

**Retirement Planning among Indian Expatriates:  
The Role of Financial Literacy, Social Connections, Lifestyle,  
Retirement Timings and Location Preferences**

## **Abstract**

The study examines the factors influencing retirement planning among Indian expatriates in the Middle East, Europe, USA/Canada, and Australia, focusing on financial literacy, lifestyle, social connections, and regional factors. Through a quantitative analysis, the research finds that financial literacy significantly impacts retirement planning confidence, while lifestyle and social connections have no statistically significant impact on planned retirement age. The study also highlights the critical role of regional context in shaping retirement location and timing preferences. These findings contribute new insights into the retirement planning complexities faced by Indian expatriates, emphasising the importance of financial literacy and regional influences. While lifestyle and social connections may require further exploration in future research, this study lays the foundation for better supporting expatriates in making informed retirement decisions.

**Keywords:** Retirement Planning Decisions, Indian Expatriates, Financial Literacy, Lifestyle considerations, Social connections, Timing of retirement, Retirement readiness, Location Choices, Health, Retirement age

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# Chapter 1

## Introduction

Retirement is a significant life transition that marks the end of one's primary full-time career. After years of dedicated service, one embraces a new lifestyle focused on leisure, engaging in volunteer work, personal fulfilment, relaxation, spending quality time with loved ones or pursuing creative efforts that features freedom from busy work schedules (Atchley, 1982). For many, retirement offers an opportunity to pursue long-held passions, hobbies and interests that may have been neglected during their working years. The phenomenon of globalisation and migration has led to a significant increase in the population of expatriates worldwide, including a considerable number of Indian professionals (Parida, et.al, 2018). A report (Singh, 2022) suggests that the Middle East and western countries are top destinations for Indians as India is a significant source for low, semi-skilled workers as well as professionals in healthcare, science, technology engineering and mathematics fields. As Indian expatriates settle in diverse regions, they encounter unique challenges and considerations in their retirement planning. Understanding these complexities is crucial for developing tailored financial strategies and support systems that cater to their needs.

### 1.1 Importance of Research

Retirement planning is a multifaceted process influenced by various factors, including financial literacy ( Boisclair,et.al, 2017 ; Okamoto, et.al, 2021; Qian, et.al, 2024 ; Hira, et.al, 2009 ; Kalmi, et.al, 2018; Farrar, et.al, 2019; Gutura, et.al, 2024), lifestyle preferences, social connections , Hutchinson,et.al, 2024; Forster,et.al, 2012; Lancee,et.al, 2012; Sabbath, et.al,2015; Tolondon,et.al, 2024) and health considerations (Ilmakunnas et al.,2018). The level of financial literacy, for instance, plays a pivotal role in determining how well individuals prepare for retirement, particularly in foreign contexts where financial systems and retirement benefits may differ significantly from those in India. Moreover, lifestyle choices, social networks, and health—both personal and familial—can significantly impact the timing and nature of retirement decisions. Furthermore, preferences for retirement locations, whether in a foreign country or back in India, and decisions regarding the timing of retirement, reflect the

different goals and ambitions of Indian expatriates De Coulon, et.al, 2010; Gobillon, et.al,2011; Duncombe, et.al, 2003; Axelrad, et.al, 2018; Gillespie, et.al, 2024; Barbosa, et.al, 2021; Tang, et.al, 2021). These decisions are often shaped by a combination of cultural ties, economic considerations, and personal aspirations, varying widely across different regions, age groups, genders, education, even level of professional experiences.

The insights provided by this dissertation aim to shed light on the factors that influence retirement planning decisions. This research seeks to contribute to a more comprehensive understanding of how Indian expatriates navigate this significant life transition. Ultimately, the study underscores the need for targeted policies, health services, community programs, retirement mobility and other resources that can better support the effective retirement planning and thereby addressing the unique needs of Indian expatriates, ensuring a fulfilling and secure post-career phase.

## **1.2 Research Objectives**

This research tries to focus and understand the complex factors influencing retirement planning decisions among Indian expatriates, particularly those residing in the Middle East, Europe, USA/Canada, and Australia. They often face significant challenges when making important life decisions, particularly concerning retirement. This research aims to assist them in navigating these difficulties and making informed, effective decisions about their retirement.

To address the research objectives, a comprehensive literature review of previous studies was conducted to define specific research questions. The insights gained from this study will contribute to a deeper understanding of the retirement planning behaviours and needs of Indian expatriates, providing valuable guidance for the development of more effective support programs and policies.



## **1.3 Structure of Research**

This dissertation systematically addresses the research questions and objectives through a carefully organized structure across six key chapters. (Fig. 1)

### **Chapter 2: Literature Review**

In this chapter, the study explores the existing literature related to key themes such as financial literacy, lifestyle preferences, social connections, health, retirement location, and views on retirement. The chapter narrows down these broad factors to examine their specific significance in retirement planning, especially within the context of Indian expatriates. This comprehensive review of literature helps in identifying gaps and sets the foundation for the research questions addressed in the subsequent chapters.

### **Chapter 3: Research Methodology**

This chapter justifies the research design and methodology adopted for the study. It details the research approach, data collection methods, sampling techniques, and the tools used for data analysis. The methodology is aligned with the research objectives to ensure that the study effectively addresses the research questions.

### **Chapter 4: Data Analysis and Results**

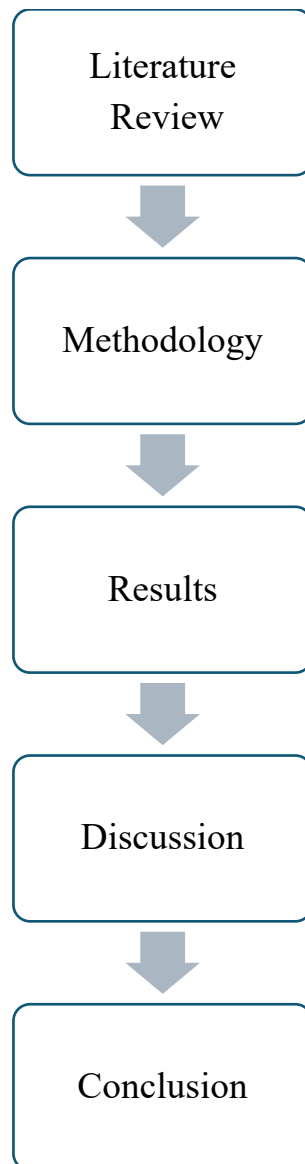
In this chapter, the study presents the findings from the data analysis. It provides a detailed examination of the collected data, using appropriate statistical tools and methods to answer the research questions formulated, from the literature review. The findings are systematically presented to highlight key trends and patterns that will be explored further in the discussion chapter.

### **Chapter 5: Discussions**

This chapter critically compares the findings with the existing literature reviewed in Chapter 2. It interprets the answers to the research questions, discussing their implications in the context of the research questions. The chapter explores how the findings align with or diverge from previous studies and offers explanations for any discrepancies. This critical analysis provides deeper insights into the factors influencing retirement planning among Indian expatriates.

## Chapter 6: Conclusion

The final chapter concludes the dissertation by summarizing the key findings and their implications for retirement planning among Indian expatriates. It discusses the broader implications for policymakers, financial planners, and the expatriates themselves. The chapter also reflects on the limitations faced during the research and suggests areas for future study, thereby contributing to the ongoing research on retirement planning.



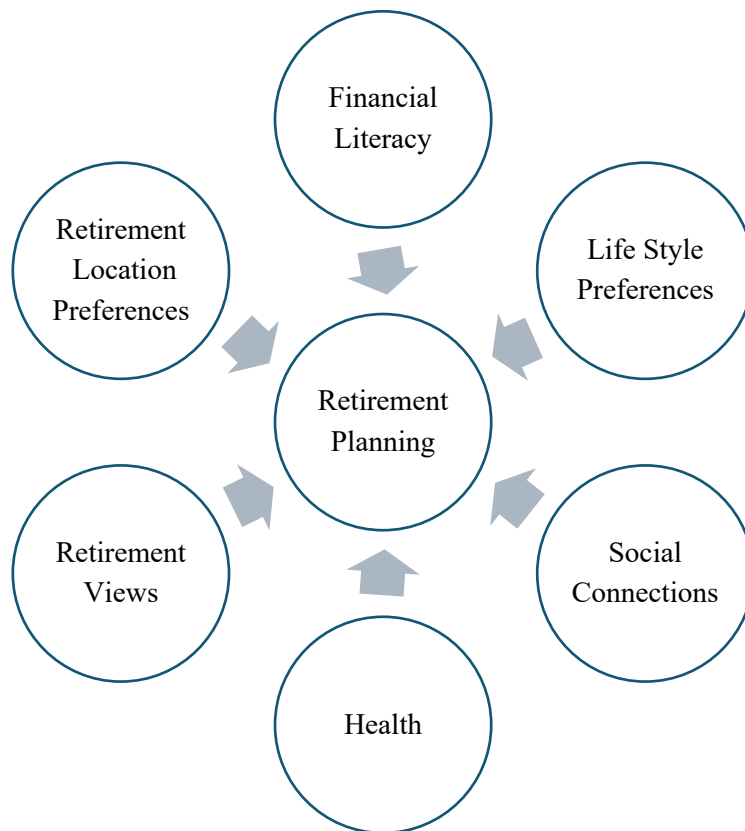
**Figure 1:** Structure of the Dissertation

## Chapter 2

### Literature Review

Retirement Planning has gained increased attention in academic and practical contexts. As globalisation continues to facilitate movement of professionals across regions, understanding the retirement planning of expatriates has become essential. Indian expatriates, one of the largest and most widespread diaspora communities across 146 countries in the world (Edmond, 2020), are a critical group in this context.

The literature review seeks to explore the existing body of knowledge on key areas related to retirement planning among Indian expatriates - financial literacy and its impact on retirement planning confidence, the influence of lifestyle and social connections on planned retirement age, the role of the current region of residence in shaping retirement location preferences, and how regional differences impact retirement timing preferences, see fig 2. This chapter reviews the existing articles and reports leading to the formulation of specific research questions.



**Figure 2:** Structural Framework of Literature Review

There is a notable absence of research addressing retirement planning among Indian expatriates, especially across different regions, mainly Europe, the Middle East, USA/Canada, and Australia. While existing studies have primarily focused on retirement planning strategies among diversified population, there is limited investigation into unexplored demographics, such as Indian expatriates. Addressing this gap, in this cultural context, is crucial as it could provide insights into the unique financial behaviors, lifestyle influences, and socioeconomic factors among Indian expats, which is essential for understanding their retirement planning processes and decisions. Without this perspective, our comprehension of the global retirement planning landscape remains incomplete, limiting our ability to develop effective policies and support systems tailored to the needs of Indian expatriates. By exploring the financial, social, and regional factors that influence retirement planning among Indian expatriates, this review will provide a foundation for understanding the unique challenges faced by this population and suggest potential interventions to enhance their retirement security and well-being.

## **2.1 Financial Literacy**

Financial literacy, defined as the ability to understand and effectively use various financial skills such as personal financial management, knowledge in savings interests, inflation, risk diversification is crucial in retirement planning (Lusardi, et al.,2011). It significantly influences individuals' decisions regarding savings and investments. Research indicates that individuals with higher financial literacy are better equipped to make informed decisions about retirement savings and are more likely to have a retirement plan in place. Education in financial literacy is essential in preparing individuals for retirement (Lusardi, et al., 2007)

Lusardi et al. (2011) and Boisclair et al. (2017) both highlight that financial literacy tends to be lower among older individuals, women, minorities, and those with less education, affecting their ability to engage in effective retirement planning. Similarly, Okamoto et al. (2021) found that in Japan, financial literacy varies significantly across different age groups and genders, with younger and older populations, as well as women, demonstrating lower levels of financial understanding. These disparities suggest that targeted financial education is essential to improve retirement readiness among these vulnerable groups.

Qian et al. (2024) and Kalmi et al. (2018) reveal a positive correlation between financial literacy and retirement planning in China and Finland, respectively. Qian et al. highlighted that risk attitudes, alongside demographic factors like age, education, and income, significantly

influenced both financial literacy levels and retirement planning among rural households. Kalmi et al. similarly emphasized that education and social security provisions played crucial roles in shaping financial literacy and retirement behaviours, noting that financial literacy is unevenly distributed among different demographic groups. Additionally, Gutura et al. (2024) found similar patterns among informal sector traders in South Africa, where education, income, and the specific sector of work were identified as significant influences on financial literacy and, consequently, on retirement planning behaviours.

Contrary to other studies, Farrar et al. (2019) in the United Kingdom found no significant relationship between financial literacy and retirement planning. However, they confirmed lower levels of retirement planning among women, suggesting that attitudes towards retirement and future expectations play a more significant role in planning behaviours. Suri et al. (2017) also observed low financial literacy among expatriates in the UAE, which weakened their ability to make informed financial decisions.

Despite the extensive research on the influence of financial literacy on retirement planning across various demographics, there is a notable gap in the literature regarding how these specifically affect Indian expatriates. While studies have explored the impact of financial literacy on retirement planning in diverse populations globally, the unique challenges faced by Indian expatriates in regions like Middle East, Europe, Australia and North America, particularly USA and Canada, due to their exposure to different financial systems, tax laws, and investment environments—remain underexplored. The literature review highlights the critical role of financial literacy in shaping retirement planning behaviours, yet much of the existing research overlooks the unique circumstances of Indian expatriates. Furthermore, the impact of financial literacy on retirement confidence remains underexplored. Given the significant variations in these factors among Indian expatriates, it is essential to understand how financial literacy influences their confidence in planning for retirement. Addressing this gap is crucial for developing targeted, region-specific financial education programs and policies that enhance the financial well-being of expatriates. This leads to the first research question of this dissertation:

**RQ1: What is the impact of financial literacy on retirement planning confidence among Indian expatriates?**

## 2.2 Lifestyle Preferences, Social Connections and Health

Hutchison et al. (2024) emphasized the importance of financial and lifestyle planning for retirement preparedness, on Canadian retirees and found that while financial planning is important, lifestyle planning—emphasizing meaningful activities and social connectedness—more strongly predicts satisfaction in retirement. Similarly, research conducted in the Philippines by Tolondon et al. (2024) highlighted that effective retirement planning involves a comprehensive approach that includes financial, health, social, and leisure activities. These findings underscore the role of lifestyle planning and social engagement in enhancing retirement readiness.

Social connectedness, defined as the relationships individuals have with family, friends, and the community, is crucial for mental and physical well-being. Socially connected retirees often experience lower levels of depression and anxiety and enjoy better physical health. Forster et al. (2012), demonstrated in a study conducted in Australia, that community connections are vital for a successful and healthy retirement, independent of self-rated health and employment status. Additionally, Lancee et al. (2012) found that social connectedness influences the timing of retirement. Informal social networks can lead to early retirement, whereas involvement in formal community roles tends to delay retirement. A study among French utility workers by Sabbath et al. (2015) revealed that low midlife socioeconomic status consistently predicted decreased formal engagements in retirement. The study observed that retirees who were 2-5 years into retirement participated more in organizational activities and maintained closer friendships compared to those newly retired. However, women and individuals with poor health were less likely to be engaged in such activities.

Alcover et al. (2023) showed that family care interfered with work and hence led to early retirement intentions. Numerous studies have explored the relationship between health and retirement. Ilmakunnas et al. (2018) investigated the gap between retirement expectations and actual retirement age, focusing on how health status, socioeconomic status, and labour market factors influence retirement timing. The study found that poor health often leads to early retirement, while good health enables individuals to work longer. According to Ilmakunnas et al. (2018), many retirees leave the workforce earlier than planned due to unforeseen health issues or job loss, while others continue working past retirement age due to financial necessity or personal preferences. High education and income levels are associated with delayed

retirement, highlighting the impact of these socioeconomic factors. In summary, retirees' lifestyle preferences and satisfaction are heavily influenced by health, financial stability, personal interests, and social networks. Effective financial and lifestyle planning, along with strong social connections, are crucial for a fulfilling and satisfying retirement.

While existing research explains the importance of lifestyle preferences, social connections, and health in retirement planning, there is a significant gap in the literature concerning how these factors specifically influence the retirement decisions of Indian expatriates. Most studies focus on general populations in Western or Asian contexts, often failing to notice the unique experiences of Indian expatriates who navigate diverse cultural, social, and economic environments abroad. The literature reveals that lifestyle choices and social connections significantly influence retirement planning decisions, yet there is a lack of focused research on how these factors specifically affect the retirement age among Indian expatriates. Given their unique circumstances, including diverse cultural ties and varying social networks, it is crucial to investigate how these elements shape their decisions about when to retire. Understanding these dynamics is vital for developing comprehensive retirement planning strategies that address not only financial considerations but also social well-being. Such insights can guide the creation of community and social programs and ensure that Indian expatriates and their families have access to quality healthcare and support services, both abroad and in India. This brings us to the second research question of this study:

**RQ2: How do lifestyle and social connections affect the planned retirement age among Indian expatriates?**

## **2.3 Retirement views and retirement location preferences**

The literature on retirement timing and location preferences reveals considerable debate and diversity in decisions. Some individuals opt for early retirement, others delay it, and some retire precisely when eligible. When considering retirement location, various factors influence whether individuals choose to stay in their host country, return to their home country, or adopt a more flexible 'back and forth' strategy. De Coulon et al. (2010) explored the retirement location preferences of immigrants and found that the presence of children in the home country significantly increased the likelihood of returning. However, the children's location did not affect the decision to split time between countries. Similarly, Kim and Waldorf (2021) suggested that proximity to family, climate, and amenities influence post-retirement relocation decisions. A study conducted in France by Gobillon et al. (2011) supports the idea that retirees often relocate to adjust their living conditions by upsizing or downsizing. The study indicates that residential mobility is significant at retirement, with factors such as housing adjustments, climate, and family location driving households' decisions to move. Conversely, Duncombe et al. (2023) suggested that tax burdens and public services affect location decisions, with income taxes having the largest relative impact among financial variables. Climate, economic conditions, and population characteristics also play significant roles in location decisions. Gillespie and Fokkema (2024) highlight that social conditions, such as ties to family and friends, significantly impact residential mobility and retirement decisions, especially late-life events. The study notes that widowhood and proximity to social ties increase the likelihood of mobility, while loneliness reduces post-retirement moves. Another interesting study by Barbosa et al. (2021) suggests that tourism influences the retirement decision-making of prospective retirees, helping them gather information and experience living conditions. While retirees benefit from better quality of life, favourable weather, and less costly countries, challenges such as lack of social support, rising healthcare costs, language barriers, and political instability persist.

Axelrad (2018) provided a comparative analysis of early and late retirement among 20 European countries, noting that economic conditions and national pension policies heavily determine retirement timing. Early retirement is more likely in countries with lower GDP and poorer health conditions, whereas late retirement is more common in countries with better economic and health conditions. This research concludes that individuals tend to retire when they become eligible for full pension benefits without reductions. Merkle, et.al (2024) show



that older individuals, especially those with inconsistent time preferences plan to retire earlier and face higher regret about their decision. Lumsdaine et al. (2015) highlight that women's retirement timing is often influenced by their caregiving responsibilities for grandchildren.

In summary, the literature demonstrates that retirement timing and location preferences are influenced by a complex interplay of economic conditions, family ties, health status, social connections, and national policies. Understanding these factors is essential for developing policies and support systems that cater to the diverse needs of retirees. While existing literature on retirement timing and location preferences provides valuable insights, it largely fails to notice the unique circumstances of Indian expatriates. The decision-making process for retiring abroad, and how these choices are influenced by the current region of residence, remains unexplored. Additionally, there is a lack of research on the specific timing of retirement—whether early or late—among Indian expatriates, and how their current location impacts these decisions. Addressing these gaps is essential for understanding the distinct retirement preferences of Indian expatriates, considering their unique cultural and socioeconomic contexts. This leads to the following research questions:

**RQ3: What is the impact of the current region of residence on retirement location preferences among Indian expatriates?**

**RQ4: How does the current region of residence influence retirement timing preferences among Indian expatriates?**

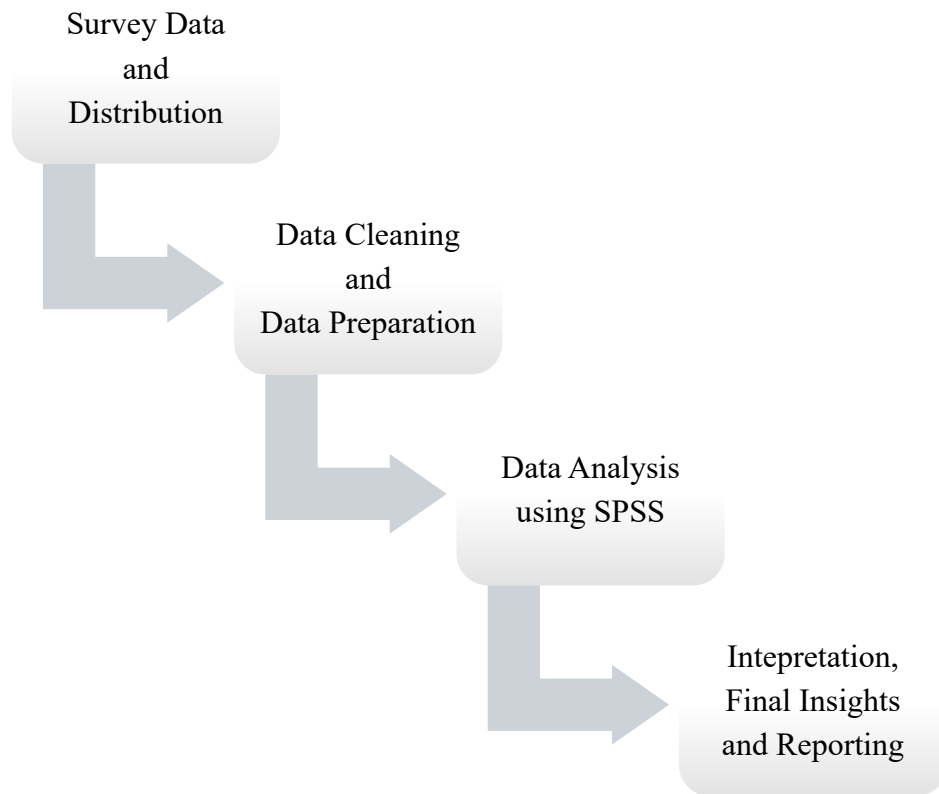
# **Chapter 3**

## **Methodology**

This section covers the research context, the recruitment of participants, outlining the sampling strategy employed to ensure a representative sample of Indian expatriates. The chapter also describes the data collection process, highlighting the development of the questionnaire, followed by procedures for data cleaning and addressing ethical considerations to ensure the integrity and confidentiality of the research. Each of these aspects is discussed comprehensively to provide a clear understanding of implementing the methodology to answer the research questions.

### **3.1 Research Context and Approach**

This research methodology aims to answer the research questions, the factors influencing retirement planning among Indian expatriates, focusing on financial literacy, social connections, lifestyle, health, retirement timings, and location preferences. To gather comprehensive data, a quantitative research approach was considered. A structured online survey was conducted among 204 Indian expatriates residing in regions such as the Middle East, North America, Australia, and Europe. The survey method was chosen for its ability to capture quick quantitative data from a geographically dispersed population, enabling robust statistical analysis (Latkovikj, et.al,2019). The collected data was then cleaned, prepared, and analysed using SPSS to uncover meaningful patterns and relationships (Fig 3).



**Figure 3:** Methodology Framework

### **3.2 Recruitment of Participants**

The target population for this study comprised Indian expatriates residing in diverse geographical regions outside India. This group was selected due to its unique experiences and challenges in retirement planning, influenced by factors such as varying financial systems, cultural differences, and distinct lifestyle choices in their host countries. The recruitment process began with the identification of potential participants through social networks, expatriate communities, and online platforms frequently used by Indian expatriates.

### **3.3 Sampling**

The target sample population was Indian expatriates. These included individuals of Indian nationality, working abroad in different professional capacities. A stratified sampling strategy (Jawale,2012) was adopted to ensure that the participants represented a broad cross-section of Indian expatriates, with diversity in terms of age, gender, occupation, and region of residence. The inclusion criteria were simple: participants had to be of Indian origin, residing outside India, and aged 23 and above, as this age group was more likely to be engaged in retirement planning activities. Those who did not meet these criteria were excluded from the study. This approach ensured that the sample was relevant to the research objectives and provided a comprehensive view of the retirement planning landscape among Indian expatriates.

Snowball sampling was utilised by leveraging personal and social media, like LinkedIn, connections. Initial participants can refer to others who meet the criteria, thereby reaching non-identifiable individuals, facilitating a broader range of participants within the population (Goodman,1961). This will allow comprehensive understanding of planned retirement age within the population, and their relative influence with the factors that were examined. Given the ease of access to participants, time efficiency and flexibility, convenience sampling was also employed (Costanza,et.al, 2015).

### **3.4 Data Collection**

Data collection was carried out using a structured questionnaire supported by Qualtrics software, designed to capture a wide range of key variables related to retirement planning, employed for the study. The survey items were ensured to be clear, concise, and relevant to the research questions. The survey was administered online, a method chosen for its practicality in reaching a geographically dispersed population. The survey instrument consisted of questions covering demographic information, financial literacy levels, social connections, lifestyle habits, health status, retirement timings, and location preferences. Each section of the survey was crafted to gather quantitative data, enabling a holistic analysis of the factors influencing retirement planning. The survey was distributed through online platforms, including expatriate forums, social media groups, and email lists. Participants were provided with a detailed explanation of the study's purpose, and informed consent was obtained prior to their participation. To encourage participation, the survey was kept concise, with an estimated

completion time of 5 minutes. The data collection period spanned one month, during which follow-up reminders were sent to maximize response rates.

In this research, primary data was used to address the research questions. Primary data was collected for the first time. These data can be later added to the existing social knowledge.

With a planned design, the effect of independent variables over dependent variables was observed and thereby permitted to interpret the data, as the overall control on the data was possessed (Hox, et.al, 2005). It was time consuming and gaining access to respondents was sometimes challenging but was crucial because it directly addressed the research question and provided insights. Primary data allows original contributions to the research thereby exploring new perspectives and potentially leading to new findings or conclusions.

### **3.5 Questionnaire Design**

There were 31 questions in the questionnaire (Appendix 8.2), which had been divided into four sections that were used to answer the proposed research questions in the literature review. Question details and data information can be found in (Appendix 8.3).

#### **Section 1: Demographic Information**

Demographic variables (figure 4) such as age, gender, region of residence, and employment status and so on, were collected. This section provided context and allowed for segmentation in the analysis of how certain demographics influenced financial literacy, lifestyle preferences, and retirement decisions. The data had a mix of ordinal, like occupational grade, education level, nominal like gender, region of residence and continuous variables like age, years spent as expat and so on.

#### **Section 2: Financial Literacy and Retirement Planning**

To assess the respondent's financial literacy knowledge. The variables, by means of a composite score formulated from individual questions, addressed RQ1 by gathering data on the respondent's understanding of financial concepts that were crucial for retirement planning. All the elements were ordinal (Likert Scale), assuming differences between points in the scale were equal. Figure 5 presents a diagram that explains questions **Q10 to Q17** related to financial literacy.

### **Section 3: Lifestyle Preferences and Social Connectedness**

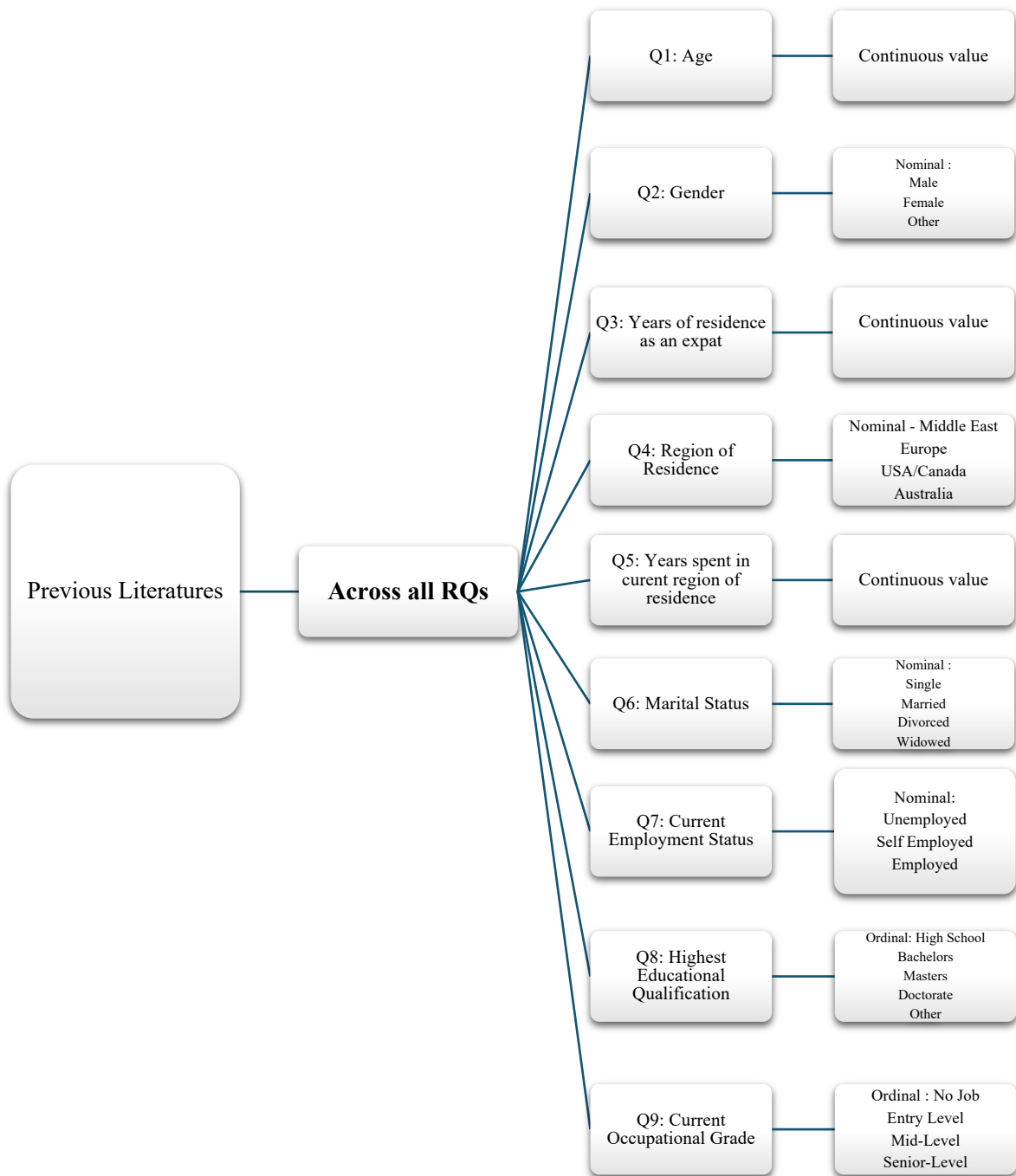
To explore how lifestyle choices, social connections, personal and family health influence retirement planning decisions. Composite scores for each of them answers RQ2 by collecting ordinal data on their importance. Scores allowed the integration of these variables into a continuous format suitable for statistical analysis. This data would help in understanding the non-financial factors that contribute to retirement planned decisions, specifically on retirement age. Questions **Q18 to Q26** are explained (in Fig 6), which provides detailed descriptions of each question's focus and intent.

### **Section 4: Retirement Age Views and Location Preferences**

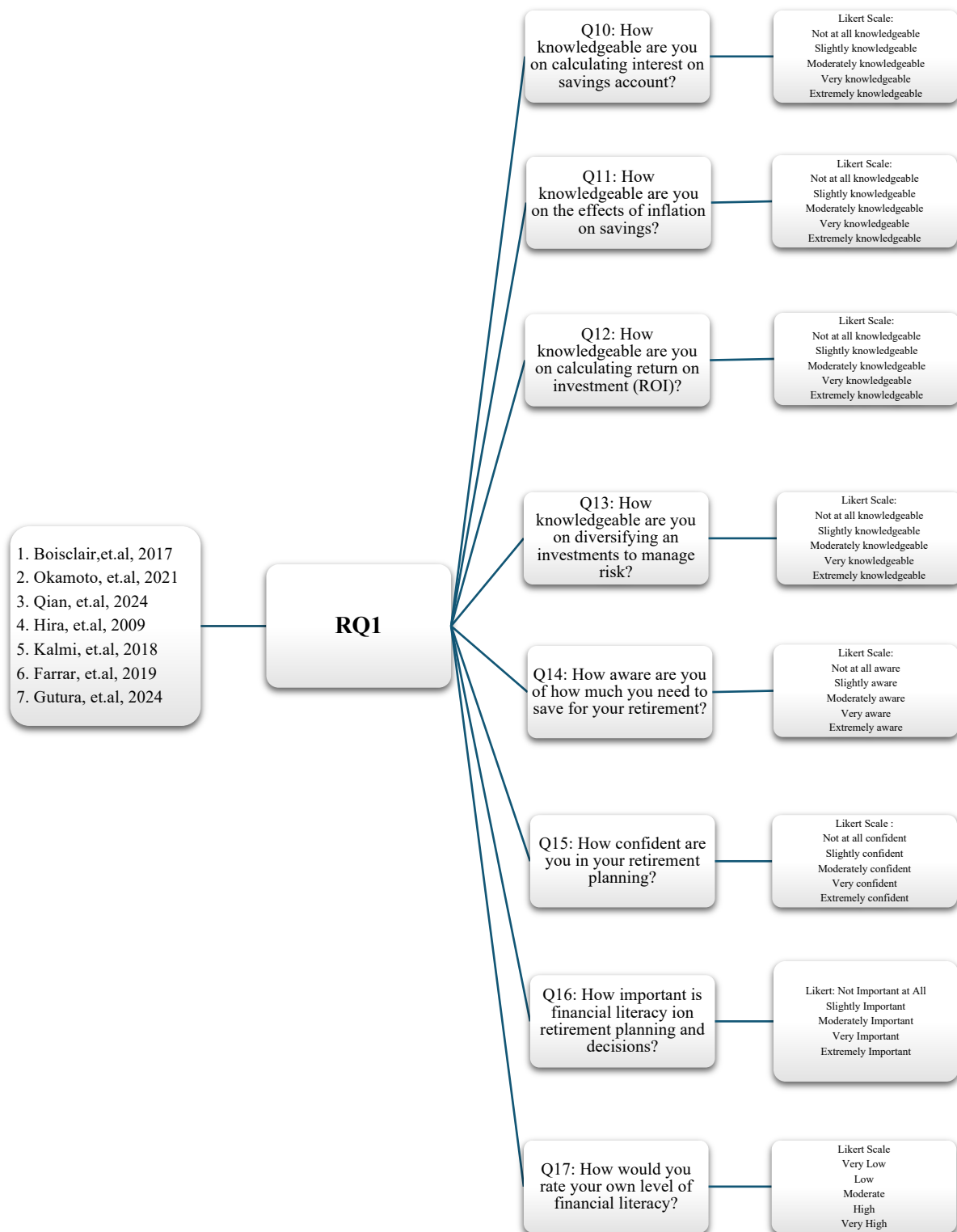
To understand the respondent's preferences regarding retirement timing and location. These variables directly addressed RQ3 and RQ4 by collecting data on when and where the respondents plan to retire, and how strongly they felt about these decisions. This section also provides insight into how flexible they were in their retirement planning based on benefits or changing circumstances.

Figure 7 illustrates how the nominal variable (**Q27**) and ordinal factors (**Q28 to Q31**) can be used to analyse trends and assess the significance of associations through tests like Chi-Square.

The questionnaire was carefully designed to ensure that each section and question serves a clear purpose in answering the research questions derived from the literature review chapter. This structured approach ensures that the data generated will be directly relevant and analysable, providing meaningful insights into the retirement planning and decisions of Indian expatriates.

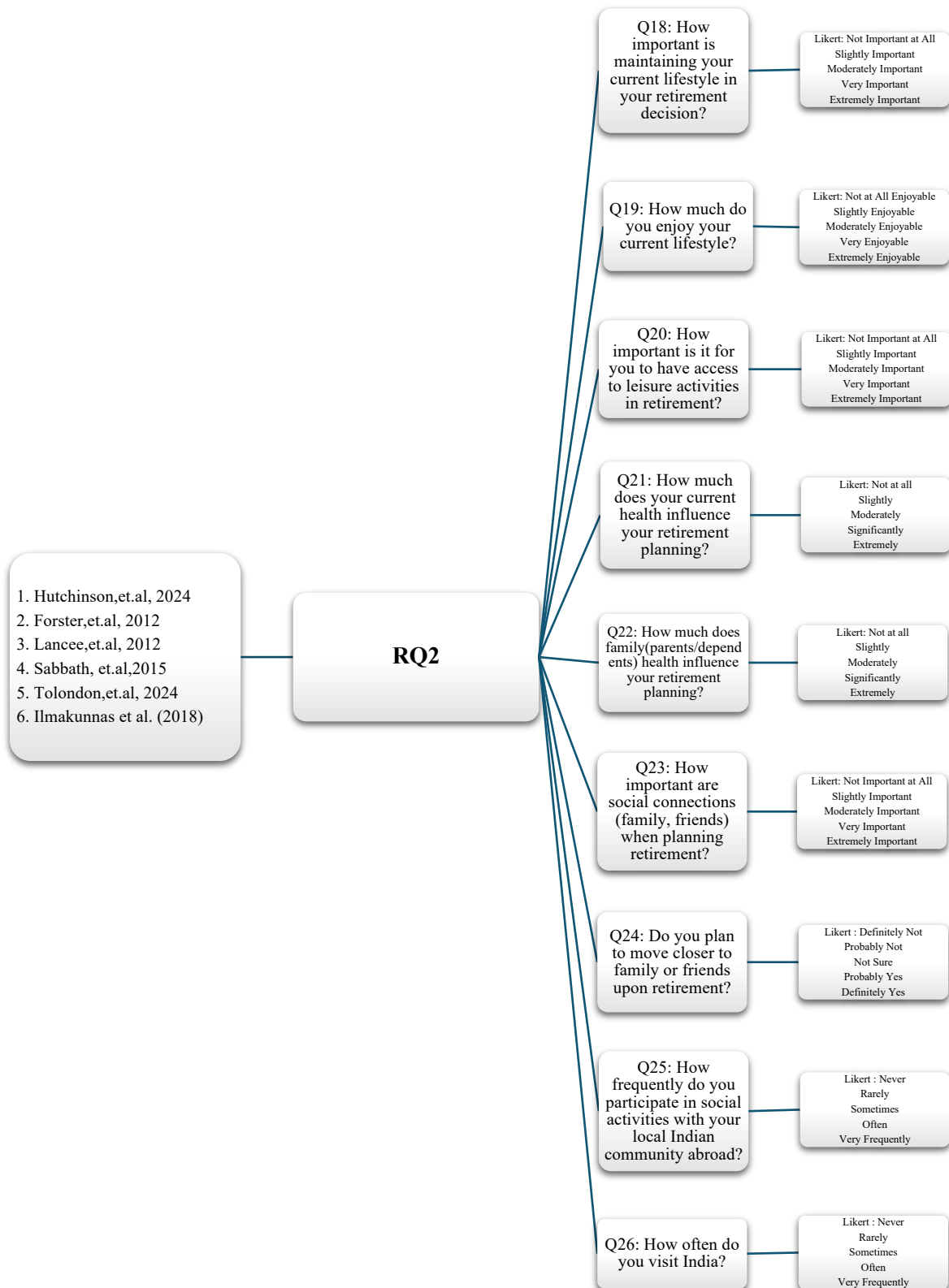


**Figure 4:** Demographic information Questionnaires

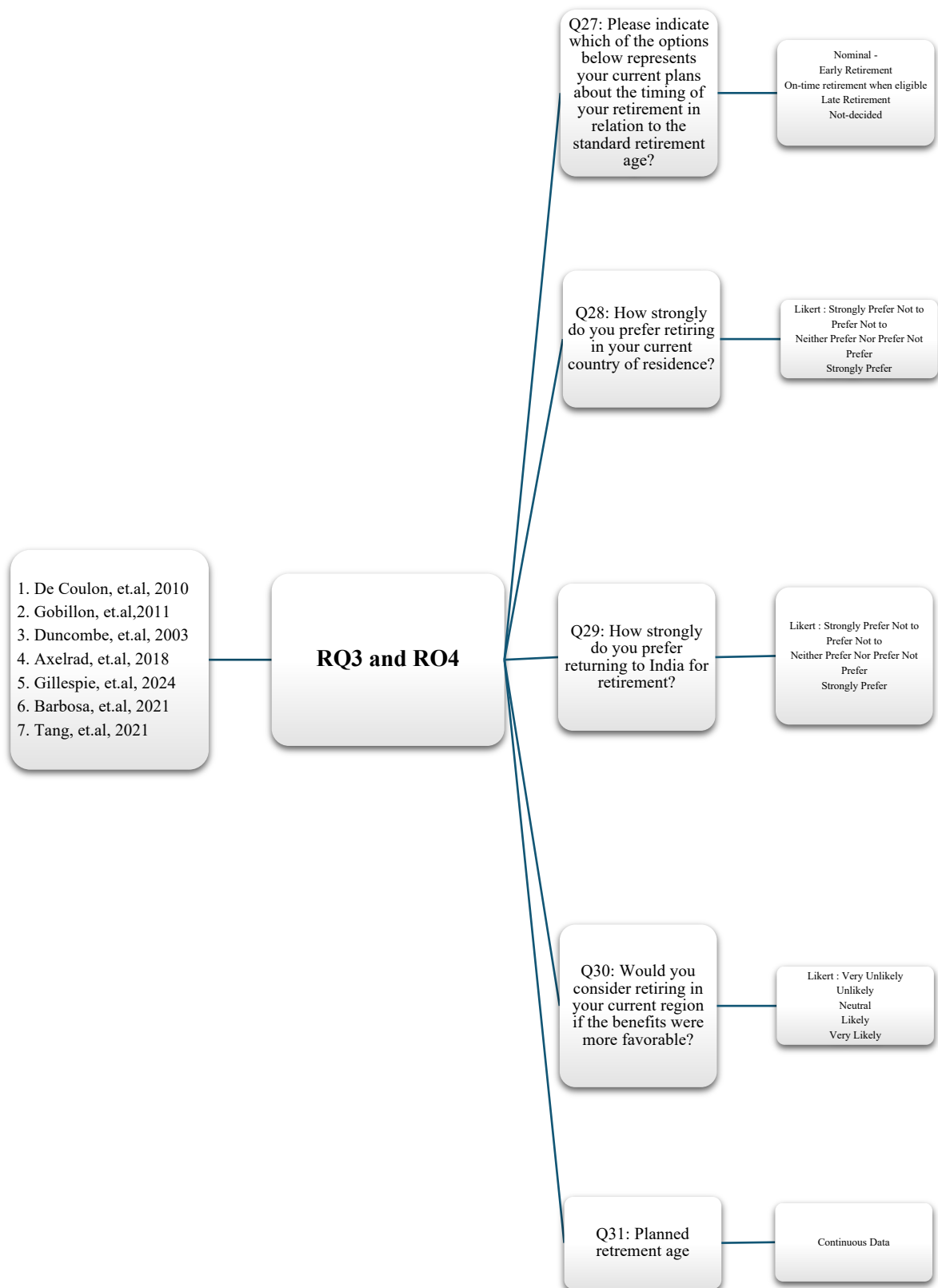


**Figure 5: Questionnaires related to RQ1**





**Figure 6:** Questionnaires related to RQ2



**Figure 7: Questionnaires related to RQ3 and RQ4**

### **3.6 Scale Measurements**

Likert scales are used to represent responses in a numerical format, with well-constructed scales typically featuring an odd number of response categories to capture a range of attitudes (Emerson, 2017). To analyse ordinal factors quantitatively, 5-point Likert scales were employed. Lower measures were assigned a value of 1 and 5 for higher in the order 1 to 5.

### **3.7 Data Cleaning**

Once the survey responses were collected, the data underwent a rigorous cleaning process to ensure accuracy and reliability. To check validity and generalisability of a study, it is mandatory to check for missing data and inconsistencies (Aydin,2024). Missing responses (17 responses) with significant missing information were excluded from the analysis. Outliers, which could potentially skew the results (Seo, 2006), were not identified hence it did not impact the overall distribution. 7 responses were initially marked as "other" with the text "UK/United Kingdom." These were cleaned and re coded as scale 2, representing the Europe region.

### **3.8 Composite Score Methodology**

Additionally, composite scores were created for more constructs such as financial literacy, lifestyle, social connections. These were measured using multiple indicators, after analysing the reliability of the underlying scales using Cronbach's alpha. Final scales were calculated by taking the mean of the underlined items that defined the construct. This step avoids risk of overfitting and was in a suitable form for statistical analyses like as regression models.

### **3.9 Ethical Considerations**

Ethical issues would arise when research is conducted. To make it transparent, before collecting any data, participants were informed and assured voluntary participation and can be withdrawn at any time, without penalty (Abed, 2015), which was included as part of the questionnaire sequence. Participants were guaranteed with confidentiality of responses and ensured the identities were protected. Sensitive information was avoided, as they can be misreported, by the participants, out of personal reasons (Tourangeau, et.al, 2007). Participants' autonomy and decision making were respected, and opportunities were facilitated for them to ask questions, seek clarification, and express concerns. Any sensitive topic, related to culture, tradition background was avoided. Participants were ensured that the research is conducted with impartiality and integrity.

# Chapter 4

## Data Analysis and Results

This chapter outlines the data analysis conducted to address the research questions concerning retirement planning among Indian expatriates. The primary aim was to systematically answer these questions using various statistical techniques, using SPSS 29. Statistical Package for Social Sciences (SPSS), helps to convert real data and associated concepts, applies statistical tests and teaches how to interpret the output (Landau, et.al, 2003).

### Preliminary Analysis

**Descriptive Statistics:** This summarises the key characteristics of the sample providing a foundational understanding of the sample's demographic profile and data distribution.

**Reliability Analysis:** Cronbach's Alpha is computed to assess the internal consistency of multi-item scales. A high Cronbach's Alpha indicates reliable scales.

### Answering the Research Questions

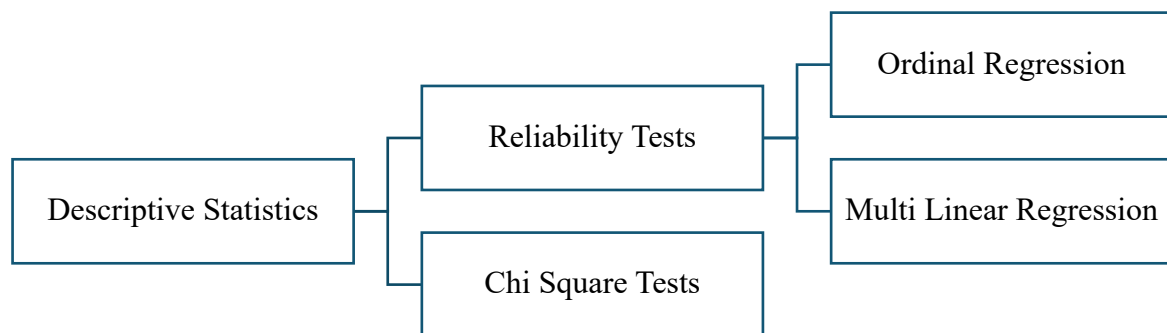
**RQ1:** Ordinal logistic regression was used to explore how financial literacy influences retirement confidence. The analysis revealed the extent to which financial literacy contributes to a deeply personal and subjective feeling, retirement confidence and decision-making processes.

**RQ2:** Multi-Linear regression model was employed to assess the impact of lifestyle preferences and social connections on planned retirement age. The linear regression allowed a clearer understanding of what determines a concrete practical decision, retirement planned age.

**RQ3 and RQ4:** Chi-Square tests were used to evaluate associations between the current region of residence and preferences for retirement location and timing respectively. Chi square test helps to group differences when the dependent variable is nominal (McHugh, 2013). This analysis explained preferences regarding retirement location and timing, showing how current residence influenced these decisions.

Fig 8 explains the model by which the analysis was performed.

Each section of the analysis addressed specific research questions, with relevant answers to them thereby providing a clear understanding of the factors influencing retirement planning.



**Figure 8:** Data analysis model

## 4.1 Preliminary Analysis

### 4.1.1 Descriptive Statistics

Descriptive statistics provide a foundational overview of the data collected in this study that offers insights into the central tendencies, dispersion, and overall distribution of the variables used in the study. By summarising the key variables of the sample of interest, it provided a groundwork for more advanced analyses.

Age was categorised into three age groups to simplify the relationship with other variables. This gives a clear identification of trends across different levels as *young, middle-aged and senior years*. It also enhanced the interpretability of results making the findings more applicable to practical contexts. Similar age groupings had been utilised in previous research to facilitate smoother comparisons (Hira, et al.,2009).

**Table 1** shows the overall demographic profile of 204 participants

The sample predominantly consisted of males. In terms of marital status, the majority were married. Participants were mainly located in Europe. Regarding employment status, most were employed (83.8%). Educationally, the majority hold a bachelor's degree. The occupational distribution showed that more than half were in mid-level positions (51.5%) and in terms of age groups, the sample was predominantly middle-aged (31-35 years) at 46.1%.

**Table 2** shows the overall descriptive statistics for the for age, years as an expat, years as an expat, years as an expat in current region, planned retirement age. The descriptive statistics revealed that the average age of participants was 33.57 years and on average, participants had been expatriates for approximately 8.76 years. They had spent an average of 6.38 years in their current region.

**Table 1:** Demographic profile of the respondents (n = 204)

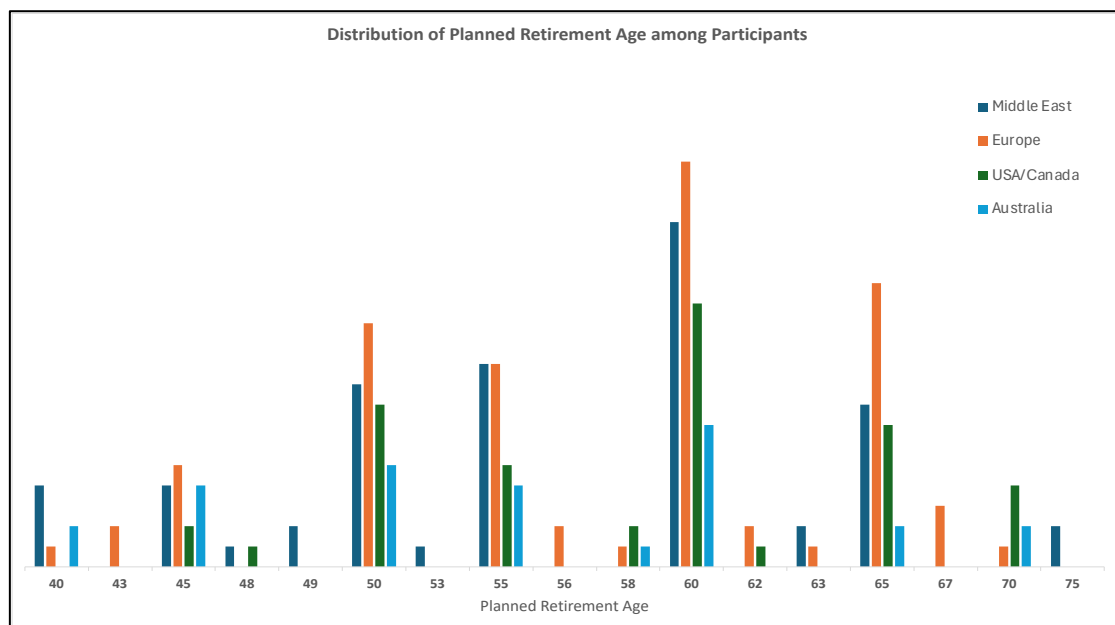
<b>Characteristics</b>	<b>Frequency</b>	<b>Percent</b>
<b>Gender</b>		
Male	115	56.4
Female	89	43.6
<b>Marital Status</b>		
Single	47	23
Married	155	76
Divorced	2	1
<b>Region of Residence</b>		
Middle East	60	29.4
Europe	74	36.3
USA/Canada	43	21.1
Australia	27	13.2
<b>Employment Status</b>		
Unemployed	25	12.3
Self Employed	8	3.9
Employed	171	83.8
<b>Educational Qualification</b>		
High School	1	0.5
Bachelors	108	52.9
Masters	92	45.1
Doctorate	3	1.5
<b>Occupational Grade</b>		
Junior Level	33	16.2
Mid-Level	105	51.5
Senior Level	66	32.4
<b>Age Group</b>		
Young (22-30)	52	25.5
Middle (31-35)	94	46.1
Senior (36-57)	58	28.4

**Table 2:** Descriptive statistics for age related characteristics

Characteristics	Mean	Median	SD
Age	33.57	34.00	5.938
Years as an expat	8.758	8.00	7.794
Years as an expat in current region	6.383	5.00	6.45
Planned Retirement Age	56.75	60.00	7.516

### Planned Retirement Age

This variable served as the dependent variable that was useful to answer RQ2, aligning with the factors focused on for our analysis. The distribution of data can be referred to in figure 9. As observed, the planned retirement age was found to be 60 for most of the participants in all current four regions of residence. However, the mean was measured 56.75 and median as 60 among all participants irrespective of their current region.

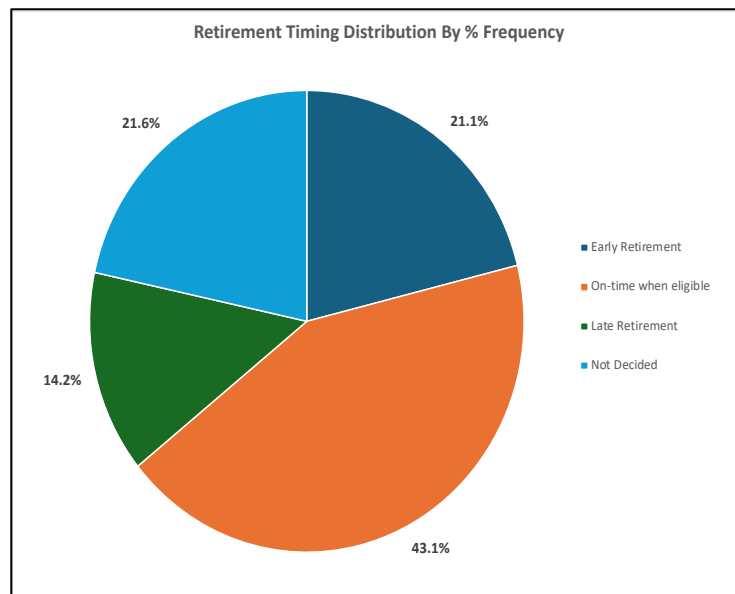


**Figure 9:** Planned retirement age distribution among participants in each current region of residence



## Retirement Timing

The distribution of retirement timing preferences among Indian expatriates highlights diverse retirement preferences regarding their retirement timing. The majority, 43.1%, plan to retire on-time when eligible, and the rest spread between other timing options, suggesting uncertainty or flexibility in their retirement plans. Refer fig 10 for the frequency distribution. This was one of the variables that was used to answer RQ4.



**Figure 10:** Retirement timing distribution among the respondents

## Financial Literacy

Descriptive statistics for financial literacy among participants revealed levels of financial knowledge across different financial topics. Individual elements were observed to reflect a neutral perspective, as their mean scores were close to 3. Descriptive statistics are summarized in Table 3

The overall **Financial Literacy Score (FLS)**, calculated as the mean of these individual scores, served as an independent variable to answer RQ1. The FLS had a mean of 2.77 (SD = 0.824), indicating a neutral assessment for their financial literacy, suggesting that participants may benefit from further financial education in key areas.

**Table 3:** Descriptive statistics for financial literacy

Items	Mean
Q10	2.96
Q11	2.72
Q12	2.69
Q13	2.59
Q14	2.79
Q17	2.89
<b>FLS</b>	<b>2.77</b>

### **Lifestyle and Health**

The **Lifestyle Score (LS)**, calculated as the mean of the individual variables, served as a factor for answering RQ2. The overall score, with a mean of 3.51 (SD = 0.577), reflected a generally positive outlook on lifestyle.

Health is a crucial component as it influences quality of life and retirement planning. Including health in the lifestyle assessment offers a comprehensive view of participants' lifestyle and future plans.

Health and lifestyle considerations were found to have a more positive perspective as the means of these variables were closer to value 4. Refer table 4, gives the overall statistics

**Table 4:** Descriptive statistics for lifestyle and health

Items	Mean
Q18	3.27
Q19	3.70
Q20	3.88
Q21	3.36
Q22	3.36
<b>LS</b>	<b>3.51</b>

### Social Connections

The statistics for social connection-related items revealed varying levels of importance and frequency concerning participants' social connections and activities.

The overall **Social Connection Score (SCS)** , with a mean of 3.50, indicated that participants generally maintain more than a moderate connection to their social networks and cultural roots. This score reflects the importance of social connections and the desire to be near family, by considering variables that were related to frequency of India visits and retiring in India therefore providing insights into their cultural integration and long-term planning related to social ties and retirement in India, in this sample, was used to answer RQ2. Refer table 5

**Table 5:** Descriptive statistics for social connections

Items	Mean
Q23	3.38
Q24	3.86
Q25	3.16
Q26	3.77
Q29	3.34
<b>SCS</b>	<b>3.50</b>

### Location Preferences

The statistics for retirement location preference and consideration revealed varying degrees of importance and focus regarding participants' retirement plans. Refer to Table 6 for detailed statistics. The variability in responses (mean of each element) highlighted differing individual preferences and considerations regarding retirement locations. This variation was important for understanding the impact of regional benefits and current location on retirement planning, which became the basis to answer RQ4.

**Table 6:** Descriptive statistics for location preferences in current country of residence.

Items	Mean
Q28	3.19
Q29	3.54

### 4.1.2 Reliability

Reliability is the measure of internal inconsistency of the constructs that are employed in the study. A construct is reliable, if the alpha ( $\alpha$ ) value is greater than 0.70 (Tavakol et al., 2011). Construct reliability was assessed using Cronbach's Alpha. The results revealed Financial Literacy (FL) with 6 items ( $\alpha = 0.904$ ) was found reliable and Lifestyle & Health (LH) with 5 items ( $\alpha = 0.648$ ) were found closely acceptable, close to 0.70. However, Social Connections (SC) with 5 items ( $\alpha = 0.504$ ) and Retirement Location Preferences (RL) with 2 items ( $\alpha = 0.521$ ) were marginally adequate. Lower value that could be due to inadequate sample size or itself being a heterogeneous construct for SC and lesser number of items for RL (Tavakol et al., 2011). Reliability results are summarised in Table 7.

**Table 7:** Reliability tests for different constructs

Constructs	No. of Items	Alpha ( $\alpha$ )
FL	6	0.904
LH	5	0.648
SC	5	0.504
RL	2	0.521

Although the Cronbach's alpha for two constructs were found to be less than 0.7, indicating questionable internal consistency, the scale was retained for further analysis because the items covered diverse aspects of the construct, under investigation. SC and RL were theoretically important in the study to capture different facets of Social Connections' and retirement location's impact on retirement. Future research could benefit from refining these two scales to enhance internal consistency or from exploring alternative measures that might more cohesively capture the constructs.

## 4.2 Answering the Research Questions

In this section, each research question, along with additional findings, was systematically addressed, using relevant statistical tests.

### 4.2.1 RQ1 (Impact of Financial Literacy on retirement planning among Indian Expatriates)

To answer RQ1, ordinal regression was used to model the relationship between an ordinal dependent variable (Retirement Planning Confidence) and one or more independent variables. In the context of researching the impact of financial literacy on retirement planning among Indian expatriates, ordinal regression was particularly well-suited due to the nature of the variables involved. RPC responses were categorised as Not at all Confident marked as 1 to Extremely confident marked as 5. Ordinal regression would be employed to explore how various predictor variables, such as gender, age, occupational grade, region of residence, and marital status, influenced an ordinal outcome variable like retirement planning confidence. The model will estimate the odds of being in or above a particular category of the ordinal outcome, given the values of the independent variables.

The ordinal regression analysis revealed that financial literacy has a significant positive impact on retirement planning confidence among Indian expatriates. The model fit was significant ( $p < 0.001$ ). This indicated that the model significantly was a good fit as compared to the null model (model without predictors). The goodness-of-fit statistics suggested that the model fits the data well and no significant differences in the observed data and fitted model. Pearson Chi-Square and Deviance Chi-Square were 688.06 ( $p=0.503$ ) and 374.17 ( $p=1.00$ ) respectively, making them insignificant thereby confirming the model was appropriate for the data, and there was no evidence of poor fit. The pseudo-R-square values, Cox and Snell (0.541), Nagelkerke (0.572), McFadden (0.268) indicated that the model explained a moderate improvement in the prediction of RPC, based on the predictors in comparison to the null model. with Nagelkerke's R-square suggesting that about 57.2% of the variation of RPC was explained by the model. Moreover, the non-significant p-value ( $p=0.989$ ) of the test of parallel lines indicated that the assumption of parallel lines holds, meaning the ordinal regression model was appropriate and the coefficients could be interpreted consistently across different levels of the RPC.

The model stated that, the financial literacy score is the most significant predictor of retirement planning confidence in this analysis. The positive estimate of 2.675 ( $p < 0.001$ ) indicated a strong positive relationship between financial literacy and confidence in retirement planning. This means that as an Indian expatriate's financial literacy improves, the likelihood of them being confident in their retirement planning increases substantially.

### Convergence Evidence

The same results were observed when the model was run using linear regression with RPC as a continuous dependent variable. The significance levels for RPC remained consistent as with those reported, in Table 8.

**Table 8:** Ordinal regression model to evaluate retirement planning confidence among Indian expatriates

		Estimate	Sig.
Threshold	RPC = 1	4.007	.016
	RPC = 2	6.071	<.001
	RPC = 3	8.752	<.001
	RPC = 4	11.224	<.001
Location	<b>Financial_Literacy_Score</b>	<b>2.601</b>	<b>&lt;.001</b>
	<b>Gender = 1</b>	<b>-.759</b>	<b>0.010</b>
	Gender = 2	0 <sup>a</sup>	.
	<b>Age Group = 1</b>	<b>-0.813</b>	<b>0.031</b>
	Age Group = 2	-0.406	0.207
	Age Group = 3	0 <sup>a</sup>	.

The ordinal regression model could be specified as follows:

$$\text{logit}(P(Y \leq j)) = \alpha_j + \beta_1(\text{Financial Literacy Score}) + \beta_2(\text{Gender}) + \beta_3(\text{Age Group})$$

$\alpha_j$  represents the threshold for each category  $j$  of the dependent variable, RPC.

$\text{logit}(P(Y \leq j))$  - odds that the probability of event  $Y$  to occur to a specific value  $j$

$\beta_1$  is the effect of the Financial Literacy Score,  $\beta_2$  is the effect of Gender,  $\beta_3$  is the coefficient for Age group.

This result aligns with the RQ1 that greater financial knowledge empowers individuals to make more informed and confident retirement planning decisions.

#### 4.2.1.1 Additional Findings

1. Gender significantly impacts retirement planning confidence. The negative estimate for males (-0.895,  $p=0.004$ ) suggested that males were less likely to be confident in their retirement planning compared to females.
2. The negative estimate for the youngest age group (-1.248,  $p=0.026$ ) indicated that younger expatriates were less confident in their retirement planning compared to older counterparts, possibly due to delayed start of savings or lack of career choices. Refer both the findings in Table 8.
3. To examine the differences in financial literacy scores between genders, an independent sample t-test was conducted. Levene's Test indicated that the assumption of equal variances was met and for its corresponding t-test for equality of means, it showed the difference was statistically significant. These results suggested that there was a statistically significant difference in financial literacy scores between genders, with males exhibiting higher financial literacy levels compared to females and the mean difference between the two genders was, 0.50254. Refer table 9 for inference.

**Table 9:** Independent Sample t-test between genders and FLS

	<b>Gender</b>	<b>N</b>	<b>Mean</b>
FLS	Male	115	2.9913
	Female	89	2.4888

<b>Variable</b>	<b>Levene's Test</b>		<b>t-test for equality of Means</b>	
	<b>Equal Variance</b>	<b>Significance</b>	<b>Mean difference</b>	<b>Significance</b>
FLS	Assumed	0.762	0.5025	<0.001

#### **4.2.2 RQ2 (Impact of Lifestyle, health and social connections on retirement planning among Indian Expatriates)**

A multi-linear regression model was employed that helps to answer RQ2, that is to assess the participants' contribution of lifestyle score and social connections score to the prediction of their planned retirement age. Here, we use Planned Retirement Age as the dependent variable, and include Lifestyle Score, Social Connections Score, and demographic factors (like Age Group, years as an expat, educational qualification) as independent variables. This will allow us to see how much each factor contributes to the variation in Planned Retirement Age while controlling for the others.

The regression analysis revealed that age group, highest educational qualification, and current occupational grade were statistically significant, see table 10. The model fit was significant ( $p < 0.001$ ), indicating that the model significantly explains the variance in the planned retirement age beyond what is explained by the intercept alone. The model summary showed an R-square value of 0.135, meaning that 13.5% of the variance in planned retirement age is explained by the predictors in the model. Although the explained variance is modest, the significance of the model fit ( $F(6, 197) = 5.113, p < 0.001$ ) suggested that these predictors collectively contribute to the prediction of planned retirement age.

In terms of individual predictors, the coefficients indicated that highest educational qualification and age group were the most significant predictors.

However, lifestyle score, social connections score, had negative impact, but statistically insignificant. Therefore, despite being relevant independent variables for answering RQ2, lifestyle and social connections did not show a significant influence on planned retirement age.



**Table 10:** Multiple linear regression model to evaluate planned retirement age based on lifestyle score, social connections and other demographics.

	<b>Estimate</b>	<b>Sig.</b>
<b>(Constant)</b>	<b>54.573</b>	<b>&lt;.001</b>
LS	-1.005	.282
SCS	-1.088	.245
Years As an Expat	.109	.126
<b>Current Occupational Grade</b>	<b>-1.704</b>	<b>.049</b>
<b>Highest Educational Qualification</b>	<b>2.731</b>	<b>.005</b>
<b>Age Group</b>	<b>2.707</b>	<b>&lt;.001</b>

The multiple linear regression model can be explained as:

$$\begin{aligned} \text{Planned Retirement Age} = & 54.573 - 1.005 \times \text{Lifestyle Score} - 1.088 \times \\ & \text{Social Connections Score} + 0.109 \times \text{Years as an Expat} - 1.704 \times \\ & \text{Current Occupational Grade} + 2.731 \times \text{Highest Educational Qualification} + 2.707 \times \\ & \text{Age Group} \end{aligned}$$

The investigation into RQ2 revealed mixed results which examined the impact of lifestyle and social connections on planned retirement age. Although the key variables of interest were lifestyle score and social connections scores, they had a negative relationship with retirement age and were not statistically significant. Yet, considering the theoretical importance from previous research, as highlighted in section 2.2, of these factors, it may be worth keeping the variables in the model, as it could still provide valuable information.

### Additional Findings

1. The positive estimate for highest educational qualification (Estimate= 2.731,  $p = 0.005$ ) suggested that individuals with higher education levels tend to plan for a later retirement age; this implies that more educated individuals may have longer career aspirations. Similarly, the positive estimate for age group (Estimate= 2.707,  $p < 0.001$ ) indicated that older individuals were likely to plan for retirement at an older age, possibly due to better job satisfaction, higher income, or a desire to continue contributing to their field or may have already passed the earlier retirement age.
2. Conversely, current occupational grade had a significant negative impact on planned retirement age (Estimate=-1.704,  $p = 0.049$ ), meaning that individuals in higher occupational grades tend to plan for an earlier retirement age, suggesting that higher positions may have greater financial stability or higher job related stress prompting them to seek retirement sooner.
3. The correlation matrix, Table 11 provides insights into the relationships between several key variables for RQ2. Lifestyle and social connections show a significant positive correlation but neither show a negative, insignificant correlation with planned retirement age, suggesting that these factors may not directly influence when individuals plan to retire. However, Years as an expat, is positively correlated with planned retirement age indicating that individuals with higher years living as an expatriate tend to plan for a later retirement, that implies potential extended career goals or better adaptation to local conditions or possibly to earn more by postponing retirement.

**Table 11:** Correlation matrix among lifestyle, social connections and other demographics.

	LS	SCS	Planned Retirement Age	Years As an Expat
LS	1			
SCS	<b>.312**</b>	1		
Planned Retirement Age	-.080	-.101	1	
Years As an Expat	-.063	-.060	<b>.184**</b>	1

\*\* . Correlation is significant at the 0.01 level (2-tailed)

#### 4.2.3 RQ3 (Impact of current region of residence on retirement location preferences)

To assess whether there was an association between current region of residence (region where the respondents currently reside and retirement preference (preference level to retire in the current resident region), RQ3, a Chi-Square test was conducted, table 12. The analysis used a crosstabulation of both variables. The Pearson Chi-Square test statistic ( $\chi^2=26.783$ ) with 12 degrees of freedom is significant at  $p=.008$ . This indicated that there was a statistically significant association between the current region of residence and the retirement preference in the current region. This could be due to various factors such as familiarity with the local environment, established social networks, and comfort with the regional lifestyle and policies and programs designed to support them might be well received.

**Table 12:** Chi Square test to check association between current region of residence and retirement location preferences in current region of residence

	Estimate	df	Significance
Pearson Chi-Square	26.783 <sup>a</sup>	12	0.008
Likelihood Ratio	30.342	12	0.002
Linear-by-Linear Association	7.884	1	0.005

The analysis showed a significant impact of the current region of residence on retirement location preferences among Indian expatriates. The statistical significance of this relationship underscores the answer to the research question, RQ3.

#### Additional Findings

A further Chi-Square test was conducted to assess the association between current region of residence and regional benefits consideration (preferability of the respondent to retire if the benefits were favourable). The analysis showed that there was no significant association between them ( $p=0.157$ ). This indicates that it's not the benefits, but some other external factors that determine one's decision to retire in the current region, to be considered for future research.

#### 4.2.4 RQ4 (Impact of current region of residence on retirement timing preferences).

To answer RQ4, another Chi-Square test was conducted between the current region of residence, of the respondent and retirement timing preferences (on time retirement or any other).

The Pearson Chi-Square test statistic ( $\chi^2=22.300$ ) is significant at  $p=.008$ , indicating that there was a statistically significant association between the current region of residence and the retirement timing preference in the current region. Refer Table 13, that presents the result of the test.

**Table 13:** Chi Square test to check association between current region of residence and timing of retirement.

	Estimate	df	Significance
Pearson Chi-Square	22.300	9	0.008
Likelihood Ratio	26.052	9	0.002
Linear-by-Linear Association	8.472	1	0.004

The study hence found a significant impact of the current region of residence on retirement timing preferences. The results indicated that expatriates' decisions about when to retire are influenced by the region in which they currently live. The Middle East region had less individuals considering early retirement, while Europe, USA/Canada and Australia lean strongly towards on-time retirement, where the latter two had minimal interest in late retirement. The significance of this finding highlights the importance of considering regional context when examining retirement planning among expatriates, thereby answering RQ4.

## Chapter 5

### Discussions

The primary purpose of the chapter is to discuss each research question, their practical, theoretical implications and suggestions for future research. In this section, we examine the impact of financial literacy, lifestyle preferences, social connections, retirement location preferences and retirement timing among Indian expatriates residing in different regions.

The first research question, RQ1 addressed the impact of financial literacy on retirement planning confidence among Indian expatriates. The findings reveal a significant positive relationship between these two variables, indicating that individuals with higher financial literacy are more confident in their retirement planning. This aligns with existing literature (Qian ,et al.,2024; Gutura,et.al, 2024) that emphasises the importance of financial knowledge in shaping retirement behaviours. The study additionally found gender differences in financial literacy, with males scoring higher than females. Though age groups had no association with the financial literacy score, it was proved that younger age groups were relatively less confident in retirement, which reinforces the need for policies and programs that benefit younger expatriates with better financial knowledge that prepares them for confident retirement planning. This study contributes to the existing body of literature by providing empirical evidence from a specific, unexplored demographic, that is Indian expatriates, thus highlighting the importance of financial literacy across different populations.

The second research question RQ2, explored the influence of lifestyle and social connections on the planned retirement age. Contrary to expectations (Hutchinson, et.al,2024; Forster, et.al, 2012), while lifestyle and social connections scores were positively correlated, they did not significantly impact the planned retirement age. This suggests that, although these factors are important to expatriates, they may not be decisive in determining when they plan to retire. Instead, the study found that educational qualifications and age group were more significant predictors of planned retirement age. Higher education levels and older age groups were associated with planning for a later retirement, while individuals in higher occupational grades tended to plan for earlier retirement. These findings contribute to the literature by suggesting that, for Indian expatriates, lifestyle and social connections may not be as critical in retirement

planning as education and career stage. However, practical relevance of lifestyle preferences, health and social connections cannot be dismissed, as they might become significant in different contexts or with larger sample sizes. This insight opens direction for future research to further explore these variables.

The third research question RQ3, examined the impact of the current region of residence on retirement location preferences. The results indicate a significant association between the region of residence and the preference to retire in that region, highlighting a tendency among expatriates to choose familiar environments for retirement which is consistent with existing literature (Axelrad,2018). This finding contributes to the literature by emphasising the importance of regional familiarity and the sense of establishment in retirement location decisions. However, the lack of a significant association between region of residence and consideration of regional benefits suggests that other factors, possibly personal or familial ties, cultural familiarity, might be more influential. This underlines the need for further research to identify additional determinants.

The fourth research question, RQ4 focused on the influence of the current region of residence on retirement timing preferences. The study found significant regional variations in preferences for early, on-time, and late retirement, with on-time retirement being the most favoured option across all regions, in the survey sample. The variations in retirement timings were found to be influenced by the region of residence, indicating that regional context plays a crucial role in shaping retirement timing decisions. Economic conditions, social security systems and cultural attitudes across regions are likely to influence retirement timing decisions, providing a ground for future research on these aspects. The findings contribute to the literature by highlighting the need for retirement planning and policies that are tailored to regional contexts.

## Chapter 6

### Conclusion

This study contributes to the existing literature by offering a refined understanding of how financial literacy, lifestyle, social connections, and regional factors interact to shape retirement planning and preferences. While some findings align with existing research, others challenge assumptions, particularly regarding the role of lifestyle and social connections in retirement age planning and the factors influencing retirement location preferences.

While lifestyle and social connections are important for overall well-being, their direct impact on the timing of retirement is less noticeable. Educational qualifications and age groups are significant predictors of retirement age, indicating that individuals with higher education levels and older ages plan for later retirement. Although lifestyle and social connections are not statistically significant, they still have practical relevance on deciding the individual's planned retirement and could be relevant for future research, for instance, investigating how specific social connections, like community involvement or close friendships, health, self and dependents and lifestyle choices, such as regular physical activity or volunteer work, influence retirement timing.

The findings also emphasise the influence of current region of residence on retirement location preferences, though regional benefits do not significantly affect these preferences. This suggests that expatriates' retirement decisions are influenced by a complex interplay of personal, professional, and regional factors.

Overall, the study highlights the elaborated nature of retirement planning and the importance of considering financial literacy, current region, lifestyle, social connections when developing strategies to support Indian expatriates in their retirement planning endeavours. By addressing these complexities, the research provides valuable insights that help expatriates overcome the challenges they face when planning for retirement, thereby effectively answering the broader research objectives. Future research could search deeper into the impact of additional determinants and refine existing models to further enhance understanding and improve retirement planning support for expatriates.

## **6.1 Limitations**

The sample, taken for study, may not be fully representing the target population and hence restricting the applicability of the results to a wider population of Indian expatriates. Participants may answer dishonestly that could lead to inaccuracy in the data (Lefever, et al., 2007). Moreover, the study captures data at a single point of time and thereby limits the ability to identify the changes in retirement decision making over time. Longitudinal studies could improve insights and follow changes on the retirement decisions over time (Caruana, et.al, 2015). The study relies on survey data and hence there are potential chances of participants misinterpreting survey questions. The factors for study are limited and there could be other factors also that this sample group would consider, when it comes to making retirement choices, which were not analysed. This limitation may explain the lower percentage of variance accounted for in regression analyses, suggesting that other key factors might have been overlooked. Better questions or improved sample size and number of items within the constructs could have improved the reliability test scores for constructs that had values less than 0.7, location preferences and social connections constructs, which were considered important for driving retirement decisions.

## **6.2 Recommendations for future research**

Building on the findings of this study, several factors for future research are recommended to deepen the understanding of retirement planning among Indian expatriates. While the study highlighted regional differences in retirement timing and location preferences, the cultural factors, local economic conditions, social security systems, health care accessibility that shape the retirement planning decisions among Indian expatriates should be explored. Additionally future research could focus on expanding sample size and diversity of participants to include broader ranges of regional contexts. This study was limited to a specific sample of 204 participants, which may not fully capture the diversity among Indian expatriates globally. A larger and diverse sample could help identify additional patterns and relationships, particularly in regions that were underrepresented in this study. Moreover, including participants from different economic backgrounds could reveal how these factors interact with financial literacy, lifestyle, and social connections to influence retirement planning. Future research could dig deeper into the reasons behind these discrepancies and explore differences that could help close the gender gap in financial knowledge.



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# Appendix

## 8.1 Ethical Form

## 8.2 Survey - Dissertation

---

### Start of Block:

#### **Purpose**

I am conducting a research study as part of my dissertation to explore how financial literacy, lifestyle preferences, and social connectedness influence retirement planning among Indian expats. Your participation will also provide valuable insights into retirement age views and location preferences, contributing to a deeper understanding of these factors that shape retirement planning and support for future retirees.

The survey will take less than 5 minutes to complete. Your time and input are greatly appreciated.

#### **Ethics and Confidentiality**

Your participation in this study is entirely voluntary, and you are free to withdraw at any time without any consequences. Responses will be treated with the utmost confidentiality and used solely for academic research purposes.

#### **Anonymity**

All responses are anonymous. No personal identifying information will be collected or linked to your responses.

#### **Data Storage and Protection**

The data collected will be securely stored and protected in accordance with the highest standards of data security. All data will be permanently removed after the completion of the study.

#### **Contact Information**

For any questions or concerns, please contact Deepak Gopalan at: [bn23dg2@leeds.ac.uk](mailto:bn23dg2@leeds.ac.uk)

Thank you for your valuable contribution to my research!

---

In this survey, we will ask you questions about your age, gender, qualifications and current region of residence. If you consent to give these information (you will remain anonymous),

please select "I consent to take part in this survey". Otherwise please click on "I do not consent to take part in this survey".

- ☐ I consent to take part in this survey
- ☐ I do not consent to take part in this survey

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Page Break \_\_\_\_\_

## Section 1: Demographic Information



Q1 What is your age?

---

---

Q2 What is your gender?

- ☐ Male
- ☐ Female
- ☐ Other



Q3 How many years have you been living as an expatriate (Anywhere Outside India)?

---

---

Q4 What is your current region of residence?

- ☐ Middle East
- ☐ Europe
- ☐ USA/Canada
- ☐ Australia
- ☐ Other, please specify \_\_\_\_\_



Q5 How many years have you spent living as an expatriate in your current region of residence?

---

Q6 What is your marital status?

- ☐ Single
- ☐ Married
- ☐ Divorced
- ☐ Widowed
- ☐ Separated

Q7 What is your current employment status?

- ☐ Unemployed
- ☐ Self Employed
- ☐ Employed



Q8 What is your highest educational qualification?

☐ High School

☐ Bachelors

☐ Masters

☐ Doctorate

☐ Other, please specify \_\_\_\_\_

-----

Q9 What is your current occupational grade?

☐ Entry-Level

☐ Mid-Level

☐ Senior-Level

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Page Break

## Section 2: Financial Literacy and Retirement Planning

---

Q10 How knowledgeable are you about calculating interest on savings account?

- ☐ Not at all knowledgeable
  - ☐ Slightly knowledgeable
  - ☐ Moderately knowledgeable
  - ☐ Very knowledgeable
  - ☐ Extremely knowledgeable
- 

Q11 How knowledgeable are you about the effects of inflation on savings?

- ☐ Not at all knowledgeable
  - ☐ Slightly knowledgeable
  - ☐ Moderately knowledgeable
  - ☐ Very knowledgeable
  - ☐ Extremely knowledgeable
-

Q12 How knowledgeable are you about calculating return on investment (ROI)?

- ☐ Not at all knowledgeable
  - ☐ Slightly knowledgeable
  - ☐ Moderately knowledgeable
  - ☐ Very knowledgeable
  - ☐ Extremely knowledgeable
- 

Q13 How knowledgeable are you about diversifying investments to manage risk?

- ☐ Not at all knowledgeable
  - ☐ Slightly knowledgeable
  - ☐ Moderately knowledgeable
  - ☐ Very knowledgeable
  - ☐ Extremely knowledgeable
- 

Q14 How aware are you of how much you need to save for your retirement?

- ☐ Not at all aware
  - ☐ Slightly aware
  - ☐ Moderately aware
  - ☐ Very aware
  - ☐ Extremely aware
-

Q15 How confident are you in your retirement planning?

- ☐ Not at all confident
  - ☐ Slightly confident
  - ☐ Moderately confident
  - ☐ Very confident
  - ☐ Extremely confident
- 

Q16 How important do you think financial literacy is for making effective retirement plans and decisions?

- ☐ Not at all important
  - ☐ Slightly important
  - ☐ Moderately important
  - ☐ Very important
  - ☐ Extremely important
- 

Q17 How would you rate your own level of financial literacy?

- ☐ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High
  - ☐ Very High
-

### **Section 3: Lifestyle preferences and Social Connectedness influence on retirement planning**

---

Q18 How enjoyable is your current lifestyle?

- ☐ Not at all enjoyable
  - ☐ Slightly enjoyable
  - ☐ Moderately enjoyable
  - ☐ Very enjoyable
  - ☐ Extremely enjoyable
- 

Q19 How important is maintaining your current lifestyle when planning your retirement?

- ☐ Not at all important
  - ☐ Slightly important
  - ☐ Moderately important
  - ☐ Very important
  - ☐ Extremely important
-

Q20 How important is it for you to have access to leisure activities (e.g., travel, hobbies) in retirement?

- ☐ Not at all important
  - ☐ Slightly important
  - ☐ Moderately important
  - ☐ Very important
  - ☐ Extremely important
- 

Q21 How much does your current health influence your retirement planning?

- ☐ Not at all
  - ☐ Slightly
  - ☐ Moderately
  - ☐ Significantly
  - ☐ Extremely
- 

Q22 How much does your family (parents/dependents) health influence your retirement planning?

- ☐ Not at all
- ☐ Slightly
- ☐ Moderately
- ☐ Significantly
- ☐ Extremely

Q23 How important are social connections(family, friends) when planning about your retirement?

- ☐ Not at all important
  - ☐ Slightly important
  - ☐ Moderately important
  - ☐ Very important
  - ☐ Extremely important
- 

Q24 Do you plan to move closer to family or friends upon retirement?

- ☐ Definitely not
  - ☐ Probably not
  - ☐ Not Sure
  - ☐ Probably yes
  - ☐ Definitely yes
- 

Q25 How frequently do you participate in social activities with your local Indian community when abroad?

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very frequently

---

Q26 How often do you visit India?

- ☐ Less than every 5 years / never
- ☐ Once every 4-5 years
- ☐ Every 2-3 years
- ☐ Once a year
- ☐ More than once a year

---

Page Break



#### **Section 4: Retirement age views and retirement location preferences.**

---

Q27 Please indicate which of the options below represents your current plans about the timing of your retirement in relation to the standard retirement age?

- ☐ Early retirement
  - ☐ On-time retirement when eligible
  - ☐ Late retirement
  - ☐ Not- decided
- 

Q28 How strongly do you prefer retiring in your current country of residence?

- ☐ Strongly prefer not to
  - ☐ Prefer not to
  - ☐ Neither prefer nor prefer not
  - ☐ Prefer to
  - ☐ Strongly prefer to
-

Q29 How strongly do you prefer returning to India for retirement?

- ☐ Strongly prefer not to
  - ☐ Prefer not to
  - ☐ Neither prefer nor prefer not
  - ☐ Prefer to
  - ☐ Strongly prefer to
- 

Q30 Would you consider retiring in your current region if the benefits were more favourable?

- ☐ Very unlikely
  - ☐ Unlikely
  - ☐ Neutral
  - ☐ Likely
  - ☐ Very likely
- 



Q31 What is your planned retirement age?

---

End of Block:

---

### 8.3 Question Details and Data Information

Question No.	Question Description	Data Type	Data Generated
Q1	What is your age?	Continuous	Integer value
Q2	What is your gender?	Nominal	Male Female Other
Q3	How many years have you been living as an expatriate (Anywhere Outside India)?	Continuous	Integer value
Q4	What is your current region of residence?	Nominal	Middle East Europe USA/Canada Australia
Q5	How many years have you spent living as an expatriate in your current region of residence?	Continuous	Integer value
Q6	What is your marital status?	Nominal	Single Married Divorced Widowed
Q7	What is your current employment status?	Nominal	Unemployed Self Employed Employed
Q8	What is your highest educational qualification?	Ordinal	High School Bachelors Masters Doctorate Other

Q9	What is your current occupational grade?	Ordinal	No Job Entry Level Mid-Level Senior-Level
Q10	How knowledgeable are you about calculating interest on savings account?	Ordinal	Not at all knowledgeable Slightly knowledgeable Moderately knowledgeable Very knowledgeable Extremely knowledgeable
Q11	How knowledgeable are you about the effects of inflation on savings?	Ordinal	Not at all knowledgeable Slightly knowledgeable Moderately knowledgeable Very knowledgeable Extremely knowledgeable
Q12	How knowledgeable are you about calculating return on investment (ROI)?	Ordinal	Not at all knowledgeable Slightly knowledgeable Moderately knowledgeable Very knowledgeable Extremely knowledgeable

Q13	How knowledgeable are you about diversifying investments to manage risk?	Ordinal	Not at all knowledgeable Slightly knowledgeable Moderately knowledgeable Very knowledgeable Extremely knowledgeable
Q14	How aware are you of how much you need to save for your retirement?	Ordinal	Not at all aware Slightly aware Moderately aware Very aware Extremely aware
Q15	How confident are you in your retirement planning?	Ordinal	Not at all confident Slightly confident Moderately confident Very confident Extremely confident
Q16	How important do you think financial literacy is for making effective retirement plans and decisions?	Ordinal	Not at all important Slightly important Moderately important Very important Extremely important
Q17	How would you rate your own level of financial literacy?	Ordinal	Very low Low Moderate High Very High

Q18	How enjoyable is your current lifestyle?	Ordinal	Not at all enjoyable Slightly enjoyable Moderately enjoyable Very enjoyable Extremely enjoyable
Q19	How important is maintaining your current lifestyle when planning your retirement?	Ordinal	Not at all important Slightly important Moderately important Very important Extremely important
Q20	How important is it for you to have access to leisure activities (e.g., travel, hobbies) in retirement?	Ordinal	Not at all important Slightly important Moderately important Very important Extremely important
Q21	How much does your current health influence your retirement planning?	Ordinal	Not at all Slightly Moderately Significantly Extremely
Q22	How much does your family (parents/dependents) health influence your retirement planning?	Ordinal	Not at all Slightly Moderately Significantly Extremely
Q23	How important are social connections (family, friends) when planning about your retirement?	Ordinal	Not at all important Slightly important Moderately important Very important Extremely important

Q24	Do you plan to move closer to family or friends upon retirement?	Ordinal	Definitely not Probably not Not Sure Probably yes Definitely yes
Q25	How frequently do you participate in social activities with your local Indian community when abroad?	Ordinal	Never Rarely Sometimes Often Very frequently
Q26	How often do you visit India?	Ordinal	Less than every 5 years / never Once every 4-5 years Every 2-3 years Once a year More than once a year
Q27	Please indicate which of the options below represents your current plans about the timing of your retirement in relation to the standard retirement age?	Nominal	Early retirement On-time retirement when eligible Late retirement Not- decided
Q28	How strongly do you prefer retiring in your current country of residence?	Ordinal	Strongly prefer not to Prefer not to Neither prefer nor prefer not Prefer to Strongly prefer to

Q29	How strongly do you prefer returning to India for retirement?	Ordinal	Strongly prefer not to Prefer not to Neither prefer nor prefer not Prefer to Strongly prefer to
Q30	Would you consider retiring in your current region if the benefits were more favourable?	Ordinal	Very unlikely Unlikely Neutral Likely Very likely
Q31	What is your planned retirement age?	Continuous	Integer value



## 8.4 Ordinal Logistic Regression - Statistical Output for RQ1

Model Fitting Information				
Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	462.350			
Final	303.329	159.021	4	<.001
Link function: Logit.				

Goodness-of-Fit			
	Chi-Square	df	Sig.
Pearson	357.478	344	.297
Deviance	218.419	344	1.000
Link function: Logit.			

Pseudo R-Square	
Cox and Snell	.541
Nagelkerke	.572
McFadden	.268
Link function: Logit.	

Parameter Estimates								
		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[Howconfidentareyouinyourretirementplanning = 1]	4.007	.621	41.641	1	<.001	2.790	5.223
	[Howconfidentareyouinyourretirementplanning = 2]	6.071	.688	77.931	1	<.001	4.723	7.419
	[Howconfidentareyouinyourretirementplanning = 3]	8.752	.824	112.827	1	<.001	7.137	10.367
	[Howconfidentareyouinyourretirementplanning = 4]	11.224	.994	127.402	1	<.001	9.275	13.173
Location	Financial_Literacy_Score	2.601	.250	108.503	1	<.001	2.112	3.091
	[Whatisyourgender=1]	-.759	.294	6.654	1	.010	-1.336	-.182
	[Whatisyourgender=2]	0 <sup>a</sup>	.	.	0	.	.	.
	[AgeGroup=1]	-.813	.378	4.635	1	.031	-1.553	-.073
	[AgeGroup=2]	-.406	.322	1.589	1	.207	-1.038	.225
	[AgeGroup=3]	0 <sup>a</sup>	.	.	0	.	.	.
Link function: Logit.								
a. This parameter is set to zero because it is redundant.								

## 8.5 Multi Linear Regression - Statistical Output for RQ2

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.367 <sup>a</sup>	.135	.108	7.097

a. Predictors: (Constant), Age Group, Social Connections Score, Highest Educational Qualification, Life Style Score, Years As an Expat, Current Occupational Grade

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1545.173	6	257.529	5.113	<.001 <sup>b</sup>
	Residual	9922.572	197	50.368		
	Total	11467.745	203			

a. Dependent Variable: Planned Retirement Age

b. Predictors: (Constant), Age Group, Social Connections Score, Highest Educational Qualification, Life Style Score, Years As an Expat, Current Occupational Grade

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	54.573	4.578		11.921	<.001
	Life Style Score	-1.005	.932	-.077	-1.079	.282
	Social Connections Score	-1.088	.933	-.082	-1.166	.245
	Years As an Expat	.109	.071	.113	1.538	.126
	Current Occupational Grade	-1.704	.862	-.154	-1.977	.049
	Highest Educational Qualification	2.731	.952	.196	2.870	.005
	Age Group	2.707	.800	.265	3.385	<.001

a. Dependent Variable: Planned Retirement Age

## 8.6 Chi Square Test - Statistical Output for RQ3

Case Processing Summary						
	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
Current Region of Residence * Current Country Retirement Preference	204	100.0%	0	0.0%	204	100.0%

Current Region of Residence * Current Country Retirement Preference Crosstabulation							
Count		Current Country Retirement Preference					Total
		1	2	3	4	5	
Current Region of Residence	1	5	21	16	10	8	60
	2	2	18	30	18	6	74
	3	0	2	21	10	10	43
	4	0	6	10	8	3	27
Total		7	47	77	46	27	204

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	26.783 <sup>a</sup>	12	.008
Likelihood Ratio	30.342	12	.002
Linear-by-Linear Association	7.884	1	.005
N of Valid Cases	204		

a. 5 cells (25.0%) have expected count less than 5. The minimum expected count is .93.

## 8.7 Chi Square Test - Statistical Output for RQ4

Case Processing Summary						
	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
Current Region of Residence * Retirement Timing Plan	204	100.0%	0	0.0%	204	100.0%

Current Region of Residence * Retirement Timing Plan Crosstabulation						
Count		Retirement Timing Plan				
		1	2	3	4	Total
Current Region of Residence	1	6	25	16	13	60
	2	17	28	11	18	74
	3	10	22	2	9	43
	4	10	13	0	4	27
Total		43	88	29	44	204

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	22.300 <sup>a</sup>	9	.008
Likelihood Ratio	26.052	9	.002
Linear-by-Linear Association	8.472	1	.004
N of Valid Cases	204		

a. 1 cells (6.3%) have expected count less than 5. The minimum expected count is 3.84.

## 8.8 Reliability Test (Cronbach's Alpha)

### I. Financial Literacy

Reliability Statistics	
Cronbach's Alpha	N of Items
.904	6

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Interest Calculation Knowledge	13.68	17.589	.709	.891
Inflation Knowledge	13.91	17.214	.747	.885
ROI Knowledge	13.95	16.662	.799	.877
Investment Diversification Knowledge	14.04	16.476	.798	.877
Retirement Savings Knowledge	13.84	17.013	.687	.896
Financial Literacy Self Rating	13.75	18.881	.701	.894

### II. Lifestyle

Reliability Statistics	
Cronbach's Alpha	N of Items
.648	5

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Current Lifestyle Enjoyment Level	14.29	6.682	.288	.642
Current Lifestyle Importance	13.87	5.826	.460	.571
Leisure Activities Importance	13.69	6.017	.403	.596
Health Influence on Retirement	14.21	5.192	.438	.578
Family Health Influence on Retirement	14.21	5.268	.431	.582

### III. Social Connections

Reliability Statistics	
Cronbach's Alpha	N of Items
.504	5

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Social Connections Importance	14.12	6.118	.186	.505
Move Closer to Family Plan	13.65	5.264	.529	.301
Social Activities Frequency Abroad	14.35	5.765	.233	.478
India Visit Frequency	13.74	6.629	.182	.499
India Retirement Preference	14.17	5.016	.303	.432

### IV. Current Location Preferences

Reliability Statistics	
Cronbach's Alpha	N of Items
.521	2

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Current Country Retirement Preference	3.54	1.166	.353	.
Regional Retirement Benefits Consideration	3.19	1.091	.353	.