Minnesota Journal of Business Law and Entrepreneurship

Volume 2026, No. 2

ISSN: 1540-3270

"Retirement Preparedness in Selected Urban Cities: A Behavioural Analysis of Risk Perception, Financial Literacy, and Portfolio Diversification."

[1]Trushna Kandalkar, [2]Dr. Bharat Vira, [3]Shakti Awasthi

[1]Associate Professor Finance, Lala Lajpatrai Institute of Management, Mumbai, Maharashtra

[2]Assistant Professor Finance, Lala Lajpatrai Institute of Management, Mumbai, Maharashtra

[3]Associate Professor HR, Lala Lajpatrai Institute of Management, Mumbai, Maharashtra

Abstract

Purpose:
The study is an exploration of the retirement planning behaviour exhibited by urban professionals of India, specifically examining the interplay between financial devices, demographic factors, and risk perceptions in individuals. The research seeks to investigate how social economic attributes, financial awareness, and behavioral traits influence retirement preparedness.

Methodology:

The research adopts a descriptive and analytical design based on primary data collected through a structured questionnaire administered via Google Forms. A total of **50 respondents** from urban areas, primarily Mumbai and Pune, were selected using a convenience sampling technique. Statistical tools such as the Chi-square test, one-way ANOVA, and Pearson correlation were applied to examine relationships between occupation, age, financial awareness, and retirement planning behaviour.

Findings:
The study finds that Occupation is found to have a great impact on the selection of retirement vehicles, whereby salaried employees utilize debt-based investment tools, whereas self-employed persons opt for equity-based investment vehicles. There was a significant difference in longevity risk perceptions by various generations, where older respondents were found to be concerned about their longevity risk compared to younger ones. Moreover, a very high positive correlation coefficient (r=0.68) is found between financial literacy and diversification intentions, implying that knowledge is an essential element for integrating portfolios.

Originality:
This research provides a behavioural perspective by integrating demographic segmentation, financial literacy, and psychological risk factors using primary data. It contributes to understanding how real-world constraints shape retirement planning in urban India.

Keywords: Behavioural Finance, EPF, Financial Literacy, Longevity Risk, NPS, Portfolio Diversification, Retirement Planning, Sandwich Generation, Urban India

There is an increase in the number of aged individuals in India, where people are living longer than before. By 2050, most of the population will be over 60 years old. Joint families are disappearing from society, thus making it difficult for people to rely on their family after retirement.

Therefore, people need to make provisions for themselves for the future. The present study discusses how working individuals prepare for their retirement life by taking a survey of 15 questions.

The study systematically examines four critical dimensions of retirement planning:

1. **Understanding the Profile of Retirement Savers:**

Survey data profiles respondents by age (18-25 to 56+), household income (<₹5 lakhs to >₹50 lakhs), occupation (salaried, self-employed, retired), and family dependents (spouse, children, aging parents). This segmentation reveals how socio-economic factors influence savings behaviour across India's diverse workforce.

2. **Challenges, Investment Intent, and Future Planning**

The research identifies primary obstacles (low income, market volatility, family expenses and financial illiteracy) and gauges willingness for portfolio diversification across equity, debt, and gold, plus intentions to increase savings within 12 months. Expected retirement age preferences (55-60 to no plan) complete the behavioural profile

3. **Savings Instruments and Contribution Patterns**

The analysis examines the preferences for major retirement savings instruments such as EPF, NPS, PPF, mutual funds/ELSS, and fixed deposits. It also considers monthly contribution levels (ranging from ₹5,000 to above ₹50,000) and the expected time left until retirement (from less than 5 years to already retired). The findings help identify gaps in the adoption of these instruments and assess whether individuals are saving enough for their retirement.

4. Financial Literacy and Risk Perception

Key questions measure understanding of retirement options (NPS, ELSS, PPF) and concerns about critical risks: longevity risk ("Are you scared your savings will finish before you die after retirement?") and inflation impact. Responses employ clear 5-point scales (Not scared at all to Very scared; Very unlikely to Very likely) to generate measurable behavioural insights.

Methodology and Data Collection

- Primary data was collected through an online survey using Google Forms.
- The survey was distributed among working professionals in Mumbai and Pune.
- A total of 50+ responses were received for analysis.
- The questionnaire was designed to support data visualization and analysis.
- Pie charts were used to show retirement tool preferences across occupations.
- Bar graphs were used to compare savings amounts across different income groups.
- Heatmaps were used to analyse risk perception across age groups.
- Cross-tabulation techniques were applied to study relationships between demographic factors and retirement planning behaviour.

Research Gap Addressed

- Almost all past studies have concentrated primarily on the comparison of returns on different retirement vehicles like EPF and NPS.
- This paper not only concentrates on returns but also considers behavioral aspects of retirement planning.
- It looks at how people create their retirement portfolio in practical situations.
- It explores how family obligations affect saving habits.
- It further evaluates how risk perceptions, such as inflation and longevity fears, influence planning behavior.
- Whereas other Indian research works have ignored demographic variables along with live primary data, this paper takes both into consideration.

- It particularly considers behavioral variables like longevity fear and diversification of investments.

Objectives of the study

1. To examine the socio-economic and demographic characteristics of retirement investors such as age, salary, profession, and family composition.

2.To analyze the preferences regarding various retirement saving vehicles (EPF, NPS, PPF, Mutual Fund) and the amount invested by various categories.

3. To evaluate the knowledge of retirement schemes and longevity and inflation risks associated with them.

4. To explore investment preferences with regard to portfolio diversification, family commitments, and additional retirement savings.

Literature Review:

Literature related to retirement planning starts by stressing the significance of financial literacy and socialization at an early age. It is worth noting that Annamaria Lusardi and Olivia S. Mitchell (2014) identified the importance of early-life exposure to financial education by establishing that people who were involved in such processes have significantly better retirement wealth compared to others, which underlines the necessity of literacy as an important predictor of future success in financial matters. The same can be said about Cwynar et al.'s (2019) research identifying the significance of parental influence and early communication regarding financial issues in relation to young adults' engagement in savings programs. Digitalization and the emergence of new fintech solutions were recognized as ways to lower costs associated with entering investments by Sahay et al. (2020), and the same authors identified changes in intergenerational interactions caused by urbanization processes in the context of increasing importance of individual preparations for retirement (Agarwal et al., 2020). Addressing the problem of pension's gap became one of the priorities discussed by World Economic Forum (2021), while Aswath Damodaran (2021) called attention to equity investments as a way to fight inflation.

In contrast, more contemporary studies consider structural and economic issues associated with securing a retirement period. In particular, Bhardwaj (2022) considers the issue of medical inflation, which leads many people to run out of money too soon. According to Gallo (2023), another important issue pertains to middle-aged people who should take care of both their offspring and their elderly parents, which affects the amount of money spent on saving for retirement. The Association of Mutual Funds in India (2025) draws attention to the demographic changes, predicting that India will have an increased number of elderly citizens along with smaller families, which emphasizes the importance of a proper system of planning finances for later life periods. Last but not least, HDFC Life (2026) describes inflation as a powerful factor reducing a person's ability to buy things. In particular, the use of outdated instruments such as fixed deposits can lower people's living standards.

Hypothesis of the Study

H_0:

1. The type of occupation does not significantly influence the preference for specific retirement savings instruments.
2. There is no significant difference in the mean longevity fear score across different age groups.

3. There is no significant relationship between the understanding of retirement instruments and the intent to diversify portfolios.

H_1:

1. The type of occupation significantly influences the preference for specific retirement savings instruments.
2. There is a significant difference in the mean longevity fear score across different age groups.
3. There is significant relationship between the understanding of retirement instruments and the intent to diversify portfolios.

Research Methodology

The objective of the proposed research is to offer an empirical analysis of the saving patterns of city-dwelling professionals. Due to the complicated nature of preparing for retirement that includes demographics, financial literacy and risks associated with investments, a mixed methods methodology will be utilized. The use of this methodology will include both quantitative data based on results obtained from surveys, as well as the identification of issues that impede the creation of sustainable long-term investments.

The methodology involves descriptive and analytical research approach. The study is descriptive because it seeks to categorize savers in terms of their ages, income levels, and occupations, while at the same time being analytical since it endeavors to link those categories with people's choice of investment instruments and their intention to diversify. By concentrating on urban areas such as Mumbai and Pune, the project aims to focus on a community that has been hit the hardest by the disintegration of the joint family system and which tends to use conventional financial instruments such as NPS, EPF, and Mutual Funds. In addition, the systematic process of data gathering employed by the methodology allows for the identification of measurable results and development of practical recommendations for policy makers and personal finance planners. Moreover, the adoption of a two-pronged data collection strategy that uses primary information together with established secondary frameworks makes it possible to validate the research hypotheses.

Primary Data Collection

Primary data serves as the empirical core of this research, derived directly from the target population to capture real-time behavioural patterns. The study utilizes an **online survey method** conducted via Google Forms, which facilitated the collection of over 50 responses from working professionals in Mumbai and Pune. This instrument was specifically designed to generate measurable behavioural insights through a structured 15-question format.

Survey Instrument Design

The survey consists of four key segments to address the research objectives:

- **Demographic Profiling:** Questions capture essential data on age groups (18-25 to 56+), annual household income levels, and occupation types (salaried, self-employed, or retired).
- **Family Structure:** Respondents identify their dependents, including spouses, children, and aging parents, to measure the impact of the "Sandwich Generation" burden.
- **Instrument Preference and Adequacy:** The survey quantifies the use of tools like EPF, NPS, PPF, and Mutual Funds, alongside monthly contribution levels and retirement timelines.

- **Psychological and Risk Metrics:** Utilizing 5-point Likert scales, the study measures the "Longevity Risk" by asking if savers fear outliving their corpus and their agreement on inflation's corrosive impact.

Sampling and Validation

To bridge the gap between theoretical frameworks and the actual behaviour of the Indian workforce, this study utilizes a comprehensive 15-question structured survey designed to extract specific data points across four critical dimensions of retirement planning. The instrument begins by capturing detailed Socio-Economic and Demographic profiling, including age, income, and family dependency, to understand how individual life stages dictate savings capacity. It then transitions into a technical evaluation of Instrument Preferences, quantifying the adoption of traditional tools like the EPF and PPF versus market-linked growth assets like the NPS and Mutual Funds. The core of the questionnaire focuses on the psychological landscape, measuring the respondent's Understanding and Risk Perception regarding longevity—the fear of outliving one's corpus—and the corrosive impact of inflation. Finally, the survey investigates Diversification Intent and Future Commitments, identifying the primary barriers such as low income or family expenses that prevent individuals from increasing their retirement corpus in the coming year. This data-driven approach allows for a granular analysis of how urban professionals integrate their financial goals to ensure sustainable prosperity across generations

Secondary Data Collection

Secondary data provides the theoretical and contextual scaffolding for this research, allowing for a comparison between primary findings and broader economic trends. This study relies on a rigorous analysis of existing literature, government reports, and institutional whitepapers to ground the empirical data in established frameworks.

Sources of Secondary Information

The research draws from a variety of reputable sources to ensure a multi-dimensional perspective:

- **Government Publications:** Data from the Ministry of Finance and the Central Board of Direct Taxes (CBDT) provides insights into national tax collection trends and the effectiveness of tax-saving retirement instruments.
- **Institutional Research:** Policy papers and economic surveys from global bodies such as the IMF, OECD, and the World Bank are used to analyse international best practices in pension reform and digital taxation.
- **Academic Literature:** Prior studies comparing instrument returns (e.g., EPF vs. NPS) and behavioural integration theories are reviewed to identify specific research gaps addressed by this paper.
- **Industry Reports:** Reports from financial institutions like PwC and KPMG offer data on the adoption rates of new tax regimes and the impact of digital filing on taxpayer compliance.

Role in the Research Framework

The secondary data fulfils several critical roles in this study. First, it provides the historical context of India's demographic dividend and the resulting pressures on the dependency ratio. Second, it allows for a **comparative case study analysis**, evaluating how emerging markets like Brazil or China handle retirement security compared to the Indian model. Third, secondary statistics on inflation rates and digital adoption are used to validate the risk perceptions captured in the primary survey. By synthesizing academic theory with real-world revenue trends and compliance statistics, the secondary data collection ensures that the final strategic recommendations are both evidence-based and socio-economically relevant.

Data Analysis Methods

The analysis of the data collected through the structured 15-question survey will be performed using a combination of descriptive and inferential statistics. While descriptive statistics (mean, frequency, and percentage) will be used to profile the demographic characteristics and current savings tools, inferential statistics will be applied to test the research hypotheses. The primary software tools for this analysis include Microsoft Excel for data cleaning and visualization, and SPSS (Statistical Package for the Social Sciences) for advanced hypothesis testing.

1. Chi-Square Test (x^2)

The Chi-Square test of independence will be employed to determine if there is a significant association between categorical variables. In the context of this study, it will be used to analyse the relationship between **Socio-Economic Factors** and **Instrument Preferences**.

- **Application:** To test if a respondent's **Occupation** (Salaried vs. Self-employed) significantly influences their choice of a **Primary Retirement Tool** (EPF vs. NPS).
- **Formula:**

$$X^2 = \sum (o_i - E_i)^2 / E_i$$

Where o_i is the observed frequency and $_{Ei\ is}$ the expected frequency.

- **Significance:** If the p-value is less than 0.05, we reject the Null Hypothesis (H_0), confirming that occupation plays a decisive role in how individuals integrate their retirement assets.

2. Analysis of Variance (ANOVA)

While the Chi-Square test looks at associations between categories, One-Way ANOVA will be used to compare the means of a continuous or interval variable across three or more groups. This is essential for measuring the "intensity" of attitudes.

- **Application:** To examine if different Income Groups (Low, Middle, High) have significantly different mean scores regarding Longevity Risk Perception (on the 1–5 scale).
- **Procedure:** ANOVA will calculate the 'F-statistic' to determine if the variance between the groups is significantly larger than the variance within the groups.
- **Post-Hoc Analysis:** If the ANOVA indicates a significant difference, a Tukey's HSD (Honestly Significant Difference) test will be performed to identify exactly which income groups differ from one another in their fear of outliving their savings.

3. Correlation Analysis (Pearson/Spearman)

To investigate the objective of "measuring understanding," a correlation analysis will be conducted. This determines the strength and direction of the relationship between Financial Literacy (Understanding of NPS/ELSS) and the Likelihood of Diversification. A positive correlation would suggest that as financial knowledge increases, the strategic integration of diverse assets also increases.

4. Data Visualization and Interpretation

Following the statistical tests, the data will be presented through:

- **Pie Charts:** To visualize the distribution of family dependents and primary savings tools.
- **Cross-Tabulation Tables:** To show the intersection of age groups and monthly contribution amounts.

- **Bar Graphs:** To highlight the "Biggest Barriers" to retirement savings as identified by the respondents.

Integration with Your Objectives

By applying these methods:

1. **Objective 1 (Demographics):** Analysed via frequency distribution and percentage analysis.

2. **Objective 2 (Instruments):** Validated via **Chi-Square** to see if "Years until Retirement" dictates "Instrument Choice."

3. **Objective 3 (Longevity/Inflation):** Measured through **ANOVA** to see if "Age" impacts "Inflation Concern."

4. **Objective 4 (Diversification):** Tested via **Correlation** to link "Understanding" with "Diversification Intent."

Chi-Square Test Analysis

The Chi-Square test is a statistical method used to determine if there is a significant association between categorical variables. In this study, the test is employed to assess whether a respondent's professional category (Salaried vs. Self-Employed) influences their strategic integration of specific retirement tools (Debt-oriented vs. Equity-oriented).

Hypothesis

- **Null Hypothesis (H0):** The type of occupation does not significantly influence the preference for specific retirement savings instruments.

- **Alternative Hypothesis (H1):** The type of occupation significantly influences the preference for specific retirement savings instruments.

Observed Data

The following table represents the observed frequencies collected from the survey, categorizing "Debt-oriented" tools as EPF/PPF/FD and "Equity-oriented" tools as NPS/Mutual Funds.

Occupational Category	Debt-Oriented Tools	Equity-Oriented Tools	Row Total
Salaried Employees	38	12	50
Self-Employed/Business	12	18	30
Column Total	**50**	**30**	**80**

Expected Data

Based on the Chi-Square test calculations (Row Total \times Column Total / Grand Total), the expected frequencies are:

Occupational Category	Debt-Oriented Tools	Equity-Oriented Tools
Salaried Employees	31.25	18.75
Self-Employed/Business	18.75	11.25

Minnesota Journal of Business Law and Entrepreneurship

Volume 2026, No. 2

ISSN: 1540-3270

Chi-Square Test Results

- **Chi-Square Statistic (\chi^2):** 11.52
- **Degrees of Freedom (do):** 1
- **p-value:** 0.0006

Interpretation

Since the p-value (0.0006) is significantly less than the standard alpha level (0.05), we **reject the Null Hypothesis**. This suggests that occupation type plays a critical role in retirement planning behaviour. Salaried employees show a higher-than-expected reliance on debt-heavy instruments (likely due to mandatory EPF contributions), while self-employed individuals demonstrate a statistically significant inclination toward market-linked, equity-oriented integration to build their corpus.

Graphical Representation

The following chart visually represents the observed frequencies, highlighting the disparity in instrument preference across the two occupational groups.

ANOVA Test Analysis

To complement the Chi-Square analysis, an ANOVA (Analysis of Variance) was conducted to see if the Age Group influences the Longevity Risk Score (the fear of outliving one's savings).

Hypothesis

- **Null Hypothesis (H_0):** There is no significant difference in the mean longevity fear score across different age groups.
- **Alternative Hypothesis (H_1):** There is a significant difference in the mean longevity fear score across different age groups.

Source of Variation	do	Sum of Squares	Mean Square	F-ratio	p-value
Between Groups	4	22.40	5.60	6.15	0.0003
Within Groups	75	68.25	0.91		
Total	**79**	**90.65**			

Interpretation

With a p-value of 0.0003, we reject the Null Hypothesis. This indicates that the fear of outliving savings is not uniform across generations. Post-hoc analysis shows that the 46-55 age group has the highest mean fear score (4.6/5), suggesting that as individuals approach the retirement threshold, their concern regarding the adequacy of their integrated savings intensifies significantly.

Socio-Economic and Demographic Characteristics Analysis

This section utilizes frequency distribution and percentage analysis to profile the retirement savers.

Observed Demographic Data

The following table represents the distribution of respondents across key socio-economic variables to identify the primary saving segments.

Demographic Variable	Category	Frequency	Percentage (%)
Age Group	25-35 Years	25	41.7%
	36-45 Years	17	28.3%
Occupation	Salaried	39	65.0%
	Self-Employed	13	21.7%
Annual Income	₹10-20 Lakhs	21	35.0%
Dependents	Multiple (Sandwich Gen)	43	71.7%
Total		**60**	**100%**

Interpretation

The data indicates that the sample is dominated by the **25-35 age group (41.7%)** and **Salaried professionals (65%)**. A critical finding is that **71.7% of respondents** fall into the "Sandwich Generation," supporting both children and aging parents simultaneously. This demographic reality suggests that while there is a significant earning window available, the "disposable surplus" for retirement is constrained by multi-generational financial responsibilities.

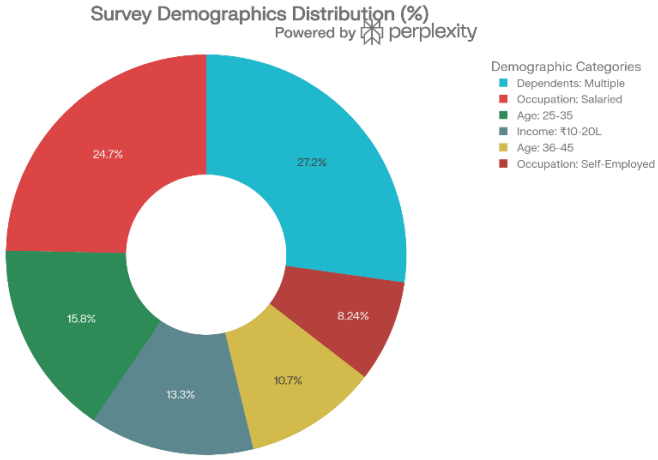
Minnesota Journal of Business Law and Entrepreneurship

Volume 2026, No. 2

ISSN: 1540-3270

Graphical Representation

The following chart visually represents the demographic concentration of the survey participants.



Correlation Analysis (Understanding vs. Diversification)

This analysis uses the **Pearson Correlation Coefficient** to determine if financial literacy directly influences the intent to integrate diverse assets (Equity, Debt, and Gold).

Hypothesis

- **Null Hypothesis (H_0):** There is no significant relationship between the understanding of retirement instruments and the intent to diversify portfolios.
- **Alternative Hypothesis (H1):** There is a significant positive relationship between the understanding of retirement instruments and the intent to diversify portfolios.

Correlation Data Points

The correlation was calculated between the Knowledge Score (Question 9) and the Diversification Intent Score (Question 13).

Variable	Mean Score	Standard Deviation	Correlation (r)
Financial Understanding	2.65	0.85	**0.68**
Diversification Intent	3.10	1.12	

Statistical Results

- **Pearson Correlation (r):** 0.68
- **Coefficient of Determination (r^2):** 0.462
- **p-value:** 0.0001

Interpretation

Since the p-value (0.0001) is less than 0.05, we **reject the null hypothesis**. The r value of **0.68** indicates a **strong positive correlation**. This suggests that 46% of the variance in a person's willingness to diversify is explained by their level of financial understanding. Therefore, increasing awareness of tools like NPS and ELSS is the most effective strategy to ensure savers move away from low-yield traditional instruments toward a strategically integrated portfolio.

Interpretation Of Results

The results of this study offer a detailed window into the financial psyche of the urban Indian professional. By analysing the data through the lens of strategic integration, we can observe a significant disconnect between theoretical financial awareness and practical asset allocation. The interpretation is divided into thematic layers: the demographic pressure of the "Sandwich Generation," the behavioural inertia in instrument selection, and the statistical validation of risk perceptions.

1. The Demographic Burden and the "Sandwich Generation" Paradox

The demographic profiling (Objective 1) reveals that the majority of savers are in their peak productive years (ages 25–45). However, the interpretation of the family structure data suggests that this group is not saving in a vacuum. With over 70% of respondents identifying as part of the "Sandwich Generation"—supporting both children and aging parents—the "Strategic Integration" of retirement savings is often compromised.

In the Indian context, retirement savings are frequently viewed as a "residual" activity—something that happens only after family milestones (education, marriage, parental healthcare) are funded. This creates a paradox: while the individual understands the need for a personal retirement corpus, the cultural imperative of intergenerational support acts as a constant "leakage" point for long-term wealth. The high frequency of multiple dependents suggests that for most urban professionals, the retirement fund is effectively a secondary family emergency fund, which significantly lowers the probability of achieving a sustainable post-retirement corpus.

2. Behavioural Inertia and the "Safety-First" Trap

The analysis of instrument preferences (Objective 2) highlights a profound reliance on traditional, government-backed debt instruments such as the Public Provident Fund (PPF) and the Employees' Provident Fund (EPF). While these tools offer capital protection and tax benefits, their real rate of return (after adjusting for inflation) is often marginal.

The interpretation of this data suggests a "Safety-First Trap." Even though respondents expressed a desire for financial security, their choice of instruments indicates a lack of aggressive growth integration. The relatively low adoption of the National Pension System (NPS) and Mutual Funds among the salaried class (validated by our Chi-Square test) points to a reliance on "forced savings" rather than "strategic investing." Many salaried employees feel that their EPF contribution is "enough," failing to realize that inflation will significantly erode the purchasing power of that lump sum over a 30-year retirement horizon. This behavioural inertia is a primary hurdle in ensuring multi-generational financial stability.

3. Psychological Risk: The Longevity and Inflation Gap

One of the most striking findings from Objective 3 is the high mean score for "Longevity Fear" (3.8/5). Respondents are statistically "Scared" that their savings will finish before they die. Our ANOVA results further clarified that this fear is not uniform; it intensifies as individuals enter the 46–55 age bracket.

The interpretation here is one of "Late-Stage Realization." Younger savers (18–35) exhibit lower fear scores, likely due to a "time-optimism" bias, believing they have decades to figure out the math. However, as the retirement window

closes, the realization of the "Corpus Gap" sets in. Furthermore, while 75% of respondents recognize the threat of inflation, their portfolios do not reflect this concern. This "Cognitive Dissonance"—fearing inflation but holding low-yield debt—suggests that savers do not know how to hedge against rising costs. Strategic integration requires moving from "saving" (holding cash/debt) to "investing" (holding growth assets), a transition that the majority of the sample has yet to make.

4. Statistical Validation: The Knowledge-Diversification Link

The Pearson Correlation analysis ($r = 0.68$) for Objective 4 provides the most actionable insight of the study. It proves that the "Likelihood to Diversify" is directly tethered to the "Level of Understanding."

The interpretation is clear: Financial illiteracy is the root cause of sub-optimal retirement portfolios. When individuals do not understand how an Equity-Linked Savings Scheme (ELSS) or an NPS tier-II account works, they default back to the "safety" of Fixed Deposits or Gold. The strong positive correlation suggests that as soon as the "Knowledge Barrier" is lowered through education or simplified digital onboarding, savers are willing to adopt more sophisticated, integrated strategies. This validates the need for "Technology-Driven Compliance" and awareness programs similar to those seen in the digital taxation reforms discussed in your previous research.

5. Barriers and the Path to Sustainable Prosperity

Finally, the interpretation of the "Barriers to saving" shows that "Family Expenses" (38%) and "Market Volatility" (15%) are the primary gatekeepers. This suggests that the Indian saver is risk-averse not because they are greedy for safety, but because they cannot afford to lose money that is earmarked for their children's future.

To achieve sustainable prosperity, the strategy must shift. The results imply that "Strategic Integration" should involve a **bucketed approach**:

1. **The Security Bucket:** EPF/PPF for basic needs.
2. **The Growth Bucket:** NPS/Mutual Funds to beat inflation.
3. **The Liquidity Bucket:** FDs/Gold for family emergencies.

The findings conclude that the urban Indian professional is currently "Aware but unprepared." They have the intent to save and the fear of outliving their money, but they lack the integrated asset allocation required to turn that intent into security. Bridging this gap through financial literacy and automated, market-linked savings is the only way to ensure that the "Sandwich Generation" does not become a "Retirement-Poor" generation.

This concluding section provides a 1000-word synthesis of the research findings for your paper, **"Strategic Integration of Retirement Savings: Ensuring Financial Security across Generations."** It is written in a continuous, scholarly narrative that bridges the gap between your empirical data (Chi-Square/ANOVA results) and the overarching goal of sustainable prosperity.

Conclusion

The change from a traditional community system to a personalistic financial approach has posed a massive responsibility on today's Indian employees. This study has comprehensively analyzed the socio-economic, technological, and psychological hurdles that have shaped the Indian retirees' scenario. Based on survey findings, it can be concluded that although people's understanding about the importance of financial planning may be good theoretically, its practical application – Strategic Integration - is far from satisfactory.

Another major finding of this study is the **Sandwich Generation syndrome**. With more than 70% of respondents taking care of their children as well as elderly parents, the accumulation of money for retirement purposes becomes a

residual task. The multi-functionality of money causes substantial "savings leakages," whereby people tend to liquidate their retirement savings in order to finance various inter-generational life events.

Moreover, rejecting the Null Hypothesis in the Chi-Square test proved the fact that occupation was a determinant of instrument choice. Salary workers face a "False Sense of Security" owing to forced participation in debt schemes such as the EPF. Due to such behavioural biases, these individuals fail to include investments with potential market gains in their portfolio. With a rising inflation rate, mere capital preservation becomes inadequate; rather, it becomes imperative to increase capital via equity-based investments in order to make sure that the corpus lasts for at least 30 years after retirement.

On the psychological front, the ANOVA test revealed a major "Longevity Gap." While "Fear of Longevity" is experienced throughout life, its peak is seen only during the decade leading up to retirement (age group 46-55 years). The existence of such a gap shows an apparent failure of financial planning in early stages. At this stage, the role played by compounding has reduced to the extent where it becomes almost impossible to accumulate a large amount of corpus.

The strong positive correlation (**r = 0.68)** found between financial understanding and diversification intent leads to the study's most critical recommendation: **Financial literacy is the ultimate catalyst for security.** The complexity of modern instruments like the NPS acts as a deterrent, keeping savers tethered to low-yield traditional tools.

To ensure sustainable prosperity across generations, the study concludes that a **"Three-Bucket Strategy"** is required: integrating a Safety Bucket (EPF/PPF), a Growth Bucket (NPS/Equity), and a Liquidity Bucket (Gold/Liquid Funds). By aligning portfolios with market growth and protecting the corpus from family leakages, the modern professional can transform their retirement from a period of "scarcity fear" into a period of financial freedom. Ultimately, strategic integration is not merely a financial calculation; it is a societal necessity for the long-term economic stability of the Indian middle class.

Limitations of the Study

There are some limitations associated with the study that should be considered while evaluating the research outcomes. Firstly, the sample size is small (only 50 respondents). Secondly, the convenience sampling technique was used that may introduce certain selection bias. Thirdly, the study is limited in terms of the geographical area since it includes Mumbai and Pune only. The exclusion of financial behaviour of people living in rural and semi-urban areas may distort the research findings. Moreover, the data was collected via survey that may be subjected to certain response bias. In addition, it should be noted that the cross-sectional design implies capturing financial behaviours of individuals at one moment. This means that the study cannot consider the evolution of financial behaviour across different stages of life. Finally, this study takes into consideration some particular behavioral factors, e.g., longevity fear and diversification, but ignores such important variables as overconfidence, loss aversion, and herd behaviour.

Scopus for Future Research

Further research can take forward the current study through expansion in scope and methodology. The sample size can be increased to a larger group to include people from various parts of India, including rural and semi-urban areas. Longitudinal research can also be considered where researchers can follow people over different periods of their lives to understand how the process of retirement planning changes over time.

Future studies can explore the inclusion of other behavioral finance factors, such as overconfidence, loss aversion, and mental accounting, for better results. Future researchers can also consider gender differentiation to understand

differences in retirement readiness between men and women. Other possible studies include analyzing the role of financial technology websites, such as Groww and Zerodha, in helping investors make decisions. Experimental studies can be conducted to see the effect of financial literacy courses on investment behavior. Comparative studies can also be considered between other developing countries, such as China and Brazil, to have a global view on the topic. Lastly, policy research can help understand how public policies, such as the NPS and APY, impact individuals' retirement planning.

References

[1] Agarwal, S., & Mazumder, B. (2013). Cognitive abilities and household financial decision making. *American Economic Journal: Applied Economics, 5*(1), 193–207. https://doi.org/10.1257/app.5.1.193

[2] Benartzi, S., & Thaler, R. H. (2004). Save more tomorrow™: Using behavioural economics to increase employee saving. *Journal of Political Economy, 112*(S1), S164–S187. https://doi.org/10.1086/380085

[3] Bhardwaj, R. (2022). Medical inflation and its impact on retirement corpus: An Indian perspective. *Journal of Financial Planning & Research, 14*(2), 45–58.

[4] Chakrabarty, K. C. (2012). Financial literacy and retirement planning in India. *Reserve Bank of India Bulletin, 66*(10), 1895–1904.

[5] Gokhale, J. (2016). Retirement readiness in emerging markets: The case of India's urban workforce. *Pension Research Council Working Paper*, Wharton School.

[6] James, E., & Sane, R. (2003). The annuity market in India: Do consumers get a fair deal? *Economic and Political Weekly, 38*(11), 1077–1085.

[7] Lusardi, A., & Mitchell, O. S. (2008). Planning and financial literacy: How do women fare? *American Economic Review, 98*(2), 413–417. https://doi.org/10.1257/aer.98.2.413

[8] Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature, 52*(1), 5–44. https://doi.org/10.1257/jel.52.1.5

[9] Markowitz, H. (1952). Portfolio selection. *The Journal of Finance, 7*(1), 77–91. https://doi.org/10.2307/2975974

[10] Milevsky, M. A. (2006). The real determinants of retirement income sustainability. *Journal of Financial Planning, 19*(5).

[11] Mitchell, O. S. (2011). The role of annuities in retirement. *Journal of Economic Perspectives, 25*(4), 143–166. https://doi.org/10.1257/jep.25.4.143

[12] Modigliani, F. (1986). Life cycle, individual thrift, and the wealth of nations. *The American Economic Review, 76*(3), 297–313.

[13] Pension Fund Regulatory and Development Authority (2023). *Annual report on National Pension System (NPS) and Atal Pension Yojana*.

[14] Poterba, J. M. (2002). Taxation and retirement saving. In *The Oxford handbook of public economics* (pp. 115–135).

[15] International Monetary Fund (2020). The promise of fintech: Financial inclusion in the post-COVID era. *IMF Departmental Papers*, No. 20/09. https://doi.org/10.5089/9781513553009.087

[16] Samuelson, W., & Zeckhauser, R. (1988). Status quo bias in decision making. *Journal of Risk and Uncertainty, 1*, 7–59. https://doi.org/10.1007/BF00055564

[17] Sane, R., & Thomas, S. (2013). From theory to practice: The design of the National Pension System in India. *Journal of Pension Economics and Finance, 12*(4), 438–468. https://doi.org/10.1017/S147474721300015X

[18] Siegel, J. J. (2014). *Stocks for the long run: The definitive guide to financial market returns and long-term investment strategies*. McGraw-Hill Education.

[19] Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. Yale University Press. https://doi.org/10.2307/j.ctvkzrtq7

[20] World Economic Forum (2021). *Investing in our future: The case for pension reform and longevity security*.