha was more 0.7 in all cases, so the reliability supported to do this study further.

- **Validity:**

Validity is the capability of a measuring instrument to check what it is purposive to check. Results are doubtful and incorrect if a scale is not validated (Hotwani, 2018).

Validity was measured with the help of coefficient of correlation at the 95% significance level. The coefficient of correlation in all the cases was less than 0.05 so data was validated and supported for the study.

### **Analyse the data**

For analysing the data, at first survey was conducted through a questionnaire. A pilot questionnaire was made to check the effectiveness of the questionnaire. Percentage, mean, factor analysis, t-test, and ANOVA statistical tools were used to find the association of independent and dependent variables. Data was tabulated for easy and effectful understanding. SPSS software was applied to analyze the data.

- **Percentage:**

Percentage makes the data easily comparable. Value of percentage lies between 0 to 100 and with the help of percentage, complex data can easily be analyzed.

- **Mean:**

Mean is an effective statistical tool to compare different sets of data. When the each and every observation of data cannot be explained due to complexity of data, then mean makes the data comparable. Mean is statistical variable to examine the central point of the distribution of a random observation.

- **Factor Analysis:**

Factor analysis is a statistical method to manage the comprehensive data and convert into limited number of factors, which helps to the researcher for analysis the data easily. It is a technique to reduce or compress the data. It manages the data into limited number of variables consists of items of same characteristics.

In this study, Exploratory Factor Analysis (EFA) was used with Principal Component Analysis (PCA) technique to analyse the pattern of data set. Principal Component Analysis (PCA) was applied to turn the original data into limited number of factors. Data was rotated on Varimax rotation. Results were found on the basis of KMO value, anti-image correlation and the value of factor loadings. KMO value was more than 0.6, the correlation value more than 0.6 and value of factor loading was more than 0.5, considered as a cut off value for the variables to this study further.

- **t-test:**

t-test was a statistical tool to test the hypothesis that there is a significance difference between the means of two groups which may be connected with particular characteristics. Calculation of data depends on the number of data values of each group, mean difference, and standard deviation of samples. In t-test, it is assumed that there is dependent and independent variable. The outcomes of the t-test match with the critical value of t-test and take decision to accept or not to accept the hypothesis. If the assessed value (p value) of t-test is more than the critical value at particular significant level (table value), then the hypothesis is accepted and the p-value is less than the critical value, then the hypothesis is not accepted.

In this study, t-test was used to find significant difference between means of sample having two categories at 95% significance level. If the assessed value of t-test was more than 0.05 then hypothesis was accepted, otherwise hypothesis was not accepted.

- **One Way ANOVA:**

One way ANOVA is a statistical tool used to determine the significant difference among the means of more than two groups. In ANOVA, it is assumed that there is dependent and independent variable. ANOVA statistics is also used for hypothesis testing. Outcomes of the ANOVA calculated value is compared with the critical value and take the decision of accept or not accept the hypothesis. If the assessed value (p value) of ANOVA is more than the critical value at particular significant level (table value), then the hypothesis is accepted and the p-value is less than the critical value, then the hypothesis is not accepted.

In this study, ANOVA statistics was used to find significant difference of variables having more than two categories at the 95% significance level. If the calculated value of ANOVA was more than 0.05 then hypothesis was accepted, otherwise hypothesis was not accepted.

### **3.6 Pilot Study:**

A pilot survey was performed to understand the respondents' behavior towards the investment in pension plans through questions related to social security conditions, perception, factor influencing and satisfaction level for investment in pension plans. "A pilot survey is done on 50 salaried class individual investors with the objective to assess the feasibility." (Swaminathan, 2019). In the study, attention has been given to adopted methodology, accessibility of the targeted sample, whether respondents were able to understand the questions easily and answer them effectively (Swaminathan, 2019) and identify any potential practical problems in data collection (Swaminathan, 2019) and the worth of the items of questionnaire. The questionnaire was framed to understand the investors' responses and their behavior towards the retirement planning and investment in pension plans. Main advantages of this pilot study were to help the researcher to find some points of improvement in questionnaire as well as to find challenges in data collection (Swaminathan, 2019). Cronbach alpha was applied to check the reliability of questionnaire. The value of Cronbach Alpha was 0.792, 0.817, 0.864, 0.883 for the social security conditions, perception, factor influencing and satisfaction level for investment in pension plans respectively. The value of Cronbach Alpha is 0.904 for the full questionnaire. So, the value was more than 0.7 in all cases and the data was reliable and there was internal consistency in the responses of the respondents.

## CHAPTER 4

### ANALYSIS AND INTERPRETATION OF DATA

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Analysis has been done after the collection of data. Results of the analyzed data and its interpretation is shown in this study with following subclassification:

- 4.1 Socio-Economic Demographical Profile of the Respondents.
- 4.2 Analysis of Social Security Conditions for Retirement.
- 4.3 Analysis of Perception towards Investment in Pension Plans for Retirement.
- 4.4 Analysis of Factors Influencing Investment in Pension Plans for Retirement.
- 4.5 Analysis of Satisfaction Level towards Investment in Pension Plans for Retirement.
- 4.6 Comparison of Investment Behavior of Salaried Class Individual Investors of NCR and Non-NCR area of Haryana State through analysing Social Security Conditions, Perception towards Investment in Pension Plans, Factors Influencing Investment in Pension Plans, Satisfaction Level towards Investment in Pension Plans.

#### **4.1 Socio-Economic Demographical Profile of the Respondents:**

Socio-economic demographical profile of respondents is an essential part of the data for any research work. In this study, socio-economic demographical profile consists of the gender, age, marital status, educational qualification, nature of employment, type of job work, job experience, annual income, type of family, number of family members, number of dependent family members.

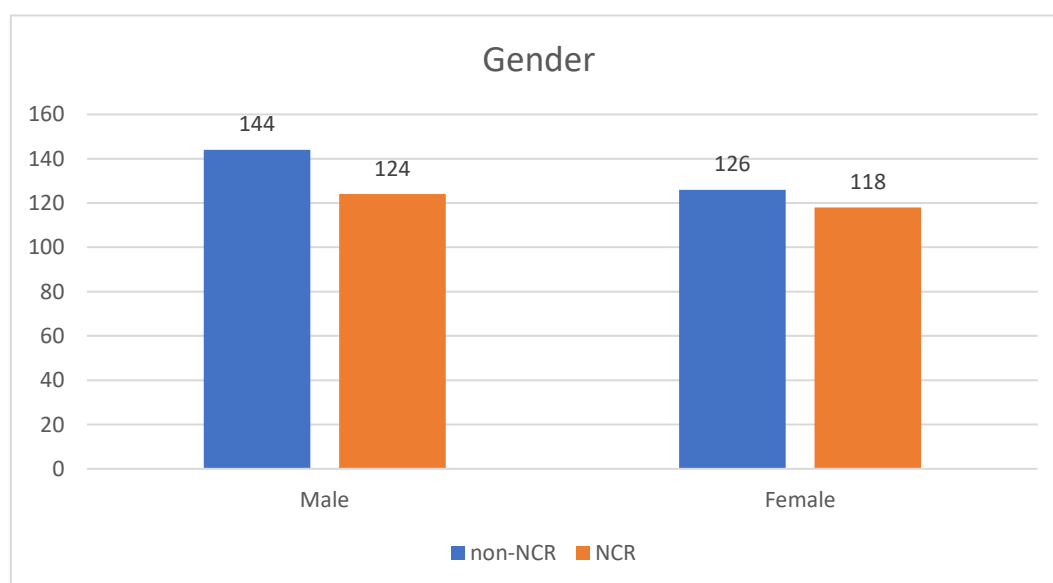
## Gender wise Categorization of Respondents

**Table No. 4.1.1: Categorization of Respondents in accordance with Gender**

| Gender | Location |      |     |      | Total |      |
|--------|----------|------|-----|------|-------|------|
|        | Non-NCR  |      | NCR |      |       |      |
|        | N        | %    | N   | %    | N     | %    |
| Male   | 144      | 53%  | 124 | 51%  | 268   | 52%  |
| Female | 126      | 47%  | 118 | 49%  | 244   | 48%  |
| Total  | 270      | 100% | 242 | 100% | 512   | 100% |

Source: Primary Data

**Figure No. 4.1.1: Categorization of Respondents in accordance with Gender**



Source: Primary Data

**Interpretation:** This Table No. 4.1.1 indicates that 144 (53%) are male and 126 (47%) are female respondents of Non-NCR area of Haryana state. 124 (51%) are males and 118 (49%) are female respondents of NCR area of Haryana state. Total 268 (52%) are males and 244 (48%) are females. It indicates that female respondents are less than male respondents.

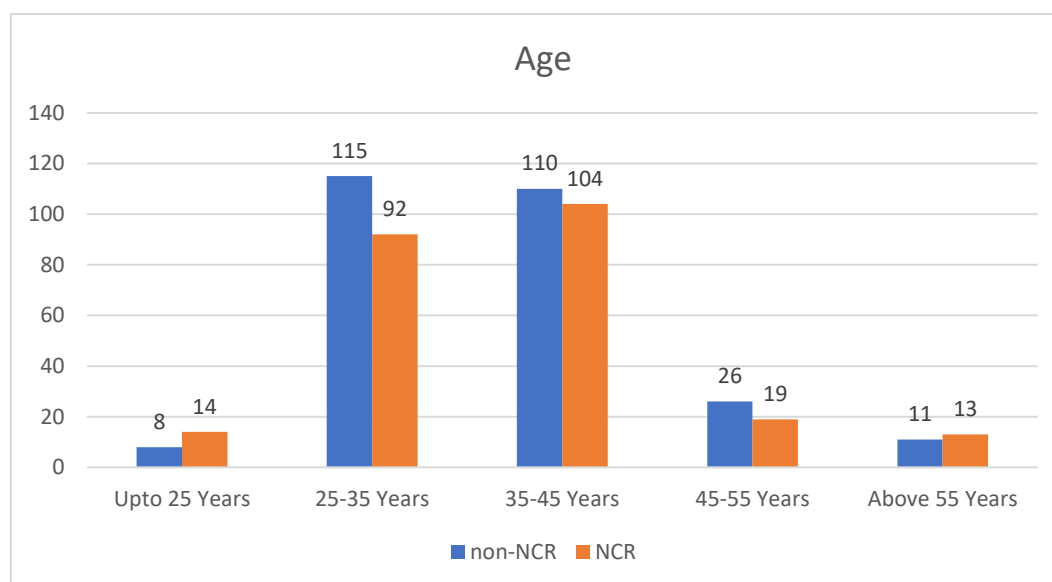
### Age wise Categorization of Respondents:

**Table No. 4.1.2: Categorization of Respondents in accordance with Age**

| Age            | Location |      |     |      | Total |      |
|----------------|----------|------|-----|------|-------|------|
|                | Non-NCR  |      | NCR |      |       |      |
|                | N        | %    | N   | %    | N     | %    |
| Upto 25 Years  | 8        | 3%   | 14  | 6%   | 22    | 4%   |
| 25-35 Years    | 115      | 42%  | 92  | 38%  | 207   | 40%  |
| 35-45 Years    | 110      | 41%  | 104 | 43%  | 214   | 42%  |
| 45-55 Years    | 26       | 10%  | 19  | 8%   | 45    | 9%   |
| Above 55 Years | 11       | 4%   | 13  | 5%   | 24    | 5%   |
| Total          | 270      | 100% | 242 | 100% | 512   | 100% |

Source: Primary Data

**Figure No. 4.1.2: Categorization of Respondents in accordance with Age**



Source: Primary Data

**Interpretation:** Table No. 4.1.2 indicates that 8 (3%) respondents belong to the upto 25 years age group, 115 (42%) belong to 25-35 years age group, 110 (41%) belong to 35-45 years age group, 26 (10%) belong to 45-55 years age group and 11(4%) belong to the above 55 years age group of non- NCR area of Haryana state. 14 (6%) respondents belong to the upto 25 years age group, 92 (38%) belong to 25-35 years

age group, 104 (43%) belong to the 35-45 years age group, 19 (8%) belong to the 45-55 years age group and 13(5%) belong to the above 55 years age group of NCR area of Haryana state. In total 22 (4%) respondents belong to the upto 25 years age group, 207 (40%) belong to 25-35 years age group, 214 (42%) belong to 35-45 years age group, 45 (9%) belong to 45-55 years age group and 24 (5%) belong to the age group of above 55 years of Haryana state. It indicates that most of the respondents are youngsters as they belong to the 25-35 years and 35-45 years age group.

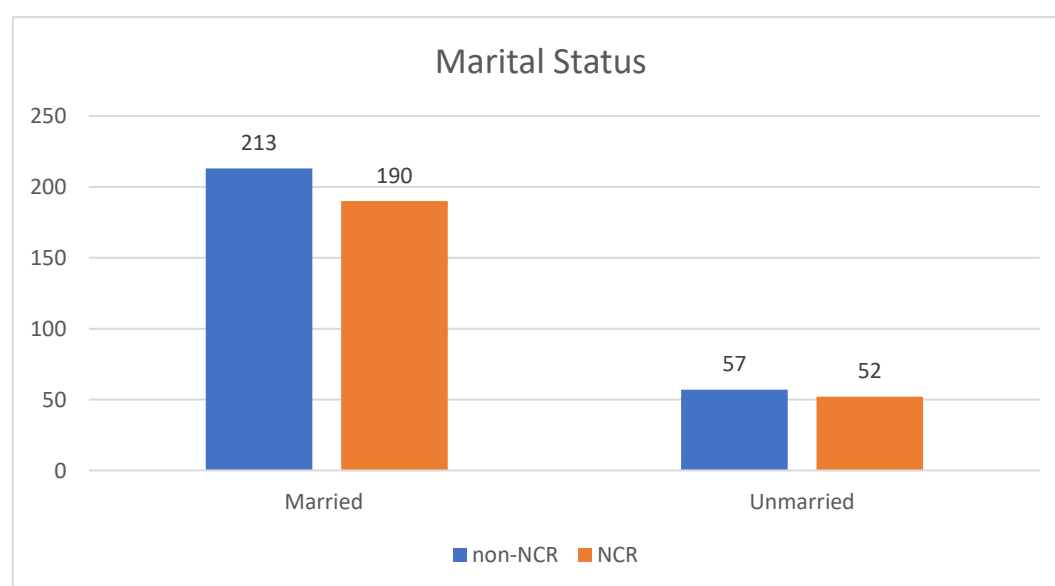
#### Marital Status wise Categorization of Respondents:

**Table No. 4.1.3: Categorization of Respondents in accordance with Marital Status**

| Marital Status | Location |      |     |      | Total |      |
|----------------|----------|------|-----|------|-------|------|
|                | Non-NCR  |      | NCR |      |       |      |
|                | N        | %    | N   | %    | N     | %    |
| Married        | 213      | 79%  | 190 | 79%  | 403   | 79%  |
| Unmarried      | 57       | 21%  | 52  | 21%  | 109   | 21%  |
| Total          | 270      | 100% | 242 | 100% | 512   | 100% |

Source: Primary Data

**Figure No. 4.1.3: Categorization of Respondents in accordance with Marital Status**



Source: Primary Data

**Interpretation:** Table No. 4.1.3 indicates that 213 (79%) are married and 57 (21%) are unmarried respondents of Non-NCR of Haryana state. 190 (79%) are married and 52 (21%) are unmarried respondents of NCR area of Haryana state. Total 403 (79%) are married and 109 (21%) are unmarried respondents. It indicates that married respondents are more than unmarried respondents.

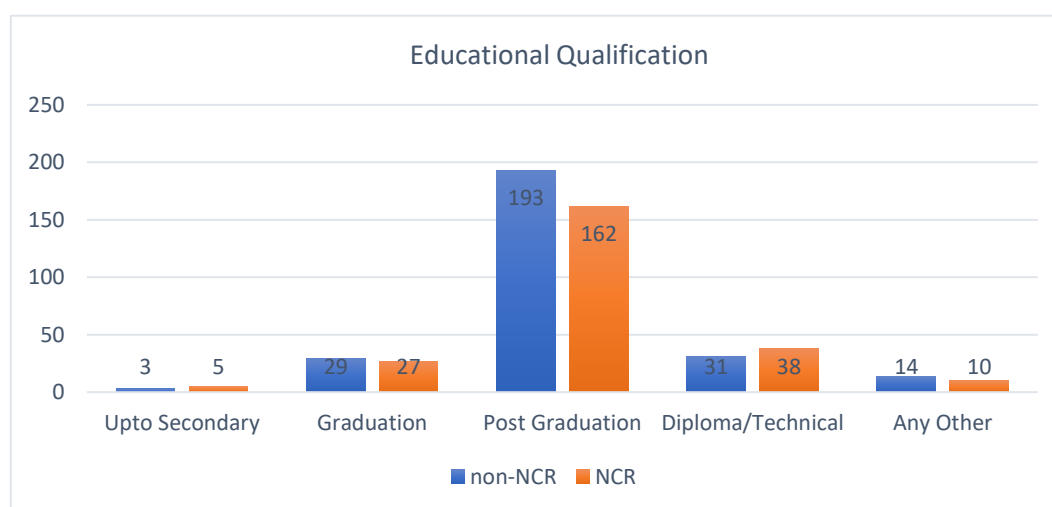
#### **Educational Qualification wise Categorization of Respondents:**

**Table No. 4.1.4: Categorization of Respondents in accordance with Educational Qualification**

| Educational Qualification | Location |      |     |      | Total |      |
|---------------------------|----------|------|-----|------|-------|------|
|                           | Non-NCR  |      | NCR |      |       |      |
|                           | N        | %    | N   | %    | N     | %    |
| Upto Secondary            | 3        | 1%   | 5   | 2%   | 8     | 2%   |
| Graduation                | 29       | 11%  | 27  | 11%  | 56    | 11%  |
| Post-Graduation           | 193      | 71%  | 162 | 67%  | 355   | 69%  |
| Diploma/Technical         | 31       | 12%  | 38  | 16%  | 69    | 13%  |
| Any Other                 | 14       | 05%  | 10  | 4%   | 24    | 5%   |
| Total                     | 270      | 100% | 242 | 100% | 512   | 100% |

Source: Primary Data

**Figure No. 4.1.4: Categorization of Respondents in accordance with Educational Qualification**



Source: Primary Data

**Interpretation:** Table No. 4.1.4 indicates that 3 (01%) respondents studied upto secondary, 29 (11%) passed their graduation, 193 (71%) studied the post-graduation, 31 (12%) passed the diploma or technical courses and 14 (5%) covered under any other category who passed course other than mention above categories of Non- NCR area of Haryana state. It shows that 5 (2%) studied upto secondary, 27 (11%) passed their graduation, 162 (67%) studied the post-graduation, 38 (16%) passed the diploma or technical courses and 10 (4%) covered under any other category who passed course other than mention above of NCR area of Haryana state. It also shows that 8 (2%) studied upto secondary, 56 (11%) passed their graduation, 355 (69%) studied the post-graduation, 69 (13%) passed diploma or technical courses and 24 (5%) covered any other category who passed courses other than mentioned above of Haryana state. This indicates that majority of respondents qualified with post-graduation which means that they are educated and have understanding capability of investment.

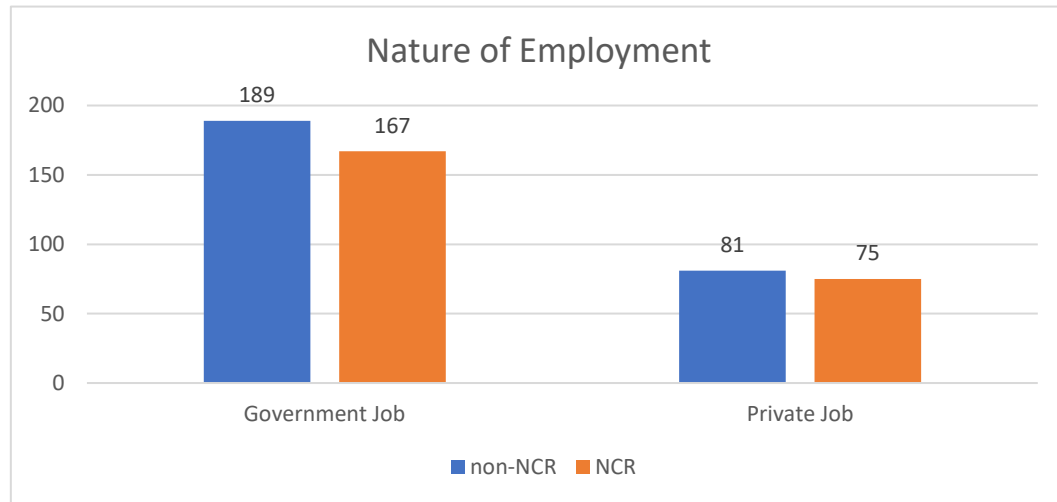
#### **Nature of Employment wise Categorization of Respondents:**

**Table No. 4.1.5: Categorization of Respondents in accordance with Nature of Employment**

| Nature of<br>Employment | Location |      |     |      | Total |      |
|-------------------------|----------|------|-----|------|-------|------|
|                         | Non-NCR  |      | NCR |      |       |      |
|                         | N        | %    | N   | %    | N     | %    |
| Government              | 189      | 70%  | 167 | 69%  | 356   | 70%  |
| Private                 | 81       | 30%  | 75  | 31%  | 156   | 30%  |
| Total                   | 270      | 100% | 242 | 100% | 512   | 100% |

Source: Primary Data

**Figure No. 4.1.5: Categorization of Respondents in accordance with Nature of Employment**



Source: Primary Data

**Interpretation:** Table No. 4.1.5 indicates that 189 (70%) are doing the job in government sector and 81(30%) are doing the job in private sector in Non-NCR area of Haryana state. 167 (69%) are doing the job in government sector and 75 (31%) are doing the job in private sector in NCR area of Haryana state. Total 356 (70%) are doing the job in government sector and 156 (30%) are doing the job in private. It indicates that respondents who do the job in government sector are more than private sector job respondents in this study.

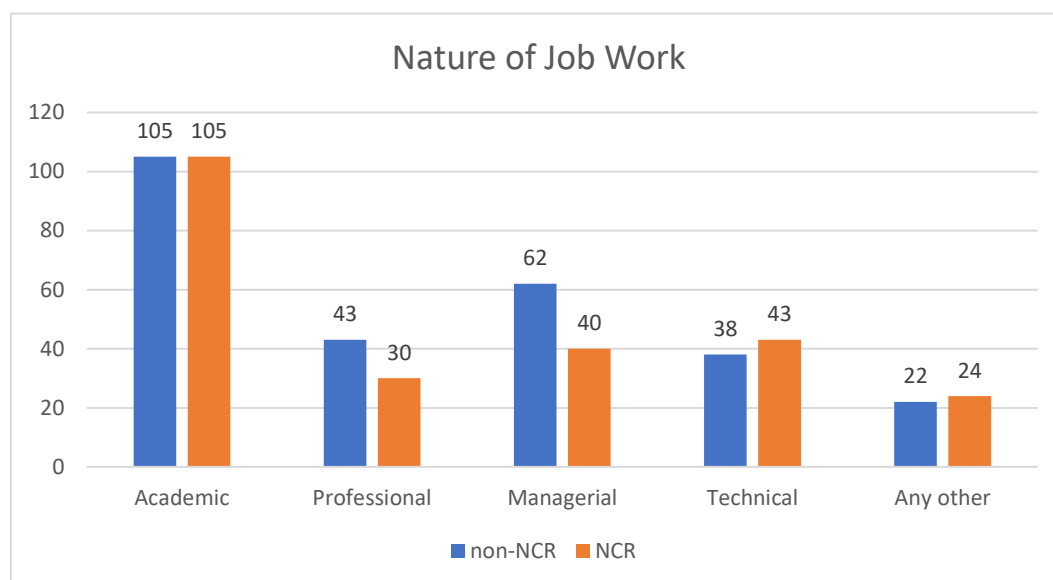
#### **Nature of Job Work wise Categorization:**

**Table No. 4.1.6: Categorization of Respondents in accordance with Nature of Job Work**

| Nature of Job Work | Location |      |     |      | Total |      |
|--------------------|----------|------|-----|------|-------|------|
|                    | Non-NCR  |      | NCR |      |       |      |
|                    | N        | %    | N   | %    | N     | %    |
| Academic           | 105      | 39%  | 105 | 43%  | 210   | 41%  |
| Professional       | 43       | 16%  | 30  | 12%  | 73    | 14%  |
| Managerial         | 62       | 23%  | 40  | 17%  | 102   | 20%  |
| Technical          | 38       | 14%  | 43  | 18%  | 81    | 16%  |
| Any Other          | 22       | 8%   | 24  | 10%  | 46    | 9%   |
| Total              | 270      | 100% | 242 | 100% | 512   | 100% |

Source: Primary Data

**Figure No. 4.1.6: Categorization of Respondents in accordance with Nature of Job Work**



Source: Primary Data

**Interpretation:** Table No. 4.1.6 indicates that 105 (39%) respondents belong to the academics related job, 43 (16%) are professional, 62 (23%) are posted on managerial job, 38 (14%) are related to technical job and 22 (8%) covered under any other category which is other than mention above in Non- NCR area of Haryana state. It indicates that 105 (43%) respondents belong to the academics related job, 30 (12%) are professional, 40 (17%) are posted on managerial job, 43 (18%) are related to technical job and 24 (10%) covers under any other category which is other than mention above in NCR area of Haryana state. It indicates that 210 (41%) respondents belong to the academics related job, 73 (14%) are professional, 102 (20%) are posted on managerial job, 81 (16%) are related to technical job and 46 (9%) falls under any other category which is other than mentioned above total in Haryana state. It indicates that majority of respondents is engaged in academic jobs in this study.

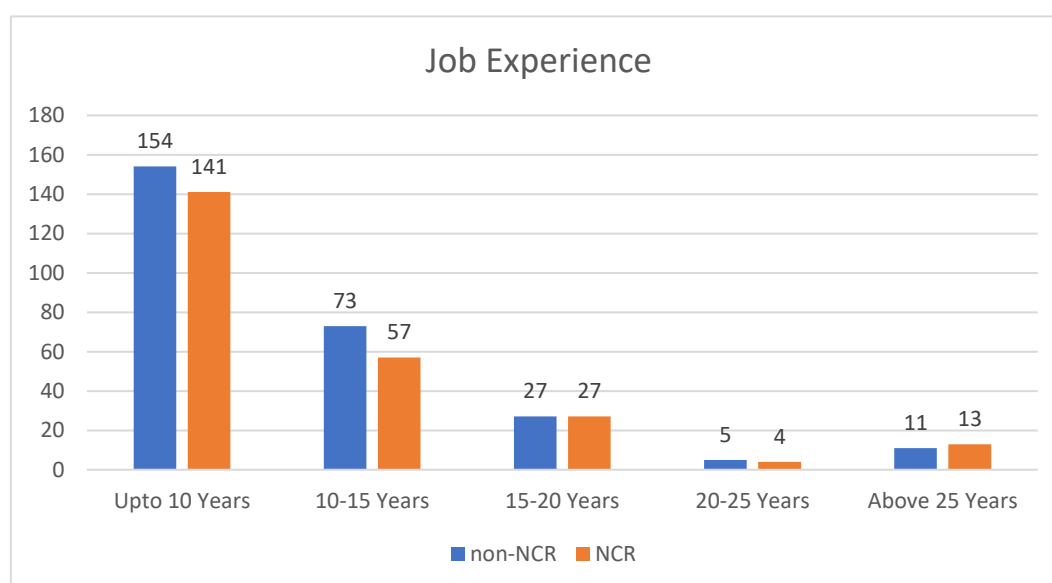
### Job Experience wise Categorization of Respondents:

**Table No. 4.1.7: Categorization of Respondents in accordance with Job Experience**

| Job Experience | Location |      |     |      | Total |      |
|----------------|----------|------|-----|------|-------|------|
|                | Non-NCR  |      | NCR |      |       |      |
|                | N        | %    | N   | %    | N     | %    |
| Upto 10 Years  | 154      | 57%  | 141 | 58%  | 295   | 58%  |
| 10-15 Years    | 73       | 27%  | 57  | 24%  | 130   | 25%  |
| 15-20 Years    | 27       | 10%  | 27  | 11%  | 54    | 11%  |
| 20-25 Years    | 5        | 2%   | 4   | 2%   | 9     | 2%   |
| Above 25 Years | 11       | 4%   | 13  | 5%   | 24    | 4%   |
| Total          | 270      | 100% | 242 | 100% | 512   | 100% |

Source: Primary Data

**Figure No. 4.1.7: Categorization of Respondents in accordance with Job Experience**



Source: Primary Data

**Interpretation:** Table No. 4.1.7 indicates that 154 (57%) respondents having the job experience upto 10 years, 73 (27%) having job experience between 10-15 years, 27 (10%) are doing the job from 15-20 years, 5 (2%) have experience of doing job between 20-25 years and 11 (4%) having the experience of doing the job above 25 years of Non- NCR area in Haryana state. 141 (58%) respondents having the job experience upto 10 years, 57 (24%) having job experience between 10-15 years, 27 (11%) are doing the job from 15-20 years, 4 (2%) having experience of doing job between 20-25 years and 13 (5%) have the experience of doing the job above 25 years in NCR area of Haryana state. In total it indicates that 295 (58%) respondents having the job experience upto 10 years, 130 (25%) having job experience between 10-15 years, 54 (11%) are doing the job from 15-20 years, 9 (2%) having experience of doing job between 20-25 years and 24 (4%) having the experience of doing the job above 25 years in Haryana state. It indicates that majority of respondents having the job experience upto the 10 years means they must start their service path and initiate to do the retirement planning and least number of respondents have the above 25 years job experience in this study.

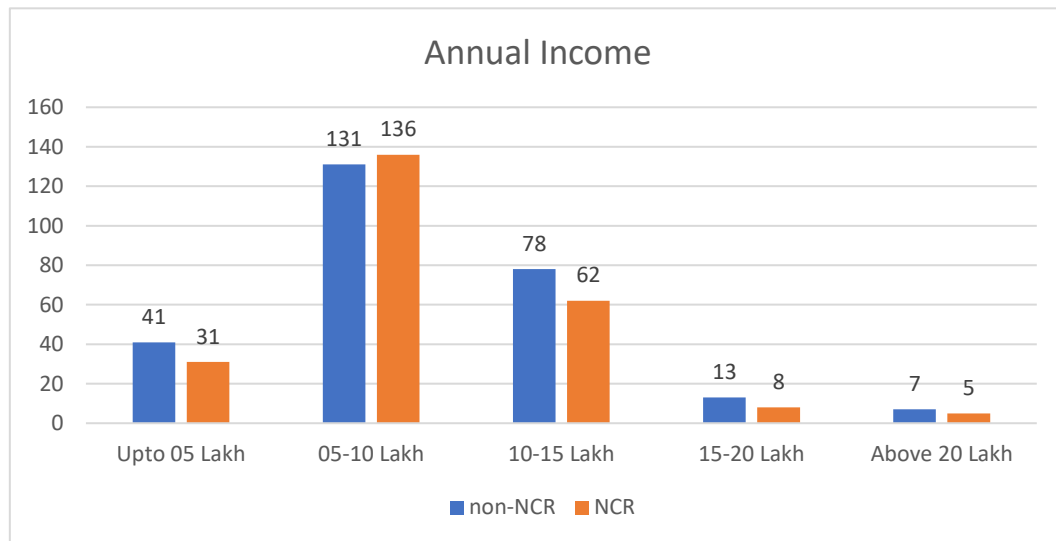
#### **Annual Income wise Categorization of Respondents:**

**Table No. 4.1.8: Categorization of Respondents in accordance with Annual Income**

| Annual Income  | Location |      |     |      | Total |      |
|----------------|----------|------|-----|------|-------|------|
|                | Non-NCR  |      | NCR |      |       |      |
|                | N        | %    | N   | %    | N     | %    |
| Upto 5 Lakhs   | 41       | 15%  | 31  | 13%  | 72    | 14%  |
| 5-10 Lakhs     | 131      | 49%  | 136 | 56%  | 267   | 52%  |
| 10-15 Lakhs    | 78       | 29%  | 62  | 26%  | 140   | 28%  |
| 15-20 Lakhs    | 13       | 5%   | 8   | 3%   | 21    | 4%   |
| Above 20 Lakhs | 7        | 3%   | 5   | 2%   | 12    | 2%   |
| Total          | 270      | 100% | 242 | 100% | 512   | 100% |

Source: Primary Data

**Figure No. 4.1.8: Categorization of Respondents in accordance with Annual Income**



Source: Primary Data

**Interpretation:** Table No. 4.1.8 indicates that 41 (15%) respondents belong to the category who have the annual income upto 5 lakhs, 131 (49%) belong to the category who have the annual income between 5-10 lakhs, 78 (29%) belong to the category who have the annual income between 10-15 lakhs, 13 (5%) belong to the category who have the annual income between 15-20 lakhs and 7 (3%) belong to the category who have the annual income above 20 lakhs of Non- NCR area of Haryana state. 31(13%) respondents belong to the category who have the annual income upto 5 lakhs, 136 (56%) belong to the category who have the annual income between 5-10 lakhs, 62 (26%) belong to the category who have the annual income between 10-15 lakhs, 8 (3%) belong to the category who have the annual income between 15-20 lakhs and 5 (2%) belong to the category who have the annual income above 20 lakhs of NCR area of Haryana state. It also indicates that 72 (14%) respondents belong to the category who have the annual income upto 5 lakhs, 267 (52%) belong to the category who have the annual income between 5-10 lakhs, 140 (28%) belong to the category who have the annual income between 10-15 lakhs, 21 (4%) belong to the category who have the annual income between 15-20 lakhs and 12 (2%) belong to the category who have the annual income above 20 lakhs of Haryana state. Majority of respondents have the annual income between 5-10 lakhs and least number of respondents have the annual income above 20 lakhs. Income is a very important predictor to save for future.

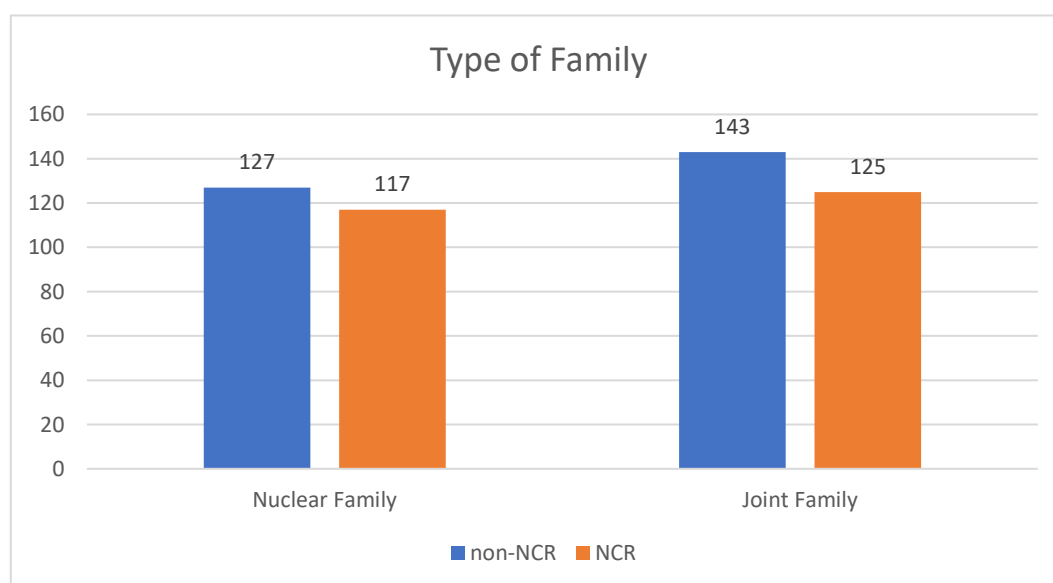
### Type of Family wise Categorization of Respondents:

**Table No. 4.1.9: Categorization of Respondents in accordance with Type of Family**

| Type of Family | Location |      |     |      | Total |      |
|----------------|----------|------|-----|------|-------|------|
|                | Non-NCR  |      | NCR |      |       |      |
|                | N        | %    | N   | %    | N     | %    |
| Nuclear Family | 127      | 47%  | 117 | 48%  | 244   | 48%  |
| Joint Family   | 143      | 53%  | 125 | 52%  | 268   | 52%  |
| Total          | 270      | 100% | 242 | 100% | 512   | 100% |

Source: Primary Data

**Figure No. 4.1.9: Categorization of Respondents in accordance with Type of Family**



Source: Primary Data

**Interpretation:** This Table No. 4.1.9 indicates that 127 (47%) respondents belong to nuclear family and 143 (53%) belong to joint family of Non-NCR area of Haryana state. 117 (48%) belong to nuclear family and 125 (52%) belong to joint family of NCR area of Haryana state. Total 244 (48%) respondents belong to nuclear family and 268 (52%) belong to joint family.

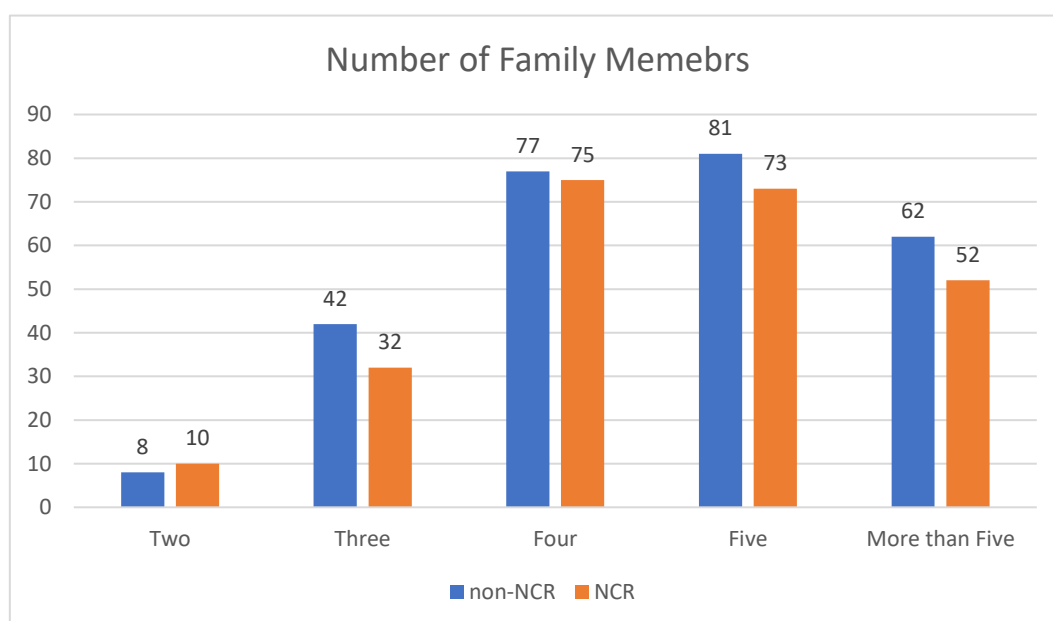
### Number of Family Members wise Categorization of Respondents:

**Table No. 4.1.10: Categorization of Respondents in accordance with Number of Family Members**

| Number of Family Members | Location |      |     |      | Total |      |
|--------------------------|----------|------|-----|------|-------|------|
|                          | Non-NCR  |      | NCR |      |       |      |
|                          | N        | %    | N   | %    | N     | %    |
| Two                      | 8        | 3%   | 10  | 4%   | 18    | 4%   |
| Three                    | 42       | 16%  | 32  | 13%  | 74    | 14%  |
| Four                     | 77       | 28%  | 75  | 31%  | 152   | 30%  |
| Five                     | 81       | 30%  | 73  | 30%  | 154   | 30%  |
| More than Five           | 62       | 23%  | 52  | 22%  | 114   | 22%  |
| Total                    | 270      | 100% | 242 | 100% | 512   | 100% |

Source: Primary Data

**Figure No. 4.1.10: Categorization of Respondents in accordance with Number of Family Members**



Source: Primary Data

**Interpretation:** This Table No. 4.1.10 indicates that 8 (3%) respondents' family consists of 2 members, 42 (16%) respondents' family consists of 3 members, 77 (28%) respondents' family consists of 4 members, 81 (30%) respondents' family consists of 5 members and 62 (23%) respondents' family consists of more than 5 members of Non- NCR area of Haryana state. 10 (4%) respondents' family consists of 2 members, 32 (13%) respondents' family consists of 3 members, 75 (31%) respondents' family consists of 4 members, 73 (30%) respondents' family consists of 5 members and 52 (22%) respondents' family consists of more than 5 members of NCR area of Haryana state. This table also indicates that 18 (4%) respondents' family consists of 2 members, 74 (14%) respondents' family consists of 3 members, 152 (30%) respondents' family consists of 4 members, 154 (30%) respondents' family consists of 5 members and 114 (22%) respondents' family consists of more than 5 members of Haryana state. Most of respondents have 4 or 5 members in their family.

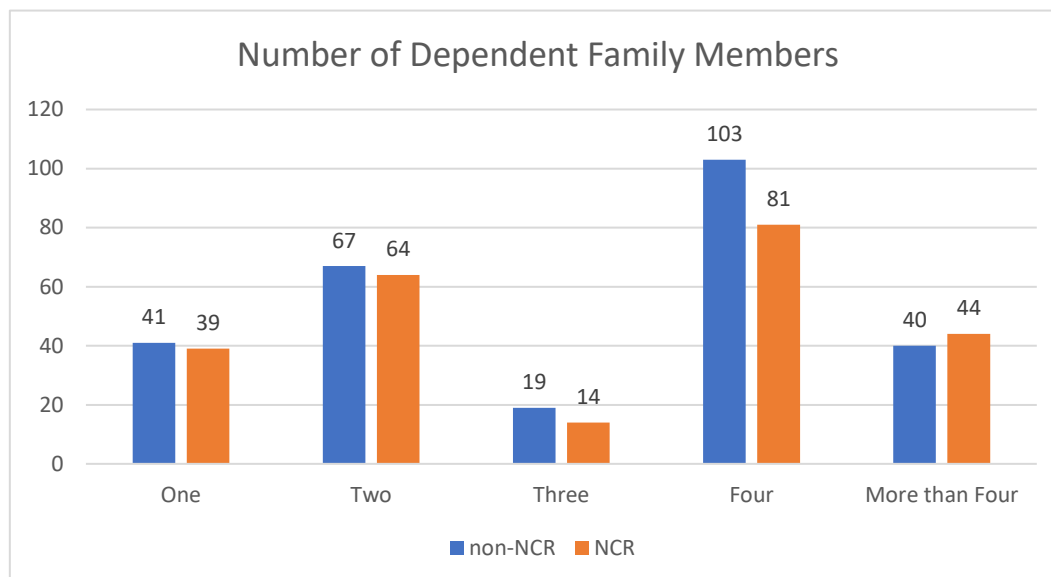
**Number of Dependent Family Members wise Categorization of Respondents:**

**Table No. 4.1.11: Categorization of Respondents in accordance with Number of Dependent Family Members**

| Number of<br>Dependent Family<br>Members | Location |      |     |      | Total |      |
|------------------------------------------|----------|------|-----|------|-------|------|
|                                          | Non-NCR  |      | NCR |      |       |      |
|                                          | N        | %    | N   | %    | N     | %    |
| One                                      | 41       | 15%  | 39  | 16%  | 80    | 16%  |
| Two                                      | 67       | 25%  | 64  | 26%  | 131   | 26%  |
| Three                                    | 19       | 7%   | 14  | 6%   | 33    | 6%   |
| Four                                     | 103      | 38%  | 81  | 34%  | 184   | 36%  |
| More than Four                           | 40       | 15%  | 44  | 18%  | 84    | 16%  |
| Total                                    | 270      | 100% | 242 | 100% | 512   | 100% |

Source: Primary Data

**Figure No. 4.1.11: Categorization of Respondents in accordance with Number of Dependent Family Members**



Source: Primary Data

**Interpretation:** Table No. 4.1.11 indicates that 41 (15%) respondents take the burden of one dependent family member, 67 (25%) take the burden of 2 dependent family members, 19 (7%) take the burden of 3 dependent family members, 103 (38%) take the burden of 4 dependent family members and 40 (15%) take the burden of more than 4 dependent family members of Non- NCR area of Haryana state. 39 (16%) respondents take the burden of one dependent family member, 64 (26%) take the burden of 2 dependent family members, 14 (6%) take the burden of 3 dependent family members, 81 (34%) take the burden of 4 dependent family members and 44 (18%) take the burden of more than 4 dependent family members of NCR area of Haryana state. This table also indicates that in total 80 (16%) respondents take the burden of one dependent family member, 131 (26%) take the burden of 2 dependent family members, 33 (6%) take the burden of 3 dependent family members, 184 (36%) take the burden of 4 dependent family members and 84 (16%) take the burden of more than 4 dependent family members of Haryana state. Most the respondents have the 4 dependent family members and after that on second number the respondents have 2 dependent family members in this study. Number of dependents in family is very important predicator to do expenditure on current living and saving for future.

## 4.2 Analysis of Social Security Conditions for Retirement

Social security is a very important parameter to find out the quality and standard of the post retirement life of any person. Social security includes the post retirement living arrangement in terms of social and financial aspect. Social security conditions vary from person to person.

### Reliability Testing:

**Table No. 4.2.1: Test of Reliability for Social Security Conditions**

| Reliability Statistics |            |
|------------------------|------------|
| Cronbach's Alpha       | N of Items |
| .810                   | 18         |

Source: Primary Data

**Interpretation:** Internal consistency (reliability) of the items or variables in data construct is checked by using the Cronbach's Alpha test of reliability. Internal consistency represents the correlation among all the items or variables, means how these items are correlated with each other. The result of test is presented with R-score value which lies between 0 to 1. The value of R-score more than 0.7 shows the high level of internal consistency. Table no. 4.2.1 indicates internal consistency of social security construct includes 18 items or variables, and value of Cronbach's Alpha is 0.810, more than 0.7 means all items are highly correlated with one other.

### Number of persons in family save for old age other than salaried class individual investors

**Table No. 4.2.2: Number of persons in family save for old age other than Salaried Class Individual Investors**

| Number of Persons | Frequency | Percentage | Descriptive Statistics                                                                                      |
|-------------------|-----------|------------|-------------------------------------------------------------------------------------------------------------|
| Nil               | 131       | 25.6%      | Mean = 2.3652<br>Median = 2.0000<br>Mode = 2.0000<br>Range = 4.0000<br>Minimum = 1.0000<br>Maximum = 5.0000 |
| One               | 176       | 34.4%      |                                                                                                             |
| Two               | 132       | 25.8%      |                                                                                                             |
| Three             | 33        | 6.4%       |                                                                                                             |
| More than three   | 40        | 7.8%       |                                                                                                             |
| Total             | 512       | 100%       |                                                                                                             |

Source: Primary Data

**Interpretation:** Table No. 4.2.2 indicates that 131(25.6%) respondents have no family member who saves for old age along with respondent, 176(34.4%) respondents have one family member who saves for old age along with respondent, 132(25.8%) respondents have two family member who saves for old age along with respondent, 33(6.4%) respondents have three family member who saves for old age along with respondent, 40(7.8%) respondents have more than three family member who saves for old age along with respondent. It indicates that majority of respondents have 0-2 family members who saves for old age other than respondents in their family. Mean is 2.3652, median and mode is 2.000 which indicates that maximum respondents have one another family member who saves for old age along with respondent.

**Percentage to save for old age from Annual Income:**

**Table No. 4.2.3: Percentage to save for old age from Annual Income**

| Percentage of Saving | Frequency  | Percentage  | Descriptive Statistics                                                                                      |
|----------------------|------------|-------------|-------------------------------------------------------------------------------------------------------------|
| Upto 10%             | 86         | 16.8%       | Mean = 2.7715<br>Median = 3.0000<br>Mode = 3.0000<br>Range = 4.0000<br>Minimum = 1.0000<br>Maximum = 5.0000 |
| 10-15%               | 124        | 24.2%       |                                                                                                             |
| 15-20%               | 157        | 30.7%       |                                                                                                             |
| 20-25%               | 111        | 21.7%       |                                                                                                             |
| Above 25%            | 34         | 6.6%        |                                                                                                             |
| <b>Total</b>         | <b>512</b> | <b>100%</b> |                                                                                                             |

Source: Primary Data

**Interpretation:** Table No. 4.2.3 indicates that 86 (16.8%) respondents save upto 10% annually from their income, 124 (24.2%) respondents save between 10-15% annually from their income, 157 (30.7%) respondents save between 15-20% annually from their income, 111 (21.7%) respondents save between 20-25% annually from their income, 34 (6.6%) respondents save above 25% annually from their income. It indicates that most of respondents save between 15-20% annually from their income for old age. Mean is 2.7715, mode is 3.0000 which shows maximum respondents save between 15-20% annually from their income for old age also.

## Social Security Arrangements for the old age:

**Table No. 4.2.4: Social Security Arrangements for the old age**

| Social Security Arrangements                                 | Yes       |       | No        |       | Descriptive Statistics                                                                                      |
|--------------------------------------------------------------|-----------|-------|-----------|-------|-------------------------------------------------------------------------------------------------------------|
|                                                              | Frequency | %     | Frequency | %     |                                                                                                             |
| “Socially secure with the working status of spouse”          | 463       | 90.4% | 49        | 9.6%  | Mean = 1.9043<br>Median = 2.0000<br>Mode = 2.0000<br>Range = 1.0000<br>Minimum = 1.0000<br>Maximum = 2.0000 |
| “Enough property for the survival in old age”                | 394       | 77%   | 118       | 23%   | Mean = 1.7695<br>Median = 2.0000<br>Mode = 2.0000<br>Range = 1.0000<br>Minimum = 1.0000<br>Maximum = 2.0000 |
| “Family members would help during post retirement period”    | 413       | 80.7% | 99        | 19.3% | Mean = 1.8066<br>Median = 2.0000<br>Mode = 2.0000<br>Range = 1.0000<br>Minimum = 1.0000<br>Maximum = 2.0000 |
| “Family members would support to save for old age”           | 438       | 85.5% | 74        | 14.5% | Mean = 1.8555<br>Median = 2.0000<br>Mode = 2.0000<br>Range = 1.0000<br>Minimum = 1.0000<br>Maximum = 2.0000 |
| “Prefer to live with spouse during post retirement period”   | 471       | 92%   | 41        | 8%    | Mean = 1.9199<br>Median = 2.0000<br>Mode = 2.0000<br>Range = 1.0000<br>Minimum = 1.0000<br>Maximum = 2.0000 |
| “Prefer to live with children during post retirement period” | 475       | 92.8% | 37        | 7.2%  | Mean = 1.9277<br>Median = 2.0000<br>Mode = 2.0000<br>Range = 1.0000<br>Minimum = 1.0000<br>Maximum = 2.0000 |

Source: Primary Data

**Interpretation:** Table No. 4.2.4 indicates that 463(90.4%) respondents feel socially secure if their spouse is working or employed elsewhere, 49 (9.6%) respondents say they are not socially secure even if their spouse is working or employed, which highlights that majority of respondents are socially secure with working status of their spouse. Mean is 1.9043, median and mode is 2.000, which also indicates that majority of respondents feel socially secure with spouse's working status.

Table No. 4.2.4 indicates that 394 (77%) respondents say yes, they have enough property to survive in old age but 118 (23%) respondents say no they have not enough property to survive in old age. Mean is 1.7695, median and mode is 2.000, which also indicates that majority of respondents have good enough property to survive in old age.

Table No. 4.2.4 indicates that 413 (80.7%) respondents have the family members who would help them after retirement, but 99 (19.3%) respondents say no, they have no family members who would help them after retirement. Mean is 1.8066, median and mode is 2.000 which also indicates maximum respondents' family members would help them in their old age.

Table No. 4.2.4 indicates that 438 (85.5%) respondents' family members would help them to save for retirement, 74 (14.5%) respondents' family members would not help them to save for retirement. Mean is 1.8555, median and mode is 2.000, which also indicates majority of respondents have the family members who would help them to save for retirement.

Table No. 4.2.4 indicates that 471 (92%) respondents prefer to be with spouse during their old age, but 41(8%) respondents don't prefer to be with spouse during their old age. Mean is 1.9199, median and mode is 2.000 which also indicates that majority of respondents prefer to live with spouse in old age.

Table No. 4.2.4 indicates that 475 (92.8%) respondents prefer to be with children during their old age, but 37 (7.2%) respondents don't prefer to be with children in their old age. Mean is 1.9277, median and mode is 2.000, which also indicates that majority of respondents prefer to be with children in their old age.

All these results indicates that salaried class investors have good social security arrangements for the survival in old age.

**Factor Analysis:**

Factor analysis is a technique to condense the data which helps the researcher to measure the data directly and easily. Factor analysis contracts the large number of variables into limited numbers of variables. Principal Component Analysis (PCA) technique is applied to analyse the pattern of data set. Principal Component Analysis (PCA) is applied to contract the dimension of original data set which convert the original data into limited number of factors. Data is rotated on Varimax rotation.

**Table No. 4.2.5: Test of KMO and Bartlett's Test for Social Security Conditions**

| <b>KMO and Bartlett's Test</b>                   |                    |          |
|--------------------------------------------------|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .891     |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 2932.032 |
|                                                  | df                 | 45       |
|                                                  | Sig.               | .000     |

Source: Primary Data

**Interpretation:**

Figure No. 4.2.5 indicates KMO(Kaiser-Meyer-Olkin) calculations of sampling adequacy applied to find out the adequacy of data. KMO value is 0.891 which is more than 0.6. It indicates that the sampling is adequate and responses are valid for study through Factor Analysis. Bartlett's Test of Sphericity set the 45% of significance level at 5%. The p-value (Sig.) is 0.000 which is below 0.05. This indicates that null hypothesis (H0) is not accepted and alternative hypothesis (H1) is accepted means there is a significant correlation among the variables. An EFA (Exploratory Factor Analysis) is used on the ten variables. Communalities test is used and all variables meet the criteria (variable value should be more than 0.5). So, all the variables are kept for the further study to find out the final results.

### Anti-Image Correlation Matrices:

**Figure 4.2.1: Anti image Correlation Matrices for Social Security Conditions**

| Anti-image Matrices       |       |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|---------------------------|-------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                           |       | SSC1              | SSC2              | SSC3              | SSC4              | SSC5              | SSC6              | SSC7              | SSC8              | SSC9              | SSC10             |
| Anti-image<br>Correlation | SSC1  | .824 <sup>a</sup> | -0.103            | 0.009             | -0.009            | 0.008             | 0.023             | -0.543            | -0.069            | 0.041             | -0.072            |
|                           | SSC2  | -0.103            | .898 <sup>a</sup> | -0.186            | -0.091            | -0.019            | -0.020            | 0.025             | -0.414            | -0.007            | 0.024             |
|                           | SSC3  | 0.009             | -0.186            | .898 <sup>a</sup> | -0.419            | -0.177            | -0.096            | -0.208            | -0.096            | 0.030             | -0.163            |
|                           | SSC4  | -0.009            | -0.091            | -0.419            | .905 <sup>a</sup> | 0.056             | -0.032            | -0.080            | -0.181            | -0.017            | 0.014             |
|                           | SSC5  | 0.008             | -0.019            | -0.177            | 0.056             | .920 <sup>a</sup> | -0.248            | 0.012             | 0.000             | -0.199            | -0.211            |
|                           | SSC6  | 0.023             | -0.020            | -0.096            | -0.032            | -0.248            | .916 <sup>a</sup> | -0.046            | -0.071            | -0.268            | -0.271            |
|                           | SSC7  | -0.543            | 0.025             | -0.208            | -0.080            | 0.012             | -0.046            | .843 <sup>a</sup> | -0.116            | -0.028            | 0.059             |
|                           | SSC8  | -0.069            | -0.414            | -0.096            | -0.181            | 0.000             | -0.071            | -0.116            | .902 <sup>a</sup> | -0.032            | 0.045             |
|                           | SSC9  | 0.041             | -0.007            | 0.030             | -0.017            | -0.199            | -0.268            | -0.028            | -0.032            | .896 <sup>a</sup> | -0.333            |
|                           | SSC10 | -0.072            | 0.024             | -0.163            | 0.014             | -0.211            | -0.271            | 0.059             | 0.045             | -0.333            | .891 <sup>a</sup> |

Source: Primary Data

**Interpretation:** Figure No. 4.2.1 indicates that correlation matrices is also used to find the correlation amid the variables and found that all the variables are strongly correlated.

### Factor Loading and Variance Explained:

**Table No. 4.2.6: Factor Loading and Variance Explained for Investment regarding Social Security Conditions**

| Factors                                           | Variable Labels | Variable                      | Factor Loading | Variance % |
|---------------------------------------------------|-----------------|-------------------------------|----------------|------------|
| <b>Factor 1</b><br>Traditional Investment Avenues | SSC7            | Investment in Insurance       | 0.796          | 52.369%    |
|                                                   | SSC8            | Investment in Post Office     | 0.773          |            |
|                                                   | SSC1            | Investment in Bank Deposits   | 0.755          |            |
|                                                   | SSC2            | Investment in Real Estate     | 0.738          |            |
|                                                   | SSC4            | Investment in Precious Metals | 0.725          |            |
|                                                   | SSC3            | Investment in P.P.F.          | 0.700          |            |

|                                                 |       |                                   |              |                |
|-------------------------------------------------|-------|-----------------------------------|--------------|----------------|
| <b>Factor 2</b><br>Modern Investment<br>Avenues | SSC10 | Investment in Any Other<br>Source | 0.846        | <b>15.628%</b> |
|                                                 | SSC9  | Investment in Mutual Fund         | 0.842        |                |
|                                                 | SSC6  | Investment in Govt.<br>Securities | 0.817        |                |
|                                                 | SSC5  | Investment in Pension<br>Plans    | 0.812        |                |
|                                                 |       |                                   | <b>Total</b> | <b>67.998%</b> |

### **Interpretation:**

Table No. 4.2.6 indicates factor 1 “Traditional Investment Avenues” factor includes total 6 variables having the statements “Investment in Insurance”, “Investment in Post Office”, “Investment in Bank Deposits”, “Investment in Real Estates”, “Investment in Precious Metals”, “Investment in P.P.F.” on the values 0.796, 0.773, 0.755, 0.738, 0.725, 0.700 respectively which explained the 52.369% of the total variance. This factor explains that what is the level of investment of salaried class individual investors in various traditional investment avenues and how they save for old age.

Table No. 4.2.6 indicates factor 2 “Modern Investment Avenues” includes total 4 variables having the statements “Investment in any other sources”, “Investment in Mutual Fund”, “Investment in Government Securities”, “Investment in Pension Plans” on the values 0.846, 0.842, 0.817, 0.812 respectively which explains the 15.628% of the total variance. This factor explains that what is the level of investment of salaried class individual investors in various modern investment avenues and how they save for old age.

### **Hypothesis Testing:**

**Hypothesis 1:** Social security conditions of salaried class individual investors are significantly different based on socio-economic demographics like gender, age, marital status, educational qualification, nature of employment, nature of job work, job experience, annual income, type of family, number of family members, number of dependent family members.

**H1a:** Social security conditions of salaried class individual investors are significantly different based on gender.

**Table No. 4.2.7: t- test for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of gender**

|         |                                | Male   |        | Female |        |         |         |                           |
|---------|--------------------------------|--------|--------|--------|--------|---------|---------|---------------------------|
| Sr. No. | Test<br>Factors                | Mean   | S.D.   | Mean   | S.D.   | t Value | P Value | Accepted/<br>Not Accepted |
| 1       | Traditional Investment Avenues | 1.5914 | 0.7347 | 1.5874 | 0.7642 | 0.060   | 0.952   | Accepted                  |
| 2       | Modern Investment Avenues      | 1.5569 | 0.9019 | 1.4949 | 0.8652 | 0.792   | 0.429   | Accepted                  |

Source: Primary Data

**Interpretation:** t-test is applied to find the gender differences towards the social security conditions through investment in traditional avenues and modern avenues.

For investment in traditional avenues, Table No. 4.2.7 indicates that p value is 0.952 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in males and females' investment in traditional avenues. Hypothesis is accepted. Mean score for investment in traditional avenues for males and females is 1.5914 and 1.5874 respectively, which also indicates the difference in their investment.

For investment in modern avenues, Table No. 4.2.7 indicates that p value is 0.429 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in males and females' investment in modern avenues. Hypothesis is accepted. Mean score for investment in modern avenues for males and females is 1.5569 and 1.4949 respectively, this is also showing the difference in their investment.

**H1b:** Social security conditions of salaried class individual investors are significantly different based on age.

**Table No. 4.2.8: ANOVA for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of Age**

| Sr. No | Test Factors                   | Categories | Mean   | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|--------------------------------|------------|--------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Traditional Investment Avenues | Upto 25    | 1.5985 | 0.499         | 0.737           | 0.656   | 0.623           | N.A.        | N.A.            | Accepted               |
|        |                                | 25-35      | 1.5338 |               |                 |         |                 |             |                 |                        |
|        |                                | 35-45      | 1.6480 |               |                 |         |                 |             |                 |                        |
|        |                                | 45-55      | 1.5481 |               |                 |         |                 |             |                 |                        |
|        |                                | Above 55   | 1.6181 |               |                 |         |                 |             |                 |                        |
| 2      | Modern Investment Avenues      | Upto 25    | 1.6818 | 1.986         | 0.095           | 0.343   | 0.849           | N.A.        | N.A.            | Accepted               |
|        |                                | 25-35      | 1.5109 |               |                 |         |                 |             |                 |                        |
|        |                                | 35-45      | 1.5456 |               |                 |         |                 |             |                 |                        |
|        |                                | 45-55      | 1.5111 |               |                 |         |                 |             |                 |                        |
|        |                                | Above 55   | 1.3958 |               |                 |         |                 |             |                 |                        |

Source: Primary Data (Age in Years)

**Interpretation:** ANOVA is applied in order to find the social security conditions through the investment in traditional and modern avenues based on age difference.

For investment in traditional avenues, Table No. 4.2.8 indicates that p value is 0.623, which is greater than 0.05 (at 5% significance level), recommends that statistically significant difference in various age group investors towards investment in traditional avenues. Hypothesis is accepted. Mean score for investment in traditional avenues is 1.5985, 1.5338, 1.6480, 1.5481, 1.6181 for the various age groups upto 25 years, 25-35 years, 35-45 years, 45-55 years, above 55 years respectively, which also indicates the difference in their investment.

For investment in modern avenues, Table No. 4.2.8 indicates that p value is 0.849, which is more than 0.05 (at 5% significance level), recommends that statistically significant difference in various age group investors towards investment in modern avenues. Hypothesis is accepted. Mean score for investment in modern avenues is 1.6818, 1.5109, 1.5456, 1.5111, 1.3958 for the various age groups upto 25 years, 25-35 years, 35-45 years, 45-55 years, above 55 years respectively, which also indicates the difference in their investment.

**H1c:** Social security conditions of salaried class individual investors are significantly different based on marital status.

**Table No. 4.2.9: t- test for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of Marital Status**

|         |                                   | Married |        | Unmarried |        |         |         |                           |
|---------|-----------------------------------|---------|--------|-----------|--------|---------|---------|---------------------------|
| Sr. No. | Test<br>Factors                   | Mean    | S.D.   | Mean      | S.D.   | t Value | P Value | Accepted/<br>Not Accepted |
| 1       | Traditional<br>Investment Avenues | 1.5873  | 0.7305 | 1.5979    | 0.8134 | -0.131  | 0.896   | Accepted                  |
| 2       | Modern<br>Investment Avenues      | 1.5105  | 0.8721 | 1.5894    | 0.9295 | -0.826  | 0.409   | Accepted                  |

Source: Primary Data

**Interpretation:** t-test is applied to find the marital status differences towards the social security conditions through investment in traditional avenues and modern avenues.

For investment in traditional avenues, Table No.4.2.9 indicates that p value is 0.896 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in married and unmarried investors' investment in traditional avenues. Hypothesis is accepted. Mean score for investment in traditional avenues for married and unmarried is 1.5873 and 1.5979 respectively, which also indicates the difference in their investment.

For investment in modern avenues, Table No. 4.2.9 indicates that p value is 0.409 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in married and unmarried investors' investment in modern avenues. Hypothesis is accepted. Mean score for investment in modern avenues for married and unmarried is 1.5105 and 1.5894 respectively, which also indicates the difference in their investment.

**H1d:** Social security conditions of salaried class individual investors are significantly different based on educational qualification.

**Table No. 4.2.10: ANOVA for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of Educational Qualification**

| Sr. No | Test Factors                   | Categories                                                                | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|--------------------------------|---------------------------------------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Traditional Investment Avenues | Upto Secondary<br>Graduation<br>Post Gradu.<br>Diploma/Tech.<br>Any other | 1.7500<br>1.5476<br>1.5934<br>1.5676<br>1.6389 | 2.138         | 0.075           | 0.178   | 0.950           | N.A.        | N.A.            | Accepted               |
| 2      | Modern Investment Avenues      | Upto Secondary<br>Graduation<br>Post Gradu.<br>Diploma/Tech.<br>Any other | 1.4375<br>1.5491<br>1.5134<br>1.5580<br>1.6250 | 1.525         | 0.194           | 0.144   | 0.966           | N.A.        | N.A.            | Accepted               |

Source: Primary Data

**Interpretation:** ANOVA is applied to find the social security conditions through the investment in traditional avenues and modern avenues on the basis of educational qualification difference.

For investment in traditional avenues, Table No. 4.2.10 indicates that p value is 0.950, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various educational qualification groups investors towards the investment in traditional avenues. Hypothesis is accepted. Mean score for investment in traditional avenues is 1.7500, 1.5476, 1.5934, 1.5676, 1.6389 for the various educational qualification groups related to upto secondary, graduation, post-graduation, diploma/technical and any other category respectively, which also indicates the difference in their investment.

For investment in modern avenues, Table No. 4.2.10 indicates that p value is 0.966, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various educational qualification groups investors towards investment in modern avenues. Hypothesis is accepted. Mean score for investment in modern avenues is 1.4375, 1.5491, 1.5134, 1.5580, 1.6250 for the various educational qualification groups related to upto secondary, graduation, post-graduation, diploma/technical and any other category respectively, which also indicates the difference in their investment.

**H1e:** Social security conditions of salaried class individual investors are significantly different based on nature of employment.

**Table No. 4.2.11: t- test for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of Nature of Employment**

| Sr. No. | Test<br>Factors                | Government Job |        | Private Job |        | t Value | P Value | Accepted/<br>Not Accepted |
|---------|--------------------------------|----------------|--------|-------------|--------|---------|---------|---------------------------|
|         |                                | Mean           | S.D.   | Mean        | S.D.   |         |         |                           |
| 1       | Traditional Investment Avenues | 1.5997         | 0.7345 | 1.5662      | 0.7802 | 0.466   | 0.642   | Accepted                  |
| 2       | Modern Investment Avenues      | 1.5309         | 0.8589 | 1.5192      | 0.9425 | 0.137   | 0.891   | Accepted                  |

Source: Primary Data

**Interpretation:** t-test is applied to find the nature of employment differences towards the social security conditions through investment in traditional avenues and modern avenues.

For investment in traditional avenues, Table No. 4.2.11 indicates that p value is 0.642 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in government employees and private sector employees' investment in traditional avenues. Hypothesis is accepted. Mean score for investment in traditional avenues for government employees and private sector employees is 1.5997 and 1.5662 respectively, which also indicates the difference in their investment.

For investment in modern avenues, Table No.4.2.11 indicates that p value is 0.891 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in government employees and private sector employees' investment in modern avenues. Hypothesis is accepted. Mean score for investment in modern avenues for government employees and private sector employees is 1.5309 and 1.5192 respectively, which also indicates the difference in their investment.

**H1f:** Social security conditions of salaried class individual investors are significantly different based on nature of job work.

**Table No. 4.2.12: ANOVA for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of Nature of Job Work**

| Sr. No | Test Factors                   | Categories   | Mean   | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|--------------------------------|--------------|--------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Traditional Investment Avenues | Academic     | 1.6294 | 0.205         | 0.935           | 0.447   | 0.774           | N.A.        | N.A.            | Accepted               |
|        |                                | Professional | 1.5297 |               |                 |         |                 |             |                 |                        |
|        |                                | Managerial   | 1.5572 |               |                 |         |                 |             |                 |                        |
|        |                                | Technical    | 1.5473 |               |                 |         |                 |             |                 |                        |
|        |                                | Others       | 1.6486 |               |                 |         |                 |             |                 |                        |
| 2      | Modern Investment Avenues      | Academic     | 1.5940 | 3.242         | 0.012           | N.A.    | N.A.            | 1.512       | 0.201           | Accepted               |
|        |                                | Professional | 1.4384 |               |                 |         |                 |             |                 |                        |
|        |                                | Managerial   | 1.3824 |               |                 |         |                 |             |                 |                        |
|        |                                | Technical    | 1.5772 |               |                 |         |                 |             |                 |                        |
|        |                                | Others       | 1.5978 |               |                 |         |                 |             |                 |                        |

Source: Primary Data

**Interpretation:** ANOVA is applied to find the social security conditions through the investment in traditional avenues and modern avenues on the basis of nature of job work difference.

For investment in traditional avenues, Table No.4.2.12 indicates that p value is 0.774, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various job work groups investors towards investment in traditional avenues. Hypothesis is accepted. Mean score for investment in traditional avenues is 1.6294, 1.5297, 1.5572, 1.5473, 1.6486 for the nature of job work groups i.e., academic, professional, managerial, technical and others respectively, which also indicates the difference in their investment.

For investment in modern avenues, Table No. 4.2.12 indicates that p value is 0.201, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various job work groups investors towards the investment in modern avenues. Hypothesis is accepted. Mean score for the investment in modern avenues is 1.5940, 1.4384, 1.3824, 1.5772, 1.5978 for the nature of job work groups i.e. academic, professional, managerial, technical and others respectively, which also indicates the difference in their investment.

**H1g:** Social security conditions of salaried class individual investors are significantly different based on job experience.

**Table No. 4.2.13: ANOVA for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of Job Experience**

| Sr. No | Test Factors                   | Categories                                     | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|--------------------------------|------------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Traditional Investment Avenues | Upto 10<br>10-15<br>15-20<br>20-25<br>Above 25 | 1.5384<br>1.6551<br>1.7438<br>1.7037<br>1.4722 | 1.213         | 0.304           | 1.372   | 0.242           | N.A.        | N.A.            | Accepted               |
| 2      | Modern Investment Avenues      | Upto 10<br>10-15<br>15-20<br>20-25<br>Above 25 | 1.5364<br>1.5250<br>1.5602<br>1.4167<br>1.3958 | 0.654         | 0.624           | 0.193   | 0.942           | N.A.        | N.A.            | Accepted               |

Source: Primary Data (Job Experience in years)

**Interpretation:** ANOVA is applied to find the social security conditions through the investment in traditional and modern avenues on the basis of job experience difference.

For investment in traditional avenues, Table No. 4.2.13 indicates that p value is 0.242, which greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various investors groups basis of job experience towards investment in traditional avenues. Hypothesis is accepted. Mean score for investment in traditional avenues is 1.5384, 1.6551, 1.7438, 1.7037, 1.4722 for the various groups on the basis of job experience upto 10 years, 10-15 years, 15-20 years, 20-25 years, above 25 years respectively, which also indicates there is difference in their investment.

For investment in modern avenues, Table No. 4.2.13 indicates that p value is 0.942, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various investors groups basis of job experience towards investment in modern avenues. Hypothesis is accepted. Mean score for investment in

modern avenues is 1.5364, 1.5250, 1.5602, 1.4167, 1.3958 for the various groups on the basis of job experience upto 10 years, 10-15 years, 15-20 years, 20-25 years, above 25 years respectively, which also indicates the difference in their investment.

**H1h:** Social security conditions of salaried class individual investors are significantly different based on annual income.

**Table No. 4.2.14: ANOVA for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of Annual Income**

| Sr. No | Test Factors                   | Categories of Annual Income                 | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|--------------------------------|---------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Traditional Investment Avenues | Upto5<br>5-10<br>10-15<br>15-20<br>Above 20 | 1.5787<br>1.5400<br>1.6405<br>1.8254<br>1.7500 | 2.053         | 0.086           | 1.120   | 0.346           | N.A.        | N.A.            | Accepted               |
| 2      | Modern Investment Avenues      | Upto5<br>5-10<br>10-15<br>15-20<br>Above 20 | 1.6111<br>1.4944<br>1.5714<br>1.4524<br>1.3750 | 1.552         | 0.186           | 0.466   | 0.761           | N.A.        | N.A.            | Accepted               |

Source: Primary Data (Annual Income in Lakhs)

**Interpretation:** ANOVA is applied to find the social security conditions through the investment in traditional avenues and modern avenues based on annual income difference.

For investment in traditional avenues, Table No. 4.2.14 indicates that p value is 0.346, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with annual income towards the investment in traditional avenues. Hypothesis is accepted. Mean score for the investment in traditional avenues is 1.5787, 1.5400, 1.6405, 1.8254, 1.7500 for the groups on the basis of annual income upto 5 lakhs, 5-10 lakhs, 10-15 lakhs, 15-20 lakhs, above 20 lakhs respectively, which also indicates the difference in their investment.

For investment in modern avenues, Table No. 4.2.14 indicates that p value is 0.761, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with annual

income towards the investment in modern avenues. Hypothesis is accepted. Mean score for investment in modern avenues is 1.6111, 1.4944, 1.5714, 1.4524, 1.3750 for the groups on the basis of annual income upto 5 lakhs, 5-10 lakhs, 10-15 lakhs, 15-20 lakhs, above 20 lakhs respectively, which also recommends the difference in their investment.

**H1i:** Social security conditions of salaried class individual investors are significantly different based on type of family.

**Table No. 4.2.15: t- test for difference Social Security Conditions of Salaried Class Individual Investors on the basis of Type of Family**

| Sr. No. | Test Factors                   | Nuclear Family |        | Joint Family |        | t Value | P Value | Accepted/ Not Accepted |
|---------|--------------------------------|----------------|--------|--------------|--------|---------|---------|------------------------|
|         |                                | Mean           | S.D.   | Mean         | S.D.   |         |         |                        |
| 1       | Traditional Investment Avenues | 1.5977         | 0.7533 | 1.5821       | 0.7447 | 0.235   | 0.814   | Accepted               |
| 2       | Modern Investment Avenues      | 1.5072         | 0.8574 | 1.5457       | 0.9092 | -0.492  | 0.623   | Accepted               |

Source: Primary Data

**Interpretation:** t-test is applied to find the type of family differences towards the social security conditions through investment in traditional avenues and modern avenues.

For investment in traditional avenues, Table No. 4.2.15 indicates that p value is 0.814 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in investment of investors belong to nuclear family or joint family in traditional avenues. Hypothesis is accepted. Mean score for investment in traditional avenues for investors belongs to nuclear family or joint family is 1.5977 and 1.5821 respectively, which also indicates the difference in their investment.

For investment in modern avenues, Table No. 4.2.15 indicates that p value is 0.623 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in investment of investors belong to nuclear family or joint family in modern avenues. Hypothesis is accepted. Mean score for investment in modern avenues for investors belongs to nuclear family or joint family is 1.5072 and 1.5457 respectively, which also indicates the difference in their investment.

**H1j:** Social security conditions of salaried class individual investors are significantly different based on number of family members.

**Table No. 4.2.16: ANOVA for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of Number of Family Members**

| Sr. No | Test Factors                   | Categories                                     | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|--------------------------------|------------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Traditional Investment Avenues | Two<br>Three<br>Four<br>Five<br>More than Five | 1.6667<br>1.6261<br>1.5746<br>1.6028<br>1.5556 | 0.259         | 0.904           | 0.177   | 0.950           | N.A.        | N.A.            | Accepted               |
| 2      | Modern Investment Avenues      | Two<br>Three<br>Four<br>Five<br>More than Five | 1.6250<br>1.5236<br>1.4852<br>1.5260<br>1.5724 | 0.704         | 0.590           | 0.214   | 0.931           | N.A.        | N.A.            | Accepted               |

Source: Primary Data

**Interpretation:** ANOVA is applied to find the social security conditions through the investment in traditional avenues and modern avenues in accordance with family member difference.

For investment in traditional avenues, Table No. 4.2.16 indicates that p value is 0.950 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with number of family members towards investment in traditional avenues. Hypothesis is accepted. Mean score for the investment in traditional avenues is 1.6667, 1.6261, 1.5746, 1.6028, 1.5556 for the various groups of investors in accordance with number of family members i.e., two, three, four, five and more than five respectively, which also indicates the difference in their investment.

For investment in modern avenues, Table No. 4.2.16 indicates that p value is 0.931 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with number of family members towards investment in modern avenues. Hypothesis is accepted. Mean score for investment in modern avenues is 1.6250, 1.5236, 1.4852, 1.5260,

1.5724 for the various groups of investors in accordance with family members i.e., two, three, four, five and more than five respectively, which also indicates the difference in their investment.

**H1k:** Social security conditions of salaried class individual investors are significantly different based on number of dependent family members.

**Table No. 4.2.17: ANOVA for difference in Social Security Conditions of Salaried Class Individual Investors on the basis of Number of Dependent Family Members**

| Sr. No | Test Factors                   | Categories                                    | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|--------------------------------|-----------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Traditional Investment Avenues | One<br>Two<br>Three<br>Four<br>More than Four | 1.5354<br>1.6565<br>1.5152<br>1.5498<br>1.6528 | 1.296         | 0.271           | 0.727   | 0.574           | N.A.        | N.A.            | Accepted               |
| 2      | Modern Investment Avenues      | One<br>Two<br>Three<br>Four<br>More than Four | 1.3969<br>1.5687<br>1.5000<br>1.5516<br>1.5446 | 1.382         | 0.239           | 0.556   | 0.695           | N.A.        | N.A.            | Accepted               |

Source: Primary Data

**Interpretation:** ANOVA is applied to find the social security conditions through the investment in traditional avenues and modern avenues in accordance with number of dependent family members' difference.

For investment in traditional avenues, Table No. 4.2.17 indicates that p value is 0.574 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with number of dependent family members towards investment in traditional avenues. Hypothesis is accepted. Mean score for investment in traditional avenues is 1.5354, 1.6565, 1.5152, 1.5498, 1.6528 for the various groups of investors in accordance

with number of dependent family members i.e., one, two, three, four, and more than four respectively, which also indicates there is difference in their investment.

For the investment in modern avenues, Table No. 4.2.17 indicates that p value is 0.695 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with number of dependent family members towards investment in modern avenues. Hypothesis is accepted. Mean score for investment in modern avenues is 1.3969, 1.5687, 1.5000, 1.5516, 1.5446 for the various groups of investors in accordance with number of dependent family members i.e., one, two, three, four, and more than four respectively, which also indicates the difference in their investment.

### 4.3 Analysis of Perception towards Investment in Pension Plan for Retirement Planning

Perception determines the behavior of the investor towards the investment. Perception of the persons also varies from individual to individual. In this study the perception is analysed regarding the investment in pension plans.

#### Reliability Testing:

**Table No. 4.3.1: Test of Reliability for Perception towards Investment in Pension Plan**

| Reliability Statistics |            |
|------------------------|------------|
| Cronbach's Alpha       | N of Items |
| .871                   | 13         |

Source: Primary Data

**Interpretation:** Internal consistency (reliability) of the items or variables in data construct is checked by using the Cronbach's Alpha test of reliability. Internal consistency represents the correlation among all the items or variables, means how these items are correlated with each other. The result of test is presented with R-score value which lies between 0 to 1. The value of R-score more than 0.7 shows the high level of internal consistency. Table No. 4.3.1 indicates internal consistency of perception construct including 13 items or variables, and value of Cronbach's Alpha is 0.871 greater than 0.7 means all items are highly correlated with one other.

#### Thinking about Retirement:

**Table No. 4.3.2: Thinking about Retirement**

| Thinking about Retirement | Frequency | Percentage | Descriptive Statistics                                                                                      |
|---------------------------|-----------|------------|-------------------------------------------------------------------------------------------------------------|
| Not at All                | 164       | 32%        | Mean = 1.8027<br>Median = 2.0000<br>Mode = 2.0000<br>Range = 2.0000<br>Minimum = 1.0000<br>Maximum = 3.0000 |
| Somewhat                  | 285       | 55.7%      |                                                                                                             |
| A Great Extent            | 63        | 12.3%      |                                                                                                             |
| Total                     | 512       | 100%       |                                                                                                             |

Source: Primary Data

**Interpretation:** Table No. 4.3.2 indicates the level of thinking of respondents about retirement. 164 (32%) respondents don't think about the retirement at all. 285 (55.7%) respondents do think somewhat about the retirement and 63 (12.3%) respondents think about the retirement at great level. This indicates that more than half respondents are thinking somewhat about the retirement. Mean is 1.8027, median and mode is 2.000 so it also indicates that most of respondents are thinking at somewhat level about retirement.

**Think to Retire at desired Age:**

**Table No. 4.3.3: Think to Retire at Desired Age**

| Think to Retire at desired Age | Frequency  | Percentage  | Descriptive Statistics                                                                                      |
|--------------------------------|------------|-------------|-------------------------------------------------------------------------------------------------------------|
| At 52 Years                    | 34         | 6.6%        | Mean = 4.2637<br>Median = 5.0000<br>Mode = 5.0000<br>Range = 4.0000<br>Minimum = 1.0000<br>Maximum = 5.0000 |
| At 54 Years                    | 10         | 2.0%        |                                                                                                             |
| At 56 Years                    | 35         | 6.8%        |                                                                                                             |
| At 58 Years                    | 141        | 27.5%       |                                                                                                             |
| At 60 Years                    | 292        | 57.0%       |                                                                                                             |
| <b>Total</b>                   | <b>512</b> | <b>100%</b> |                                                                                                             |

Source: Primary Data

**Interpretation:** Table No. 4.3.3 indicates that 34 (6.6%) respondents wish to go for retirement at the age of 52 years, 10 (2%) respondents willing to retire at the age of 54 years, 35 (6.8%) respondents willing to retire at the age of 56 years, 141 (27.5%) respondents willing to retire at the age of 58 years and 292 (57%) respondents willing to retire at the age of 60 years. It indicates that majority of respondents willing to retire at the age of 58 years or 60 years. Mean is 4.2637, mode and median are 5.000, which also indicates that maximum respondents willing to retire at the age of 60 years and earn more.

### Factor Analysis:

Factor analysis is a technique to condense the data which helps the researcher to measure the data directly and easily. Factor analysis contract the large number of variables into limited numbers of variables. Principal Component Analysis (PCA) technique is applied to analyse the pattern of data set. Principal Component Analysis (PCA) is applied to contract the dimension of original data set which convert the original data into limited number of factors. Data is rotated on Varimax rotation.

**Table No. 4.3.4: Test of KMO Value and Bartlett's Test for Perception towards Investment in Pension Plan**

| KMO and Bartlett's Test                          |                    |          |
|--------------------------------------------------|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .792     |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 8132.608 |
|                                                  | df                 | 55       |
|                                                  | Sig.               | .000     |

Source: Primary Data

### Interpretation:

Table No. 4.3.4 indicates KMO(Kaiser-Meyer-Olkin) calculations of sampling adequacy applied to find out the adequacy of data. KMO value is 0.792 which is more than 0.6. It indicates that the sampling is adequate and responses are valid for study through factor analysis. Bartlett's Test of Sphericity set the 55% of significance level at 5%. The p-value (Sig.) is 0.000 which is below 0.05. This indicates that null hypothesis(H0) is not accepted and alternative hypothesis (H1) is accepted means there is a significant correlation among the variables. An EFA (Exploratory Factor Analysis) is used on the eleven variables. Communalities test is used and all variables meet the criteria (variable value should be more than 0.5). So, all the variables are kept for the further study to find out the final results.

## Anti-Image Correlation Matrices

**Figure No. 4.3.1: Anti-Image Correlation Matrices for Perception towards Investment in Pension Plan**

| Anti-image Matrices    |       |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|------------------------|-------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                        |       | PER1              | PER2              | PER3              | PER4              | PER5              | PER6              | PER7              | PER8              | PER9              | PER10             | PER11             |
| Anti-image Correlation | PER1  | .827 <sup>a</sup> | 0.018             | 0.017             | -0.050            | -0.125            | -0.186            | 0.040             | 0.016             | -0.685            | -0.174            | 0.187             |
|                        | PER2  | 0.018             | .771 <sup>a</sup> | -0.006            | -0.082            | 0.012             | -0.148            | -0.036            | 0.041             | -0.200            | -0.798            | 0.095             |
|                        | PER3  | 0.017             | -0.006            | .716 <sup>a</sup> | 0.251             | -0.111            | -0.144            | -0.047            | -0.956            | -0.025            | 0.026             | -0.232            |
|                        | PER4  | -0.050            | -0.082            | 0.251             | .721 <sup>a</sup> | -0.713            | 0.083             | 0.005             | -0.266            | 0.034             | 0.064             | -0.646            |
|                        | PER5  | -0.125            | 0.012             | -0.111            | -0.713            | .827 <sup>a</sup> | 0.001             | 0.089             | 0.096             | 0.121             | -0.019            | -0.049            |
|                        | PER6  | -0.186            | -0.148            | -0.144            | 0.083             | 0.001             | .924 <sup>a</sup> | 0.018             | -0.070            | 0.252             | 0.005             | -0.097            |
|                        | PER7  | 0.040             | -0.036            | -0.047            | 0.005             | 0.089             | 0.018             | .970 <sup>a</sup> | -0.065            | -0.148            | 0.038             | -0.105            |
|                        | PER8  | 0.016             | 0.041             | -0.956            | -0.266            | 0.096             | -0.070            | -0.065            | .717 <sup>a</sup> | -0.050            | -0.031            | 0.264             |
|                        | PER9  | -0.685            | -0.200            | -0.025            | 0.034             | 0.121             | 0.252             | -0.148            | -0.050            | .822 <sup>a</sup> | 0.040             | -0.231            |
|                        | PER10 | -0.174            | -0.798            | 0.026             | 0.064             | -0.019            | 0.005             | 0.038             | -0.031            | 0.040             | .766 <sup>a</sup> | -0.055            |
|                        | PER11 | 0.187             | 0.095             | -0.232            | -0.646            | -0.049            | -0.097            | -0.105            | 0.264             | -0.231            | -0.055            | .806 <sup>a</sup> |

### a. Measures of Sampling Adequacy(MSA)

**Interpretation:** Correlation matrices is also used to find the correlation amid the variables and Figure No. 4.3.1 found that all the variables are strongly correlated.

### Factor Loading and Variance Explained:

**Table No. 4.3.5: Factor Loading and Variance Explained for Perception towards Investment in Pension Plan**

| Factors                                               | Variable Labels | Variable                                                                 | Factor Loading | Variance % |
|-------------------------------------------------------|-----------------|--------------------------------------------------------------------------|----------------|------------|
| <b>Factor 1</b><br>Perception for Services            | PER3            | Investment in pension plans provides the tax deduction                   | 0.951          | 50.119%    |
|                                                       | PER8            | Minimum amount is contributed for the investment in pension plans        | 0.947          |            |
|                                                       | PER6            | Balance amount is contributed for the investment in pension plans        | 0.840          |            |
|                                                       | PER7            | Investment in pension plans is convenient                                | 0.706          |            |
| <b>Factor 2</b><br>Perception for Safety and Security | PER4            | Investment in pension plans provides the safety of retirement life       | 0.967          | 21.036%    |
|                                                       | PER5            | Investment in pension plans provides assured returns and safety of money | 0.961          |            |

|                                                                             |       |                                                                                                                         |              |                |
|-----------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------|--------------|----------------|
|                                                                             | PER11 | Investment in pension plans provides the safety and security of my dependents                                           | 0.960        |                |
| <b>Factor 3</b><br>Perception for<br>Predicators of Return<br>on Investment | PER10 | Investment in pension plans helps to get the corpus with the consideration of inflation index at the time of retirement | 0.918        | <b>14.331%</b> |
|                                                                             | PER2  | Investment in pension for a long period provides high and lump sum payment                                              | 0.914        |                |
|                                                                             | PER1  | Investment in pension plans provides regular income                                                                     | 0.777        |                |
|                                                                             | PER9  | Investment in pension plans provides more pension as per increase in retirement age                                     | 0.724        |                |
|                                                                             |       |                                                                                                                         | <b>Total</b> | <b>85.486%</b> |

Source: Primary Data

### **Interpretation:**

Table No. 4.3.5 indicates that factor 1 “Perception for Services” factor includes total 4 items having the statements “Investment in pension plans provides tax deduction”, “Minimum amount is contributed for the investment in pension plans”, “Balanced amount is contributed for the investment in pension plans”, “Investment in pension plans is convenient” on the values 0.951, 0.947, 0.840, 0.706 respectively which explains the 50.119% of the total variance. This factor explains that what is the perception of salaried class individual investor towards the services provided by the pension fund providers to investors of pension plans.

Table No. 4.3.5 indicates that factor 2 “Perception for Safety and Security” included total 3 items having the statements “Investment in pension plans provides the safety of retirement life”, “Investment in pension plans provides assured returns and safety of money”, “Investment in pension plans provides the safety and security of my dependents” on the values 0.967, 0.961, 0.960, respectively which explains the 21.036% of the total variance. This factor explains that what is the perception of salaried class individual investor towards the security of the invested money and security of the self and dependents in old age through the investment in pension plans.

Table No. 4.3.5 indicates that factor 3 “Perception for Predicators of Return on Investment” factor included total 4 items having the statements “Investment in pension plans helps to get the corpus with the consideration of inflation index at the time of retirement”, “Investment in pension plans for a long period provides high and lump sum payment”, “Investment in pension plans provides regular income”, “Investment in pension plans provides more pension as per increase in retirement age” on the values 0.918, 0.914, 0.777, 0.724 respectively which explains the 14.331% of the total variance. This factor explains that what is the perception of salaried class individual investor towards the predicators of return on investment which they will get through the investment in pension plans.

### Hypothesis Testing:

**Hypothesis 2:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on socio-economic demographics like gender, age, marital status, educational qualification, nature of employment, nature of job work, job experience, annual income, type of family, number of family members, number of dependent family members.

**H2a:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on gender.

**Table No. 4.3.6: t- test for difference in Perception of Salaried Class Individual Investors on the basis of Gender**

|         |                                                    | Male   |        | Female |        |         |         |                           |
|---------|----------------------------------------------------|--------|--------|--------|--------|---------|---------|---------------------------|
| Sr. No. | Test<br>Factors                                    | Mean   | S.D.   | Mean   | S.D.   | t Value | P Value | Accepted/<br>Not Accepted |
| 1       | Perception for Services                            | 3.2715 | 0.9060 | 3.2787 | 0.8368 | -0.094  | 0.925   | Accepted                  |
| 2       | Perception for safety and security                 | 3.7624 | 1.0391 | 3.7855 | 1.0700 | -0.247  | 0.805   | Accepted                  |
| 3       | Perception for Predicators of Return on Investment | 3.5159 | 0.8554 | 3.4641 | 0.8305 | 0.693   | 0.489   | Accepted                  |

Source: Primary Data

**Interpretation:** t-test is applied to find the gender differences towards perception for services factor, safety and security factor and predictors of return-on-investment factor.

For perception towards the services provided by pension fund providers Table No. 4.3.6 indicates that p value is 0.925 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in perception of males and females towards the services provided by pension fund providers. Hypothesis is accepted. Mean score for perception towards the services provided by pension fund providers for males and females is 3.2715 and 3.2787 respectively, this also shows the difference in their perception.

For perception towards the safety and security Table no.4.3.6, indicates that p value is 0.805 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in perception of males and females towards the safety and security. Hypothesis is accepted. Mean score for perception towards the safety for males and females is 3.7624 and 3.7855 respectively, this also shows the difference in their perception.

For perception towards the predictors of return-on-investment Table No. 4.3.6 indicates that p value is 0.489 which is greater than 0.05 (at 5% significance level), recommends that there is statistically significant difference in perception of males and females towards the return on investment. Hypothesis is accepted. Mean score for perception towards the return on investment for males and females is 3.5159 and 3.4641 respectively, this is also showing the difference in their perception.

**H2b:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on age.

**Table No. 4.3.7: ANOVA for difference in Perception of Salaried Class Individual Investors on the basis of Age**

| Sr. No | Test Factors                                       | Categories                                     | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|----------------------------------------------------|------------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Perception for Services                            | Upto 25<br>25-35<br>35-45<br>45-55<br>Above 55 | 3.1705<br>3.2283<br>3.3458<br>3.1444<br>3.3854 | 0.966         | 0.426           | 0.926   | 0.448           | N.A.        | N.A.            | Accepted               |
| 2      | Perception for Safety and Security                 | Upto 25<br>25-35<br>35-45<br>45-55<br>Above 55 | 3.8636<br>3.7536<br>3.7944<br>3.6667<br>3.8750 | 0.159         | 0.959           | 0.250   | 0.910           | N.A.        | N.A.            | Accepted               |
| 3      | Perception for Predicators of Return on Investment | Upto 25<br>25-35<br>35-45<br>45-55<br>Above 55 | 3.2500<br>3.4444<br>3.5374<br>3.6111<br>3.4792 | 0.786         | 0.534           | 0.998   | 0.408           | N.A.        | N.A.            | Accepted               |

Source: Primary Data (Age in years)

**Interpretation:** ANOVA is applied to find perception for services factor, safety and security factor and predicators of return-on-investment factor on the basis of age difference.

For perception towards the services provided by pension fund providers, Table No. 4.3.7 indicates that p value is 0.448, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various age group investors' perception towards the services provided by pension fund providers. Hypothesis is accepted. Mean score for the investors' perception towards the services provided by pension fund providers is 3.1705, 3.2283, 3.3458, 3.1444, 3.3854 for the

age group upto 25 years, 25-35 years, 35-45 years, 45-55 years, above 55 years respectively, which also indicates the difference in their perception.

For perception towards the safety and security, Table No. 4.3.7 indicates that p value is 0.910, which is greater than 0.05 (at 5% significance level), recommends that the statistically significant difference in various age group investors' perception towards the safety and security. Hypothesis is accepted. Mean score for the investors' perception towards the safety is 3.8636, 3.7536, 3.7944, 3.6667, 3.8750 for the age group upto 25 years, 25-35 years, 35-45 years, 45-55 years, above 55 years respectively, which also indicates the difference in their perception.

For perception for predictors of return on investment, Table No. 4.3.7 indicates that p value is 0.408, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various age group investors' perception towards the predictors return on investment. Hypothesis is accepted. Mean score for perception towards the predictors of return on investment is 3.2500, 3.4444, 3.5374, 3.6111, 3.4792 for the age group upto 25 years, 25-35 years, 35-45 years, 45-55 years, above 55 years respectively, which also indicates the difference in their perception.

**H2c:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on marital status.

**Table No. 4.3.8: t- test for difference in Perception of Salaried Individual Investors on the basis of Marital Status**

| Sr. No. | Test<br>Factors                                   | Married |        | Unmarried |        | t Value | P Value | Accepted/<br>Not Accepted |
|---------|---------------------------------------------------|---------|--------|-----------|--------|---------|---------|---------------------------|
|         |                                                   | Mean    | S.D.   | Mean      | S.D.   |         |         |                           |
| 1       | Perception for Services                           | 3.2940  | 0.8859 | 3.2041    | 0.8229 | 0.954   | 0.341   | Accepted                  |
| 2       | Perception for safety and Security                | 3.7577  | 1.0761 | 3.8318    | 0.9650 | -0.652  | 0.515   | Accepted                  |
| 3       | Perception for Predictors of Return on Investment | 3.5074  | 0.8502 | 3.4312    | 0.8178 | 0.837   | 0.403   | Accepted                  |

Source: Primary Data

**Interpretation:** t-test is applied to find the marital status differences towards perception for services factor, safety and security factor and predictors of return-on-investment factor.

For perception towards the services provided by pension fund providers, Table No. 4.3.8 indicates that p value is 0.341 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in married and unmarried investors' perception towards the services provided by pension fund providers. Hypothesis is accepted. Mean score for perception towards the services provided by pension fund providers for married and unmarried investors is 3.2940 and 3.2041 respectively, which also indicates the difference in their perception.

For perception towards the safety and security, Table No. 4.3.8 indicates that p value is 0.515 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in married and unmarried investors' perception towards the safety and security. Hypothesis is accepted. Mean score for perception towards for safety and security for married and unmarried investors is 3.7577 and 3.8318 respectively, which also indicates the difference in their perception.

For perception towards the predictors of return on investment, Table No. 4.3.8 indicates that p value is 0.403 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in married and unmarried investors' perception towards the predictors of return on investment. Hypothesis is accepted. Mean score for perception towards the return on investment for married and unmarried is 3.5074 and 3.4312 respectively, which also indicates the difference in their perception.

**H2d:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on educational qualification.

**Table No. 4.3.9: ANOVA for difference in Perception of Salaried Class Individual Investors on the basis of Educational Qualification**

| Sr. No | Test Factors                                       | Categories                                                                   | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|----------------------------------------------------|------------------------------------------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Perception for Services                            | Upto<br>Secondary<br>Graduation<br>Post Gradu.<br>Diploma/Tech.<br>Any other | 2.7188<br>3.0670<br>3.3373<br>3.2645<br>3.0521 | 2.109         | 0.079           | 2.482   | 0.043           | N.A.        | N.A.            | Not Accepted           |
| 2      | Perception for safety and security                 | Upto<br>Secondary<br>Graduation<br>Post Gradu.<br>Diploma/Tech.<br>Any other | 2.8750<br>3.8274<br>3.7934<br>3.7971<br>3.5833 | 1.722         | 0.144           | 1.739   | 0.140           | N.A.        | N.A.            | Accepted               |
| 3      | Perception for Predicators of Return on Investment | Upto<br>Secondary<br>Graduation<br>Post Gradu.<br>Diploma/Tech.<br>Any other | 3.0000<br>3.4866<br>3.5099<br>3.4964<br>3.3750 | 1.747         | 0.138           | 0.836   | 0.503           | N.A.        | N.A.            | Accepted               |

Source: Primary Data

**Interpretation:** ANOVA is applied to find perception for services factor, safety and security factor and predicators of return-on-investment factor on the basis of educational qualification difference.

For perception for services provided by pension fund providers, Table No. 4.3.9 indicates that p value is 0.043, which is less than 0.05 (at 5% significance level), recommends that there is not statistically significant difference in various educational qualification group investors' perception towards the services provided by pension fund providers. Hypothesis is not accepted. Mean score for perception towards the services provided by pension fund providers is 2.7188, 3.0670, 3.3373, 3.2645, 3.0521 for the educational qualification groups related to upto secondary, graduation, post-graduation, diploma/technical and any other category respectively.

For perception for safety and security, Table No. 4.3.9 indicates that p value is 0.140, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various educational qualification group investors' perception towards the safety and security. Hypothesis is accepted. Mean score for perception towards the safety and security is 2.8750, 3.8274, 3.7934, 3.7971, 3.5833 for the educational qualification groups related to upto secondary, graduation, post-graduation, diploma/technical and any other category respectively, which also indicates the difference in their perception.

For perception for predictors of return on investment, Table No. 4.3.9 indicates that p value is 0.503, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various educational qualification group investors' perception towards the predictors of return on investment. Hypothesis is accepted. Mean score for perception for return on investment is 3.000, 3.4866, 3.5099, 3.4964, 3.3750 for the educational qualification groups related to upto secondary, graduation, post-graduation, diploma/technical and any other category respectively, which also indicates the difference in their perception.

**H2e:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on nature of employment.

**Table No. 4.3.10: t- test for difference in Perception of Salaried Class Individual Investors on the basis of Nature of Employment**

| Sr. No. | Test<br>Factors                                   | Government Job |        | Private Job |        | t Value | P Value | Accepted/ Not Accepted |
|---------|---------------------------------------------------|----------------|--------|-------------|--------|---------|---------|------------------------|
|         |                                                   | Mean           | S.D.   | Mean        | S.D.   |         |         |                        |
| 1       | Perception for Services                           | 3.3041         | 0.8607 | 3.2083      | 0.8993 | 1.143   | 0.254   | Accepted               |
| 2       | Perception for Safety and Security                | 3.7837         | 1.0492 | 3.7500      | 1.0646 | 0.333   | 0.739   | Accepted               |
| 3       | Perception for Predictors of Return on Investment | 3.5056         | 0.8466 | 3.4583      | 0.8370 | 0.584   | 0.560   | Accepted               |

Source: Primary Data

**Interpretation:** t-test is applied to find the nature of employment differences towards perception for services factor, safety and security factor and predictors of return-on-investment factor.

For perception towards the services provided by pension fund providers, Table No. 4.3.10 indicates that p value is 0.254 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in government employees and private sector employees' perception towards services provided by pension fund providers. Hypothesis is accepted. Mean score for perception towards services provided by pension fund providers for government employees and private sector employees is 3.3041 and 3.2083 respectively, which also indicates the difference in their perception.

For perception towards the safety and security, Table No. 4.3.10 indicates that p value is 0.739 which is greater than 0.05 (at 5% significance level), recommends statistically significant difference in government employees and private sector employees' perception towards safety and security. Hypothesis is accepted. Mean score for perception towards safety and security for government employees and private sector employees is 3.7837 and 3.7500 respectively, which also indicates the difference in their perception.

For perception towards predictors of return on investment, Table No. 4.3.10 indicates that p value is 0.560 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in government employees and private sector employees' perception towards the predictors of return on investment. Hypothesis is accepted. Mean score for perception towards the predictors of return on investment for government employees and private sector employees is 3.5056 and 3.4583 respectively, which also indicates the difference in their perception.

**H2f:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on nature of job work.

**Table No. 4.3.11: ANOVA for difference in Perception of Salaried Class Individual Investors on the basis of Nature of Job work**

| SrNo | Test<br>Factors                                                   | Categories                                                    | Mean                                           | Levene.<br>Stat. | Sig.<br>(2<br>tailed) | F-<br>Value | Sig.<br>(2<br>tailed) | Welch<br>Stat. | Sig.<br>(2<br>tailed) | Accepted/<br>Not<br>Accepted |
|------|-------------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------|------------------|-----------------------|-------------|-----------------------|----------------|-----------------------|------------------------------|
| 1    | Perception<br>for<br>Services                                     | Academic<br>Professional<br>Managerial<br>Technical<br>Others | 3.3024<br>3.2089<br>3.2598<br>3.2685<br>3.2989 | 0.347            | 0.846                 | 0.173       | 0.952                 | N.A.           | N.A.                  | Accepted                     |
| 2    | Perception<br>for safety<br>and<br>security                       | Academic<br>Professional<br>Managerial<br>Technical<br>Others | 3.6984<br>3.7945<br>3.9118<br>3.7901<br>3.7464 | 0.314            | 0.869                 | 0.725       | 0.575                 | N.A.           | N.A.                  | Accepted                     |
| 3    | Perception<br>for<br>Predicators<br>of Return<br>on<br>Investment | Academic<br>Professional<br>Managerial<br>Technical<br>Others | 3.4679<br>3.5582<br>3.5588<br>3.4691<br>3.3804 | 0.380            | 0.823                 | 0.530       | 0.714                 | N.A.           | N.A.                  | Accepted                     |

Source: Primary Data

**Interpretation:** ANOVA is applied to find perception for services factor, safety and security factor and predicators of return-on-investment factor on the basis of nature of job work difference.

For perception for service provided by pension fund providers, Table No. 4.3.11 indicates that p value is 0.952, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various investors groups on the basis of nature of job work towards the perception for services provided by pension fund providers. Hypothesis is accepted. Mean score for the perception towards the service provided by pension fund providers is 3.3024, 3.2089, 3.2598, 3.2685, 3.2989 for the groups on the basis of nature of job work academic, professional, managerial, diploma/technical, any other respectively, which also indicates the difference in their perception.

For perception for safety and security, Table No. 4.3.11 indicates that p value is 0.575, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various investors groups on the basis of nature of job work towards perception for safety and security. Hypothesis is accepted. Mean score for perception towards the safety is 3.6984, 3.7945, 3.9118, 3.7901 and 3.7464 for the groups on the basis of nature of job work academic, professional, managerial, diploma/technical, any other respectively, which also indicates the difference in their perception.

For perception for predictors of return on investment, Table No. 4.3.11 indicates that p value is 0.714, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various investors groups on the basis of nature of job work towards perception for predictors of return on investment. Hypothesis is accepted. Mean score for the predictors of return on investment is 3.4679, 3.5582, 3.5588, 3.4691, 3.3804 for the groups on the basis of nature of job work i.e., academic, professional, managerial, diploma/technical, any other respectively, which also indicates the difference in their perception.

**H2g:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on job experience.

**Table No. 4.3.12: ANOVA for difference in Perception of Salaried Class Individual on the basis of Job Experience Investors**

| Sr. No | Test Factors                                      | Categories                                     | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|---------------------------------------------------|------------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Perception for Services                           | Upto 10<br>10-15<br>15-20<br>20-25<br>Above 25 | 3.2686<br>3.2481<br>3.3750<br>3.2500<br>3.2813 | 0.871         | 0.481           | 0.213   | 0.931           | N.A.        | N.A.            | Accepted               |
| 2      | Perception for Safety and Security                | Upto 10<br>10-15<br>15-20<br>20-25<br>Above 25 | 3.7910<br>3.7974<br>3.5988<br>3.5185<br>3.9167 | 0.655         | 0.623           | 0.650   | 0.627           | N.A.        | N.A.            | Accepted               |
| 3      | Perception for Predictors of Return on Investment | Upto 10<br>10-15<br>15-20<br>20-25<br>Above 25 | 3.4678<br>3.5692<br>3.3472<br>3.2500<br>3.7708 | 1.376         | 0.241           | 1.580   | 0.178           | N.A.        | N.A.            | Accepted               |

Source: Primary Data (Job Experience in years)

**Interpretation:** ANOVA is applied to find perception for services factor, safety and security factor and predictors of return-on-investment factor on the basis of job experience difference.

For perception for services provided by the pension fund providers, Table No. 4.3.12 indicates that p value is 0.931, which is greater than 0.05 (at 5% significance level), recommends that the statistically significant difference in various investors groups on the basis of job experience towards perception for services provided by the pension fund providers. Hypothesis is accepted. Mean score for perception towards services provided by the pension fund providers is 3.2686, 3.2481, 3.3750, 3.2500, 3.2813 for the groups on the basis of job experience upto 10 years, 10-15 years, 15-20 years, 20-25 years, above 25 years respectively, which also indicates the difference in their perception.

For perception for safety and security, Table No. 4.3.12 indicates that p value is 0.627, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various investors groups on the basis of job experience towards perception for safety and security. Hypothesis is accepted. Mean score for perception towards safety and security is 3.7910, 3.7974, 3.5988, 3.5185, 3.9167 for the groups on the basis of job experience upto 10 years, 10-15 years, 15-20 years, 20-25 years, above 25 years respectively, which also indicates the difference in their perception.

For perception towards the predictors of return on investment, Table No. 4.3.12 indicates that p value is 0.178, which is greater than 0.05 (at 5% significance level), recommends that the statistically significant difference in various investors groups on the basis of job experience towards perception for predictors of return on investment. Hypothesis is accepted. Mean score for perception towards the predictors of return on investment is 3.4678, 3.5692, 3.3472, 3.2500, 3.7708 for the groups on the basis of job experience upto 10 years, 10-15 years, 15-20 years, 20-25 years, above 25 years respectively, which also indicates the difference in their perception.

**H2h:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on annual income.

**Table No. 4.3.13: ANOVA for difference in Perception of Salaried Class Individual Investors on the basis of Annual Income**

| Sr. No | Test Factors                                       | Categories                                  | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|----------------------------------------------------|---------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Perception for Services                            | Upto5<br>5-10<br>10-15<br>15-20<br>Above 20 | 3.2847<br>3.2463<br>3.2893<br>3.3214<br>3.6042 | 1.908         | 0.108           | 0.523   | 0.719           | N.A.        | N.A.            | Accepted               |
| 2      | Perception for Safety and Security                 | Upto5<br>5-10<br>10-15<br>15-20<br>Above 20 | 3.9352<br>3.6916<br>3.8333<br>4.0635<br>3.4167 | 1.222         | 0.300           | 1.693   | 0.150           | N.A.        | N.A.            | Accepted               |
| 3      | Perception for Predicators of Return on Investment | Upto5<br>5-10<br>10-15<br>15-20<br>Above 20 | 3.4375<br>3.4728<br>3.5893<br>3.3214<br>3.3750 | 0.803         | 0.524           | 0.847   | 0.496           | N.A.        | N.A.            | Accepted               |

Source: Primary Data (Annual Income in Lakhs)

**Interpretation:** ANOVA is applied to find perception for services factor, safety and security factor and predicators of return-on-investment factor on the basis of annual income difference.

For perception towards the services provided by pension fund providers, Table No. 4.3.13 indicates that p value is 0.719, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors on the basis of annual income towards perception for services provided by pension fund providers. Hypothesis is accepted. Mean score for perception towards services provided by pension fund providers is 3.2847, 3.2463, 3.2893, 3.3214, 3.6042 for the groups on the basis of annual income upto 5 lakhs, 5-10 lakhs, 10-15 lakhs, 15-20 lakhs, above 20 lakhs respectively, which also indicates the difference in their perception.

For perception towards the safety and security, Table No. 4.3.13 indicates that p value is 0.150, which is greater than 0.05 (at 5% significance level), recommends the

statistically significant difference in various groups of investors on the basis of annual income towards perception for safety and security. Hypothesis is accepted. Mean score for perception towards safety is 3.9352, 3.6916, 3.8333, 4.0635, 3.4167 for the groups on the basis of annual income upto 5 lakhs, 5-10 lakhs, 10-15 lakhs, 15-20 lakhs, above 20 lakhs respectively, which also indicates the difference in their perception.

For perception towards the predictors of return on investment, Table No. 4.3.13 indicates that p value is 0.496, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors on the basis of annual income towards perception for the predictors of return on investment. Hypothesis is accepted. Mean score for perception towards the predictors of return on investment is 3.4375, 3.4728, 3.5893, 3.3214, 3.3750 for the groups on the basis of annual income upto 5 lakhs, 5-10 lakhs, 10-15 lakhs, 15-20 lakhs, above 20 lakhs respectively, which also indicates the difference in their perception.

**H2i:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on type of family.

**Table No. 4.3.14: t- test for difference in Perception of Salaried Class Individual Investors on the basis of Type of Family**

| Sr. No. | Test<br>Factors                                   | Nuclear Family |        | Joint Family |        | t Value | P Value | Accepted/ Not Accepted |
|---------|---------------------------------------------------|----------------|--------|--------------|--------|---------|---------|------------------------|
|         |                                                   | Mean           | S.D.   | Mean         | S.D.   |         |         |                        |
| 1       | Perception for Services                           | 3.2500         | 0.8865 | 3.2976       | 0.8613 | -0.616  | 0.538   | Accepted               |
| 2       | Perception for Safety and Security                | 3.8087         | 1.0492 | 3.7413       | 1.0573 | 0.724   | 0.470   | Accepted               |
| 3       | Perception for Predictors of Return on Investment | 3.5297         | 0.8638 | 3.4562       | 0.8240 | 0.986   | 0.325   | Accepted               |

Source: Primary Data

**Interpretation:** t-test is applied to find the type of family difference and perception for services factor, safety and security factor and predictors of return-on-investment factor.

For perception for services provided by pension fund providers, Table No. 4.3.14 indicates that p value is 0.538 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in perception towards the services provided by pension fund providers of investors belong to nuclear family or joint family. Hypothesis is accepted. Mean score for perception towards the services provided by pension fund providers for investors belong to nuclear family or joint family is 3.2500 and 3.2976 respectively, which also indicates the difference in their perception.

For perception for safety and security, Table No. 4.3.14 indicates that p value is 0.470 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in perception towards the safety and security of investors belong to nuclear family or joint family. Hypothesis is accepted. Mean score for perception towards the safety and security for investors belong to nuclear family or joint family is 3.8087 and 3.7413 respectively, which also indicates the difference in their perception.

For perception towards the predictors of return on investment, Table No. 4.3.14 indicates that p value is 0.325 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in perception of investors belong to nuclear family or joint family towards the predictors of return on investment. Hypothesis is accepted. Mean score for perception for predictors of return on investment of investors belongs to nuclear family or joint family is 3.5297 and 3.4562 respectively, which also indicates the difference in their perception.

**H2j:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on number of family members.

**Table No. 4.3.15: ANOVA for difference in Perception of Salaried Class Individual Investors on the basis of Number of Family Members**

| Sr. No | Test Factors                                       | Categories     | Mean   | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|----------------------------------------------------|----------------|--------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Perception for Services                            | Two            | 3.2917 | 0.296         | 0.881           | 0.742   | 0.563           | N.A.        | N.A.            | Accepted               |
|        |                                                    | Three          | 3.3277 |               |                 |         |                 |             |                 |                        |
|        |                                                    | Four           | 3.2056 |               |                 |         |                 |             |                 |                        |
|        |                                                    | Five           | 3.3555 |               |                 |         |                 |             |                 |                        |
|        |                                                    | More than Five | 3.2215 |               |                 |         |                 |             |                 |                        |
| 2      | Perception for Safety and Security                 | Two            | 3.8889 | 0.475         | 0.754           | 0.165   | 0.956           | N.A.        | N.A.            | Accepted               |
|        |                                                    | Three          | 3.8333 |               |                 |         |                 |             |                 |                        |
|        |                                                    | Four           | 3.7807 |               |                 |         |                 |             |                 |                        |
|        |                                                    | Five           | 3.7489 |               |                 |         |                 |             |                 |                        |
|        |                                                    | More than Five | 3.7398 |               |                 |         |                 |             |                 |                        |
| 3      | Perception for Predicators of Return on Investment | Two            | 3.7639 | 0.491         | 0.742           | 0.830   | 0.507           | N.A.        | N.A.            | Accepted               |
|        |                                                    | Three          | 3.4595 |               |                 |         |                 |             |                 |                        |
|        |                                                    | Four           | 3.5263 |               |                 |         |                 |             |                 |                        |
|        |                                                    | Five           | 3.5000 |               |                 |         |                 |             |                 |                        |
|        |                                                    | More than Five | 3.4101 |               |                 |         |                 |             |                 |                        |

Source: Primary Data

**Interpretation:** ANOVA is applied to find perception for services factor, safety and security factor and predicators of return-on-investment factor in accordance with number of family members' difference.

For perception for services provided by pension fund providers, Table No. 4.3.15 indicates that p value is 0.563 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with number of family members towards perception for services provided by pension fund providers. Hypothesis is accepted. Mean score for perception for services provided by pension fund providers is 3.2917, 3.3277, 3.2056, 3.3555, 3.2215 for the various groups of investors in accordance with number of family members i.e., two, three, four, five and more than five respectively, which also indicates the difference in their perception.

For perception for safety and security, Table No. 4.3.15 indicates that p value is 0.956 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with number of family members towards perception for safety and security. Hypothesis is accepted. Mean score for perception for safety is 3.8889, 3.8333, 3.7807, 3.7489, 3.7398 for the various groups of investors in accordance with number of family members i.e., two, three, four, five and more than five respectively, which also indicates the difference in their perception.

For perception on return on investment, Table No. 4.3.15 indicates that p value is 0.507 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with number of family members towards perception for predictors of return on investment. Hypothesis is accepted. Mean score for perception for predictors of return on investment is 3.7639, 3.4595, 3.5263, 3.5000, 3.4101 for various groups of investors in accordance with number of family members i.e., two, three, four, five and more than five respectively, which also indicates the difference in their perception.

**H2k:** Perception of salaried class individual investors towards investment in pension plans is significantly different based on number of dependent family members.

**Table No. 4.3.16: ANOVA for difference in Perception of Salaried Class Individual Investors on the basis of Number of Dependent Family Members**

| Sr. No | Test Factors                                       | Categories                                    | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|----------------------------------------------------|-----------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Perception for Services                            | One<br>Two<br>Three<br>Four<br>More than Four | 3.2000<br>3.2958<br>3.1818<br>3.3342<br>3.2202 | 0.469         | 0.758           | 0.553   | 0.697           | N.A.        | N.A.            | Accepted               |
| 2      | Perception for safety and Security                 | One<br>Two<br>Three<br>Four<br>More than Four | 3.9208<br>3.7328<br>3.8384<br>3.7844<br>3.6468 | 0.486         | 0.746           | 0.779   | 0.539           | N.A.        | N.A.            | Accepted               |
| 3      | Perception for Predicators of Return on Investment | One<br>Two<br>Three<br>Four<br>More than Four | 3.5719<br>3.4943<br>3.5985<br>3.4293<br>3.5030 | 2.499         | 0.042           | N.A.    | N.A.            | 0.578       | 0.679           | Accepted               |

Source: Primary Data

**Interpretation:** ANOVA is applied to find perception for services factor, safety and security factor and predicators of return-on-investment factor in accordance with number of dependent family members' difference.

For perception for services provided by pension fund providers, Table No. 4.3.16 indicates that p value is 0.697 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with number of dependent family members towards perception for services provided by pension fund providers. Hypothesis is accepted. Mean score for

perception for service provided by pension fund providers is 3.2000, 3.2958, 3.1818, 3.3342, 3.2202 for the various groups of investors in accordance with number of dependent family members i.e., one, two, three, four, and more than four respectively, which also indicates the difference in their perception.

For perception for safety, Table No. 4.3.16 indicates that p value is 0.539 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with number of dependent family members towards perception for safety and security. Hypothesis is accepted. Mean score for the perception is 3.9208, 3.7328, 3.8384, 3.7844, 3.6468 for various groups of investors in accordance with number of dependent family members i.e., one, two, three, four, and more than four respectively, which also indicates the difference in their perception.

For perception towards the predictors of return on investment, Table No. 4.3.16 indicates that p value is 0.679 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with number of dependent family members towards perception for predictors of return on investment. Hypothesis is accepted. Mean score for perception for return on investment is 3.5719, 3.4943, 3.5985, 3.4293, 3.5030 for various groups of investors in accordance with number of dependent family members i.e., one, two, three, four, and more than four respectively, which also indicates the difference in their perception.

#### 4.4 Analysis of Factors Influencing Investment in Pension Plans for Retirement

Various factors are influence the investors while they invest for their future. In this study, factors influencing the salaried class individual investors towards the investment in pension plans has been analysed.

##### Reliability Testing

**Table No. 4.4.1:**

**Test of Reliability for Factors Influencing the Investment in Pension Plans**

| Reliability Statistics |            |
|------------------------|------------|
| Cronbach's Alpha       | N of Items |
| .947                   | 24         |

Source: Primary Data

**Interpretation:** Internal consistency (reliability) of the items or variables in data construct is checked by using the Cronbach's Alpha test of reliability. Internal consistency represents the correlation among all the items or variables, means how these items are correlated with each other. The result of test is presented with R-score value which lies between 0 to 1. The value of R-score more than 0.7 shows the high level of internal consistency. Table No. 4.4.1 indicates the internal consistency of factors influencing the investment in pension plans construct includes 24 items or variables and value of Cronbach's Alpha is 0.947 greater than 0.7 means all items are highly correlated with one other.

##### Advice for the Selection of Pension Plan for Investment

**Table No. 4.4.2: Advice for the Selection of Pension Plan for Investment**

| Advice for the Selection of Pension Plan for Investment | Yes       |       | No        |       | Descriptive Statistics                            |
|---------------------------------------------------------|-----------|-------|-----------|-------|---------------------------------------------------|
|                                                         | Frequency | %     | Frequency | %     |                                                   |
| Profession Advisor                                      | 455       | 88.9% | 57        | 11.1% | Mean = 1.8887<br>Median = 2.0000<br>Mode = 2.0000 |

|                                                               |     |       |     |       |                                                                                                             |
|---------------------------------------------------------------|-----|-------|-----|-------|-------------------------------------------------------------------------------------------------------------|
|                                                               |     |       |     |       | Range = 1.0000<br>Minimum = 1.0000<br>Maximum = 2.0000                                                      |
| Colleagues/ Friends                                           | 430 | 84%   | 82  | 16%   | Mean = 1.8398<br>Median = 2.0000<br>Mode = 2.0000<br>Range = 1.0000<br>Minimum = 1.0000<br>Maximum = 2.0000 |
| Relatives                                                     | 419 | 81.8% | 93  | 18.2% | Mean = 1.8184<br>Median = 2.0000<br>Mode = 2.0000<br>Range = 1.0000<br>Minimum = 1.0000<br>Maximum = 2.0000 |
| Print Media<br>(Newspaper/Magazine/Journals)                  | 420 | 82%   | 92  | 18%   | Mean = 1.8203<br>Median = 2.0000<br>Mode = 2.0000<br>Range = 1.0000<br>Minimum = 1.0000<br>Maximum = 2.0000 |
| Electronic Media<br>(T.V./Radio/email/Cell<br>Phone/Internet) | 404 | 78.9% | 108 | 21.1% | Mean = 1.7891<br>Median = 2.0000<br>Mode = 2.0000<br>Range = 1.0000<br>Minimum = 1.0000<br>Maximum = 2.0000 |

Source: Primary Data

**Interpretation:** Table No.4.4.2 indicates that 455 (88.9%) respondents take the advice from professional advisor and 57 (11.1%) don't take the advice from the professional advisor while they are investing in pension plans, 430 (84%) respondents take the advice from colleagues/friends and 82 (16%) don't take the advice from the colleagues/friends while they are investing in pension plans, 419 (81.8%) respondents take the advice from relatives and 93 (18.2%) don't take the advice from the relatives while they are investing in pension plans, 420 (82%) respondents do take care the information given in print media i.e. Newspapers/ magazines/journal and 92 (18%) don't take care the information given in print media i.e. Newspapers/ magazines/journal while they are investing in pension plans, 404 (78.9%) respondents do take care the information given in electronic media i.e. T.V./ email/Radio/Cell Phone/Internet and 108 (21.1%) don't take care the information given in electronic media i.e. T.V./ email/Radio/Cell Phone/Internet while they are investing in pension plans. Mean is 1.8887, 1.8398, 1.8184, 1.8203, 1.7891 for the advice taking from professional advisors, colleagues/friends, relatives, print media and electronic media respectively. Median and mode is 2.000 for all the information sources like professional advisors, Colleagues/friends, relatives, print media and electronic media, which indicates that majority of respondents do take the advice while they investing in pension plans.

#### **Factor Analysis:**

Factor analysis is a technique to condense the data which helps the researcher to measure the data directly and easily. Factor analysis contracts the large number of variables into limited numbers of variables. Principal Component Analysis (PCA) technique is applied to analyse the pattern of data set. Principal Component Analysis (PCA) is applied to contract the dimension of original data set which convert the original data into limited number of factors. Data is rotated on Varimax rotation.

**Table No. 4.4.3: Test of KMO value and Bartlett's Test Factor Influencing Investment in Pension Plans**

| KMO and Bartlett's Test                          |                    |           |
|--------------------------------------------------|--------------------|-----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .858      |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 18316.067 |
|                                                  | df                 | 171       |
|                                                  | Sig.               | .000      |

Source: Primary Data

### Interpretation:

Table No. 4.4.3 indicates KMO(Kaiser-Meyer-Olkin) calculations of sampling adequacy applied to find out the adequacy of data. KMO value is 0.858 which is more than 0.6. It indicates that the sampling is adequate and responses are valid for study through factor analysis. Bartlett's Test of Sphericity set the 171% of significance level at 5%. The p-value (Sig.) is 0.000 which is below 0.05. This suggests that null hypothesis (H0) is not accepted and alternative hypothesis (H1) is accepted. It means that there is a significant inter relationship among the variables. An EFA (Exploratory Factor Analysis) is used on the nineteen variables. Communalities test is used and all variables meet the criteria (variable value should be more than 0.5). So, all the variables are kept for the further study to find out the final results.

### Anti-Image Correlation Matrices:

**Figure 4.4.1: Anti-Image Correlation Matrices for Factor Influencing Investment in Pension Plans**

|                           |      | Anti-image Matrices |        |        |        |        |         |        |        |        |        |        |        |        |        |        |        |        |        |       |
|---------------------------|------|---------------------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
|                           |      | FI1                 | FI2    | FI3    | FI4    | FI5    | FI6     | FI7    | FI8    | FI9    | FI10   | FI11   | FI12   | FI13   | FI14   | FI15   | FI16   | FI17   | FI18   | FI19  |
| Anti-image<br>Correlation | FI1  | .970*               |        |        |        |        |         |        |        |        |        |        |        |        |        |        |        |        |        |       |
|                           | FI2  | -0.347              | .948*  |        |        |        |         |        |        |        |        |        |        |        |        |        |        |        |        |       |
|                           | FI3  | 0.012               | 0.098  | .975*  |        |        |         |        |        |        |        |        |        |        |        |        |        |        |        |       |
|                           | FI4  | -0.019              | -0.070 | -0.013 | .723*  |        |         |        |        |        |        |        |        |        |        |        |        |        |        |       |
|                           | FI5  | 0.051               | -0.057 | -0.087 | 0.004  | .960*  |         |        |        |        |        |        |        |        |        |        |        |        |        |       |
|                           | FI6  | 0.009               | 0.019  | -0.304 | -0.010 | 0.059  | .890*   |        |        |        |        |        |        |        |        |        |        |        |        |       |
|                           | FI7  | 0.023               | 0.088  | 0.054  | -0.029 | -0.012 | -0.762* | .894*  |        |        |        |        |        |        |        |        |        |        |        |       |
|                           | FI8  | -0.136              | -0.072 | -0.060 | 0.699  | 0.049  | -0.023  | -0.034 | .770*  |        |        |        |        |        |        |        |        |        |        |       |
|                           | FI9  | 0.005               | 0.084  | 0.012  | -0.995 | -0.009 | 0.008   | 0.024  | -0.698 | .721*  |        |        |        |        |        |        |        |        |        |       |
|                           | FI10 | 0.066               | -0.303 | 0.036  | 0.067  | -0.147 | -0.019  | -0.026 | 0.038  | -0.136 | .957*  |        |        |        |        |        |        |        |        |       |
|                           | FI11 | -0.065              | 0.064  | 0.011  | -0.031 | -0.345 | -0.033  | -0.029 | -0.056 | 0.032  | -0.104 | .966*  |        |        |        |        |        |        |        |       |
|                           | FI12 | 0.004               | 0.043  | 0.013  | -0.708 | -0.075 | 0.003   | 0.015  | -0.982 | 0.706  | -0.026 | 0.043  | .768*  |        |        |        |        |        |        |       |
|                           | FI13 | 0.013               | -0.142 | -0.020 | 0.006  | 0.095  | -0.004  | 0.000  | 0.020  | 0.001  | -0.107 | 0.032  | -0.016 | .935*  |        |        |        |        |        |       |
|                           | FI14 | -0.152              | 0.129  | -0.016 | -0.013 | 0.075  | 0.001   | 0.006  | 0.010  | 0.028  | -0.241 | 0.082  | -0.001 | -0.281 | .951*  |        |        |        |        |       |
|                           | FI15 | 0.135               | 0.043  | 0.019  | 0.000  | 0.042  | 0.002   | 0.026  | -0.029 | -0.009 | 0.078  | -0.066 | 0.000  | -0.429 | -0.156 | .949*  |        |        |        |       |
|                           | FI16 | -0.004              | -0.004 | -0.007 | -0.445 | -0.036 | -0.002  | 0.013  | -0.310 | 0.443  | -0.049 | 0.026  | 0.320  | 0.020  | 0.022  | 0.027  | .772*  |        |        |       |
|                           | FI17 | -0.107              | 0.040  | 0.014  | -0.004 | -0.096 | -0.001  | 0.006  | 0.008  | 0.009  | -0.029 | -0.017 | 0.012  | -0.084 | -0.150 | -0.103 | 0.005  | .864*  |        |       |
|                           | FI18 | 0.097               | -0.055 | -0.014 | 0.004  | 0.082  | -0.001  | -0.002 | -0.003 | -0.010 | 0.030  | 0.010  | -0.015 | 0.049  | 0.106  | 0.006  | 0.000  | -0.905 | .860*  |       |
|                           | FI19 | 0.005               | -0.004 | 0.011  | 0.441  | 0.003  | 0.000   | -0.012 | 0.306  | -0.440 | 0.081  | -0.036 | -0.313 | -0.029 | -0.089 | -0.050 | -0.986 | 0.027  | -0.065 | .772* |

### a. Measures of Sampling Adequacy(MSA)

Source: Primary Data

**Interpretation:** Correlation matrices is also used to find the correlation amid the variables and found that all the variables are strongly correlated.

**Factor Loading and Variance Explained:**

**Table No. 4.4.4: Factor Loading and Variance Explained for Factor Influencing Investment in Pension Plans**

| Factors                                                                                      | Variable Labels | Variable                                                | Factor Loading | Variance %     |
|----------------------------------------------------------------------------------------------|-----------------|---------------------------------------------------------|----------------|----------------|
| <b>Factor 1<br/>Motivational Factors<br/>Influencing<br/>Investment in<br/>Pension Plans</b> | FI8             | High Returns                                            | 0.933          | <b>53.076%</b> |
|                                                                                              | FI12            | Value of fund/corpus required at the time of retirement | 0.931          |                |
|                                                                                              | FI1             | Payment Facility                                        | 0.899          |                |
|                                                                                              | FI6             | Low cost of services                                    | 0.851          |                |
|                                                                                              | FI4             | Tax Relief                                              | 0.842          |                |
|                                                                                              | FI9             | Safety and Security                                     | 0.838          |                |
|                                                                                              | FI7             | Portfolio of Pension Scheme                             | 0.828          |                |
|                                                                                              | FI3             | Track Record and reputation of pension plan             | 0.796          |                |
|                                                                                              | FI2             | Adequate Prior Information                              | 0.768          |                |
|                                                                                              | FI10            | Claim settlement ratio                                  | 0.767          |                |
|                                                                                              | FI11            | Time taken for the settlement of claim                  | 0.718          |                |
|                                                                                              | FI5             | Easy Withdrawal                                         | 0.717          |                |
| <b>Factor2<br/>Discouraging Factors<br/>Influencing<br/>Investment in<br/>Pension Plans</b>  | FI19            | Poor claim settlement mechanism                         | 0.934          | <b>23.260%</b> |
|                                                                                              | FI16            | Poor grievances handling mechanism                      | 0.930          |                |
|                                                                                              | FI18            | Poor timing of investment                               | 0.924          |                |
|                                                                                              | FI17            | Portfolio Manipulation                                  | 0.923          |                |
|                                                                                              | FI14            | Lack of information                                     | 0.888          |                |
|                                                                                              | FI15            | Lack of innovative products                             | 0.882          |                |
|                                                                                              | FI13            | Fear of fraud                                           | 0.855          |                |
|                                                                                              |                 |                                                         | <b>Total</b>   | <b>76.336%</b> |

Source: Primary Data

**Interpretation:**

Table No. 4.4.4 indicates that factor 1 “Motivational Factors Influencing Investment in Pension Plans” factor including total 12 items having the statements “High returns”, “Value of fund/corpus required at the time of Retirement”, “Payment Facility”, “Low Cost of Services”, “Tax Relief “, “Safety and Security”, “Portfolio of Pension Scheme”, “Track Record and Reputation of Pension Plan”, “Adequate Prior Information”, “Claim Settlement Ratio”, “Time taken for the Settlement of Claim”, “Easy Withdrawal” on the values 0.933, 0.931, 0.899, 0.851, 0.842, 0.838, 0.828, 0.796, 0.768, 0.767, 0.718, 0.717 respectively which explains the 53.076% of the total variance. This factor explains about the factors that motivate the salaried class individual investors to invest in pension plans and secure their old age.

Table No. 4.4.4 indicates that factor 2 “Discouraging Factors Influencing Investment in Pension Plans” including total 7 items having the statements “Poor Claim Settlement Mechanism”, “Poor Grievances Handling Mechanism”, “Poor timing of Investment”, “Portfolio Manipulation”, “Lack of Information”, “Lack of Innovative Products”, “Fear of Fraud” on the values 0.934, 0.930, 0.924, 0.923, 0.888, 0.882, 0.855 respectively which explains the 23.260% of the total variance. This factor explains about the factors that discourage and demotivate the salaried class investors to invest in pension plans.

### Hypothesis Testing:

**Hypothesis 3:** Factors influencing salaried class individual investors to do the investment in pension plans for retirement planning are significantly different based on socio-economic demographics like gender, age, marital status, educational qualification, nature of employment, nature of job work, job experience, annual income, type of family, number of family members, number of dependent family members.

**H3a:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on gender.

**Table No. 4.4.5: t- test for difference in Factors Influencing Salaried Class Individual Investors on the basis of Gender**

| Sr. No. | Test<br>Factors                                              | Male   |        | Female |        | t Value | P Value | Accepted/<br>Not Accepted |
|---------|--------------------------------------------------------------|--------|--------|--------|--------|---------|---------|---------------------------|
|         |                                                              | Mean   | S.D.   | Mean   | S.D.   |         |         |                           |
| 1       | Motivational Factors Influencing Investment in Pension Plans | 4.1835 | 0.8804 | 4.1144 | 0.8064 | 0.922   | 0.357   | Accepted                  |
| 2       | Discouraging Factors Influencing Investment in Pension Plans | 3.4275 | 0.9084 | 3.4303 | 0.8672 | -0.036  | 0.971   | Accepted                  |

Source: Primary Data

**Interpretation:** t-test is applied to find gender differences towards the factors influencing the investment in pension plans through motivational factors and discouraging factors.

For motivational factors to do the investment in pension plans, Table No. 4.4.5 indicates that p value is 0.357 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in motivational factors to do investment in pension plans for males and females. Hypothesis is accepted. Mean score for investment for males and females is 4.1835 and 4.1144 respectively, this is also showing the difference in their motivational factors to do investment in pension plans.

For discouraging factors to do the investment in pension plans, Table No. 4.4.5 indicates that p value is 0.971 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in discouraging factors to do investment in pension plans for males and females. Hypothesis is accepted. Mean score for discouraging factor to do investment in pension plans for males and females is 3.4275 and 3.4303 respectively, which also indicates there is difference in their discouraging factors to do investment in pension plans.

**H3b:** Factors influencing to salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on age.

**Table No. 4.4.6: ANOVA for difference in Factors Influencing Salaried Class Individual Investors on the basis of Age**

| Sr. No | Test Factors                                                 | Categories | Mean   | Levene. Stat. | Sig. (2 tailed) | F- Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|--------------------------------------------------------------|------------|--------|---------------|-----------------|----------|-----------------|-------------|-----------------|------------------------|
| 1      | Motivational Factors Influencing Investment in Pension Plans | Upto 25    | 4.0000 | 1.194         | 0.313           | 0.382    | 0.822           | N.A.        | N.A.            | Accepted               |
|        |                                                              | 25-35      | 4.1272 |               |                 |          |                 |             |                 |                        |
|        |                                                              | 35-45      | 4.1636 |               |                 |          |                 |             |                 |                        |
|        |                                                              | 45-55      | 4.2444 |               |                 |          |                 |             |                 |                        |
|        |                                                              | Above 55   | 4.1979 |               |                 |          |                 |             |                 |                        |
| 2      | Discouraging Factors Influencing Investment in Pension Plans | Upto 25    | 3.4740 | 0.378         | 0.825           | 0.282    | 0.889           | N.A.        | N.A.            | Accepted               |
|        |                                                              | 25-35      | 3.3948 |               |                 |          |                 |             |                 |                        |
|        |                                                              | 35-45      | 3.4433 |               |                 |          |                 |             |                 |                        |
|        |                                                              | 45-55      | 3.5302 |               |                 |          |                 |             |                 |                        |
|        |                                                              | Above 55   | 3.3631 |               |                 |          |                 |             |                 |                        |

Source: Primary Data (Age in years)

**Interpretation:** ANOVA is applied to find factors influencing the investment in pension plans through motivational factors and discouraging factors on the basis of age difference.

For motivational factors to do the investment in pension plans, Table No. 4.4.6 indicates that p value is 0.822, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various age group investors' motivational factors towards investment in pension plans. Hypothesis is accepted. Mean score for the the motivational factors to do investment in pension plans is

4.0000, 4.1272, 4.1636, 4.2444, 4.1979 for the age group upto 25 years, 25-35 years, 35-45 years, 45-55 years, above 55 years respectively, which also indicates the difference in their motivational factors towards investment in pension plans.

For discouraging factors to do the investment in pension plans, Table No. 4.4.6 indicates that p value is 0.889, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various age group investors' discouraging factors to do investment in pension plans. Hypothesis is accepted. Mean score for the discouraging factors to do investment in pension plans is 3.4740, 3.3948, 3.4433, 3.5302, 3.3631 for the age group upto 25 years, 25-35 years, 35-45 years, 45-55 years, above 55 years respectively, which also indicates the difference in their discouraging factor to do investment in pension plans.

**H3c:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on marital status.

**Table No. 4.4.7: t- test for difference in Factors Influencing Salaried Class Individual Investors on the basis of Marital Status**

| Sr. No. | Test<br>Factors                                              | Married |        | Unmarried |        | t Value | P Value | Accepted/<br>Not Accepted |
|---------|--------------------------------------------------------------|---------|--------|-----------|--------|---------|---------|---------------------------|
|         |                                                              | Mean    | S.D.   | Mean      | S.D.   |         |         |                           |
| 1       | Motivational Factors Influencing Investment in Pension Plans | 4.1563  | 0.8483 | 4.1292    | 0.8402 | 0.297   | 0.767   | Accepted                  |
| 2       | Discouraging Factors Influencing Investment in Pension Plans | 3.4346  | 0.8828 | 3.4076    | 0.9113 | 0.281   | 0.779   | Accepted                  |

Source: Primary Data

**Interpretation:** t-test is applied to find marital status differences towards factors influencing the investment in pension plans through motivational factors and discouraging factors.

For motivational factors to do investment in pension plans, Table No. 4.4.7 indicates that p value is 0.767 which is greater than 0.05 (at 5% significance level),

recommends the statistically significant difference in motivational factors to do investment in pension plans of married and unmarried investors. Hypothesis is accepted. Mean score for motivational factors to do investment in pension plans for married and unmarried is 4.1563 and 4.1292 respectively, which also indicates the difference in their motivational factors to do investment in pension plans.

For discouraging factors to do investment in pension plans Table No. 4.4.7 indicates that p value is 0.779 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in married and unmarried investors' discouraging factors to do investment in pension plans. Hypothesis is accepted. Mean score for investment in discouraging factors towards investment in pension plans for married and unmarried is 3.4346 and 3.4076 respectively, which also indicates the difference in their discouraging factors to do investment in pension plans.

**H3d:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on educational qualification.

**Table No. 4.4.8: ANOVA for difference in Factors Influencing Salaried Class Individual Investors on the basis of Educational Qualification**

| Sr. No | Test Factors                                                 | Categories                                                                | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|--------------------------------------------------------------|---------------------------------------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Motivational Factors Influencing Investment in Pension Plans | Upto Secondary<br>Graduation<br>Post Gradu.<br>Diploma/Tech.<br>Any other | 3.4896<br>4.1339<br>4.1697<br>4.1123<br>4.2361 | 1.059         | 0.376           | 1.373   | 0.242           | N.A.        | N.A.            | Accepted               |
| 2      | Discouraging Factors Influencing Investment in Pension Plans | Upto Secondary<br>Graduation<br>Post Gradu.<br>Diploma/Tech.<br>Any other | 3.6786<br>3.4133<br>3.4571<br>3.3230<br>3.2679 | 2.498         | 0.042           | N.A.    | N.A.            | 0.926       | 0.458           | Accepted               |

**Source:** Primary Data

**Interpretation:** ANOVA is applied to find factors influencing the investment in pension plans through motivational factors and discouraging factors on the basis of educational qualification difference.

For motivational factors regarding the investment in pension plans, Table No. 4.4.8 indicates that p value is 0.242, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various educational qualification group investors towards motivational factors regarding the investment in pension plans. Hypothesis is accepted. Mean score for the motivational factors to do investment in pension plans is 3.4896, 4.1339, 4.1697, 4.1123, 4.2361 for the educational qualification groups related to upto secondary, graduation, post-graduation, diploma/technical and any other category respectively, which also indicates the difference in their motivational factors to do investment in pension plans.

For discouraging factors regarding the investment in pension plans, Table No. 4.4.8 indicates that p value is 0.458, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various educational qualification group investors towards discouraging factors to do investment in pension plans. Hypothesis is accepted. Mean score for the discouraging factors to do investment in pension plans is 3.6786, 3.4133, 3.4571, 3.3230, 3.2679 for the educational qualification groups related to upto secondary, graduation, post-graduation, diploma/technical and any other category respectively, which also indicates the difference in their discouraging factors to do investment in pension plans.

**H3e:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on nature of employment.

**Table No. 4.4.9: t- test for difference in Factors Influencing Salaried Class Individual Investors on the basis of Nature of Employment**

| Sr. No. | Test<br>Factors                                              | Government Job |        | Private Job |        | t Value | P Value | Accepted/<br>Not Accepted |
|---------|--------------------------------------------------------------|----------------|--------|-------------|--------|---------|---------|---------------------------|
|         |                                                              | Mean           | S.D.   | Mean        | S.D.   |         |         |                           |
| 1       | Motivational Factors Influencing Investment in Pension Plans | 4.1346         | 0.8509 | 4.1870      | 0.8359 | -0.644  | 0.520   | Accepted                  |
| 2       | Discouraging Factors Influencing Investment in Pension Plans | 3.4518         | 0.8878 | 3.3764      | 0.8895 | 0.885   | 0.377   | Accepted                  |

Source: Primary Data

**Interpretation:** t-test is applied to find nature of employment differences towards factors influencing the investment in pension plans through motivational factors and discouraging factors.

For motivational factors to do investment in pension plans, Table No. 4.4.9 indicates that p value is 0.520 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in government employees and private sector employees' motivational factors to do investment in pension plans. Hypothesis is accepted. Mean score for motivational factors to do investment in pension plans for government employees and private sector employees is 4.1346 and 4.1870 respectively, which also indicates the difference in their motivational factors to do investment in pension plans.

For discouraging factors to do investment in pension plans, Table No. 4.4.9 indicates that p value is 0.377 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in government employees and private sector employees' discouraging factors to do investment in pension plans. Hypothesis is accepted. Mean score for investment in discouraging factors to do investment in pension plans for government employees and private sector employees is 3.4518 and 3.3764 respectively, which also indicates the difference in their discouraging factors to do investment in pension plans.

**H3f:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on nature of job work.

**Table No. 4.4.10: ANOVA for difference in Factors Influencing Salaried Class Individual Investors on the basis of Nature of Job Work**

| Sr. No | Test Factors                                                     | Categories                                                    | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|------------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Motivational Factors Influencing the Investment in Pension Plans | Academic<br>Professional<br>Managerial<br>Technical<br>Others | 4.0869<br>4.1564<br>4.2966<br>4.2562<br>3.9221 | 0.337         | 0.853           | 2.234   | 0.064           | N.A.        | N.A.            | Accepted               |
| 2      | Discouraging Factors Influencing the Investment in Pension Plans | Academic<br>Professional<br>Managerial<br>Technical<br>Others | 3.3959<br>3.3307<br>3.4076<br>3.4974<br>3.6615 | 4.293         | 0.002           | N.A.    | N.A.            | 2.165       | 0.075           | Accepted               |

Source: Primary Data

**Interpretation:** ANOVA is applied to find factors influencing the investment in pension plans through motivational factors and discouraging factors on the basis of nature of job work difference.

For motivational factors to do investment in pension plans, Table No. 4.4.10 indicates that p value is 0.064, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various nature of job work group investors towards the motivational factors to do investment in pension plans. Hypothesis is accepted. Mean score for the motivational factors to do investment in pension plans is 4.0869, 4.1564, 4.2966, 4.2562, 3.9221 for the nature of job work groups i.e., academic, professional, managerial, technical and others respectively, which also indicates the difference in their motivational factors to do investment in pension plans.

For discouraging factors to do investment in pension plans, Table No. 4.4.10 indicates that p value is 0.075, which is greater than 0.05 (at 5% significance level),

recommends the statistically significant difference in various nature of job work group investors towards the discouraging factors to do investment in pension plans. Hypothesis is accepted. Mean score for the discouraging factors to do investment in pension plans is 3.3959, 3.3307, 3.4076, 3.4974, 3.6615 for the nature of job work groups academic, professional, managerial, technical and others respectively, which also indicates the difference in their discouraging factors to do investment in pension plans.

**H3g:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on job experience.

**Table No. 4.4.11: ANOVA for difference in Factors Influencing Salaried Class Individual Investors on the basis of Job Experience**

| Sr. No | Test<br>Factors                                              | Categories                                     | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|--------------------------------------------------------------|------------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Motivational Factors Influencing Investment in Pension Plans | Upto 10<br>10-15<br>15-20<br>20-25<br>Above 25 | 4.1661<br>4.1590<br>4.0494<br>3.9537<br>4.2153 | 0.219         | 0.928           | 0.376   | 0.826           | N.A.        | N.A.            | Accepted               |
| 2      | Discouraging Factors Influencing Investment in Pension Plans | Upto 10<br>10-15<br>15-20<br>20-25<br>Above 25 | 3.4145<br>3.5198<br>3.3148<br>3.3968<br>3.3810 | 0.498         | 0.737           | 0.601   | 0.662           | N.A.        | N.A.            | Accepted               |

Source: Primary Data (Job Experience in years)

**Interpretation:** ANOVA is applied to find factors influencing the investment in pension plans through motivational factors and discouraging factors on the basis of job experience difference.

For motivational factors to do investment in pension plans, Table No. 4.4.11 indicates that p value is 0.826, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various investors groups on the basis of job experience towards motivational factors to do investment in pension plans. Hypothesis is accepted. Mean score for the motivational factors to do

investment in pension plans 4.1661, 4.1590, 4.0494, 3.9537, 4.2153 for the groups on the basis of job experience upto 10 years, 10-15 years, 15-20 years, 20-25 years, above 25 years respectively, which also indicates the difference in their motivational factors to do investment in pension plans.

For discouraging factors to do investment in pension plans, Table No. 4.4.11 indicates that p value is 0.662, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various investors groups on the basis of job experience for the discouraging factors to do investment in pension plans. Hypothesis is accepted. Mean score for the discouraging factors to do investment in pension plans is 3.4145, 3.5198, 3.3148, 3.3968, 3.3810 for the groups on the basis of job experience upto 10 years, 10-15 years, 15-20 years, 20-25 years, above 25 years respectively, which also indicates the difference in their discouraging factors to do investment in pension plans.

**H3h:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on annual income.

**Table No. 4.4.12: ANOVA for difference in Factors Influencing Salaried Class Individual Investors on the basis of Annual Income**

| Sr. No | Test<br>Factors                                              | Categories                                   | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|--------------------------------------------------------------|----------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Motivational Factors influencing Investment in Pension Plans | Upto 5<br>5-10<br>10-15<br>15-20<br>Above 20 | 4.1667<br>4.0746<br>4.2673<br>4.3254<br>4.0764 | 0.587         | 0.672           | 1.464   | 0.212           | N.A.        | N.A.            | Accepted               |
| 2      | Discouraging Factors Influencing Investment in Pension Plans | Upto 5<br>5-10<br>10-15<br>15-20<br>Above 20 | 3.4861<br>3.3467<br>3.5173<br>3.6531<br>3.4881 | 0.455         | 0.769           | 1.345   | 0.252           | N.A.        | N.A.            | Accepted               |

Source: Primary Data (Annual Income in Lakhs)

**Interpretation:** ANOVA is applied to find factors influencing the investment in pension plans through motivational factors and discouraging factors on the basis of annual income difference.

For motivational factors to do investment in pension plans, Table No. 4.4.12 indicates that p value is 0.212, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors on the basis of annual income towards the motivational factors to do investment in pension plans. Hypothesis is accepted. Mean score for the motivational factors to do investment in pension plans is 4.1667, 4.0746, 4.2673, 4.3254, 4.0764 for the groups on basis of annual income upto 5 lakhs, 5-10 lakhs, 10-15 lakhs, 15-20 lakhs, above 20 lakhs respectively, which also indicates the difference in their motivational factors to do investment in pension plans.

For discouraging factors to do investment in pension plans, Table No. 4.4.12 indicates that p value is 0.252, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors on the basis of annual income towards the discouraging factors to do investment in pension plans. Hypothesis is accepted. Mean score for the discouraging factors to do investment in pension plans is 3.4861, 3.3467, 3.5173, 3.6531, 3.4881 for the groups on basis of annual income upto 5 lakhs, 5-10 lakhs, 10-15 lakhs, 15-20 lakhs, above 20 lakhs respectively, which also indicates the difference in their discouraging factors to do investment in pension plans.

**H3i:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on type of family.

**Table No. 4.4.13: t-test for difference in Factor Influencing Salaried Class Individual Investors on the basis of Type of Family**

|         |                                                              | Nuclear Family |        | Joint Family |        |         |         |                        |
|---------|--------------------------------------------------------------|----------------|--------|--------------|--------|---------|---------|------------------------|
| Sr. No. | Test Factors                                                 | Mean           | S.D.   | Mean         | S.D.   | t Value | P Value | Accepted/ Not Accepted |
| 1       | Motivational Factors Influencing Investment in Pension Plans | 4.2169         | 0.8277 | 4.0902       | 0.8592 | 1.696   | 0.091   | Accepted               |
| 2       | Discouraging Factors Influencing Investment in Pension Plans | 3.4303         | 0.9236 | 3.4275       | 0.8562 | 0.036   | 0.971   | Accepted               |

Source: Primary Data

**Interpretation:** t-test is applied to find type of family differences towards the factors influencing the investment in pension plans through motivational factors and discouraging factors.

For motivational factors to do investment in pension plans, Table No. 4.4.13 indicates that p value is 0.091 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in investment of investors belong to nuclear family or joint family in motivational factors to do investment in pension plans. Hypothesis is accepted. Mean score for motivational factors to do investment in pension plans for investors belong to nuclear family or joint family is 4.2169 and 4.0902 respectively, which also indicates the difference in their motivational factors to do investment in pension plans.

For discouraging factors to do investment in pension plans, Table No. 4.4.13 indicates that p value is 0.971 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in investment of investors belong to nuclear family or joint family in discouraging factors to do investment in pension plans. Hypothesis is accepted. Mean score for discouraging factors to do investment in pension plans for investors belong to nuclear family or joint family is 3.4303 and 3.4275 respectively, which also indicates the difference in their discouraging factors to do investment in pension plans.

**H3j:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on number of family members.

**Table No. 4.4.14: ANOVA Statistics for difference in Factors Influencing Salaried Class Individual Investors on the basis of Number of Family members**

| Sr. No | Test Factors                                                 | Categories                                     | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|--------------------------------------------------------------|------------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Motivational Factors Influencing Investment in Pension Plans | Two<br>Three<br>Four<br>Five<br>More than Five | 4.3380<br>4.1757<br>4.2193<br>4.0557<br>4.1411 | 1.510         | 0.198           | 0.975   | 0.421           | N.A.        | N.A.            | Accepted               |
| 2      | Discouraging Factors Influencing Investment in Pension Plans | Two<br>Three<br>Four<br>Five<br>More than Five | 3.6984<br>3.4537<br>3.3778<br>3.3711<br>3.5163 | 0.372         | 0.829           | 0.994   | 0.411           | N.A.        | N.A.            | Accepted               |

Source: Primary Data

**Interpretation:** ANOVA is applied to find factors influencing towards the investment in pension plans through motivational factors and discouraging factors in accordance with number of family members' difference.

For motivational factors to do investment in pension plans, Table No. 4.4.14 indicates that p value is 0.421 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with number of family members towards the motivational factors to do investment in pension plans. Hypothesis is accepted. Mean score for the motivational factors to do investment in pension plans is 4.3380, 4.1757, 4.2193, 4.0557, 4.1411 for the various groups of investors in accordance with number of family members i.e. two, three, four, five and more than five respectively, which also indicates the difference in their motivational factors to do investment in pension plans.

For discouraging factors to do investment in pension plans, Table No. 4.4.14 indicates that p value is 0.411 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with number of family members for the discouraging factors to do investment in pension plans. Hypothesis is accepted. Mean score for the discouraging factors towards the investment in pension plans is 3.6984, 3.4537, 3.3778, 3.3711, 3.5163 for the various groups of investors in accordance with number of family members i.e., two, three, four, five and more than five respectively, which also indicates the difference in their discouraging factors to do investment in pension plans.

**H3k:** Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on number of dependent family members.

**Table No. 4.4.15: ANOVA for difference in Factors Influencing Salaried Class Individual Investors on the basis of Number of Dependent Family Members**

| Sr. No | Test Factors                                                 | Categories                                    | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|--------------------------------------------------------------|-----------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Motivational Factors Influencing Investment in Pension Plans | One<br>Two<br>Three<br>Four<br>More than Four | 4.3677<br>4.1011<br>4.3258<br>4.1105<br>4.0397 | 1.049         | 0.381           | 2.270   | 0.061           | N.A.        | N.A.            | Accepted               |
| 2      | Discouraging Factors Influencing Investment in Pension Plans | One Two<br>Three<br>Four<br>More than Four    | 3.4393<br>3.3282<br>3.7229<br>3.4495<br>3.4150 | 0.913         | 0.456           | 1.362   | 0.246           | N.A.        | N.A.            | Accepted               |

Source: Primary Data

**Interpretation:** ANOVA is applied to find factors influencing the investment in pension plans through motivational factors and discouraging factors in accordance with number of dependent family members' difference.

For motivational factors to do investment in pension plans, Table No. 4.4.15 indicates that p value is 0.061 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with number of dependent family members for the motivational factors to do investment in pension plans. Hypothesis is accepted. Mean score for the motivational factors to do investment in pension plans is 4.3677, 4.1011, 4.3258, 4.1105, 4.0397 for the various groups of investors in accordance with number of dependent family members i.e., one, two, three, four, and more than four respectively, which also indicates the difference in their motivational factors to do investment in pension plans.

For discouraging factors to do investment in pension plans, Table No. 4.4.15 indicates that p value is 0.246 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with number of dependent family members towards the discouraging factors to do investment in pension plans. Hypothesis is accepted. Mean score for the discouraging factors to do investment in pension plans is 3.4393, 3.3282, 3.7229, 3.4495, 3.4150 for the various groups of investors in accordance with number of dependent family members i.e., one, two, three, four, and more than four respectively, which also indicates the difference in their discouraging factors to do investment in pension plans.

#### **4.5 Analysis of Satisfaction Level towards Investment in Pension Plan for Retirement**

Satisfaction level is also an important parameter to find the behavior of any person towards investment. Satisfaction is must when any person is investing for future because he sacrifices his present to protect the future. Satisfaction level also varies from individual to individual. In this study, satisfaction level of salaried class individual investors towards investment in pension plan is studied and analysed.

##### **Reliability Testing**

**Table No. 4.5.1:**

##### **Test of Reliability for Satisfaction Level towards Investment in Pension Plans**

| <b>Reliability Statistics</b> |            |
|-------------------------------|------------|
| Cronbach's Alpha              | N of Items |
| .930                          | 14         |

Source: Primary Data

**Interpretation:** Internal consistency (reliability) of the items or variables in data construct is checked by using the Cronbach's Alpha test of reliability. Internal consistency represents the correlation among all the items or variables, means how these items are correlated with each other. The result of test is presented with R-score value which lies between 0 to 1. The value of R-score more than 0.7 shows the high level of internal consistency. Table No. 4.5.1 indicates the internal consistency of satisfaction level towards the investment in pension plans construct includes 14 items or variables and value of Cronbach's Alpha is 0.930 greater than 0.7 means all items are highly correlated with one other.

### Understanding about the benefits of Pension Plan by Respondents:

**Table No. 4.5.2: Understanding about the Benefits of Pension Plans by Respondents**

| Understanding about the benefits of Pension Plan | Frequency  | Percentage  | Descriptive Statistics                                                                                      |
|--------------------------------------------------|------------|-------------|-------------------------------------------------------------------------------------------------------------|
| Yes                                              | 213        | 41.6%       | Mean = 2.0391<br>Median = 2.0000<br>Mode = 3.0000<br>Range = 2.0000<br>Minimum = 1.0000<br>Maximum = 3.0000 |
| No                                               | 66         | 12.9%       |                                                                                                             |
| Can't Say                                        | 233        | 45.5%       |                                                                                                             |
| <b>Total</b>                                     | <b>512</b> | <b>100%</b> |                                                                                                             |

Source: Primary Data

**Interpretation:** Table No. 4.5.2 indicates that understanding of the respondents about the benefits which will be available to them by investing in pension plans at time of retirement. 213 (41.6%) respondents do understand the benefits that would be available through pension plans. 66 (12.9%) have no understanding about the benefits would be available through pension plans at the time of retirement. 233 (45.5%) respondents say that they can't understand the benefits would be available at the time of retirement. Mean is 2.0391, mode is 3.000 it also indicates that most of the respondents do not have the clear understanding about the benefits available by investing in pension plans at the time of retirement.

### Factor Analysis:

Factor analysis is a technique to condense the data which helps to the researcher to measure the data directly and easily. Factor analysis contract the large number of variables into limited numbers of variables. Principal Component Analysis (PCA) technique is applied to analyse the pattern of data set. Principal Component Analysis (PCA) is applied to contract the dimension of original data set which convert the original data into limited number of factors. Data is rotated on Varimax rotation.

**Table No. 4.5.3: Test of KMO Value and Bartlett's Test for Satisfaction Level towards Investment in Pension Plans**

| KMO and Bartlett's Test                          |                    |           |
|--------------------------------------------------|--------------------|-----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .877      |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 10498.448 |
|                                                  | df                 | 78        |
|                                                  | Sig.               | .000      |

Source: Primary Data

#### Interpretation:

Table No. 4.5.3 indicates KMO(Kaiser-Meyer-Olkin) calculations of sampling adequacy is applied to find out the adequacy of data. KMO value is 0.877 which is more than 0.6. It indicates that the sampling is adequate and responses are valid for study through factor analysis. Bartlett's Test of Sphericity set the 78% of significance level at 5%. The p-value (Sig.) is 0.000 which is below 0.05. This suggests that null hypothesis (H0) is not accepted and alternative hypothesis (H1) is accepted. It means that there is a significant interrelationship among the variables. An EFA (Exploratory Factor Analysis) is used on the thirteen variables. Communalities test is used and all variables meet the criteria (variable value should be more than 0.5). So, all the variables are kept for further study to find out the final results.

#### Anti-Image Correlation Matrices:

**Figure 4.5.1: Table for Anti-Image Correlation Matrices for the Satisfaction Level towards Investment in Pension Plans**

| Anti-image Matrices       |      |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|---------------------------|------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                           |      | SS1               | SS2               | SS3               | SS4               | SS5               | SS6               | SS7               | SS8               | SS9               | SS10              | SS11              | SS12              | SS13              |
| Anti-image<br>Correlation | SS1  | .868 <sup>a</sup> | -0.783            | 0.004             | 0.038             | -0.329            | -0.020            | -0.006            | -0.010            | -0.002            | 0.035             | -0.065            | -0.126            | -0.088            |
|                           | SS2  | -0.783            | .879 <sup>a</sup> | 0.001             | -0.016            | 0.090             | 0.014             | -0.005            | -0.001            | 0.020             | -0.046            | -0.062            | 0.088             | -0.123            |
|                           | SS3  | 0.004             | 0.001             | .794 <sup>a</sup> | -0.201            | -0.011            | 0.124             | 0.181             | -0.993            | -0.064            | -0.040            | 0.061             | 0.021             | 0.010             |
|                           | SS4  | 0.038             | -0.016            | -0.201            | .814 <sup>a</sup> | 0.050             | -0.090            | -0.942            | 0.185             | 0.098             | 0.058             | -0.091            | -0.345            | -0.031            |
|                           | SS5  | -0.329            | 0.090             | -0.011            | 0.050             | .949 <sup>a</sup> | 0.028             | -0.085            | 0.017             | 0.034             | -0.012            | -0.329            | 0.058             | 0.026             |
|                           | SS6  | -0.020            | 0.014             | 0.124             | -0.090            | 0.028             | .924 <sup>a</sup> | -0.132            | -0.126            | -0.368            | -0.062            | 0.260             | 0.100             | -0.001            |
|                           | SS7  | -0.006            | -0.005            | 0.181             | -0.942            | -0.085            | -0.132            | .828 <sup>a</sup> | -0.172            | -0.002            | -0.080            | 0.024             | 0.138             | 0.036             |
|                           | SS8  | -0.010            | -0.001            | -0.993            | 0.185             | 0.017             | -0.126            | -0.172            | .798 <sup>a</sup> | 0.057             | 0.006             | -0.066            | -0.011            | -0.012            |
|                           | SS9  | -0.002            | 0.020             | -0.064            | 0.098             | 0.034             | -0.368            | -0.002            | 0.057             | .866 <sup>a</sup> | 0.011             | -0.679            | -0.016            | 0.046             |
|                           | SS10 | 0.035             | -0.046            | -0.040            | 0.058             | -0.012            | -0.062            | -0.080            | 0.006             | 0.011             | .990 <sup>a</sup> | -0.036            | -0.085            | -0.051            |
|                           | SS11 | -0.065            | -0.062            | 0.061             | -0.091            | -0.329            | 0.260             | 0.024             | -0.066            | -0.679            | -0.036            | .873 <sup>a</sup> | -0.015            | -0.333            |
|                           | SS12 | -0.126            | 0.088             | 0.021             | -0.345            | 0.058             | 0.100             | 0.138             | -0.011            | -0.016            | -0.085            | -0.015            | .957 <sup>a</sup> | -0.044            |
|                           | SS13 | -0.088            | -0.123            | 0.010             | -0.031            | 0.026             | -0.001            | 0.036             | -0.012            | 0.046             | -0.051            | -0.333            | -0.044            | .969 <sup>a</sup> |

#### a. Measures of Sampling Adequacy (MSA)

Source: Primary Data

**Interpretation:** Correlation matrices is also used to find the correlation amid the variables and found that all the variables are strongly correlated.

### Factor Loading and Variance Explained:

**Table No. 4.5.4: Factor Loading and Variance Explained Satisfaction Level towards Investment in Pension Plans**

| Factors                                    | Variable Labels | Variable                                                                     | Factor Loading | Variance %     |
|--------------------------------------------|-----------------|------------------------------------------------------------------------------|----------------|----------------|
| <b>Factor 1<br/>Financial Satisfaction</b> | SS1             | Tax Benefit Available                                                        | 0.900          | <b>61.506%</b> |
|                                            | SS11            | Premium Payment Frequency                                                    | 0.892          |                |
|                                            | SS2             | Govt. Contribution                                                           | 0.880          |                |
|                                            | SS5             | Deduction from Salary for the Contribution in Pension Fund                   | 0.845          |                |
|                                            | SS13            | Late fees for delay in the Payment of Contribution Instalment after Due Date | 0.831          |                |
|                                            | SS9             | Stability and Certainty in Return                                            | 0.814          |                |
| <b>Factor 2<br/>Service Satisfaction</b>   | SS4             | Regular Information Available                                                | 0.921          | <b>15.433%</b> |
|                                            | SS7             | Client Services                                                              | 0.917          |                |
|                                            | SS6             | Availability of Annual Report                                                | 0.845          |                |
|                                            | SS12            | Policy Issuance Time after Purchasing the Plan                               | 0.807          |                |
|                                            | SS8             | Terms and Conditions of Pension Plans                                        | 0.708          |                |
|                                            | SS3             | Pension Fund Management performance                                          | 0.707          |                |
|                                            | SS10            | Grievance Settlement Procedure                                               | 0.632          |                |
|                                            |                 |                                                                              | <b>Total</b>   | <b>76.938%</b> |

Source: Primary Data

### Interpretation:

Table No. 4.5.4 indicates that factor 1 “Financial Satisfaction” factor includes total 6 items having the statements “Tax Benefit Available”, “Premium Payment Frequency”, “Govt. Contribution”, “Deduction from Salary for the Contribution in Pension Fund”, “Late Fees for delay in the Payment of Contribution Instalment after Due Date”, “Stability and Certainty in Return” on the values 0.900, 0.892, 0.880, 0.845, 0.831, 0.814 respectively which explains the 61.506% of the total variance. This factor explains that what is the satisfaction level of salaried class investors

towards the financial benefits that will be received by investing the money in pension plans.

Table No. 4.5.4 indicates that factor 2 “Service Satisfaction” includes total 7 items having the statements “Regular Information Available”, “Client Services”, “Availability of Annual Report”, “Policy Issuance Time after Purchasing the Plan”, “Terms and Conditions of Pension Plans”, “Pension Fund Management Performance”, “Grievance Settlement Procedure” on the values 0.921, 0.917, 0.845, 0.807, 0.708, 0.707, 0.632 respectively which explains the 15.433% of the total variance. This factor explains that what is the satisfaction level of salaried class investors towards the services provided by the pension fund providers to the investor of pension plans.

#### **Hypothesis Testing:**

**Hypothesis 4:** Satisfaction level of salaried class individual investors towards the investment in pension plans is significantly different based on socio-economic demographics like gender, age, marital status, educational qualification, nature of employment, nature of job work, job experience, annual income, type of family, number of family members, number of dependent family members.

**H4a:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on gender.

**Table No. 4.5.5: t- test for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Gender**

|         |                        | Male   |        | Female |        |         |         |                           |
|---------|------------------------|--------|--------|--------|--------|---------|---------|---------------------------|
| Sr. No. | Test<br>Factors        | Mean   | S.D.   | Mean   | S.D.   | t Value | P Value | Accepted/<br>Not Accepted |
| 1       | Financial Satisfaction | 3.3930 | 0.7954 | 3.3367 | 0.7909 | 0.802   | 0.423   | Accepted                  |
| 2       | Service Satisfaction   | 3.4366 | 0.7526 | 3.3800 | 0.7750 | 0.838   | 0.403   | Accepted                  |

Source: Primary Data

**Interpretation:** t-test is applied to find gender differences for satisfaction level towards investment in pension plans through financial satisfaction and service satisfaction.

For financial satisfaction level towards investment in pension plans, Table No. 4.5.5 indicates that p value is 0.423 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in financial satisfaction level towards investment in pension plans for males and females. Hypothesis is accepted. Mean score for investment in financial satisfaction level towards the investment in pension plans for males and females is 3.3930 and 3.3367 respectively, this also shows the difference in their financial satisfaction level towards investment in pension plans.

For service satisfaction level towards investment in pension plans, Table No. 4.5.5 indicates that p value is 0.403 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in service satisfaction level towards investment in pension plans for males and females' investment. Hypothesis is accepted. Mean score for service satisfaction level towards investment in pension plans for males and females is 3.4366 and 3.3800 respectively, which also indicates the difference in their service satisfaction level towards investment in pension plans.

**H4b:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on age.

**Table No. 4.5.6: ANOVA for difference in Satisfaction level of Salaried Class Individual Investors on the basis of Age**

| Sr. No | Test Factors           | Categories                                     | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|------------------------|------------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Financial Satisfaction | Upto 25<br>25-35<br>35-45<br>45-55<br>Above 55 | 3.1894<br>3.2641<br>3.4883<br>3.4444<br>3.1736 | 0.886         | 0.472           | 2.096   | 0.021           | N.A.        | N.A.            | Not Accepted           |
| 2      | Service Satisfaction   | Upto 25<br>25-35<br>35-45<br>45-55<br>Above 55 | 3.2922<br>3.3996<br>3.4172<br>3.4952<br>3.3750 | 0.298         | 0.879           | 0.297   | 0.880           | N.A.        | N.A.            | Accepted               |

Source: Primary Data (Age in Years)

**Interpretation:** ANOVA is applied to find satisfaction level toward investment in pension plans through financial satisfaction and service satisfaction on the basis of age difference.

For financial satisfaction level towards investment in pension plans, Table No. 4.5.6 indicates that p value is 0.021, which is less than 0.05 (at 5% significance level), recommends that there is a not statistically significant difference in various age group investors for financial satisfaction level towards investment in pension plans. Hypothesis is not accepted. Mean score for the financial satisfaction level towards investment in pension plans is 3.1894, 3.2641, 3.4883, 3.4444, 3.1736 for the various age groups upto 25 years, 25-35 years, 35-45 years, 45-55 years, above 55 years respectively.

For service satisfaction level towards investment in pension plans, Table No. 4.5.6 indicates that p value is 0.880, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various age group investors for service satisfaction level towards investment in pension plans. Hypothesis is accepted. Mean score for investment in traditional avenues is 3.2922, 3.3996, 3.4172, 3.4952, 3.3750 for various age groups upto 25 years, 25-35 years, 35-45 years, 45-55 years, above 55 years respectively, which also indicates the difference in their service satisfaction level towards investment in pension plans.

**H4c:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on marital status.

**Table No. 4.5.7: t-test for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Marital Status**

| Sr. No. | Test<br>Factors        | Married |        | Unmarried |        | t Value | P Value | Accepted/<br>Not Accepted |
|---------|------------------------|---------|--------|-----------|--------|---------|---------|---------------------------|
|         |                        | Mean    | S.D.   | Mean      | S.D.   |         |         |                           |
| 1       | Financial Satisfaction | 3.4053  | 0.8080 | 3.2217    | 0.7201 | 2.299   | 0.023   | Not Accepted              |
| 2       | Service Satisfaction   | 3.4233  | 0.7651 | 3.3591    | 0.7573 | 0.778   | 0.437   | Accepted                  |

Source: Primary Data

**Interpretation:** t-test is applied to find marital status differences for satisfaction level towards the investment in pension plans through financial satisfaction and service satisfaction.

For financial satisfaction level towards investment in pension plans, Table No. 4.5.7 indicates that p value is 0.023 which is less than 0.05 (at 5% significance level), recommends that there is not statistically significant difference in married and unmarried investors' financial satisfaction level towards investment in pension plans. Hypothesis is not accepted. Mean score for financial satisfaction level towards investment in pension plans for married and unmarried investors is 3.4053 and 3.2217 respectively.

For service satisfaction level towards the investment in pension plans, Table No. 4.5.7 indicates that p value is 0.437 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in married and unmarried investors' service satisfaction level towards investment in pension plans. Hypothesis is accepted. Mean score for service satisfaction level towards investment in pension plans for married and unmarried investors is 3.4233 and 3.3591 respectively, which also indicates the difference in their service satisfaction level towards investment in pension plans.

**H4d:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on educational qualification.

**Table No. 4.5.8: ANOVA for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Educational Qualification**

| Sr. No | Test Factors           | Categories                                                                   | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|------------------------|------------------------------------------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Financial Satisfaction | Upto<br>Secondary<br>Graduation<br>Post Gradu.<br>Diploma/Tech.<br>Any other | 3.2708<br>3.4226<br>3.3460<br>3.3527<br>3.6042 | 2.744         | 0.028           | N.A.    | N.A.            | 0.440       | 0.779           | Accepted               |
| 2      | Service Satisfaction   | Upto<br>Secondary<br>Graduation<br>Post Gradu.<br>Diploma/Tech.<br>Any other | 3.3571<br>3.4872<br>3.3980<br>3.3789<br>3.5060 | 0.677         | 0.608           | 0.297   | 0.880           | N.A.        | N.A.            | Accepted               |

Source: Primary Data

**Interpretation:** ANOVA is applied to find satisfaction level towards investment in pension plans through financial satisfaction and service satisfaction on the basis of educational qualification difference.

For financial satisfaction level towards investment in pension plans, Table No. 4.5.8 indicates that p value is 0.779, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various educational qualification group investors for financial satisfaction level towards investment in pension plans. Hypothesis is accepted. Mean score for the financial satisfaction level towards the investment in pension plans is 3.2708, 3.4226, 3.3460, 3.3527, 3.6042 for the educational qualification groups related to upto secondary, graduation, post-graduation, diploma/technical and any other category respectively, which also indicates the difference in their financial satisfaction level towards investment in pension plans.

For service satisfaction level towards investment in pension plans, Table No. 4.5.8 indicates that p value is 0.880, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various educational qualification group investors towards service satisfaction level towards investment in pension plans. Hypothesis is accepted. Mean score for service satisfaction level towards investment in pension plans is 3.3571, 3.4872, 3.3980, 3.3789, 3.5060 for the educational qualification groups related to upto secondary, graduation, post-graduation, diploma/technical and any other category respectively, which also indicates the difference in their service satisfaction level towards services available on investment in pension plans.

**H4e:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on nature of employment.

**Table No. 4.5.9: t-test for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Nature of Employment**

|         |                        | Government Job |        | Private Job |        |         |         |                           |
|---------|------------------------|----------------|--------|-------------|--------|---------|---------|---------------------------|
| Sr. No. | Test<br>Factors        | Mean           | S.D.   | Mean        | S.D.   | t Value | P Value | Accepted/<br>Not Accepted |
| 1       | Financial Satisfaction | 3.3778         | 0.7833 | 3.3397      | 0.8166 | 0.500   | 0.618   | Accepted                  |
| 2       | Service Satisfaction   | 3.3949         | 0.7842 | 3.4432      | 0.7142 | 0.660   | 0.510   | Accepted                  |

Source: Primary Data

**Interpretation:** t-test is applied to find nature of employment differences for the satisfaction level towards investment in pension plans through financial satisfaction and service satisfaction.

For financial satisfaction level towards investment in pension plans, Table No. 4.5.9 indicates that p value is 0.618 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in government employees and private sector employees' financial satisfaction level towards investment in pension plans. Hypothesis is accepted. Mean score for financial satisfaction level towards investment in pension plans for government employees and private sector employees is 3.3778 and 3.3397 respectively, which also indicates the difference in their financial satisfaction level towards investment in pension plans.

For service satisfaction level towards investment in pension plans, Table No. 4.5.9 indicates that p value is 0.510 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in government employees and private sector employees' service satisfaction level towards investment in pension plans. Hypothesis is accepted. Mean score for service satisfaction level towards the investment in pension plans for government employees and private sector employees is 3.3949 and 3.4432 respectively, which also indicates the difference in their service satisfaction level towards investment in pension plans.

**H4f:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on nature of job work.

**Table No. 4.5.10: ANOVA for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Nature of Job work**

| Sr. No | Test Factors           | Categories   | Mean   | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|------------------------|--------------|--------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Financial Satisfaction | Academic     | 3.3079 | 0.272         | 0.896           | 0.906   | 0.460           | N.A.        | N.A.            | Accepted               |
|        |                        | Professional | 3.4110 |               |                 |         |                 |             |                 |                        |
|        |                        | Managerial   | 3.4706 |               |                 |         |                 |             |                 |                        |
|        |                        | Technical    | 3.3889 |               |                 |         |                 |             |                 |                        |
|        |                        | Others       | 3.2899 |               |                 |         |                 |             |                 |                        |
| 2      | Service Satisfaction   | Academic     | 3.3116 | 3.064         | 0.016           | N.A.    | N.A.            | 1.947       | 0.105           | Accepted               |
|        |                        | Professional | 3.4364 |               |                 |         |                 |             |                 |                        |
|        |                        | Managerial   | 3.5462 |               |                 |         |                 |             |                 |                        |
|        |                        | Technical    | 3.4568 |               |                 |         |                 |             |                 |                        |
|        |                        | Others       | 3.4286 |               |                 |         |                 |             |                 |                        |

Source: Primary Data

**Interpretation:** ANOVA is applied to find satisfaction level towards investment in pension plans through financial satisfaction and service satisfaction on the basis of nature of job work difference.

For financial satisfaction level towards investment in pension plans, Table No. 4.5.10 indicates that p value is 0.460, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various nature of job work group investors towards financial satisfaction level towards investment in pension plans. Hypothesis is accepted. Mean score for financial satisfaction level towards investment in pension plans is 3.3079, 3.4110, 3.4706, 3.3889, 3.2899 for nature of job work groups i.e., academic, professional, managerial, technical and others respectively, which also indicates the difference in their financial satisfaction level towards investment in pension plans.

For service satisfaction level towards investment in pension plans, Table No. 4.5.10 indicates that p value is 0.105, which is greater than 0.05 (at 5% significance level),

recommends the statistically significant difference in various nature of job work group investors for service satisfaction level towards investment in pension plans. Hypothesis is accepted. Mean score for service satisfaction level towards investment in pension plans is 3.3116, 3.4364, 3.5462, 3.4568, 3.4286 for nature of job work groups i.e., academic, professional, managerial, technical and others respectively, which also indicates the difference in their service satisfaction level towards investment in pension plans.

**H4g:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on job experience.

**Table No. 4.5.11: ANOVA for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Job Experience**

| Sr. No | Test Factors           | Categories | Mean   | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|------------------------|------------|--------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Financial Satisfaction | Upto 10    | 3.3220 | 2.807         | 0.025           | N.A.    | N.A.            | 1.274       | 0.294           | Accepted               |
|        |                        | 10-15      | 3.4551 |               |                 |         |                 |             |                 |                        |
|        |                        | 15-20      | 3.4784 |               |                 |         |                 |             |                 |                        |
|        |                        | 20-25      | 2.8704 |               |                 |         |                 |             |                 |                        |
|        |                        | Above 25   | 3.3611 |               |                 |         |                 |             |                 |                        |
| 2      | Service Satisfaction   | Upto 10    | 3.4276 | 1.194         | 0.312           | 2.221   | 0.066           | N.A.        | N.A.            | Accepted               |
|        |                        | 10-15      | 3.3527 |               |                 |         |                 |             |                 |                        |
|        |                        | 15-20      | 3.4974 |               |                 |         |                 |             |                 |                        |
|        |                        | 20-25      | 2.7619 |               |                 |         |                 |             |                 |                        |
|        |                        | Above 25   | 3.5417 |               |                 |         |                 |             |                 |                        |

Source: Primary Data (Job Experience in Years)

**Interpretation:** ANOVA is applied to find satisfaction level towards investment in pension plans through financial satisfaction and service satisfaction on the basis of job experience difference.

For financial satisfaction level towards investment in pension plans, Table No. 4.5.11 indicates that p value is 0.294, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors on the basis of job experience for financial satisfaction level towards investment in pension plans. Hypothesis is accepted. Mean score for financial satisfaction level towards investment in pension plans is 3.3220, 3.4551, 3.4784, 2.8704, 3.3611 for the

groups on the basis of job experience upto 10 years, 10-15 years, 15-20 years, 20-25 years, above 25 years respectively, which also indicates the difference in their financial satisfaction level towards investment in pension plans.

For service satisfaction level towards investment in pension plans, Table No. 4.5.11 indicates that p value is 0.066, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors on the basis of job experience towards the service satisfaction level towards the investment in pension plans. Hypothesis is accepted. Mean score for service satisfaction level towards investment in pension plans is 3.4276, 3.3527, 3.4974, 2.7619, 3.5417 for the groups on the basis of job experience upto 10 years, 10-15 years, 15-20 years, 20-25 years, above 25 years respectively, which also indicates the difference in their service satisfaction level towards investment in pension plans.

**H4h:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on annual income.

**Table No. 4.5.12: ANOVA for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Annual Income**

| Sr. No | Test Factors           | Categories                                  | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|------------------------|---------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Financial Satisfaction | Upto5<br>5-10<br>10-15<br>15-20<br>Above 20 | 3.4259<br>3.3452<br>3.3583<br>3.5476<br>3.2500 | 0.724         | 0.576           | 0.490   | 0.743           | N.A.        | N.A.            | Accepted               |
| 2      | Service Satisfaction   | Upto5<br>5-10<br>10-15<br>15-20<br>Above 20 | 3.5595<br>3.3660<br>3.3786<br>3.5510<br>3.5952 | 0.282         | 0.889           | 1.332   | 0.257           | N.A.        | N.A.            | Accepted               |

Source: Primary Data (Annual Income in Lakhs)

**Interpretation:** ANOVA is applied to find satisfaction level towards investment in pension plans through financial satisfaction and service satisfaction on the basis of annual income difference.

For financial satisfaction level towards investment in pension plans, Table No. 4.5.12 indicates that p value is 0.743, which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors on the basis of annual income for financial satisfaction level towards investment in pension plans. Hypothesis is accepted. Mean score for financial satisfaction level towards investment in pension plans is 3.4259, 3.3452, 3.3583, 3.5476, 3.2500 for the groups on the basis of annual income upto 5 lakhs, 5-10 lakhs, 10-15 lakhs, 15-20 lakhs, above 20 lakhs respectively, which also indicates the difference in their financial satisfaction level towards investment in pension plans.

For service satisfaction level towards investment in pension plans, Table No. 4.5.12 indicates that p value is 0.257, which is greater than 0.05 (at 5% significance level) which recommends the statistically significant difference in various groups of investors on the basis of annual income for service satisfaction level towards investment in pension plans. Hypothesis is accepted. Mean score for service satisfaction level towards investment in pension plans is 3.5595, 3.3660, 3.3786, 3.5510, 3.5952 for groups of investors on the basis of annual income upto 5 lakhs, 5-10 lakhs, 10-15 lakhs, 15-20 lakhs, above 20 lakhs respectively, which also indicates the difference in their service satisfaction level towards investment in pension plans.

**H4i:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on type of family.

**Table No. 4.5.13: t-test for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Type of Family**

| Sr. No. | Test<br>Factors        | Nuclear Family |        | Joint Family |        | t Value | P Value | Accepted/<br>Not Accepted |
|---------|------------------------|----------------|--------|--------------|--------|---------|---------|---------------------------|
|         |                        | Mean           | S.D.   | Mean         | S.D.   |         |         |                           |
| 1       | Financial Satisfaction | 3.3921         | 0.7503 | 3.3427       | 0.8306 | 0.704   | 0.482   | Accepted                  |
| 2       | Service Satisfaction   | 3.4098         | 0.7158 | 3.4094       | 0.8052 | 0.007   | 0.995   | Accepted                  |

Source: Primary Data

**Interpretation:** t-test is applied to find type of family differences for satisfaction level towards investment in pension plans through financial satisfaction and service satisfaction.

For financial satisfaction level towards investment in pension plans, Table No. 4.5.13 indicates that p value is 0.482 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in investment of investors belong to nuclear family or joint family in financial satisfaction level towards investment in pension plans. Hypothesis is accepted. Mean score for financial satisfaction level towards investment in pension plans for investors belong to nuclear family or joint family is 3.3921 and 3.3427 respectively, which also indicates the difference in their financial satisfaction level towards investment in pension plans.

For service satisfaction level towards investment in pension plans, Table No. 4.5.13 indicates that p value is 0.995 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in service satisfaction level towards investment in pension plans of investors belong to nuclear family or joint family. Hypothesis is accepted. Mean score for service satisfaction level towards investment in pension plans for investors belong to nuclear family or joint family is 3.4098 and 3.4094 respectively, which also indicates the difference in their service satisfaction level towards investment in pension plans.

**H4j:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on number of family members.

**Table No. 4.5.14: ANOVA for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Number of Family Members**

| Sr. No | Test Factors           | Categories                                     | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|------------------------|------------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Financial Satisfaction | Two<br>Three<br>Four<br>Five<br>More than Five | 3.5741<br>3.4414<br>3.3421<br>3.3182<br>3.3816 | 1.772         | 0.133           | 0.661   | 0.619           | N.A.        | N.A.            | Accepted               |
| 2      | Service Satisfaction   | Two<br>Three<br>Four<br>Five<br>More than Five | 3.6825<br>3.4653<br>3.3430<br>3.3720<br>3.4699 | 1.171         | 0.323           | 1.237   | 0.294           | N.A.        | N.A.            | Accepted               |

Source: Primary Data

**Interpretation:** ANOVA is applied to find satisfaction level towards investment in pension plans through financial satisfaction and service satisfaction in accordance with number of family members' difference.

For financial satisfaction level towards the investment in pension plans, Table No. 4.5.14 indicates that p value is 0.619 which is greater than 0.05 (at 5% significance level) which recommends the statistically significant difference in various groups of investors in accordance with number of family members towards the financial satisfaction level towards investment in pension plans. Hypothesis is accepted. Mean score for financial satisfaction level towards investment in pension plans is 3.5741, 3.4414, 3.3421, 3.3182, 3.3816 for the various groups of investors in accordance with number of family members i.e., two, three, four, five and more than five respectively, which also indicates the difference in their financial satisfaction level towards investment in pension plans.

For service satisfaction level towards the investment in pension plans, Table No. 4.5.14 indicates that p value is 0.294 which is greater than 0.05 (at 5% significance

level), recommends the statistically significant difference in various groups of investors in accordance with number of family members towards service satisfaction level towards investment in pension plans. Hypothesis is accepted. Mean score for service satisfaction level towards the investment in pension plans is 3.6825, 3.4653, 3.3430, 3.3720, 3.4699 for the various groups of investors in accordance with number of family members i.e., two, three, four, five and more than five respectively, which also indicates the difference in their service satisfaction level towards investment in pension plans.

**H4k:** Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on number of dependent family members.

**Table No.4.5.15: ANOVA for difference in Satisfaction Level of Salaried Class Individual Investors on the basis of Number of Dependent Family Members**

| Sr. No | Test Factors           | Categories                                    | Mean                                           | Levene. Stat. | Sig. (2 tailed) | F-Value | Sig. (2 tailed) | Welch Stat. | Sig. (2 tailed) | Accepted/ Not Accepted |
|--------|------------------------|-----------------------------------------------|------------------------------------------------|---------------|-----------------|---------|-----------------|-------------|-----------------|------------------------|
| 1      | Financial Satisfaction | One<br>Two<br>Three<br>Four<br>More than Four | 3.3063<br>3.4148<br>3.5051<br>3.3116<br>3.4127 | 1.978         | 0.097           | 0.779   | 0.539           | N.A.        | N.A.            | Accepted               |
| 2      | Service Satisfaction   | One<br>Two<br>Three<br>Four<br>More than Four | 3.3714<br>3.4351<br>3.4286<br>3.4099<br>3.3980 | 1.980         | 0.096           | 0.096   | 0.984           | N.A.        | N.A.            | Accepted               |

Source: Primary Data

**Interpretation:** ANOVA is applied to find satisfaction level towards investment in pension plans through financial satisfaction and service satisfaction in accordance with number of dependent family members' difference.

For financial satisfaction level towards investment in pension plans, Table No. 4.5.15 indicates that p value is 0.539 which is greater than 0.05 (at 5% significance level)

recommends the statistically significant difference in various groups of investors in accordance with number of dependent family members for financial satisfaction level towards investment in pension plans. Hypothesis is accepted. Mean score for financial satisfaction level towards investment in pension plans is 3.3063, 3.4148, 3.5051, 3.3116, 3.4127 for the various groups of investors in accordance with number of dependent family members i.e., one, two, three, four, and more than four respectively, which also indicates the difference in their financial satisfaction level towards investment in pension plans.

For service satisfaction level towards investment in pension plans, Table No. 4.5.15 indicates that p value is 0.984 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in various groups of investors in accordance with number of dependent family members for service satisfaction level towards investment in pension plans. Hypothesis is accepted. Mean score for the service satisfaction level towards investment in pension plans is 3.3714, 3.4351, 3.4286, 3.4099, 3.3980 for various groups of investors in accordance with number of dependent family members i.e., one, two, three, four, and more than four respectively, which also indicates the difference in their service satisfaction level towards investment in pension plans.

#### 4.6 Comparison of Investment Behavior of Salaried Class Individual Investors of NCR and Non-NCR area of Haryana State through Analysing Social Security Conditions, Perception towards Investment in Pension Plans, Factors Influencing Investment in Pension Plans, Satisfaction Level towards Investment in Pension Plans.

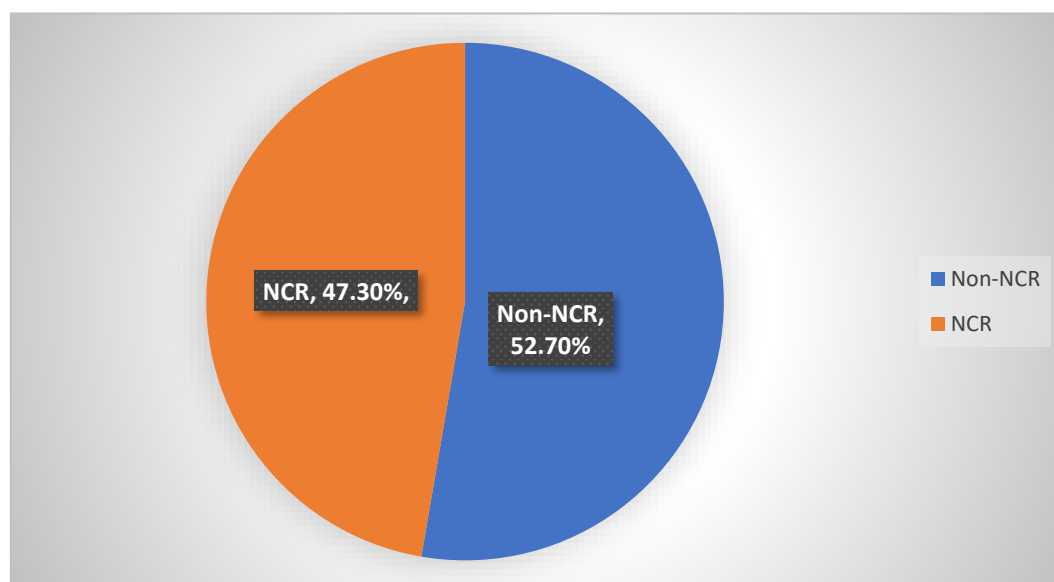
##### Number of Respondents of NCR and Non-NCR area of Haryana State

**Table No. 4.6.1: Number of Respondents of NCR and Non-NCR area of Haryana State**

| Number of Respondents | Frequency | Percentage |
|-----------------------|-----------|------------|
| NCR                   | 242       | 47.3%      |
| Non-NCR               | 270       | 52.7%      |
| Total                 | 512       | 100%       |

Source: Primary Data

**Figure No. 4.6.1: Number of Respondents of NCR and Non-NCR area of Haryana State**



**Interpretation:** Table No. 4.6.1 indicates that 242(47.3%) respondents belonging to NCR area of Haryana state, 270 (52.7%) respondents belonging to Non-NCR area of Haryana state.

## Hypothesis Testing:

### Hypothesis 5

Investment behavior including social security conditions, perception, factors influencing and satisfaction level towards investment in pension plans of salaried class individual investors of NCR and Non-NCR area of Haryana state is significantly different.

**H5a:** Social Security Conditions of Salaried Class Individual Investors of NCR and Non-NCR area of Haryana state are significantly different.

**Table No. 4.6.2: t- test for difference between the Social Security Conditions of Salaried Class Individual Investors of NCR and Non-NCR area of Haryana state**

| Sr. No. | Test<br>Factors                | NCR    |        | Non-NCR |        | t Value | P Value | Accepted/<br>Not Accepted |
|---------|--------------------------------|--------|--------|---------|--------|---------|---------|---------------------------|
|         |                                | Mean   | S.D.   | Mean    | S.D.   |         |         |                           |
| 1       | Traditional Investment Avenues | 1.6033 | 0.7457 | 1.5772  | 0.7515 | -0.394  | 0.693   | Accepted                  |
| 2       | Modern Investment Avenues      | 1.4587 | 0.8124 | 1.5889  | 0.9413 | 1.680   | 0.094   | Accepted                  |

Source: Primary Data

**Interpretation:** t-test is applied to find the differences in the social security conditions of salaried class individual investors through investment in traditional avenues and modern avenues of NCR and Non-NCR area of Haryana state.

For social security conditions through investment in traditional avenues, Table No. 4.6.2 indicates that p value is 0.693 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in investment in traditional avenues of investors belong to NCR and Non-NCR of Haryana state. Hypothesis is accepted. Mean score for investment in traditional avenues for investors belongs to NCR and Non-NCR area is 1.6033 and 1.5772 respectively, which also indicates the difference in their investment.

For social security through investment in modern avenues Table No. 4.6.2 indicates that p value is 0.094 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in investment of investors belong

to NCR and Non-NCR area of Haryana state in modern avenues. Hypothesis is accepted. Mean score for investment in modern avenues for investors belongs NCR and Non-NCR area of Haryana state is 1.4587 and 1.5889 respectively, which also indicates the difference in their investment.

**H5b:** Perception of Salaried Class Individual Investors towards Investment in Pension Plans for Retirement Planning of NCR and Non-NCR area of Haryana state is significantly different.

**Table No. 4.6.3: t- test for difference in the Perception of Salaried Class Individual Investors towards Investment in Pension Plans for Retirement Planning of NCR and Non-NCR area of Haryana state**

| Sr. No. | Test Factors                                       | NCR    |        | Non-NCR |        | t Value | P Value | Accepted/ Not Accepted |
|---------|----------------------------------------------------|--------|--------|---------|--------|---------|---------|------------------------|
|         |                                                    | Mean   | S.D.   | Mean    | S.D.   |         |         |                        |
| 1       | Perception for Services                            | 3.2944 | 0.8185 | 3.2574  | 0.9201 | -0.479  | 0.632   | Accepted               |
| 2       | Perception for Safety and Security                 | 3.7245 | 1.0568 | 3.8173  | 1.0495 | 0.995   | 0.320   | Accepted               |
| 3       | Perception for Predicators of Return on Investment | 3.4959 | 0.7931 | 3.4870  | 0.8871 | -0.118  | 0.906   | Accepted               |

Source: Primary Data

**Interpretation:** t-test is applied to find the difference in the perception of salaried class individual investors for services factor, safety and security factor and predicators of return-on-investment factor of NCR and Non-NCR area of Haryana state.

For perception for services provided by pension fund providers, Table No. 4.6.3 indicates that p value is 0.632 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in perception towards the services provided by pension fund providers of investors belong to NCR and Non-NCR area of Haryana state. Hypothesis is accepted. Mean score for perception towards the services provided by pension fund providers for investors belong to NCR and Non-NCR area of Haryana state is 3.2944 and 3.2574 respectively, which also indicates the difference in their perception.

For perception for safety and security, Table No. 4.6.3 indicates that p value is 0.320 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in perception towards the safety and security of investors belong to NCR and Non-NCR area of Haryana state. Hypothesis is accepted. Mean score for perception towards the safety and security for investors belong to NCR and Non-NCR area of Haryana state is 3.7245 and 3.8173 respectively, which also indicates the difference in their perception.

For perception towards the predictors of return on investment, Table No. 4.6.3 indicates that p value is 0.906 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in perception of investors belong to NCR and Non-NCR area of Haryana state towards the predictors of return on investment. Hypothesis is accepted. Mean score of perception for predictors of return on investment of investors belongs to NCR and Non-NCR area of Haryana state is 3.4959 and 3.4870 respectively, which also indicates the difference in their perception.

**H5c:** Factors Influencing to Salaried Class Individual Investors towards Investment in Pension Plans for Retirement Planning of NCR and Non-NCR area of Haryana state are significantly different.

**Table No. 4.6.4: t- test for difference between the Factors Influencing to Salaried Class Individual Investors towards Investment in Pension Plans for Retirement Planning of NCR and Non-NCR area of Haryana state**

| Sr. No. | Test Factors                                               | NCR    |        | Non-NCR |        | t Value | P Value | Accepted/ Not Accepted |
|---------|------------------------------------------------------------|--------|--------|---------|--------|---------|---------|------------------------|
|         |                                                            | Mean   | S.D.   | Mean    | S.D.   |         |         |                        |
| 1       | Motivational Factors Influence Investment in Pension Plans | 4.1932 | 0.8419 | 4.1123  | 0.8491 | -1.080  | 0.281   | Accepted               |
| 2       | Discouraging Factors Influence Investment in Pension Plans | 3.4132 | 0.8555 | 3.4429  | 0.9177 | 0.377   | 0.707   | Accepted               |

Source: Primary Data

**Interpretation:** t-test is applied to find the differences for the factors influencing salaried class individual investors towards investment in pension plans through motivational factors and discouraging factors of NCR and Non-NCR area of Haryana state.

For motivational factors to do investment in pension plans, Table No. 4.6.4 indicates that p value is 0.281 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in motivational factors to do investment in pension plans by salaried class investors belong to NCR and Non-NCR area of Haryana state. Hypothesis is accepted. Mean score for investment by salaried class individual investors belong to NCR and Non-NCR area is 4.1932 and 4.1123 respectively, this is also showing the difference in their motivational factors to do investment in pension plans.

For discouraging factors to do investment in pension plans, Table No. 4.6.4 indicates that p value is 0.707 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in discouraging factors to do investment in pension plans by salaried class individual investors belong to NCR and Non-NCR area of Haryana state. Hypothesis is accepted. Mean score for discouraging factors to investment in pension plans for salaried class individual investors belong to NCR and Non-NCR area of Haryana state is 3.4132 and 3.4429 respectively, which also indicates the difference in their discouraging factors to do investment in pension plans.

**H5d:** Satisfaction Level of Salaried Class Individual Investors towards Investment in Pension Plans for Retirement Planning of NCR and Non-NCR area of Haryana state is significantly different.

**Table No. 4.6.5: t- test for difference between the Satisfaction Level of Salaried Class Individual Investors towards Investment in Pension Plans for Retirement Planning of NCR and Non-NCR area of Haryana state**

| Sr. No. | Test<br>Factors        | NCR    |        | Non-NCR |        | t Value | P Value | Accepted/<br>Not Accepted |
|---------|------------------------|--------|--------|---------|--------|---------|---------|---------------------------|
|         |                        | Mean   | S.D.   | Mean    | S.D.   |         |         |                           |
| 1       | Financial Satisfaction | 3.3953 | 0.7247 | 3.3401  | 0.8501 | -0.786  | 0.432   | Accepted                  |
| 2       | Service Satisfaction   | 3.4008 | 0.7486 | 3.4175  | 0.7773 | 0.246   | 0.806   | Accepted                  |

Source: Primary Data

**Interpretation:** t-test is applied to find the differences in satisfaction level of salaried class individual investors towards investment in pension plans through financial satisfaction and service satisfaction of NCR and Non-NCR area of Haryana state.

For financial satisfaction level towards investment in pension plans, Table No. 4.6.5 indicates that p value is 0.432 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in financial satisfaction level towards the investment in pension plans of salaried class individual investors belong to NCR and Non-NCR area of Haryana state. Hypothesis is accepted. Mean score for investment in financial satisfaction level towards the investment in pension plans of salaried class individual investors belong to NCR and Non-NCR area of Haryana state is 3.3953 and 3.3401 respectively, this also shows the difference in their financial satisfaction level towards investment in pension plans.

For service satisfaction level towards the investment in pension plans, Table No. 4.6.5 indicates that p value is 0.806 which is greater than 0.05 (at 5% significance level), recommends the statistically significant difference in service satisfaction level towards investment in pension plans of salaried class individual investors belong to NCR and Non-NCR area of Haryana state. Hypothesis is accepted. Mean score for service satisfaction level towards investment in pension plans of salaried class individual investors belong to NCR and Non-NCR area of Haryana state is 3.4008 and 3.4175 respectively, which also indicates the difference in their service satisfaction level towards investment in pension plans.

#### 4.7 Result of Hypothesis Testing:

| Sr.                                                                                                                                                                                                                                                                                                                                                                         | Hypothesis                                                                                                                               | Factors                        | Result   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------|
| <b>Hypothesis 1:</b> Social security conditions of salaried class individual investors are significantly different based on socio-economic demographics like gender, age, marital status, educational qualification, nature of employment, nature of job work, job experience, annual income, type of family, number of family members, number of dependent family members. |                                                                                                                                          |                                |          |
| 1                                                                                                                                                                                                                                                                                                                                                                           | H1a: “Social security conditions of salaried class individual investors are significantly different based on gender.”                    | Traditional Investment Avenues | Accepted |
|                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                          | Modern Investment Avenues      | Accepted |
| 2                                                                                                                                                                                                                                                                                                                                                                           | H1b: “Social security conditions of salaried class individual investors are significantly different based on age.”                       | Traditional Investment Avenues | Accepted |
|                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                          | Modern Investment Avenues      | Accepted |
| 3                                                                                                                                                                                                                                                                                                                                                                           | H1c: “Social security conditions of salaried class individual investors are significantly different based on marital status.”            | Traditional Investment Avenues | Accepted |
|                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                          | Modern Investment Avenues      | Accepted |
| 4                                                                                                                                                                                                                                                                                                                                                                           | H1d: “Social security conditions of salaried class individual investors are significantly different based on educational qualification.” | Traditional Investment Avenues | Accepted |
|                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                          | Modern Investment Avenues      | Accepted |
| 5                                                                                                                                                                                                                                                                                                                                                                           | H1e: “Social security conditions of salaried class individual investors are significantly different based on nature of employment.”      | Traditional Investment Avenues | Accepted |
|                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                          | Modern Investment Avenues      | Accepted |

|                                                                                                                                                                                                                                                |                                                                                                                                                   |                                |          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------|
| 6                                                                                                                                                                                                                                              | H1f: “Social security conditions of salaried class individual investors are significantly different based on nature of job work.”                 | Traditional Investment Avenues | Accepted |
|                                                                                                                                                                                                                                                |                                                                                                                                                   | Modern Investment Avenues      | Accepted |
| 7                                                                                                                                                                                                                                              | H1g: “Social security conditions of salaried class individual investors are significantly different based on job experience.”                     | Traditional Investment Avenues | Accepted |
|                                                                                                                                                                                                                                                |                                                                                                                                                   | Modern Investment Avenues      | Accepted |
| 8                                                                                                                                                                                                                                              | H1h: “Social security conditions of salaried class individual investors are significantly different based on annual income.”                      | Traditional Investment Avenues | Accepted |
|                                                                                                                                                                                                                                                |                                                                                                                                                   | Modern Investment Avenues      | Accepted |
| 9                                                                                                                                                                                                                                              | H1i: “Social security conditions of salaried class individual investors are significantly different based on type of family.”                     | Traditional Investment Avenues | Accepted |
|                                                                                                                                                                                                                                                |                                                                                                                                                   | Modern Investment Avenues      | Accepted |
| 10                                                                                                                                                                                                                                             | H1j: “Social security conditions of salaried class individual investors are significantly different based on number of family members.”           | Traditional Investment Avenues | Accepted |
|                                                                                                                                                                                                                                                |                                                                                                                                                   | Modern Investment Avenues      | Accepted |
| 11                                                                                                                                                                                                                                             | H1k: “Social security conditions of salaried class individual investors are significantly different based on number of dependent family members.” | Traditional Investment Avenues | Accepted |
|                                                                                                                                                                                                                                                |                                                                                                                                                   | Modern Investment Avenues      | Accepted |
| Hypothesis 2: Perception of salaried class individual investors towards the investment in pension plans is significantly different based on socio-economic demographics like gender, age, marital status, educational qualification, nature of |                                                                                                                                                   |                                |          |

|                                                                                                                                              |                                                                                                                                                         |                                                    |              |
|----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------|
| employment, nature of job work, job experience, annual income, type of family, number of family members, number of dependent family members. |                                                                                                                                                         |                                                    |              |
| 12                                                                                                                                           | <b>H2a:</b> “Perception of salaried class individual investors towards investment in pension plans is significantly different based on gender.”         | Perception for Services                            | Accepted     |
|                                                                                                                                              |                                                                                                                                                         | Perception for Safety and Security                 | Accepted     |
|                                                                                                                                              |                                                                                                                                                         | Perception for Predicators of Return on Investment | Accepted     |
| 13                                                                                                                                           | <b>H2b:</b> “Perception of salaried class individual investors towards investment in pension plans is significantly different based on age.”            | Perception for Services                            | Accepted     |
|                                                                                                                                              |                                                                                                                                                         | Perception for Safety and Security                 | Accepted     |
|                                                                                                                                              |                                                                                                                                                         | Perception for Predicators of Return on Investment | Accepted     |
| 14                                                                                                                                           | <b>H2c:</b> “Perception of salaried class individual investors towards investment in pension plans is significantly different based on marital status.” | Perception for Services                            | Accepted     |
|                                                                                                                                              |                                                                                                                                                         | Perception for Safety and Security                 | Accepted     |
|                                                                                                                                              |                                                                                                                                                         | Perception for Predicators of Return on Investment | Accepted     |
| 15                                                                                                                                           | <b>H2d:</b> “Perception of salaried class individual investors towards investment in                                                                    | Perception for Services                            | Not Accepted |

|    |                                                                                                                                                               |                                                    |          |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|----------|
|    | pension plans is significantly different based on educational qualification”                                                                                  | Perception for Safety and Security                 | Accepted |
|    |                                                                                                                                                               | Perception for Predicators of Return on Investment | Accepted |
| 16 | <b>H2e:</b> “Perception of salaried class individual investors towards investment in pension plans is significantly different based on nature of employment.” | Perception for Services                            | Accepted |
|    |                                                                                                                                                               | Perception for Safety and Security                 | Accepted |
|    |                                                                                                                                                               | Perception for Predicators of Return on Investment | Accepted |
| 17 | <b>H2f:</b> “Perception of salaried class individual investors towards investment in pension plans is significantly different based on nature of job work.”   | Perception for Services                            | Accepted |
|    |                                                                                                                                                               | Perception for Safety and Security                 | Accepted |
|    |                                                                                                                                                               | Perception for Predicators of Return on Investment | Accepted |
| 18 | <b>H2g:</b> “Perception of salaried class individual investors towards investment in pension plans is significantly different based on job experience.”       | Perception for Services                            | Accepted |
|    |                                                                                                                                                               | Perception for Safety and Security                 | Accepted |
|    |                                                                                                                                                               | Perception for Predicators of                      | Accepted |

|    |                                                                                                                                                            |                                                    |          |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|----------|
|    |                                                                                                                                                            | Return on Investment                               |          |
| 19 | H2h: “Perception of salaried class individual investors towards investment in pension plans is significantly different based on annual income.”            | Perception for Services                            | Accepted |
|    |                                                                                                                                                            | Perception for Safety and Security                 | Accepted |
|    |                                                                                                                                                            | Perception for Predicators of Return on Investment | Accepted |
| 20 | H2i: “Perception of salaried class individual investors towards investment in pension plans is significantly different based on type of family.”           | Perception for Services                            | Accepted |
|    |                                                                                                                                                            | Perception for Safety and Security                 | Accepted |
|    |                                                                                                                                                            | Perception for Predicators of Return on Investment | Accepted |
| 21 | H2j: “Perception of salaried class individual investors towards investment in pension plans is significantly different based on number of family members.” | Perception for Services                            | Accepted |
|    |                                                                                                                                                            | Perception for Safety and Security                 | Accepted |
|    |                                                                                                                                                            | Perception for Predicators of Return on Investment | Accepted |
| 22 | H2k: “Perception of salaried class individual investors towards investment in                                                                              | Perception for Services                            | Accepted |

|                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                              |                                                              |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|----------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                 | pension plans is significantly different based on number of dependent family members.”                                                                                       | Perception for Safety and Security                           | Accepted |
|                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                              | Perception for Predicators of Return on Investment           | Accepted |
| <b>Hypothesis 3:</b> Factors influencing salaried class individual investors to do the investment in pension plans for retirement planning are significantly different based on socio-economic demographics like gender, age, marital status, educational qualification, nature of employment, nature of job work, job experience, annual income, type of family, number of family members, number of dependent family members. |                                                                                                                                                                              |                                                              |          |
| 23                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>H3a:</b> “Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on gender.” | Motivational Factors Influencing Investment in Pension Plans | Accepted |
|                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                              | Discouraging Factors Influencing Investment in Pension Plans | Accepted |
| 24                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>H3b:</b> “Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on age.”    | Motivational Factors Influencing Investment in Pension Plans | Accepted |
|                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                              | Discouraging Factors Influencing Investment in Pension Plans | Accepted |

|    |                                                                                                                                                                                                 |                                                              |          |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|----------|
| 25 | <b>H3c:</b> “Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on marital status.”            | Motivational Factors Influencing Investment in Pension Plans | Accepted |
|    |                                                                                                                                                                                                 | Discouraging Factors Influencing Investment in Pension Plans | Accepted |
| 26 | <b>H3d:</b> “Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on educational qualification.” | Motivational Factors Influencing Investment in Pension Plans | Accepted |
|    |                                                                                                                                                                                                 | Discouraging Factors Influencing Investment in Pension Plans | Accepted |
| 27 | <b>H3e:</b> “Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on nature of employment.”      | Motivational Factors Influencing Investment in Pension Plans | Accepted |
|    |                                                                                                                                                                                                 | Discouraging Factors Influencing Investment in Pension Plans | Accepted |
| 28 | <b>H3f:</b> “Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on nature of                   | Motivational Factors Influencing Investment in Pension Plans | Accepted |

|    |                                                                                                                                                                                      |                                                              |          |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|----------|
|    | job work.”                                                                                                                                                                           | Discouraging Factors Influencing Investment in Pension Plans | Accepted |
| 29 | <b>H3g:</b> “Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on job experience.” | Motivational Factors Influencing Investment in Pension Plans | Accepted |
|    |                                                                                                                                                                                      | Discouraging Factors Influencing Investment in Pension Plans | Accepted |
| 30 | <b>H3h:</b> “Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on annual income.”  | Motivational Factors Influencing Investment in Pension Plans | Accepted |
|    |                                                                                                                                                                                      | Discouraging Factors Influencing Investment in Pension Plans | Accepted |
| 31 | <b>H3i:</b> “Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on type of family.” | Motivational Factors Influencing Investment in Pension Plans | Accepted |
|    |                                                                                                                                                                                      | Discouraging Factors Influencing Investment in Pension Plans | Accepted |

|                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                   |                                                              |              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------|
| 32                                                                                                                                                                                                                                                                                                                                                                                                  | H3j: “Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on number of family members.”           | Motivational Factors Influencing Investment in Pension Plans | Accepted     |
|                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                   | Discouraging Factors Influencing Investment in Pension Plans | Accepted     |
| 33                                                                                                                                                                                                                                                                                                                                                                                                  | H3k: “Factors influencing salaried class individual investors to do investment in pension plans for retirement planning are significantly different based on number of dependent family members.” | Motivational Factors Influencing Investment in Pension Plans | Accepted     |
|                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                   | Discouraging Factors Influencing Investment in Pension Plans | Accepted     |
| Hypothesis 4: Satisfaction level of salaried class individual investors towards the investment in pension plans is significantly different based on socio-economic demographics like gender, age, marital status, educational qualification, nature of employment, nature of job work, job experience, annual income, type of family, number of family members, number of dependent family members. |                                                                                                                                                                                                   |                                                              |              |
| 34                                                                                                                                                                                                                                                                                                                                                                                                  | H4a: “Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on gender.”                                                  | Financial Satisfaction                                       | Accepted     |
|                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                   | Services Satisfaction                                        | Accepted     |
| 35                                                                                                                                                                                                                                                                                                                                                                                                  | H4b: “Satisfaction level of salaried class individual investors towards investment in                                                                                                             | Financial Satisfaction                                       | Not Accepted |

|    |                                                                                                                                                                            |                        |              |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------|
|    | pension plans is significantly different based on age.”                                                                                                                    | Services Satisfaction  | Accepted     |
| 36 | <b>H4c:</b> “Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on marital status.”            | Financial Satisfaction | Not Accepted |
|    |                                                                                                                                                                            | Services Satisfaction  | Accepted     |
| 37 | <b>H4d:</b> “Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on educational qualification.” | Financial Satisfaction | Accepted     |
|    |                                                                                                                                                                            | Services Satisfaction  | Accepted     |
| 38 | <b>H4e:</b> “Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on nature of employment.”      | Financial Satisfaction | Accepted     |
|    |                                                                                                                                                                            | Services Satisfaction  | Accepted     |
| 39 | <b>H4f:</b> “Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on nature of job work.”        | Financial Satisfaction | Accepted     |
|    |                                                                                                                                                                            | Services Satisfaction  | Accepted     |
| 40 | <b>H4g:</b> “Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on job experience.”            | Financial Satisfaction | Accepted     |
|    |                                                                                                                                                                            | Services Satisfaction  | Accepted     |
| 41 | <b>H4h:</b> “Satisfaction level of salaried class individual investors towards investment in                                                                               | Financial Satisfaction | Accepted     |

|                                                                                                                                                                                                                                                                                       |                                                                                                                                                                              |                                |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------|
|                                                                                                                                                                                                                                                                                       | pension plans is significantly different based on annual income.”                                                                                                            | Services Satisfaction          | Accepted |
| 42                                                                                                                                                                                                                                                                                    | H4i: “Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on type of family.”                     | Financial Satisfaction         | Accepted |
|                                                                                                                                                                                                                                                                                       |                                                                                                                                                                              | Services Satisfaction          | Accepted |
| 43                                                                                                                                                                                                                                                                                    | H4j: “Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on number of family members.”           | Financial Satisfaction         | Accepted |
|                                                                                                                                                                                                                                                                                       |                                                                                                                                                                              | Services Satisfaction          | Accepted |
| 44                                                                                                                                                                                                                                                                                    | H4k: “Satisfaction level of salaried class individual investors towards investment in pension plans is significantly different based on number of dependent family members.” | Financial Satisfaction         | Accepted |
|                                                                                                                                                                                                                                                                                       |                                                                                                                                                                              | Services Satisfaction          | Accepted |
| <b>Hypothesis 5:</b> Investment behavior including social security conditions, perception, factors influencing and satisfaction level towards investment in pension plans of salaried class individual investors of NCR and Non-NCR area of Haryana state is significantly different. |                                                                                                                                                                              |                                |          |
| 45                                                                                                                                                                                                                                                                                    | H5a: “Social Security Conditions of Salaried Class Individual Investors of NCR and Non-NCR area of Haryana state are significantly different.”                               | Traditional Investment Avenues | Accepted |
|                                                                                                                                                                                                                                                                                       |                                                                                                                                                                              | Modern Investment Avenues      | Accepted |
| 46                                                                                                                                                                                                                                                                                    | H5b: “Perception of Salaried Class Individual Investors towards Investment                                                                                                   | Perception for Services        | Accepted |

|    |                                                                                                                                                                                                            |                                                            |          |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|----------|
|    | in Pension Plans for Retirement Planning of NCR and Non-NCR area of Haryana state is significantly different.”                                                                                             | Perception for Safety and Security                         | Accepted |
|    |                                                                                                                                                                                                            | Perception for Predicators of Return on Investment         | Accepted |
| 47 | <b>H5c:</b> “Factors Influencing to Salaried Class Individual Investors towards investment in Pension Plans for Retirement Planning of NCR and Non-NCR area of Haryana state are significantly different.” | Motivational Factors Influence Investment in Pension Plans | Accepted |
|    |                                                                                                                                                                                                            | Discouraging Factors Influence Investment in Pension Plans | Accepted |
| 48 | <b>H5d:</b> “Satisfaction Level of Salaried Class Individual Investors towards Investment in Pension Plans for Retirement Planning of NCR and Non-NCR area of Haryana state is significantly different.”   | Financial Satisfaction                                     | Accepted |
|    |                                                                                                                                                                                                            | Services Satisfaction                                      | Accepted |

## **CHAPTER 5**

### **FINDINGS, CONCLUSION AND LIMITATIONS**

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5.1 Introduction

5.2 Findings

5.3 Conclusion

5.4 Implications/Outcomes/Suggestions of the Study

5.5 Scope for further studies

5.6 Limitations

#### **5.1 Introduction**

The prime purpose of this study has been to find investment behavior of the salaried class individual investors towards the pension plans for retirement planning with comparative dimension of NCR and Non-NCR areas of Haryana state. With the purpose of finding the main objective, this study includes the following mentioned objectives-

- 1) To identify the social security conditions for retirement,
- 2) To ascertain the perception towards investment in pension plans for retirement planning,
- 3) To examine the factors influencing investment in pension plans for retirement planning, and
- 4) To analyze the satisfaction level towards investment in pension plans for retirement planning.

These four objectives have been further assessed comparatively between the salaried class investors of NCR and Non-NCR areas.

All objectives have been studied on the basis of demographical factors like gender, age, marital status, educational qualification, nature of employment, nature of job work, job experience, annual income, type of family, number of family members,

number of dependent family members. Both primary and secondary data has been used in this study. Structured questionnaire is used for the collection of primary data from respondents. Percentage, mean, factor analysis, t-test, ANOVA are used to analyze the data. In this chapter, total findings of this research work have been presented by highlighting the significant points.

## **5.2 Findings**

### **5.2.1 Findings of Socio-Economic Demographical Profile of the Respondents-**

- Approximately 50% of respondents are male and 50% respondents are female.
- Most of the respondents are between the age of 25 – 45 years. This shows that young people are also the investors in pension plans.
- Majority of the respondents are married (79%).
- Majority of the respondents are post graduates (69%).
- Majority of the respondents are engaged in government jobs (70%).
- Majority of the respondents are academicians (41%) and after that people are engaging in managerial job (20%) on second preference.
- Majority of the respondents have job experience upto 10 years (58%).
- Majority of the respondents have the annual income between 5 -10 lakhs (52%) and then 10-15 lakhs (28%) on second number in the terms of percentage.
- 48% respondents belong to the nuclear families and remaining 52% respondents belong to the joint families.
- Majority of the respondents have four (30%) or five (30%) members in their family.
- Most of the respondents have four dependents (36%) who create a burden on the respondents to do savings.

### **5.2.2 Findings of objective no. 1: Social Security Conditions for Retirement-**

- Majority of the respondents (34.4%) have one family member who save for old age along with the respondents.

- Majority of the respondents (30.7%) have savings between 15-20% of their annual income for old age which means that they have only a small part of income to save for retirement after consumption.
- Majority of the respondents (90.4%) feel socially secure if their spouse is employed.
- Majority of respondents' old age (77%) is secured by having good and sound personal property.
- Majority of the respondents (80.7%) have support of their family members during their retirement life.
- Majority of the respondents (85.5%) have support of family members for saving for retirement life.
- Majority of the respondents (92%) "prefer to live with spouse during post retirement period".
- Majority of the respondents (92.8%) "prefer to live with children during post retirement period".

#### **Findings of Hypothesis Testing:**

After using the factor analysis, two factors are determined "Traditional Investment Avenues" and "Modern Investment Avenues". First factor consists of investment in "Insurance", "Post Office", "Bank Deposits", "Real Estate", "Precious Metals", "P.P.F.". Second factor is "Modern Investment Avenues" consists of investment in "Mutual Fund", "Govt. Securities", "Pension Plans" and "Any Other Sources".

Hypothesis testing is done to find the social security conditions through investment in "Traditional Investment Avenues" and "Modern Investment Avenues" by using the t-test and ANOVA.

- Males do more investment for the social security of old age than females.
- Investors of age group of less than 25 years invest the money in modern investment avenues and respondents of age group between 35-45 years and above

55 years invest money in traditional investment avenues in comparison to the respondents of other age groups.

- Unmarried do more investment for the social security of old age than married.
- Investors who have studied upto secondary level, invest in the traditional investment avenues than others and respondents who have other qualification they invest in modern investment avenues.
- Government employees do more investment for old age security than private sector employees.
- Investors who are in the jobs other than academic, managerial, professional and technical, do more investment for old age.
- Investors who have the job experience between the 15-20 years are more socially secure and do more investment.
- Investors who have income upto 5 lakhs do investment in modern avenues and who have income between 15-20 lakhs do more investment traditional investment avenues than other respondents.
- Investors belonging to joint family do more investment in modern avenues and who are from nuclear family do more investment in traditional investment avenues.
- Investors with two members in their family are more socially secure and do investment both in traditional and modern avenues but traditional avenues are more preferable.
- Investors with two dependents are more socially secure and do investment both in traditional and modern avenues but traditional avenues are more preferable.

### **5.2.3 Findings of objective no. 2: Perception towards Investment in Pension Plans for Retirement Planning-**

- 164 (32%) respondents are not thinking of retirement at all, 285 (55.7%) respondents are thinking somewhat about retirement, 63 (12.3%) respondents are

thinking to a great extent about retirement. Majority of respondents are thinking to a little extent and are not much concerned about retirement.

- Majority of the respondents are willing to retire at the age of 60 years. They want to do work for long life and earn more money.

### **Findings of Hypothesis Testing:**

After using the factor analysis, three factors are determined. First factor is “Perception for Services provided by Pension Fund Providers”, second factor is “Perception for Safety of Money and Retirement life” and third factor is “Perception for Predicators of Return on Investment”.

Hypothesis testing is done to ascertain the perception towards investment in pension plan for retirement planning through “Perception for Services provided by Pension Fund Providers”, “Perception for Safety of Money and Retirement Life” and “Perception for Predicators of Return on Investment” by using the t-test and ANOVA.

- Perception of males for investment in pension plans is towards providing good return on investment; whereas females consider safety and services factors.
- Perception of the respondents between the age of 45-55 years is that investment in pension plans is to get return on investment and those who are above the 55 years age, consider safety and service factors.
- Perception of unmarried respondents to do investment in pension plans is to save money and retirement life and the married respondents give more consideration on good return on investment and services provided by pension plan providers.
- Perception of the post graduated respondents is that pension plans provide good return on investment and good services provided by pension plan providers and the graduate investors do investment with the purpose of saving of money.
- The government employees have more strong perception to get good return on investment, safety of money and own life and dependents and services provided by the pension plan providers than the private sector employees.
- The investors who do managerial jobs have the purpose of getting the good return on investment and safety of money and own life and dependents but those

investors who are academicians have the perception to get better services through investing the money in pension plans.

- The perception of the investors who have job experience above 25 years, is to get good return and safety of money and retirement life through investment in pension plans but the investors who have the job experience between the 15-20 years have the perception to get good services provided by pension plan providers.
- The investors who have annual income between 10-15 lakhs have the perception that pension plans provide good return on investment, whereas that investors who have annual income between 15-20 lakhs consider pension plans provide safety of money, security in old age for them and their dependents and the investors who have the annual income above 20 lakhs consider that pension plans provide better services.
- The investors who belong to the nuclear families have the perception that pension plans provide good return on investment and safety of money, security in old age to them and their dependents, whereas the investors who belong to joint families consider that pension plans provide better services.
- The investors with two family members have the perception that pension plans provide good return on investment and safety of money, security in old age to them and their dependents, whereas the investors with five family members consider that pension plans provide better services.
- The investors with three dependent family members have the perception that pension plans provide good return on investment, whereas the investors with one dependent family member consider the safety of money, security in old age to them and their dependents, and the investors with four dependent family members consider that pension plans provide better services.

#### **5.2.4 Findings of objective no. 3: Factors Influencing Investment in Pension Plans for Retirement Planning-**

- Majority of the respondents are taking the advice from any source like professional advisors/colleagues/friends/relatives/print media/electronic media

before investing money in pension plans. Professional advisors are the most preferable source of information.

### **Findings of Hypothesis Testing:**

After using the factor analysis, two factors are determined “Motivational Factors influencing the decision of Investment in Pension Plans” and “Discouraging Factors influencing the decision of Investment in Pension Plans” which affect the decision of investment in pension plans.

Hypothesis testing is done to examine the factors influencing investment in pension plan for retirement planning on “Motivational Factors influencing the decision of Investment in Pension Plans” and “Discouraging Factors influencing the decision of Investment in Pension Plans” by using the t-test and ANOVA.

- Motivation factors have influenced males more than females. Females fear to do investment in pension plans.
- The investors between the age of 45-55 years are highly influenced by various positive factors and are least affected by negative factors related to the investment in pension plans.
- The married investors are more influenced by various positive factors and are less affected by negative factors related to the investment in pension plans than unmarried investors.
- The private sector investors are more influenced by the motivational or positive factors than government sector investors
- Positive or motivational factors related to investment in pension plans are main factors to encourage the managerial job holding investors to do the investment in pension plans.
- The investors having job experience of above 25 years are influenced by motivational or positive factors but the investors of pension plans having the job experience between 10-15 years are least affected by negative or discouraging factors. The investors having 15-20 years job experience are most affected by discouraging factors.

- The investors with annual income between 15-20 lakhs are more influenced by various positive factors and are least affected by negative factors related to investment in pension plans.
- The investors belonging to nuclear families are more influenced by various positive and are less affected by negative factors related to investment in pension plans.
- The investors with two members in their family are more influenced by various positive factors and are least affected by negative factors related to investment in pension plans.
- The investors with one dependent family member are most influenced by motivational or positive factors but the investors of pension plans having three dependents are least affected by negative or discouraging factors.

#### **5.2.5 Findings of objective no. 4: Satisfaction Level towards Investment in Pension Plans for Retirement Planning-**

- Majority of the respondents (45.5%) are not in the position to say that they have understanding about the benefits which they will get through investment in pension plans.

#### **Findings of Hypothesis Testing:**

After using the factor analysis two factors are determined “Financial Satisfaction” and “Service Satisfaction” to find the satisfaction of clients after having invested money in pension plans.

Hypothesis testing is done to find the satisfaction level for investment in pension plan for retirement planning through “Financial Satisfaction” and “Service Satisfaction” by using the t-test and ANOVA.

- The males investors are more satisfied to do investment in pension plans than the females in the terms of finance and services provided by the pension plans providers.

- The investors who are between the age of 45-55 years are more satisfied by services provided by pension plan providers and the investors between the age of 35-45 years are more satisfied by financial benefits.
- The married investors are more satisfied than the unmarried.
- The satisfaction level of the government employees is higher in financial terms and private sector employees are more satisfied in terms of the services provided by pension plans providers.
- The investors on managerial jobs are more satisfied with investment in pension plans.
- The investors having the job experience between 15-20 years are highly satisfied in financial matters and those who have the job experience above 25 years are satisfied for the services provided by pension plans providers.
- The investors having the annual income between 15-20 lakhs are highly satisfied in financial matters and those who have the annual income above 20 lakhs are satisfied by the services provided by pension plans providers.
- The financial satisfaction level is high among the investors who belong to nuclear families but all the investors are satisfied with the pension plan services.
- The investors having two family members are most satisfied.
- The investors having three dependent family members are most satisfied by financial benefits and the investors having two dependents are most satisfied by the services provided by pension plans providers.

#### **5.2.6 Findings of Comparison of the Investment Behavior of the Salaried Class Investors of the NCR and Non-NCR areas of Haryana state-**

- 242 (47.3%) respondents belonging to the NCR area, 270 (52.7%) respondents belonging to Non-NCR area. Approximately 50% respondents belong to NCR and rest of respondents belong to Non-NCR area.

### **Findings of Hypothesis Testing:**

- Investors belonging to the NCR area do investment in traditional avenues and Non-NCR investors do investment in modern investment avenues for old age social security. NCR investors do more investment than Non-NCR area investors. NCR investors are more socially secure as they have enough property and their families have supportive attitude to help them in old age, they prefer to live with spouse and children during their old age. In modern avenues, pension plans are most preferable option for both Non-NCR and NCR investors but Non-NCR investors prefer the pension plans more than NCR investors.
- The investors belonging to NCR area have the perception that pension plans provide them with good rate of return on investment and good services provided by pension plans providers but Non-NCR area investors have perception regarding the safety of their old age and their dependents by investing money in pension plans. NCR investors have the perception that pension plans provide high payments with long term investments, tax relief, balanced amount can be contributed in pension plans and pension plans providers take proper consideration of inflation index while they are investing money in pension plans. but Non-NCR area investors have the perception that pension plans provide financial security in their old age to them and their dependents.
- The investors belonging to NCR area are more affected by factors which influence the decision to do investment in pension plans than the investors, who belong to Non-NCR. Payment facility, adequate prior information, tax relief, easy withdrawal, low cost of services, high return, portfolio of pension plan, safety and security of money, claim settlement ratio, time taken for claim settlement are the main factors which influence the decision to do investment in pension plans. But the most influencing factor is the availability of adequate prior information.
- The investors belonging to NCR area are satisfied with the financial benefits received by them through investing in pension plans like tax benefit availability, govt. contribution in pension scheme, self-contribution in pension plans, certainty of return, premium payment frequency, and late fees for the delay payment of

contribution but the investors belong of Non-NCR are satisfied with the services provided by pension plans providers like regular information available, client service, grievance settlement procedure, policy issuance time after purchasing the plan and availability of annual report, terms and conditions of pension plans, management of pension fund.

### **5.3 Conclusion:**

This study has concluded that the salaried class investors have strong social security conditions as they have good and sound property to secure their old age, and their family members are also supportive in their retirement life and they are willing to spend their old age with their spouse and children. For doing investment to secure old age, traditional investment avenues are more preferable than modern avenues till now and males do more investment than females. The investors between the age group of 35-45 years are more risk averse than the investors belonging to the below 25 years age group. It means that the young generation has started investing money now in modern avenues. Unmarried people do more investment in pension plans than married. Investors who have secondary level of education do more investment in traditional avenues than other categories of educated people. The government sector employees do more investment for old age than private sector employees. People who are doing job other than academic, professional, managerial and technical, do more investment. People who have the job experience between the 15-20 years do more investment than others and who have the income between 15-20 lakhs do more investment in traditional investment avenues and who have the income upto 5 lakhs do more investment in modern investment avenues which indicates that people with high level of income are investing in traditional avenues which consists of the real estate and precious metals creates the large amount of money and who have low level of income invests in modern investment avenues. Investors belonging to the nuclear family do more investment in traditional avenues and investors who belong to the joint family do more investment in modern avenues. Investors who have two family members and two dependent family members do more investment for future than other categories of investors, which indicates that they have enough money to save for future after consumption. Investment in pension plans is most preferable by male who

are unmarried under the age of 25 years, posted in government services have the job experience upto 10 years with annual income upto 5 lakhs and belong to joint family with two dependent family members.

In the case of perception, majority of employees are willing to retire at 60 years, it means they wish to work for long life and earn more money. They start thinking about the retirement but to somewhat extent and they are not serious about the retirement till yet. Perception to the investment in pension plans is found on the basis of facilities and services given by the pension fund providers, safety and security of money and retirement life, and return on investment. Females prefer the facilities and services which are given by the pension fund providers and safety of retirement life and their dependents but male prefer that pension plans which provide the better return on investment. Investors belonging to the age above 55 years have high level of perception towards the pension plans and consider the service of pension plan providers and security of retirement life and dependents. Unmarried investors prefer to the safety and security of invested money and retirement life through saving in pension plans and married investors have the perception that pension plans provide good return on investment and good services provided by pension plan providers, post graduate people highly prefer to investment in pension plans. Investors belong to joint family consider that pension plans provide better services and investors belong to the nuclear family consider that pension plans provide the good return and safety of money. Investors with job experience between 15-20 years consider that pension plans provide better services and investors with job experience above 25 years consider that pension plans provide the good return and safety of money. Safety and security of invested money and retirement life is more important parameter to invest the money in pension plans on the basis of gender, marital status, nature of employment, nature of job work, job experience, annual income, type of family, number of family members and number of dependent family members which indicates employees give preference to the pension plans thinking about the safety and security of the invested money and want to save their retirement life by investing money in pension plans.

Investment in pension plans is affected by the advice of different persons like professional advisors, colleagues, friends, relatives, print media and electronic media. All the investors take advice and use the information which is available through various information sources which make their decision better and able to invest the money in good pension plans. To take the decision for investment in pension plans is also influenced by many factors which may be motivational factors or discouraging factors. Males are more interested to investing the money in pension plans than females, married are more interested than unmarried, investors belonging to the nuclear family are more interested to invest in pension plans in comparison of those belonging to joint family. The investors belonging to the age group between 45-55 years, and who have the income between 15-20 lakhs, prefer to invest in pension plans. The investors who do the managerial jobs are most influenced to do investment in pension plans. The investors having two family members are more influenced than other investors. The investors having one dependent family member mostly prefer to invest in pension plans. The fear of fraud influences the salaried class individual investor negatively. However, but after the removal of these discouraging factors people do the investment in pension plans. Financial awareness should be spread among the investor for the clear understanding about the financial terms and for enabling the investors to take good investment decision.

In terms of satisfaction level, approximately 50% investors of pension plans are able to say that they can understand about the benefits available by investing money in pension plans. Males are more satisfied than females, married and unmarried both are satisfied in financial terms but satisfaction level towards the services provided by pension fund providers is more for married than unmarried investors. The government employees are more satisfied than the private employees. The investors on managerial post are more satisfied than belonging to other categories; investors having the job experience of 15-20 years are more satisfied with services than other investors, investors of nuclear family are more satisfied than those joint family for services; investors having two family members, and investors having three dependent family members are more satisfied with services. On the basis of age, the investors belonging to the age between 35-45 years have more financial satisfaction; the investors belong of 45-55 years age group are more satisfied with services provided by pension fund

providers. The investors of pension plans having annual income between 15-20 lakhs are more financially satisfied, but the investors having the annual income above 20 lakhs are more satisfied with services provided by pension fund providers. All these results suggest that the government has to start those pension plans which will give more benefits in financial terms for the early retirement planners and service factor is the primary factor for the middle age group investors in pension plans to attract the people for investment in pension plans.

As stated by the findings of investment behavior of the salaried class individual investors for investment in pension plans of NCR and Non-NCR areas of Haryana state through social security conditions, perception towards the investment in pension plans, factors influencing investment in pension plans and the satisfaction level for investment in pension plans, it is concluded that investors of NCR area are more interested to invest in traditional avenues and the investors of Non-NCR area are doing more investment in modern avenues. The investors of NCR area prefer to invest in pension plans for the services provided by the pension fund providers and good return on investment but the investors of Non-NCR area prefer to invest in pension plans due to safety and security of invested money and retirement life. The investors of NCR area are more influenced to invest in pension plans than the investors of Non-NCR area. The investors of NCR area are more satisfied in financial terms and the investors of Non-NCR area are more satisfied by services provided by the pension fund providers and pension fund providers should start the different pension plans which fulfil the requirements of the investors of particular area. So, government has to spread more financial knowledge in Non-NCR areas through conducting the financial awareness programs. Prepare the pension plans as per their requirements and make them feel that their money will be secure by investing in pension plans and their retirement life will be safe.

#### **5.4 Implications/ Outcomes/Suggestions of the Study:**

##### **5.4.1 Theoretical Implications:**

This study enhances the concept of retirement planning and behavior towards investment in pension plans. Although the concept of pension plans and retirement planning has been developed years ago. This study has made addition to the

theoretical and empirical literatures on the retirement planning and investment behavior in pension plans for the old age security. This study has been done to find the behavior towards investment in pension plans on the basis of demographical factors. Most of previous literatures has proved that investment behavior in pension plans depends on the demographical factors. In the similar way this study results also indicates that demographical factors determine the behavior to do the investment in pension plans and retirement planning.

#### **5.4.2 Managerial Implications:**

##### **For Pension Plan Providers:**

- For the social security of old age or retirement life, employees do more investment in various investment avenues like PPF, precious metals, government securities, mutual fund and pension plans. So, pension plans providers should provide more facilities in comparison to other investment avenues to attract the clients towards the pension plans.
- Majority of salaried investors have annual income between 5-10 lakhs and they invest between 15-20% of their annual income. So, they have a small part of their annual income to save for retirement life. From this point of view, pension plan providers should start the progressive premium payment facility. They charge low amount of premium when the employee is on lower grade with low-income level, however if the income level is increased then premium amount can also be increased to get the required amount of corpus by investors at the time of retirement. This suggestion could be used to attract people towards investment in pension plans.
- Majority of employees wish to retire at the age of 60 years which means they are willing to be active and work for a long period. So, pension plans should be framed to cover the long maturity age.
- Majority of salaried investors are strongly agreed that they get the adequate information before investing in pension plans. Most of them prefer to take advice from professional advisors, colleagues and friends respectively. In order to provide adequate information about the pension plans, pension plans providers

should hire or connect with trained professional advisors with updated, adequate and accurate information about the pension plans so that they can provide the same information to the potential investors in an efficient and effective manner.

The investors prefer to get the information from colleagues/friends also. So, periodic information through monthly statements about current status of investment should also be provided to the current pension investors. So that, they can provide the adequate information to the potential investors.

- Salaried investors of NCR want to get the high and lump sum payments with minimum and balanced amount of contribution. They take into account the inflation index to calculate the corpus amount which will be received at the time of retirement. All these factors indicate the market linked pension plans. So, pension plans providers should formulate the pension plans as per their requirements.

Salaried investors of Non-NCR prefer to get regular income as well as safety of money, security in old age for themselves and their dependents in a convenient way. All these factors indicate the features of debts. So, pension plan providers should design plans as per the requirements of their investors and should invest the money in debt fund.

- As per suggestions of respondents, periodical meetings should be arranged with investors to resolve their problems.

#### **For Investors:**

- Most of the salaried investors agree that value of corpus increases as per the increase in retirement age. So, everyone should start investment for retirement at early stage of life in order to get huge amount of corpus required at retirement.
- In this study most of investors have the annual income between 5-10 lakhs and they save 10-15% of their annual income. So, investors have less amount to invest for old age security. So, they should plan properly and fix a monthly instalment for contribution to decrease the burden of single instalment in a year.

- Most of the salaried investors have fear that pension plans providers would commit fraud with them. So, before investing the money in pension plans, every investor should collect the information about the PFDRA regulated plans and should read carefully all the guidelines related to the rights of the investors and everyone should be aware about the PFDRA regulated pension plans and invest the money in these pension plans as per their requirements.
- Every investor has its own requirements related to the retirement life. So, one should plan for retirement as per one's needs. Before investing the money, tracking the investment market environment and considering the track record and reputation of pension plan providers to get good pension plan can be done by taking professional advice also. However, one should not follow the generic advice about the investment and choice of retirement pension plan.
- Most of salaried investors' response in this study that they think about the retirement to a little extent. It shows that they are not serious about retirement as their family is supportive of the survival in old age and they wish to live with their spouse and children. However, concept of joint family has converted into nuclear family and children have shifted from their native place to another places for employment purposes. Government has limited resources and is unable to support the huge portion of elderly population. So, everyone should be financially self-dependent and should plan properly for retirement life as soon as possible.
- In this study, mostly investors are unaware of the benefits which are available through pension plans. So, every investor must attend the financial literacy programmes to enhance the knowledge and understanding about management of pension fund, portfolio allocation, time of investment, market trends, quality of services, rate of return, claim settlement ratio, time taken for the claim settlement, tax relief, cost of services, inflation index and value of corpus and choose the best pension plan as per his or her needs.

**For Government:**

- Financial literacy campaign should be started by government to educate the people about the various PFDRA regulated pension plans, benefits available

through investment in pension plans, importance of timely thinking about the retirement life and invest accordingly. Short term courses should also be started specially for females as they are less participative in financial decisions than their male counterparts. Females should also be self-dependent and take their own financial decisions and have the necessary confidence about retirement planning.

- Government should strictly enforce the PFRDA regulations related to pension plans. Timely check the documents provided by pension fund managers to investors. Change the fundamental policy regulations if require for the benefits of the investors.
- According to the findings of this study, taxation is also an important parameter to take decision for investment in pension plans. So, government should provide the extra tax benefit over Rs. 150000/- under 80C of Income Tax Act, 1961. On the basis of 80 CCD(1B) which is available for the NPS contribution, a new section should be created to give extra tax benefits for all the pension plans provided by the private and government pension plan providers. Tax relief should also be provided at the time of the corpus received on retirement.
- As per the suggestions of respondents a new pension plan should be created with the minimum guaranteed amount of pension and should cover the medical and life insurance of an investor and his or her dependents with single premium payment for both.
- Most of the salaried investors are willing to retire at the age of 60 year as they wish to work and earn for a long time. So, the government should fix minimum age to retirement is 60 years.

### **5.5 Scope for Further Studies:**

This study has identified the various opportunities for the further research in the area of investment behavior towards pension plans and retirement planning. Some prospective areas of further research in this field are explained below-

1. A study on behavior of salaried class investors for the investment in pension plans may be extended at the national level and international level.

2. A comparison of pension plans provided by the government and private organisations may be taken for further research.
3. A study may be done to evaluate the performance of pension plan providers.
4. A comparative study may be done on the pension plans with similar type of financial products to save for the retirement.
5. A study may be done on other states also.
6. A comparative study may be done on pension plans of Haryana state with other states of India.
7. A study may be done on other sample elements also like business class investors, household sector investors.
8. A same type of study may be done with increase sample size.

#### **5.6 Limitations of the Study:**

1. It is assumed that respondents answered the questions with due honesty and filled the questionnaire without biasness.
2. The result of this study represents the investment behavior of salaried class individual investors of particular state (Haryana) which is not applicable to another states of country.
3. Respondents are not interested to provide the information related to the income and investment. So, it is a big challenge to convince the respondents and collect the information through questionnaire.
4. This study is conducted on the salaried class individual investors, so the results cannot be generalised to the other categories of investors who are investing in pension plans.

## REFERENCES

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### Research Papers:

- Afthanorhan, A., Mamun, A. A., Zainol, N. R., Foziah, H., & Awang, Z. (2020). Framing the retirement planning behavior model towards sustainable wellbeing among youth: The moderating effect of public profiles. *Sustainability*, 12(21), 8879.
- Alam, M. (2004). Ageing, old age income security and reforms: An exploration of Indian situation. *Economic and Political Weekly*, 3731-3740.
- Alexander, G. J., Jones, J. D., & Nigro, P. J. (1998). Mutual fund shareholders: Characteristics, investor knowledge, and sources of information. *Financial Services Review*, 7(4), 301-316.
- Allen, S. G., Clark, R. L., Maki, J., & Morrill, M. S. (2016). Golden years or financial fears? How plans change after retirement seminars. *The Journal of Retirement*, 3(3), 96-115.
- Ameriks, J., & Zeldes, S. P. (2004). *How do household portfolio shares vary with age* (pp. 1-87). working paper, Columbia University.
- Amudhan, S., Poornima, J., & Kumar, S. S. (2016). A study on individual investors satisfaction level of existing investment schemes in Salem districts. *South Asian Journal of Marketing & Management Research*, 6(3and4), 31-41.
- Asher, M. G. (2000). Reforming civil service pensions in selected Asian countries. In *World Bank Social Security Workshop*, World Bank, Washington, DC.
- Asher, M. G. (2001). Pension reform, capital markets and corporate governance in Malaysia. *Journal of Financial Regulation and Compliance*.
- Asher, M. G. (2003). Reforming India's social security system. *Unpublished Manuscript*.

- Asher, M. G., & Nandy, A. (2006). Issues and Options in the Pay-out Phase in Defined Contribution Pension Schemes (No. id: 561).
- Asher, M. G. (2008). Social security reform imperatives in developing Asia. *The Indian Economic Journal*, 56(1), 112-123.
- Asher, M. G. (2009). Pension coverage and linkages in low-and middle-income countries (Vol. 11). Working paper.
- Asher, M. G., & Bali, A. S. (2010). India's social security systems: An assessment. *Social protection in East Asia—Current state and challenges (ERIA Research Project Report 2009–9)*, 399-423.
- Asher, M. G. (2012). Social pensions for the elderly in Asia: fiscal costs and financing methods. *Lee Kuan Yew School of Public Policy Research Paper No. LKYSPP*, 12-12.
- Asher, M. G., & Bali, A. S. (2014). Financing social protection in developing Asia: Issues and options. *Journal of Southeast Asian Economies*, 68-86.
- Asher, M. G., Vora, Y., & Maurya, D. (2015). An analysis of selected pension and health care initiatives for informal sector workers in India. *Social Policy & Administration*, 49(6), 738-751.
- Asher, M. G., & Bali, A. S. (2015). Public Pension Programs in Southeast Asia: An Assessment. *Asian Economic Policy Review*, 10(2), 225-245.
- Asher, M. G., & Zen, F. (2015). Social protection in ASEAN: Challenges and initiatives for post-2015 vision. *Lee Kuan Yew School of Public Policy Research Paper*, (15-13).
- Asher, M.G. (2020). Requirements for a Robust Pension System in Middle-Income Countries. *Public policy*, 10, 22.
- Attanasio, O., Kitao, S., & Violante, G. L. (2007). Global demographic trends and social security reform. *Journal of monetary Economics*, 54(1), 144-198.

- Bailey, J. J., Nofsinger, J. R., & O'Neill, M. (2003). A review of major influences on employee retirement investment decisions. *Journal of Financial Services Research*, 23(2), 149-165.
- Barr, N., & Diamond, P. (2009). Reforming pensions: Principles, analytical errors and policy directions. *International social security review*, 62(2), 5-29.
- Barrientos, A. (2012). What is the role of social pensions in Asia?
- Beattie, R. (1998). Pension systems and prospects in Asia and the Pacific. *International Social Security Review*, 51(3), 63-87.
- Beshears, J., Choi, J. J., Laibson, D., & Madrian, B. C. (2011). Behavioral economics perspectives on public sector pension plans. *Journal of pension economics & finance*, 10(2), 315-336.
- Bloom, D. E., Canning, D., & Graham, B. (2003). Longevity and life-cycle savings. *The Scandinavian Journal of Economics*, 105(3), 319-338.
- Bloom, D. E., Canning, D., & Moore, M. (2004). Health, longevity, and optimal retirement. *National Bureau of Economic Research (NBER) Working Paper Forthcoming WBS Finance Group Research Paper No. 34*
- Bloom, D. E., Canning, D., & Moore, M. J. (2004). The effect of improvements in health and longevity on optimal retirement and saving.
- Bloom, D. E., Canning, D., Moore, M. J., & Song, Y. (2006). The effect of subjective survival probabilities on retirement and wealth in the United States.
- Bloom, D. E., Canning, D., Mansfield, R. K., & Moore, M. (2007). Demographic change, social security systems, and savings. *Journal of Monetary Economics*, 54(1), 92-114.
- Bloom, D. E., Canning, D., & Moore, M. J. (2007). A theory of retirement.
- Bloom, D. E., Canning, D., Fink, G., & Finlay, J. E. (2008). Social Security, Institutional Settings, and Labor Supply.

- Bloom, D. E., Canning, D., Hu, L., Liu, Y., Mahal, A., & Yip, W. (2010). The contribution of population health and demographic change to economic growth in China and India. *Journal of Comparative Economics*, 38(1), 17-33.
- Bloom, D. E., Mahal, A., Rosenberg, L., & Sevilla, J. (2010). Economic security arrangements in the context of population ageing in India. *International Social Security Review*, 63(3-4), 59-89.
- Bloom, D. E., & McKinnon, R. (2013). *The design and implementation of public pension systems in developing countries: Issues and options* (No. 59). IZA Policy Paper.
- Bloom, D. E., Canning, D., & Moore, M. (2014). Optimal retirement with increasing longevity. *The Scandinavian journal of economics*, 116(3), 838-858.
- Bloom, D. E., Canning, D., & Lubet, A. (2015). Global population aging: Facts, challenges, solutions & perspectives. *Daedalus*, 144(2), 80-92.
- Bloom, D. E., Chatterji, S., Kowal, P., Lloyd-Sherlock, P., McKee, M., Rechel, B., ... & Smith, J. P. (2015). Macroeconomic implications of population ageing and selected policy responses. *The Lancet*, 385(9968), 649-657.
- Bloom, D. E., & Luca, D. L. (2016). The global demography of aging: facts, explanations, future. In *Handbook of the economics of population aging* (Vol. 1, pp. 3-56). North-Holland.
- Bodie, Z., & Crane, D. B. (1997). Personal investing: Advice, theory, and evidence. *Financial Analysts Journal*, 53(6), 13-23.
- Chard, R., Rogofsky, D., & Yoong, J. (2016). Wealthy or Wise: How Knowledge Influences Retirement Savings Behavior.
- Chattopadhyay, S., & Dasgupta, R. (2015). Demographic and socioeconomic impact on risk attitudes of the Indian investors-an empirical study. *Asian Economic and Financial Review*, 5(4), 601-623.

- Chaudhuri, A., & Roy, K. (2009). Gender differences in living arrangements among older persons in India. *Journal of Asian and African Studies*, 44(3), 259-277.
- Chawla, D. (2014). An empirical analysis of factors influencing investment in mutual funds in India. *Global Business Review*, 15(3), 493-503.
- Clark, G. L., & Strauss, K. (2008). Individual pension-related risk propensities: the effects of socio-demographic characteristics and a spousal pension entitlement on risk attitudes. *Ageing & Society*, 28(6), 847-874.
- Clark, G. L., Fiaschetti, M., & Gerrans, P. (2015). The demand for advice in defined contribution pension plans: age, gender, and the size-of-bet effect. *Gender, and the Size-of-Bet Effect* (January 16, 2015).
- Clark-Murphy, M., & Gerrans, P. (2001). Consultation and resource usage in retirement savings decisions: Australian evidence of systematic gender differences. *Financial Services Review*, 10(1-4), 273-290.
- Clark, R. L., & d'Ambrosio, M. (2003). Financial education and retirement savings. *Available at SSRN 390642*.
- Clark, R. L., d'Ambrosio, M. B., McDermed, A. A., & Sawant, K. (2006). Retirement plans and saving decisions: the role of information and education. *Journal of Pension Economics & Finance*, 5(1), 45-67.
- Clark, R. L., Morrill, M. S., & Allen, S. G. (2009). Employer-provided retirement planning programs.
- Clark, R. L., & Mitchell, O. S. (2009). The evolution of retirement risk management.
- Clark, R. L., Morrill, M. S., & Allen, S. G. (2012). The role of financial literacy in determining retirement plans. *Economic inquiry*, 50(4), 851-866.
- Clark, R. L., Morrill, M. S., & Allen, S. G. (2012). Effectiveness of employer-provided financial information: Hiring to retiring. *American Economic Review*, 102(3), 314-18.

- Clark, R., Lusardi, A., & Mitchell, O. S. (2017). Employee financial literacy and retirement plan behavior: a case study. *Economic Inquiry*, 55(1), 248-259.
- Clark, R. L., Hammond, R. G., & Khalaf, C. (2019). Planning for retirement? The importance of time preferences. *Journal of Labor Research*, 40(2), 127-150.
- Clark, R. L., Hammond, R. G., & Liu, S. (2021). Work after retirement: worklife transitions of career public employees. *Journal of Pension Economics & Finance*, 20(3), 341-356.
- Coile, C. C. (2015). Economic Determinants of Workers' retirement Decisions. *Journal of Economic Surveys*, 29(4), 830-853.
- Curtis, C. C., Lugauer, S., & Mark, N. C. (2017). Demographics and aggregate household saving in Japan, China, and India. *Journal of Macroeconomics*, 51, 175-191.
- Dash, M. K. (2010). Factors influencing investment decision of generations in India: An econometric study. *Int. J. Buss. Mgt. Eco. Res*, 1(1), 15-26.
- De Bresser, J., & Van Soest, A. (2015). Retirement expectations and satisfaction with retirement provisions. *Review of Income and Wealth*, 61(1), 119-139.
- DiCenzo, J. (2014). Employees' Retirement Choices, Perceptions and Understanding: A Review of Selected Survey and Empirical Behavioral Decision-Making Research. *Behavioral Research Associates, LLC and Society of Actuaries Working paper*.
- Drèze, J., & Khera, R. (2017). Recent social security initiatives in India. *World Development*, 98, 555-572.
- Duflo, E., & Saez, E. (2002). Participation and investment decisions in a retirement plan: The influence of colleagues' choices. *Journal of public Economics*, 85(1), 121-148.
- Elder, H. W., & Rudolph, P. M. (1999). Does retirement planning affect the level of retirement satisfaction?. *Financial Services Review*, 8(2), 117-127.

- Farrar, S., Moizer, J., Lean, J., & Hyde, M. (2019). Gender, financial literacy, and preretirement planning in the UK. *Journal of Women & Aging*, 31(4), 319-339.
- Foster, L. (2017). Young people and attitudes towards pension planning. *Social Policy and Society*, 16(1), 65-80.
- Foster, L., & Heneghan, M. (2018). Pensions planning in the UK: A gendered challenge. *Critical Social Policy*, 38(2), 345-366.
- Ganapathy, V. (2021). Is Pension an Effective and Adequate Solution to the Challenges of Ageing? *Bimaquest*, 21(1).
- Goli, S., Reddy, A. B., James, K. S., & Srinivasan, V. (2019). Economic independence and social security among India's elderly. *Econ Polit Wkly*, 54(39), 32-41.
- Goswami, R. (2002). Old age protection in India: Problems and prognosis. *International Social Security Review*, 55(2), 95-121.
- Grable, J. E., & Joo, S. H. (2001). A further examination of financial help-seeking behavior. *Journal of Financial Counseling and Planning*, 12(1), 55.
- Griffin, B., Loe, D., & Hesketh, B. (2012). Using proactivity, time discounting, and the theory of planned behavior to identify predictors of retirement planning. *Educational Gerontology*, 38(12), 877-889.
- Guerard, Y., Asher, M. G., Park, D., & Estrada, G. B. (2012). Reducing Disparities and Enhancing Sustainability in Asian Pension Systems. *Lee Kuan Yew School of Public Policy Research Paper*, (12-15).
- Guillen, J. B. (2018). Perceptions of affiliates to private pension funds. *Ecos de Economía*, 22(47), 58-72.
- Gupta, R., & Hershey, D. A. (2016). Cross-national differences in goals for retirement: the case of India and the United States. *Journal of cross-cultural gerontology*, 31(3), 221-236.

- Gutierrez, H. C., & Hershey, D. A. (2014). Age differences in expected satisfaction with life in retirement. *The International Journal of Aging and Human Development*, 78(2), 93-114.
- Halilbegovic, S., & Mehanovic, E. (2018). Effect of Person's Age on Supplemental Investment Habits Towards Retirement in Federation of Bosnia and Herzegovina. *European Journal of Economic Studies*, 7(1), 16-21.
- Haris, A., & Said, R. (2012). Social security wealth and early retirement in public pension scheme. *International Journal of Economics and Management*, 6(2), 346-359.
- Hauff, J. C., Carlander, A., Gärling, T., & Nicolini, G. (2020). Retirement financial behavior: how important is being financially literate? *Journal of Consumer Policy*, 43(3), 543-564.
- Hershey, D. A., Mowen, J. C., & Jacobs-Lawson, J. M. (2003). An experimental comparison of retirement planning intervention seminars. *Educational Gerontology*, 29(4), 339-359.
- Hershey, D. A., Henkens, K., & Van Dalen, H. P. (2007). Mapping the minds of retirement planners: A cross-cultural perspective. *Journal of Cross-Cultural Psychology*, 38(3), 361-382.
- Hershey, D. A., Jacobs-Lawson, J. M., McArdle, J. J., & Hamagami, F. (2007). Psychological foundations of financial planning for retirement. *Journal of Adult Development*, 14(1), 26-36.
- Hershey, D. A., & Jacobs-Lawson, J. M. (2009). Goals for retirement: Content, structure and process. *New directions in aging research*, 167-186.
- Hershey, D. A., & Jacobs-Lawson, J. M. (2012). Bridging the gap: Anticipated shortfalls in future retirement income. *Journal of Family and Economic Issues*, 33(3), 306-314.
- Hessel, P., Sayer, P., & Riumallo-Herl, C. (2020). Educational inequalities in disability linked to social security coverage among older individuals in five Latin American countries. *Social Science & Medicine*, 267, 112378.

- Hira, T. K., Rock, W. L., & Loibl, C. (2009). Determinants of retirement planning behavior and differences by age. *International Journal of Consumer Studies*, 33(3), 293-301.
- Imthiyas, Y. (2016). A Study on Investment Strategy & Behavior of Individual Investors Belonging to Software/It/ITES Profession in Chennai City.
- Jacobs-Lawson, J. M., & Hershey, D. A. (2003). Perceptions of Financial Stability. *Advances in psychology research*, 22, 123-136
- Jacobs-Lawson, J. M., & Hershey, D. A. (2005). Influence of future time perspective, financial knowledge, and financial risk tolerance on retirement saving behaviors. *Financial Services Review-greenwich-*, 14(4), 331.
- Jamaludin, N., & Gerrans, P. (2015). Retirement savings investment decisions: Evidence from Malaysia. *Journal of the Asia Pacific Economy*, 20(4), 644-657.
- James, H., Price, D., & Buffel, T. (2020). How do people think about later life when making workplace pension saving decisions? *Journal of Aging Studies*, 54, 100869.
- Jayapriya, C.K., & Chandni, P.S. (2016). A study on the Awareness, Preference and Satisfaction of Policy holders towards LIC with Special Reference to Malappuram district. *International Journal of Research-Granthaalayah*, 4(10).
- Jha, R. K., & Bhattacharyya, S. (2010). Social security system in India: An international comparative analysis.
- Jiménez, I., Chiesa, R., & Topa, G. (2019). Financial Planning for retirement: Age-related Differences among Spanish workers. *Journal of Career Development*, 46(5), 550-566.
- Jing, Z., & Joo, S. H. (2021). Intergenerational Comparison of Successful Aging Perception, Lifestyle and Self-Esteem. *Journal of Intergenerational Relationships*, 19(1), 92-108.

- John, V.K., & Namchaisawadwong, S. (2020). Retirement Planning: An Analysis of the Factors Influencing Thai People. *International Journal of Latest Research in Engineering and Technology (IJLRET)*, 6(7), 48-59.
- Joo, S. H., & Grable, J. E. (2001). Factors associated with seeking and using professional retirement-planning help. *Family and consumer sciences research journal*, 30(1), 37-63.
- Joo, S. H., & Pauwels, V. (2002). Factors affecting workers' retirement confidence: A gender perspective. *Journal of Financial Counseling and Planning*, 13(2).
- Joo, S. H., & Grable, J. E. (2005). Employee education and the likelihood of having a retirement savings program. *Journal of Financial Counseling and Planning*, 16(1).
- Joo, S. H., Grable, J. E., & Choe, H. (2007). Who is and who is not willing to use online employer-provided retirement investment advice? *journal of employment counseling*, 44(2), 73-85.
- Jun, H. (2020). Social security and retirement in fast-aging middle-income countries: Evidence from Korea. *The Journal of the Economics of Ageing*, 17, 100284.
- Kamath, D. V., & Patil, D. R. (2017). Cost Benefit Analysis of National Pension Scheme. *International Journal of management*, 8(3).
- Kannadhasan, M. (2015). Retail investors' financial risk tolerance and their risk-taking behavior: The role of demographics as differentiating and classifying factors. *IIMB Management Review*, 27(3), 175-184.
- Karunakaran, N., & Shilpa, C. (2020). Effect of Social Protection and Occupational Pensions in Kerala: A Study from Kasaragod District. *Journal of Management Research and Analysis*, 7(1), pp. 34-39.
- Ketkaew, C., Sukitprapanon, C., & Naruetharadhol, P. (2020). Association between retirement behavior and financial goals: A comparison between urban and rural citizens in China. *Cogent Business & Management*, 7(1), 1739495.

- Kotecha, M., Maplethorpe, N., Arthur, S., Stoll, N., Green, R., Wood, N., & Hussey, D. (2011). Perceptions of income requirements in retirement. *Published by The Department for Work and Pensions. Available at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/214555/rrep773.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/214555/rrep773.pdf).*
- Kumar, S. V. (2003). Economic security for the elderly in India: An overview. *Journal of aging & social policy*, 15(2-3), 45-65.
- Kumar, S., & Kumar, K. A. (2019). Living arrangement and economic dependency among the elderly in India: a comparative analysis of EAG and non EAG states. *Ageing International*, 44(4), 352-370.
- Kumar, S., Shukla, G. P., & Sharma, R. (2019). Analysis of key barriers in retirement planning: An approach based on interpretive structural modeling. *Journal of Modelling in Management*.
- Kwan, C. Y., & Asher, M. G. (2022). Managing shocks in Singapore's ageing and retirement arrangements. *Policy Studies*, 43(2), 264-278.
- Lee, A., Xu, Y., & Hyde, K. F. (2012). Influences on Consumer Choice of Pension Fund: the Case of New Zealand's Kiwisaver Pension Scheme. *ACR Asia-Pacific Advances*.
- Lee, D., Arumugam, D., & Arifin, N. B. (2019). A study of factors influencing personal financial planning among young working adults in Kuala Lumpur, Malaysia. *International Journal of Recent Technology and Engineering*, 7(5S), 114-119.
- Lyons, A. C., Grable, J. E., & Joo, S. H. (2018). A cross-country analysis of population aging and financial security. *The Journal of the Economics of Ageing*, 12, 96-117.
- Madaan, G., & Singh, S. (2020). A Systematic Review of Investment Influences of Individual Investors. *TEST: Engineering & Management*, 83, 15324-15341.
- Mahanti, A., Tripathy S.K., & Sundaray, B. K. (2017). Perception towards the Acceptability and Implementation of the New Pension Scheme: A Study in the

State of Odisha. *International Research Journal of Management Science & Technology*, 8(6), 134-149.

- Manoli, D. S., & Weber, A. (2016). *The effects of the early retirement age on retirement decisions* (No. w22561). National Bureau of Economic Research.
- Mazzonna, F., & Peracchi, F. (2012). Ageing, cognitive abilities and retirement. *European Economic Review*, 56(4), 691-710.
- Moorthy, M. K., Durai, T., Chelliah, L., Sien, C. S., Leong, L. C., Kai, N. Z., & Teng, W. Y. (2012). A Study on the retirement planning behavior of working individuals in Malaysia. *International Journal of Academic Research in Economics and Management Sciences*, 1(2), 54.
- Mutran, E. J., Reitzes, D. C., & Fernandez, M. E. (1997). Factors that influence attitudes toward retirement. *Research on aging*, 19(3), 251-273.
- Nguyen, T. A. N., Rózsa, Z., Belás, J., & Belásová, L. (2017). The effects of perceived and actual financial knowledge on regular personal savings: Case of Vietnam. *Journal of International Studies*.
- Njogu, E. W. (2014). Employee perception of the defined contribution pension scheme in the public sector.
- Njuguna, A. G., & Otsola, J. K. (2011). Predictors of pension finance literacy: A survey of members of occupational pension schemes in Kenya.
- Nolan, A., & Doorley, K. (2019). Financial literacy and preparation for retirement.
- Osuji, C. U. (2014). Teachers' perceptions and attitudes towards retirement in secondary schools: an analytical study. *International journal of education and research*, 2(10), 355-370.
- Padawer, E. A., Jacobs-Lawson, J. M., Hershey, D. A., & Thomas, D. G. (2007). Demographic indicators as predictors of future time perspective. *Current Psychology*, 26(2), 102-108.
- Palanivelu, V. R., & Chandrakumar, K. (2013, March). A study on preferred investment avenues among salaried peoples with reference to Namakkal Taluk,

Tamil Nadu, India. In *International conference on business and accounting, Thailand* (pp. 20-23).

- Pandiyan, L., & Aranganathan, T. (2012). Savings and investments among salaried class: an evaluation. *International journal of economics, management and research*, 2, pp.1-13.
- Patel, C. Y. P., & Patel, C. C. Y. (2012). A study of investment perspective of salaried people (private sector). *Asia Pacific Journal of Marketing & Management Review*, 1(2), 126-146.
- Perera, S., Martínez, M., & Monreal-Bosch, P. (2013). Managing the process of retirement: The medical professionals' perceptions. *Procedia-Social and Behavioral Sciences*, 82, 657-662.
- Pettigrew, N., Taylor, J., Simpson, C., Lancaster, J., & Madden, R. (2007). Live now, save later? Young people, saving and pensions. *Research Report- Department for Work and Pensions*, 438.
- Reyers, M. (2018). Perceptions of retirement adequacy: Evidence from South Africa. *Journal of Financial Counseling and Planning*, 29(2), 343-356.
- Roy, A., Le, A., & Rideau, J. (2019). UK Spotlight: Demographics, Pensions & Governance.
- Saeed, S., & Sarwar, A. (2016). Perception about social and financial issues of life after retirement: A case study of academic staff of public sector universities in Lahore Pakistan. *Cogent Business & Management*, 3(1), 1236432.
- Safari, K., Njoka, C., & Munkwa, M. G. (2021). Financial literacy and personal retirement planning: a socioeconomic approach. *Journal of Business and Socio-Economic Development*.
- Shankar, S., & Asher, M. G. (2011). Micro-pensions in India: Issues and challenges. *International Social Security Review*, 64(2), 1-21.

- Shanmugapriya, S., & Saravanan, S. (2020). Rural Investors Behavior and Satisfaction Level of Financial Saving Schemes towards Post Office. *International Journal of Recent Technology and Engineering*, 8(6), pp. 2277-3878.
- Shariff, N. S. M., & Isah, N. A. M. (2019, November). An empirical study on the determinants of retirement savings attitude in Malaysia! In *Journal of Physics: Conference Series* (Vol. 1366, No. 1, p. 012110). IOP Publishing.
- Shreevastava, R., & Brahmabhatt, M. (2020). Impact of Demographic Variable of Retirement planning Behavior of Gen Y. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(6), 9452-9460.
- Shrivastava, A.K. (2018). Investment Behavior towards Different Financial Products. *International Journal of Innovative Knowledge Concepts*, 6, p.5.
- Singal, V. S., & Manrai, R. (2018). Factors affecting investment in mutual funds. *Journal of general management research*, 5(2), 96-107.
- Singh, C., Bharati, K., & Sanyal, A. (2015). Ageing in India: Need for universal pension scheme. *Economic and Political Weekly*, 40-46.
- Singh, S., & Kumar, N. (2015). Investors Attitude towards Pension Scheme (Special Reference to Kanpur District, Uttar Pradesh State, India). *International Journal of Social and Economic Research*, 5(2), 181-190.
- Sireesha, P., & Laxmi, C. (2013). Impact of demographics on select investment avenues: A case study of Twin Cities of Hyderabad and Secunderabad, India. *International Journal of Marketing, Financial Services & Management Research*, 2(6).
- Smith, D. B. (2004). Volunteering in retirement: Perceptions of midlife workers. *Nonprofit and voluntary sector quarterly*, 33(1), 55-73.
- Sundali, J., Westerman, J. W., & Stedham, Y. (2008). The importance of stable income sources in retirement: An exploratory study. *Journal of Behavioral and Applied Management*, 10(1), 18-46.
- Szinovacz, M. E., & Davey, A. (2005). Predictors of perceptions of involuntary retirement. *The Gerontologist*, 45(1), 36-47.

- Thakur, S. S., & Jain, S. C. (2017). Retirement planning and social security concept in Indian context. *Intern J Comm Manage Res*, 3(2), 35-40.
- UMA, G., & Sekar, A. (2020). A Study on Investment Pattern and Awareness of Salaried Class Investors with Reference to Neyveli Lignite Corporation (NIC) India Ltd.
- Umamaheswari, S., & Kumar, M. A. (2014). A special study on Coimbatore based salaried investors' awareness, attitude, expectation and satisfaction over their investments. *Impact: International Journal of Research in Business Management*, 2(2), 99-108.
- Van Dalen, H. P., Henkens, K., & Hershey, D. A. (2010). Perceptions and expectations of pension savings adequacy: A comparative study of Dutch and American workers. *Ageing & Society*, 30(5), 731-754.
- Vinmalar, J. (2018). A Study on Retirement Planning of Working Individuals with special reference to Chennai City. *Pacific Business Review International*, 10(9), 18-24.
- Wata, L., Kamau, C., & Bett, B. (2015). Determinants of employees' attitude towards retirement in the energy sector in Kenya; a case of Kenya pipeline company. *International Journal of Scientific and Research Publications*, 5(10), 54-66.
- Whitley, E., Benzeval, M., & Popham, F. (2018). Associations of successful aging with socioeconomic position across the life-course: The West of Scotland Twenty-07 Prospective Cohort Study. *Journal of Aging and Health*, 30(1), 52-74.
- Woerheide, W. (1995). The Impact of Salary Growth, Inflation, Employee Age, and Career Length on the Relative Desirability of Pension Fund Type. *Journal of Financial Counseling and Planning*, 6, 53.
- Worthington, A. C. (2008). Knowledge and perceptions of superannuation in Australia. *Journal of Consumer Policy*, 31(3), 349-368.

### **Thesis:**

- Ashlesha, S. (2019). Behavioral Analysis of Retirement Financial Planning of IT Sector Employees A Case Study of Pune Metropolitan Region A Case Study of Pune Metropolitan Region, *Symbiosis International University, Pune, Maharashtra.*
- Bhambure, V.A. (2013). Customer Preferences in Pune city of Pension & Retirement Products offered by selected Insurance Companies, *S.N.D. T. Women's University, Pune.*
- Dhanalakshmi, P. (2016). Evaluation of Retirement Benefit Plans and Pension Plans Offered by Public Sector and Private Sector Banks (A Case Study of Krishna District In Andhra Pradesh, India) *Acharya Nagarjuna University, Guntur, Andhra Pradesh.*
- Eronimus, A. (2015). A Study on National Pension Scheme NPS In India with Special Reference to Pension Subscribers In Tamil Nadu.
- Hotwani, M. M. (2018). An assessment of financial literacy and financial planning with respect to investment pattern of IT professionals, *Global Business School & Research Centre Tathawade Pune.*
- Jebaraj, S.P. (2013). Investment Pattern of Salaried Class in Tirunelveli District (Doctoral Dissertation, *Manonmaniam Sundaranar University Tirunelveli.*
- Mengesha, D. (2015). Employees' perception Towards the New Private Organizations' employees' pension Scheme: The Case of Clinton Health Access Initiative (Doctoral Dissertation, *St. Mary's University).*
- Priyadarshini, M. (2017). Tax planning and investment behavior of salaried individuals a study in Salem district.
- Rushdi, N.J. (2014). Impact of Psychological influences on Investment Behavior of Salaried Investors in India, *University of Lucknow.*

- Shukla, G.P. (2013). Female Faculty Members' Investment Decision Making for Retirement Planning in the Shadow in Holistic Decision-Making Model, (*Doctoral Dissertation, Banasthali University, Rajasthan*).
- Sisodiya, P. (2018). A Comprehensive Study of Employee Welfare Schemes (With Special Reference to Private and Public Sector Educational Institutes in M.P. Region), *Jiwaji University, Gwalior*.
- Somansundaram, (1999). A Study on the Savings and Investment Pattern of Salaried Class in Coimbatore District, *Bharathiar University*.
- Tanesh, B. (2016). An Empirical Study of Determinants of Performance of Privately Managed Pension Funds in India, NMIMS School of Business Management.
- Vyas, G. N. (2017). To Study an Impact of Financial Literacy on Retirement Saving Attitude of Households, *Gujarat University*.

**Books:**

- Chandra S. (2001). *A Guide to happy retirement for the salaried people*. Pustak Mahal, Delhi.
- Clark, G. L., Strauss, K., & Knox-Hayes, J. (2012). *Saving for retirement: Intention, context, and behavior*. Oxford University Press.
- Deborah Barndt (Ed.). (2004). *Women working the NAFTA food chain: Women, food and globalization*. Canadian Scholars' Press.
- Girdhar, G., Sathyanarayana, K.M., Kumar, S., James, K.S., & Alam, M., (2014). *Population Ageing in India*. Cambridge University Press.
- Mitchell, O. S., & Lusardi, A. (Eds.). (2011). *Financial literacy: Implications for retirement security and the financial marketplace*. Oxford University Press.
- Thaper G.D. (2000). *Life after fifty*. Pustak Mahal.

**Website links:**

- <https://www.crisil.com/en/home/our-analysis/reports/2019/03/securing-lives-second-innings.html>
- <https://www.macrotrends.net/countries/IND/india/fertility-rate>
- [https://epfindia.gov.in/site\\_en/index.php](https://epfindia.gov.in/site_en/index.php)
- [https://www.nsiindia.gov.in/InternalPage.aspx?Id\\_Pk=55](https://www.nsiindia.gov.in/InternalPage.aspx?Id_Pk=55)
- <https://enps.nsdl.com/eNPS/NationalPensionSystem.html>
- <https://www.indiafilings.com/learn/indira-gandhi-national-old-age-pension-scheme-ignoaps/>
- <https://www.licpensionfund.in/>
- <https://www.sbipensionfunds.com/>
- <https://utirsl.com/>
- <https://www.hdfcpension.com/>
- <https://pensionfund.adityabirlacapital.com/>
- <https://www.icicirupensionfund.com/NPS/#/>
- <https://www.kotakpensionfund.com/aboutus/nps>
- <https://mfinindia.org/about/industry>

**Appendix 1**  
**Questionnaire**  
**Part A**

**Dear Sir /Madam,**

I am Anita Taneja, pursuing my Ph.D. degree on the topic “Investment Behavior of Salaried class Individual Investors towards Pension Plans for Retirement Planning – A Comparative Study of NCR and Non-NCR of Haryana State”. Your views are very important part for my research. I assure you that the information gathered from you will be kept confidential and will be used only for my Ph.D. work. An earliest response from your side shall be highly appreciated.

Please place a tick “√” for each of the following:

**Demographical Profile**

Name(Optional).....

.....

Designation.....

.....

Name of Organization

.....

City/Location of Organization

.....

Gender

a) Male ☐

b) Female ☐

Age

a) upto 25 years ☐

b) 25-35 years ☐

c) 35-45 years ☐

d) 45-55 years ☐

e) Above 55 years ☐

Marital Status:

- a) Married  b) Unmarried

Educational Qualification:

- a) Upto Secondary  b) Graduate  c) Post Graduate   
d) Diploma/Technical  e) Any other

Nature of the Employment:

- a) Government Job  b) Private Job

Nature of Job Work:

- a) Academic  b) Professional  c) Managerial   
d) Technical  e) Any Other

Job Experience (in years):

- a) Upto 10 years  b) 10-15 years  c) 15-20 years   
d) 20-25 years  e) Above 25 years

Annual Income: (in ₹ )

- a) up to 5 Lakhs  b) 5-10 Lakhs  c) 10-15 Lakhs   
d) 15-20 Lakhs  e) Above 20 Lakhs

Type of the family:

- a) Nuclear Family  b) Joint Family

Number of Members in your family:

- a) Two  b) Three  c) Four   
d) Five  e) More than Five

Number of Dependent Members in your family:

- a) One  b) Two  c) Three   
d) Four  e) More than four

### Part B Social Security Conditions

1: Number of persons in your family other than you save for old age?

- a) Nil  b) One  C) Two   
d) Three  e) More than Three

2: Percentage of saving that you do from annual income for old age?

- a) Upto 10%  b) 10-15%  c) 15-20%   
d) 20-25 %  e) Above 25%

3. Please Tick Appropriate Box (Yes) or (No) to indicate your agreement or disagreement with below mention statements towards social security conditions

| Statements                                                      | Yes | No |
|-----------------------------------------------------------------|-----|----|
|                                                                 | 2   | 1  |
| I feel socially secure with working/employment status of spouse |     |    |
| I have enough property for the survival in old age              |     |    |
| My family members would help during Post retirement period      |     |    |
| My family members would support to save for old age             |     |    |
| I prefer to live with spouse during post retirement period      |     |    |
| I prefer to live with children during post retirement period    |     |    |

4. Indicate that how significantly you invest annually in these avenues for the security in retirement or old age.

|                    | 1          | 2            | 3             | 4             | 5            |
|--------------------|------------|--------------|---------------|---------------|--------------|
| Investment Avenues | Upto 50000 | 50000-100000 | 100000-150000 | 150000-200000 | Above 200000 |
| Bank Deposits      |            |              |               |               |              |
| Real Estate        |            |              |               |               |              |
| P.P.F.             |            |              |               |               |              |

|                     |  |  |  |  |  |
|---------------------|--|--|--|--|--|
| Precious Metals     |  |  |  |  |  |
| Pension Plans       |  |  |  |  |  |
| Govt. Securities    |  |  |  |  |  |
| Insurance           |  |  |  |  |  |
| Post Office Deposit |  |  |  |  |  |
| Mutual Funds        |  |  |  |  |  |
| Any other           |  |  |  |  |  |

### Part C Perception towards Pension Plans for Retirement Planning

1. To what extent have you start thinking about retirement?

a) Not at All  b) Somewhat  c) A Great Extent

2. At what age you would like to retire?

a) At 52 Years  b) At 54 Years  c) At 56 Years

d) At 58 Years  e) At 60 Years

3. Indicate your agreement or disagreement with below mention purpose regarding selection of pension schemes for investment

| Statements                                                                 | Strongly Disagree | Disagree | Not Agree not Disagree | Agree | Strongly Agree |
|----------------------------------------------------------------------------|-------------------|----------|------------------------|-------|----------------|
|                                                                            | 1                 | 2        | 3                      | 4     | 5              |
| Investment in pension plans provides regular income                        |                   |          |                        |       |                |
| Investment in pension for a long period provides high and lump sum payment |                   |          |                        |       |                |
| Investment in pension plans provided the tax deduction                     |                   |          |                        |       |                |
| Investment in pension plans provides the safety of retirement life         |                   |          |                        |       |                |
| Investment in pension plans                                                |                   |          |                        |       |                |

|                                                                                                                         |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| provides assured returns and safety of money                                                                            |  |  |  |  |  |
| Balance amount is contributed for the investment in pension plans                                                       |  |  |  |  |  |
| Investment in pension plans is convenient                                                                               |  |  |  |  |  |
| Minimum amount is contributed for the investment in pension plans                                                       |  |  |  |  |  |
| Investment in pension plans provides more pension as per increase in retirement age                                     |  |  |  |  |  |
| Investment in pension plans helps to get the corpus with the consideration of inflation index at the time of retirement |  |  |  |  |  |
| Investment in pension plans provides the safety and security of my dependents                                           |  |  |  |  |  |

#### **Part D Factor Influencing the decision of investment in Pension Plans**

1. Please Tick Appropriate Box (Yes) or (No) to indicate your agreement or disagreement with below mention statements towards social security conditions-

| <b>Statements</b>                                           | <b>Yes</b> | <b>No</b> |
|-------------------------------------------------------------|------------|-----------|
|                                                             | <b>2</b>   | <b>1</b>  |
| Professional Advisor                                        |            |           |
| Colleagues/ Friends                                         |            |           |
| Relatives                                                   |            |           |
| Print Media (Newspaper/Magazine/Journals)                   |            |           |
| Electronic Media (T.V./Radio/email/<br>Cell Phone/Internet) |            |           |

2. Indicate your agreement or disagreement with below mention Factors influencing the selection of pension schemes.

| <b>Statements</b>                                       | <b>Strongly Disagree</b> | <b>Disagree</b> | <b>Not Agree not Disagree</b> | <b>Agree</b> | <b>Strongly Agree</b> |
|---------------------------------------------------------|--------------------------|-----------------|-------------------------------|--------------|-----------------------|
|                                                         | <b>1</b>                 | <b>2</b>        | <b>3</b>                      | <b>4</b>     | <b>5</b>              |
| Payment Facility                                        |                          |                 |                               |              |                       |
| Adequate Prior Information                              |                          |                 |                               |              |                       |
| Track Record and reputation of pension plan             |                          |                 |                               |              |                       |
| Tax Relief                                              |                          |                 |                               |              |                       |
| Easy Withdrawal                                         |                          |                 |                               |              |                       |
| Low cost of services                                    |                          |                 |                               |              |                       |
| Portfolio of Pension Scheme                             |                          |                 |                               |              |                       |
| High Returns                                            |                          |                 |                               |              |                       |
| Safety and Security                                     |                          |                 |                               |              |                       |
| Claim settlement ratio                                  |                          |                 |                               |              |                       |
| Time taken for the settlement of claim                  |                          |                 |                               |              |                       |
| Value of fund/corpus required at the time of retirement |                          |                 |                               |              |                       |

3. Indicate your agreement or disagreement with below mention factors discouraging the investment in pension schemes.

| <b>Statements</b>                  | <b>Strongly Disagree</b> | <b>Disagree</b> | <b>Not Agree not Disagree</b> | <b>Agree</b> | <b>Strongly Agree</b> |
|------------------------------------|--------------------------|-----------------|-------------------------------|--------------|-----------------------|
|                                    | <b>1</b>                 | <b>2</b>        | <b>3</b>                      | <b>4</b>     | <b>5</b>              |
| Fear of fraud                      |                          |                 |                               |              |                       |
| Lack of information                |                          |                 |                               |              |                       |
| Lack of innovative products        |                          |                 |                               |              |                       |
| Poor grievances handling mechanism |                          |                 |                               |              |                       |

|                                 |  |  |  |  |  |
|---------------------------------|--|--|--|--|--|
| Portfolio Manipulation          |  |  |  |  |  |
| Poor timing of investment       |  |  |  |  |  |
| Poor claim settlement mechanism |  |  |  |  |  |

**Part E Satisfaction Level towards investment in Pension Plans for retirement planning**

1. Do you understand your retirement plan well enough to be able to estimate how much you would get from this plan?

a) Yes ☐      b) No ☐      c) Can't Say ☐

2. Indicate the Level of Satisfaction or dissatisfaction regarding the fulfilment of objectives in pension schemes.

| <b>Statements</b>                                          | <b>Highly Dissatisfied</b> | <b>Dissatisfied</b> | <b>Neutral</b> | <b>Satisfied</b> | <b>Highly Satisfied</b> |
|------------------------------------------------------------|----------------------------|---------------------|----------------|------------------|-------------------------|
|                                                            | <b>1</b>                   | <b>2</b>            | <b>3</b>       | <b>4</b>         | <b>5</b>                |
| Tax Benefit available                                      |                            |                     |                |                  |                         |
| Govt. contribution                                         |                            |                     |                |                  |                         |
| Pension fund management performance                        |                            |                     |                |                  |                         |
| Regular information available                              |                            |                     |                |                  |                         |
| Deduction from salary for the contribution in pension fund |                            |                     |                |                  |                         |
| Availability of annual report                              |                            |                     |                |                  |                         |
| Client services                                            |                            |                     |                |                  |                         |
| Terms and conditions of pension plans                      |                            |                     |                |                  |                         |
| Stability and certainty in return                          |                            |                     |                |                  |                         |

|                                                                              |  |  |  |  |  |
|------------------------------------------------------------------------------|--|--|--|--|--|
| Grievance Settlement procedure                                               |  |  |  |  |  |
| premium payment frequency                                                    |  |  |  |  |  |
| Policy issuance time after purchasing the plan                               |  |  |  |  |  |
| Late fees for delay in the payment of contribution instalment after due date |  |  |  |  |  |

**Suggestions if Any:**

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**Thank You**

## Appendix 2

### List of Abbreviations

|        |                                                        |
|--------|--------------------------------------------------------|
| CRISIL | Credit Rating Information Services of India Limited    |
| DB     | Defined Benefit                                        |
| DC     | Defined Contribution                                   |
| EFA    | Exploratory Factor Analysis                            |
| EPF    | Employee Provident Fund                                |
| EPFO   | Employee Provident Fund Organization                   |
| HDFC   | Housing Development Finance Corporation Limited        |
| HUF    | Hindu Undivided Family                                 |
| ICICI  | Industrial Credit and Investment Corporation of India  |
| LIC    | Life Insurance Corporation of India                    |
| MFI    | Micro Finance Institutions                             |
| NAV    | Net Asset Value                                        |
| NCR    | National Capital Region                                |
| NLC    | Neyveli Lignite Corporation (NLC)                      |
| NOAP   | National Old Age Pension                               |
| NPS    | National Pension Scheme                                |
| NSAP   | National Security Assistance Program                   |
| OECD   | Organisation for Economic Co-operation and Development |
| PCA    | Principal Component Analysis                           |
| PFRDA  | Pension Fund Regulatory and Development Authority      |
| POP    | Point of Presence                                      |
| PPF    | Public Provident Fund                                  |

|      |                                     |
|------|-------------------------------------|
| PRAN | Permanent Retirement Account Number |
| ROI  | Rate of Investment                  |
| SBI  | State Bank of India                 |
| SEWA | Self Employed Women's Association   |
| TDA  | Tax Deferred Account                |
| UAN  | Universal Account Number            |
| UTI  | Unit Trust of India                 |

### Appendix 3

#### List of Publications

| <b>Sr. No.</b> | <b>Title of paper with author names</b>                                                                                                                                                             | <b>Name of journal / conference</b>                               | <b>Published date</b> | <b>ISSN no./ vol no., issue no.</b>       |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------|-------------------------------------------|
| <b>1.</b>      | Factor Influencing the Investors' Behaviour towards the Retirement Planning and Selection of Pension Plans<br><br>Anita Taneja,<br>Dr Mahesh Kumar Sarva,<br>Dr. Nitin Gupta,<br>Dr. Suresh Kashyap | International Journal of Interdisciplinary Organizational Studies | 25 Feb, 2022          | ISSN: 2324-7657<br><br>Volume 17, Issue 1 |
| <b>2.</b>      | Social Security Status and Retirement Planning of Salaried Class Investors: A Study of Haryana State<br><br>Anita Taneja<br>Dr. Mahesh Kumar Sarva                                                  | Psychology and Education                                          | March, 2021           | ISSN: 0033-3077<br><br>Volume 58 Issue 2  |
| <b>3.</b>      | A Study of Retirement Planning Behaviour of Individuals<br><br>Anita Taneja<br>Dr. Mahesh Kumar Sarva                                                                                               | IJRTS Journal of Research                                         | June, 2022            | ISSN: 2347-6117<br><br>Volume 22, Issue 1 |
| <b>4.</b>      | National Pension Scheme in India                                                                                                                                                                    | Theoretical and Empirical                                         | 2019                  | ISBN: 978-93-88365-                       |

|    |                                                                                                                                                                    |                                                                                       |      |                                 |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------|---------------------------------|
|    | Dr. Ajay Sidana<br>Anita Taneja                                                                                                                                    | Development in<br>Financial<br>Market in India                                        |      | 68-0                            |
| 5. | Investment in Pension Plans:<br>Relationship of Age and Information<br>Sources<br><br>Anita Taneja<br>Dr. Mahesh Kumar Sarva                                       | Business<br>Dynamics and<br>Innovations                                               | 2021 | ISBN: 978-<br>93-84783-<br>63-1 |
| 6. | Gender Differentiation: Factors<br>Discouraging the Investment in<br>Pension Plans for the Retirement<br>Preparation<br><br>Anita Taneja<br>Dr. Mahesh Kumar Sarva | Women and<br>National<br>Building                                                     | 2022 | ISBN: 978-<br>93-91768-<br>66-9 |
| 7. | Role of Financial Literacy in<br>Retirement Planning in India<br><br>Anita Taneja<br>Dr. Mahesh Kumar Sarva<br>Dr. Ajay Sidana                                     | Sustainable<br>Development<br>Goals Lessons<br>and Challenges<br>in the VUCA<br>World | 2022 | ISBN: 978-<br>93-54350-<br>90-0 |

## Appendix 4

### Journal Article 1

International Journal of Interdisciplinary Organizational Studies  
ISSN: 2324-7649 (Print) ISSN: 2324-7657 (Online)  
Volume 17 No. 1, 2022

#### Factor Influencing the Investors' Behaviour towards the Retirement Planning and Selection of Pension Plans

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Dr. Mahesh Kumar Sarva<sup>2</sup>, Dr. Nitin Gupta<sup>3</sup>, Dr. Suresh Kashyap<sup>4</sup>

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Professor, Lovely Professional University, Phagwara, Punjab, India<sup>4</sup>

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#### Abstract

With the purpose to provide the financial protection to the elderly population, government of India is expanding its social security system. Various Defined Benefit (DB) and Defined Contribution (DC) pension plans are provided by the government and private pension fund managers. Various factors influencing the behavior of investors towards the investment in pension plans. The main purpose of this paper is to find out the difference of factor influencing the salaried class investors towards the selection of pension plans on the basis of demographical variables (gender, age, marital status, nature of employment) to do the investment for the old age security. Percentage, factor analysis, ANOVA and t-test was used to analyses the data. The researcher found that there was significant difference between the demographical factors and the factor influencing the behavior of salaried class investors while they investing their money in pension schemes in almost all cases.

#### Keywords

Pension Plans, Factor Influencing, Retirement Planning Behavior, Salaried Class Investors, Haryana.

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#### Introduction:

India is a developing country, it is facing the challenge to secure the old age population as it is estimated that in 2050, Indian old age population will be increased up to 316759 thousand and

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Co-author(s) email(s): [maresh.18850@lpu.co.in](mailto:maresh.18850@lpu.co.in), [nitin.20368@lpu.co.in](mailto:nitin.20368@lpu.co.in), [suresh.kashyap@lpu.co.in](mailto:suresh.kashyap@lpu.co.in)  
© Common Ground Research Networks, Anita Taneja, All Rights Reserved.  
Acceptance: 28Jan2022, Publication: 25Feb2022

## Social Security Status and Retirement Planning of Salaried Class Investors: A Study of Haryana State

Anita Taneja, Ph.D. Research Scholar, Lovely Professional University, Phagwara, Punjab<sup>a</sup>

Dr. Mahesh Kumar Sarva, Associate Professor, Lovely Professional University, Phagwara, Punjab<sup>b</sup>

### Abstract:

Social security becomes the emergent issue of the world. For developing countries, it is very difficult to provide the social security to whole population but it is very important for the welfare for entire society. In all phases of life, social and economic security is necessary but need of security is increased in the old age because human not remains so efficient to do the work and they have no regular source of income in this phase of life. Main aim of this paper is to find the relationship between the demographic variables and social security conditions and retirement planning of salaried class investors of Haryana state. Total 150 is the sample size. The data is collected through a well structured questionnaire for salaried class investors of Haryana state. Main finding of this paper is salaried class investors have same level of social security conditions on the basis of different demographical variables such as gender, age, marital status, nature of employment, job experience, annual income and number of dependent family members except some statements but age is significant towards the retirement planning except some statements.

**Keywords:** Social Security, Retirement Planning, Haryana,

*Article Received: 18 October 2020, Revised: 3 November 2020, Accepted: 24 December 2020*

### Introduction:

Nowadays social security becomes the emergent issue of the world. Providing social security to the population in developing countries becomes more difficult than the developed countries because developing countries are facing the vital problems like inequality of wealth distribution, poverty, slow improvement in rate of capital formation, poor quality of human capital, unemployment, poor educational level etc. So, it is very challenging task to provide the social security with facing these problems. India is a one of the developing countries which is facing the same nature of problems. But social security is very necessary for the welfare of the entire society because Productivity and work capability is increased by providing health care, social services and income security. In all the phases of life, social and economic security is necessary but need of security is increased in the old age because human not remains so efficient to do the work and productivity goes down with the increase in the age. It becomes very difficult to survival in old age with the dignity due to the no regular sources of income in this phase of life. Dependency is increased on the other people of family and society in old age. To provide the social and economic security to live independently in old age, there are

various pension plans are available in India. Some pension plans are operating by the government to provide the social and economic security to its employees and their family like old pension scheme and new pension scheme. Some pension plans are operating by government and private pension fund managers to provide the social security to those who are not covered under the existing pension system and people are working in the private organisations and self-employed. So, with the investment in this beneficial pension cum retirement plans, people can do plan for their future and secure their retirement life and live happily. The investment in the retirement plans depends on the saving behaviour of the population. In last few decades there has been a drastic change in the saving and investment pattern of the population of India. People are educated and much aware about their current needs and future requirements. They do make a balance between their current and future needs and save for their future. Social and economic security is the very closely related to the saving behaviour towards the future so this is the main theme for this paper to study the status of social security and behaviour of salaried class investors towards the retirement planning.

### Review of Literature:

8561

[www.psychologyandeducation.net](http://www.psychologyandeducation.net)

## Journal Article 3

36 | Page

### A STUDY OF RETIREMENT PLANNING BEHAVIOUR OF INDIVIDUALS

<sup>1</sup>Anita Taneja\*, <sup>2</sup>Dr. Mahesh Kumar Sarva

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Accepted: 06.05.2022

Published: 01.06.2022

Keywords: Retirement Planning Behaviour.

#### Abstract

Retirement planning is very important for any individual. It is crucial stage of life when no one has regular source of income. Enough cash inflow is required to maintain the living standard in retirement phase. Retirement planning provides the regular cash inflow which facilitate in survival of living and maintain the standard of living. As per the previous studies in this area showed that "government provides the various social security programs like National Social Assistance Programme (NSAP) and Atal Pension Yojana (APY) and with the purpose to provide the health care service to the informal sector, Atal Pension Yojana (APY) also implemented" (Asher et. al., 2015). Some other contributory or self-acquired retirement security avenues are also available such as real estate, bank deposits, post office deposits, investment in gold, investment in pension plans, public provident fund, and investment in insurance. "Investment in real estate is the most preferable investment avenue followed by fixed deposits and after that National Pension Scheme" (Vasudeva, 2021). All this aspect conclude that retirement planning is important for everyone and should do at early stage of life with the consideration of all the parameters of financial terms related to investment. Government should also plan to implement appropriate investment

avenues according to demographical profile of investors. Financial awareness programmes should also be organized by the government to make aware the people about financial terms and they make investors able to take better decision to save their old age.

#### Paper Identification



\*Corresponding Author

#### Introduction:

"Retirement is a huge responsibility" (Kumar et. al. 2017). "It is the time when people have no regular income inflows, but expect only cash outflows" (Kumar et al., 2017). "Retirement involves various aspects right from the preparation for retirement and is related to deciding on the moment to retire" (Peter et. al., 2021). "In the ancient days the idea of retirement was seemingly not common because people did not live long" (Siame, 2020). But nowadays, due to increase in life expectancy and less support by family leads to think about retirement. "Every working individual desires to retire happily and have both personal and financial peace of mind" (Ajaya & Rai,

## Edited Book Chapter Article 4

### NATIONAL PENSION SCHEME IN INDIA

- Dr. Ajay Sidana  
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- Anita Taneja  
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#### ABSTRACT

People cannot survive without any income source in old age. Pension plans provide financial and social security during the old age when people do not have a regular source of income. To maintain the regular source of income govt. of India regulates the National Pension Scheme (NPS) on 10<sup>th</sup> October, 2003 with the establishment of Pension Fund Regulatory and Development Authority (PFRDA). NPS is a revolutionary method of retirement planning. Under NPS, investment can be made in two accounts Tier – I and Tier – II. Tier – I account is eligible for the tax benefit and Tier – II account is eligible for the tax exemption after the amendment on 1 April, 2019. Tax benefit is availed in NPS under section 80C, 80CCD (1), 80CCD (1B) and 80CCD (2). Various pension fund managers are available in which money is invested like ICICI Prudential Pension Fund Management Co. Ltd., LIC Pension Fund Ltd., SBI Pension Funds Pvt. Ltd., UTI Retirement Solutions Ltd., and HDFC Pension Management Co. Ltd., Reliance Capital Pension Fund Ltd., Birla Sunlife Pension Management Ltd. Value of investment depends upon the fluctuations of capital market. So the main purpose of this paper is to show the trends of return of various pension fund managers and positive as well as negative side of NPS.

## Edited Book Chapter Article 5

24

### Investment in Pension Plans: Relationship of Age and Information Sources

Anita Taneja & Mahesh Kumar Sarva

#### ABSTRACT

Retirement is very important stage of life. At this stage people do shift from working life to the life of rest and enjoyment. Enjoyment in post-retirement life depends upon the savings for the future because who save for the old age can live independently and enjoy the life with full of enthusiasm. Various investment avenues are available to save for the future. Pension plans are one of the important investment avenues. So, people should choose the best pension plan as per their requirement at appropriate age of life with the collection of all the relevant important information about these. So, the main objective of this paper is to determine the relationship of the age and the source of information for the selection of pension plan to secure the old age. Sample size is 150 salaried class investors of the Haryana state. Percentage and ANOVA statistical test were used to analyze the data and presented in tabulated form. Researcher found that various groups of investors have no significant different opinions towards the sources of information for the investment in pension plans i.e., bankers, professional advisor, T.V./Radio/email/Cell Phone/Internet, Company Annual Report, Relatives and brochure. But various age groups investors have different opinions to get the information regarding the pension plans through some sources of information like brokers, Colleagues/Friends, Newspaper/Magazines/Journal.

**Keywords:** Age, Pension Plans, Retirement Planning, Information Source.

#### Introduction

It is estimated that in 2050, 80% of population around the world, above the age of 60 years will be reside in developing countries (United Nations, 2005). India is at the stage of development and growth and considered into the developing economies. It is estimated that the elderly population in India will be increased up to 316759 thousand in 2050 and it is the 17% of the total population of India (UN Population estimates,

## Edited Book Chapter Article 6

*Women and Nation Building*  
(ISBN: 978-93-91768-66-9)

### **GENDER DIFFERENTIATION: FACTORS DISCOURAGING THE INVESTMENT IN PENSION PLANS FOR THE RETIREMENT PREPARATION**

**Anita Taneja and Mahesh Kumar Sarva**

Lovely Professional University

Phagwara, Punjab

Corresponding author E-mail: [anitataneja63@yahoo.com](mailto:anitataneja63@yahoo.com), [m\\_sarva@yahoo.com](mailto:m_sarva@yahoo.com)

#### **Abstract:**

**Purpose-** Purpose of this study is to analyze the factors discouraging the investment in the pension plans for the retirement on the basis of gender among the salaried class investors.

**Methodology –** A Well-structured questionnaire at 5 point Likert scale is used to collect the information and data. Sample element of this study is salaried class investors of Haryana state of India. Voluntary pension plans are the matter of consideration in this study. Percentage and t-Test is used to analyze the relationship between the independent and dependent variables. Data is presented in tabulated and graphical format for the better understanding.

**Findings –** Researcher found that there is no significant difference between the male a female's thinking towards the factors discouraging them to invest in the pension plans for retirement. Both male and female are not interested to invest in pension plans due to the lower level of financial knowledge and lack of detailed information about the pension plans. Poor regulatory mechanism, poor grievances settlement, poor client services, poor claim settlement, lack of transparency and lack of innovative products are the main factors for the less interest for the investment in pension plans provided by the pension plans providers.

**Originality/Value -** This study provides the first review regarding the discouraging factors towards the investment in pension plans on the basis of gender in Haryana state of India. This study provides the platform for the further research and enhance the literature in this area. Originality/value of this research lies in its methodology to analyze the data.

**Keywords:** Gender Differences, Discouraging Factors, Investment, Pension Plans, Retirement, Haryana.

## Edited Book Chapter Article 7

### Role of Financial Literacy in Retirement Planning in India

Anita Taneja<sup>1</sup>, Mahesh Kumar Sarva<sup>2</sup> and Ajay Sidana<sup>3</sup>

#### ABSTRACT

*Retirement life means live in relief after working 8 hours regularly and daily from long time. Some people think retirement life is full of boredom and problems but some people who plan and save for their post retirement life, live happily and enjoy every movement of their life after retirement. So, nowadays retirement planning becomes an emerging issue in worldwide and Financial Literacy plays an important role in retirement planning. Financial literacy is defined differently by different experts. The OECD (Organization for Economic Co-operation and Development), an international organization defines financial literacy as- "A combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial well-being". It provides the knowledge about the financial concepts and make able the people to take sound financial decision like determine the best financial situation to invest the money for retirement, understand the current pension provisions and social security rules, manage their debts, increase the knowledge towards taxation issues, they may be able to manage their portfolio and diversified their risk through investment in different investment options, easily understand the concept of interest rate and inflation and may be able to determine the receivable amount of pension at the time*

<sup>1</sup> Ph.D. Research Scholar, Lovely Professional University, Phagwara (Punjab).

<sup>2</sup> Associate Professor, Lovely Professional University, Phagwara (Punjab).

<sup>3</sup> Associate Professor, Amity International Business School, Amity University, Noida.

## Appendix 5

### List of Conferences

| <b>S No.</b> | <b>Title of Paper</b>                                                                                         | <b>Name of Conference</b>                                                                                    | <b>Organizing Institution</b>                            | <b>Conference date</b> |
|--------------|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------------------------|
| 1            | Salaried Class Investors Satisfaction Level towards the Investment in Pension Plans: A Study of Haryana State | International Conference on Sustainable Development Goals: Harnessing Innovation, Technology and Society 5.0 | Amity University, Noida                                  | 31 March-1 April, 2022 |
| 2            | Managing Retirement: Perception of Salaried Class Investors towards the Pension Plans                         | Sustainable Development Goals: Lessons and Challenges in the VUCA World                                      | Amity University, Noida                                  | 18-19 March, 2021      |
| 3            | Retirement Planning: Issues and Challenges                                                                    | International Conference on Contemporary Issues in Business Management & Economics                           | Panipat Institute of Engineering and Technology, Panipat | 28-29 May, 2021        |
| 4            | Investment in Pension Plans: Relationship of Age and Information Sources                                      | International Conference of Business Management and Social Innovations                                       | Chaudhary Bansilal University, Bhiwani                   | 26-27 August, 2021     |
| 5            | Indian Pension System: Need, Challenges and Reforms                                                           | Rethinking Business: Designing Strategies in the Age of Disruption                                           | Lovely Professional University, Phagwara                 | 19 December, 2020      |

## Appendix 6

### Conference 1



**AMITY UNIVERSITY**  
UTTAR PRADESH

**AMITY SCHOOL OF ECONOMICS**  
5TH INTERNATIONAL CONFERENCE

**SUSTAINABLE DEVELOPMENT GOALS: HARNESSING INNOVATION, TECHNOLOGY AND SOCIETY 5.0**  
ON  
31<sup>st</sup> March - 1<sup>st</sup> April, 2022

**CERTIFICATE OF PARTICIPATION**

This is to certify that \_\_\_\_\_ Ms. Anita Taneja

From \_\_\_\_\_ Lovely Professional University, Punjab \_\_\_\_\_ participated/presented a paper titled \_\_\_\_\_

\_\_\_\_\_ Salaried Class Investors' Satisfaction Level towards the Investment in Pension Plans – A Study of Haryana State \_\_\_\_\_

\_\_\_\_\_ during the 5th International Conference on "Sustainable Development Goals: Harnessing Innovation, Technology \_\_\_\_\_

\_\_\_\_\_ and Society 5.0 organized by Amity School of Economics from 31st March - 1st April 2022.



**Neeru Sidana**  
Dr. Neeru Sidana  
Conference Convener  
Asst. Professor III



**Dr. Kavita Indapurkar**  
Conference Chair  
Joint Administrator



**Prof. (Dr.) Balvinder Shukla**  
Vice Chancellor, AUUP



**Sankhya**  
Sankhya



**Dabirvani**  
Dabirvani



**Dabirvani**  
Dabirvani

**Sponsors:**



**Sankhya**  
Sankhya



**Dabirvani**  
Dabirvani



**Dabirvani**  
Dabirvani

## Conference 2

 **AMITY UNIVERSITY**  
UTTAR PRADESH

**AMITY SCHOOL OF ECONOMICS**  
**VIRTUAL 4<sup>TH</sup> NATIONAL CONFERENCE**

**SUSTAINABLE DEVELOPMENT GOALS: LESSONS AND CHALLENGES IN THE VUCA WORLD**  
ON  
18th-19th March, 2021

**CERTIFICATE OF PARTICIPATION**

This is to certify that \_\_\_\_\_ Anita Taneja  
from \_\_\_\_\_ LPU \_\_\_\_\_ participated/presented a paper titled  
Managing the Retirement: Perception of Salaried Class Investors towards the Pension Plans \_\_\_\_\_ during the Virtual  
4th National Conference on Sustainable Development Goals: Lessons and Challenges in the VUCA World organized by  
Amity School of Economics from 18th-19th March 2021.

*Neeru Sidana*  
**Dr. Neeru Sidana**  
Conference Convener  
Asst. Professor III

*Kavita*  
**Dr. Kavita Indapurkar**  
Conference Chair  
Joint Administrator

*Balvinder Shukla*  
**Prof (Dr.) Balvinder Shukla**  
Vice Chancellor, AUUP

**Sponsor:**  **Partners:**   



# CERTIFICATE



## INTERNATIONAL CONFERENCE ON CONTEMPORARY ISSUES IN BUSINESS MANAGEMENT & ECONOMICS (ICCIBME-2021)

28<sup>th</sup> & 29<sup>th</sup> May 2021 | E-Conference

This is to Certify that ..... of  
..... presented his/her research  
paper titled .....  
..... at the  
“International Conference on Contemporary Issues in Business Management & Economics (ICCIBME-2021)” organized by  
Department of Management Studies, Panipat Institute of Engineering and Technology, Haryana held on 28<sup>th</sup> & 29<sup>th</sup> May 2021.

**Dr. Akhilesh Kumar Mishra**  
Convenor | ICCIBME 2021  
Head - DMS  
Panipat Institute of Engineering and  
Technology, Haryana

**Prof. (Dr.) Vijay Anant Athavale**  
Conference Chair | ICCIBME 2021  
Dean Engineering  
Panipat Institute of Engineering and  
Technology, Haryana

**Prof. (Dr.) Shakti Kumar**  
Director  
Panipat Institute of Engineering and  
Technology, Haryana

**Mr. Rudra Bhanu Satpathy**  
CEO & Founder  
IFERP

## Conference 4



## Conference 5

**MITTAL**  
SCHOOL OF BUSINESS

Certificate No. 214330

### Certificate of Recognition

This is to certify that Dr./ Mr. / Ms. Anita Taneja

of Mittal School of business, Lovely Professional University

has participated and presented a paper titled Indian Pension System: Need, Challenges and Reforms

in the International Conference on "Rethinking Business : Designing Strategies in the Age of Disruptions" held on **December 19, 2020** organized by **Mittal School of Business, Lovely Professional University, Punjab.**

Date of Issue : 14-01-2021  
Place of Issue: Phagwara (India)

  
Prepared by  
(Administrative Officer-Records)

  
Organizing Secretary  
Dr. Rajesh Verma

  
Conference Director  
Dr. Sanjay Modi

## Appendix 7

### List of Workshops

| <b>Sr. No.</b> | <b>Title of Workshop</b>                              | <b>Organizing Institution</b>                          | <b>Date</b>       |
|----------------|-------------------------------------------------------|--------------------------------------------------------|-------------------|
| <b>1</b>       | Research Methodology                                  | Bhagat Phool Singh Mahila Vishwavidhalya               | 04-10 Jan., 2021  |
| <b>2</b>       | Research Methodology                                  | Nirankari Baba Gurbachan Singh Memorial College, Sohna | 08-10 March, 2021 |
| <b>3</b>       | Research Tools: Google Scholar, Zotero and Publons    | Desh Bandhu Gupta Government College, Panipat          | 13 June, 2020     |
| <b>4</b>       | Financial Literacy and Awareness for Professionals    | Sh. L.N. Hindu College, Rohtak                         | 19 Aug., 2020     |
| <b>5</b>       | Retirement Benefits and National Pension System (NPS) | Haryana Institute of Public Administration             | 07-09 Sept., 2020 |

## Appendix 8

### Workshop 1



Ref.No. : UGC/HRDC/18/01/2021/13225

**UGC-HUMAN RESOURCE DEVELOPMENT CENTRE**

**Bhagat Phool Singh Mahila Vishwavidyalaya**

Khanpur Kalan Sonipat-131305 Haryana

<http://sites.google.com/view/bpsmvhrdc>



ज्ञान-विज्ञान विमुक्तये

# Certificate of Participation

This is to certify that **Ms. Anita Taneja**, Assistant Professor of Commerce, Commerce, Government College for Women, Hisar

affiliated to **Guru Jambheshwar University Science & Technology, Hisar**

participated in **"Online Short Term Course on Research Methodology"** from 4th January 2021 to 10th January 2021

organized by **UGC-Human Resource Development Centre, B.P.S. Mahila Vishwavidyalaya, Khanpur Kalan (Sonipat).**

**Dr. Bhawna Sharma**  
Coordinator  
10/1/2021

**Dr. Mahesh Sharma**  
Director  
10/1/2021

**Prof. Sushma Yadava**  
Vice-Chancellor  
10/1/2021

Scan the QR code for verification.

## Workshop 2

|                                                                                                                                                                                                                                                |                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| <br><b>NIRANKARI BABA GURBACHAN SINGH MEMORIAL COLLEGE, SOHNA</b><br>Affiliated to Gurugram University, Gurugram<br>NAAC Accredited 'B'   Recognised by UGC | <b>S.NO. RDB_05</b>                                              |
| <b>CERTIFICATE OF PARTICIPATION</b>                                                                                                                                                                                                            |                                                                  |
| <br><b>DR. M.S. KHATRI</b><br>PRINCIPAL                                                                                                                     | <b>THIS IS TO CERTIFY THAT</b><br><br><b>ANITA TANEJA</b>        |
| <br><b>DR. D.P. SINGH</b><br>CONVENER                                                                                                                     | <b>OF</b> GOVERNMENT COLLEGE FOR WOMEN, HISAR                    |
| has participated in the<br><b>"3-Days Online Workshop on Research Methodology"</b><br>organised by Research and Development Board, N.B.G.S.M.<br>College, Sohna from <b>08th March to 10th March 2021</b>                                      |                                                                  |
|  <a href="http://www.nbgsmc.ac.in">www.nbgsmc.ac.in</a>                                                                                                   | <a href="mailto:research@nbgsmc.ac.in">research@nbgsmc.ac.in</a> |

## Workshop 3



## Workshop 4



**Sh. L. N. Hindu College, Rohtak**

Affiliated to M.D. University, Rohtak  
A Post Graduate Co-Educational College, Bhiwani Road, Rohtak  
Accredited by NAAC with 'B' (2.74) Grade

### NATIONAL WEBINAR

ON

## Financial Literacy and Awareness for Professionals *Certificate Of Participation*

This is to certify that Anita Taneja Assistant Professor of  
of Government College for Women, Hisar Commerce has attended  
National Webinar on "Financial Literacy and Awareness for Professionals"  
organised by Department of Commerce on August 19, 2020.

*Dr. Neelam Maggu*  
Coordinator

**Dr. Vijay Kumar**  
Principal

## Workshop 5

### HARYANA INSTITUTE OF PUBLIC ADMINISTRATION



#### SHORT TERM TRAINING COURSE (Sponsored by DoPT, GoI)

*This is certified that Ms. Anita Taneja, Assistant Professor of Commerce, Government College for Women, Hisar has participated in Three Days Virtual Workshop on "Retirement Benefits and National Pension System (NPS)" conducted by Haryana Institute of Public Administration, Gurugram from 07.09.2020 to 09.09.2020.*

**Gurugram**

*Dated the 9<sup>th</sup> Sept, 2020*

**Lalit Kumar**  
Course Director