Chapter 4 -Demographics and Retirement Financial Behaviour

4.1 Introduction

In this chapter, we examine the influence of demographic variables on retirement financial behaviour among working individuals in the BTR. The chapter is structured to fulfil Objective 1: To examine the impact of demographic factors on the retirement financial behaviour of working individuals in BTR and to address Research Question 1 (RQ1): Does the retirement financial behaviour of working individuals in BTR differ according to demographic factors?

Understanding how demographic characteristics shape this behaviour is crucial for designing effective financial planning strategies that cater to the unique needs of various groups. This analysis aims to identify patterns in behaviour and attitudes based on demographic factors such as age, gender, income, education level, marital status, number of children, caste, and employment type. These factors will help assess whether certain demographic groups are more likely to engage in proactive retirement related behaviour.

Through this research, we seek to answer key questions, such as whether younger or older individuals are more involved in retirement preparedness, whether income levels correlate with the likelihood of investing in retirement savings, and whether differences in financial behaviour exist based on education or marital status. By identifying these demographic patterns, the study provides valuable insights that can inform targeted financial education programs and policy interventions, ultimately improving retirement outcomes for diverse groups within the BTR.

The remainder of this chapter is organized as follows: Section 4.2 outlines the methodology, Section 4.3 presents the model estimates, and Section 4.4 offers concluding remarks.

4.2 Data and Methodology

To systematically explore the relationship between various demographic factors and retirement financial behaviour, we propose the following null hypotheses (H), each of which will be tested through inferential statistical methods.

Guided by Moorthy et. al., (2012), we frame the following null hypothesis (H) to determine whether significant differences exist in retirement financial behaviour across the specified demographic categories:

$H_0$1: There is no association between age group and retirement financial behaviour.

$H_0$2: There is no association between gender and retirement financial behaviour.

$H_0$3: There is no association between marital status and retirement financial behaviour.

$H_0$4: There is no association between the number of children and retirement financial behaviour.

$H_0$5: There is no association between caste and retirement financial behaviour.

$H_0$6: There is no association between education level and retirement financial behaviour.

$H_0$7: There is no association between income level and retirement financial behaviour.

$H_0$8: There is no association between type of employment and retirement financial behaviour.

The results of our analysis, derived from One-Way ANOVA, will provide clarity on the associations between demographic factors and retirement financial behaviour by examining whether the means across different groups are all the same. The study employs ANOVA, a statistical method designed to compare mean differences across multiple groups, making it ideal for examining categorical demographic variables like age, income, and education. ANOVA helps identify significant differences in retirement financial behavior between different demographic groups. The analysis includes both parametric and non-parametric versions of ANOVA to account for possible violations of assumptions such as normality and homogeneity of variance. Parametric ANOVA is used when assumptions are met, offering greater statistical power, while non-parametric alternatives like the Kruskal-Wallis Test are employed when assumptions are violated. By using both methods, the study ensures a robust and reliable analysis of how various demographic factors influence retirement planning. The findings aim to provide insights that can inform targeted financial planning resources and policies for individuals in the region.

The findings shall enhance our understanding of how demographic characteristics shape retirement financial behaviour. This knowledge is crucial for tailoring financial education initiatives and policy measures aimed at improving retirement outcomes for diverse groups

within the BTR, thereby addressing the specific needs and challenges faced by different demographic segments.

4.3 Discussion of Results

4.3.1 Parametric Approach

The analysis examines the influence of various demographic factors—including age, gender, marital status, number of children, caste, education, income, and type of employment—on retirement financial behaviour among the sample of 641 respondents. Using one-way ANOVA guided by Kim (2017), the analysis compares the mean scores for retirement financial behaviour across each demographic group, allowing us to assess significant differences in retirement financial behaviour based on each factor. We employ the Levene's test[1] in validating ANOVA by assessing the homogeneity of variances assumption, which ensures that the variances across groups are approximately equal.

The ANOVA results for age presented in Table 4.1 indicate a statistically significant difference in retirement financial behaviour across age groups ($p < 0.001$). Respondents aged 40–49, 50–59, and 60 years and above have higher mean scores than younger groups, particularly those aged 18–29. This trend suggests that as individuals age, they tend to focus more on retirement. This is likely due to proximity to retirement age and a growing awareness of retirement needs. Among the youngest group, aged 18–29, the mean score of 2.994 is the lowest, suggesting that individuals in this stage of life are less focused on retirement. Younger individuals (18–29) might prioritize other financial goals over retirement, which could explain their lower mean scores. In the next group, aged 30–39, the mean score slightly increases to 3.062, reflecting the early to mid-career stage where there may be a growing awareness of long-term financial needs but still competing short-term priorities. Retirement becomes considerably more pronounced for individuals aged 40–49, with a mean score rising to 3.3008, indicating a significant shift in focus toward securing financial stability as retirement becomes more foreseeable. Similarly, those aged 50–59 maintain a high mean score of 3.287, showing continued and active

[1] The Levene test evaluates the null hypothesis (H_0) that variances are equal across all groups against the alternative hypothesis (H_1) that at least one group has a different variance. In this analysis, the test result was not significant (p-value > 0.05), confirming the assumption of equal variances and allowing the standard ANOVA to be conducted with confidence. For brevity, detailed results of the Levene test are presented in Appendix B.

retirement engagement, as individuals in this age range are likely focused on solidifying their savings and reducing financial risk. The oldest group, aged 60 and above, also has a high mean score of 3.280, reflecting sustained attention to managing retirement issues.

Table 4.1 Age and Retirement Financial Behaviour

Age Groups	N	Mean	Standard Deviation	F value	P Value
18-29 years	213	2.994	0.612	7.577	0.000*
30-39 years	210	3.062	0.632		
40-49 years	121	3.3008	0.520		
50-59 years	82	3.287	0.530		
60 years and above	15	3.280	0.658		
Total	641	3.118	0.606		

Note: Significance level of 1 percent (*); 'N' is the number of observations.
Source: Researcher's Analysis

Overall, the total sample mean score is 3.118, reflecting a moderate focus on retirement across all age groups. Statistical analysis using ANOVA confirms that these variations across age groups are significant, with an F value of 7.577 and a p-value of 0.000, highlighting that age has a statistically significant association with retirement financial behaviour. This trend—where engagement grows with age, especially after age 40—underscores the increasing prioritization of financial security for retirement as individuals near the later stages of their careers. These insights are valuable for financial planners, policymakers, and organizations aiming to encourage earlier engagement in retirement planning and savings, potentially through targeted financial education initiatives that can instil proactive savings habits from a younger age. The ANOVA analysis presented in Table 4.2 reveals no significant difference in retirement financial behaviour between male and female respondents ($p = 0.743$). This finding suggests that gender may not be a distinguishing factor in retirement financial behaviour.

Table 4.2 Gender and Retirement Financial Behaviour

Gender	N	Mean	Standard Deviation	F value	P Value
Male	431	3.124	0.610	0.108	0.743
Female	210	3.107	0.599		

Total	641	3.118	0.606		

Note: 'N' is the number of observations.
Source: Researcher's Analysis

Marital status shows a statistically significant impact on retirement financial behaviour (p = 0.048), with married individuals reporting slightly higher scores than single and divorced respondents as presented in Table 4.3. This may be attributed to married individuals' tendency to prioritize financial stability for family support, prompting a stronger focus on retirement.

Table 4.3 Marital Status and Retirement Financial Behaviour

Marital Status	N	Mean	Standard Deviation	F value	P Value
Single	226	3.042	0.585	3.042	0.048**
Married	408	3.163	0.615		
Divorced	7	3.000	0.541		
Total	641	3.118	0.606		

Note: Significance level of 5 percent (**); 'N' is the number of observations.
Source: Researcher's Analysis

The analysis shows no significant difference in retirement financial behaviour based on the number of children (p = 0.197) as presented in Table 4.4. While mean scores are slightly higher for respondents with two or more children, the difference is not statistically significant, suggesting that the number of dependents may not have a strong impact on retirement financial behaviour in this group.

Table 4.4 Number of Children and Retirement Financial Behaviour

Number of Children	N	Mean	Standard Deviation	F value	P Value
No Children	300	3.092	0.620	1.564	0.197
1 Child	182	3.086	0.595		
2 Children	127	3.218	0.596		
More than 2 Children	32	3.156	0.544		
Total	641	3.118	0.606		

Note: 'N' is the number of observations.
Source: Researcher's Analysis

Caste does not have a significant effect on retirement financial behaviour, as indicated by the non-significant ANOVA result (p = 0.829) as presented in Table 4.5. This suggests that retirement financial behaviour in this sample is not influenced by caste-based differences.

Table 4.5 Caste and Retirement Financial Behaviour

Caste	N	Mean	Standard Deviation	F value	P Value
Scheduled Tribe	382	3.124	0.608	0.295	0.829
General	134	3.134	0.574		
Scheduled Caste	34	3.029	0.603		
Other Backward Classes	91	3.107	0.649		
Total	641	3.118	0.606		

Note: 'N' is the number of observations.
Source: Researcher's Analysis

The results indicate a significant effect of education level on retirement financial behaviour (p < 0.001) as presented in Table 4.6. Respondents with higher education levels (graduate and above) have higher mean scores, suggesting that individuals with more education have more focus on retirement. This emphasizes the role of education in promoting proactive financial behaviour.

Table 4.6 Education and Retirement Financial Behaviour

Education	N	Mean	Standard Deviation	F value	P Value
Up to Matriculation	69	2.942	0.575	6.012	0.000*
Higher Secondary	123	2.946	0.611		
Graduate	252	3.191	0.575		
Post Graduate	168	3.181	0.598		
Above Post Graduate	29	3.282	0.739		

Total	641	3.118	0.606		

Note: Significance level of 1 percent (*); 'N' is the number of observations.
Source: Researcher's Analysis

Income level has a significant effect on retirement financial behaviour ($p < 0.001$) as presented in Table 4.7. Higher-income respondents tend to score higher, suggesting a positive correlation between income and proactive financial planning. This finding highlights those greater financial resources enable individuals to focus more on long-term financial goals, such as retirement.

Table 4.7 Income and Retirement Financial Behaviour

Income	N	Mean	Standard Deviation	F value	P Value
Up to Rs 2,50,000	310	3.003	0.644	10.058	0.000*
Rs 2,50,001 – Rs 5,00,000	163	3.137	0.525		
Rs 5,00,001 – Rs 10,00,000	103	3.322	0.501		
Above Rs 10,00,000	65	3.301	0.633		
Total	641	3.118	0.606		

Note: Significance level of 1 percent (*); 'N' is the number of observations.
Source: Researcher's Analysis

Employment type significantly influences retirement financial behaviour ($p < 0.001$) as presented in Table 4.8. Respondents in government and professional sectors show higher mean scores, while gig workers have the lowest scores. This indicates that stable employment with benefits (often present in government jobs) supports long-term financial planning, while gig workers, facing income variability, may deprioritize retirement. The highest mean score is observed among government sector employees, at 3.290, indicating a strong inclination towards proactive retirement savings and planning, likely due to more stable incomes and benefits associated with government jobs. In contrast, public sector employees have a lower mean score of 3.000, suggesting that while they are still engaged in retirement savings and

planning, their focus may be less pronounced compared to their government counterparts. Private sector employees score slightly higher than public sector employees, with a mean of 3.207, indicating that the dynamics of the private sector may foster a more proactive approach to retirement savings and planning. Those in business show a similar trend, with a mean score of 3.176, reflecting that entrepreneurs may prioritize retirement savings and planning differently, potentially balancing immediate business needs with long-term financial security. Professionals have a mean score of 3.254, suggesting a solid but not exceptional focus on retirement savings and planning, perhaps influenced by the varying income levels and financial pressures within professional fields. Conversely, gig workers demonstrate the lowest mean score at 2.755, highlighting the challenges faced by this group in retirement savings and planning, likely due to irregular income streams and a lack of access to employer-sponsored retirement benefits. The overall mean score across all employment categories stands at 3.118, indicating a moderate level of focus on retirement preparation. The ANOVA results reveal a highly significant F value of 13.034 with a p-value of 0.000, confirming that the employment type is a crucial factor influencing retirement financial behaviour. This analysis suggests that targeted financial education and resources tailored to specific employment sectors may enhance among lower-scoring groups, particularly gig workers, to improve their financial security in retirement.

Table 4.8 Employment and Retirement Financial Behaviour

Income	N	Mean	Standard Deviation	F value	P Value
Government Sector	124	3.290	0.538	13.034	0.000*
Public Sector	105	3.000	0.499		
Private Sector	104	3.207	0.761		
Business	102	3.176	0.582		
Professionals	102	3.254	0.493		

Gig Worker	104	2.755	0.567		
Total	641	3.118	0.606		

Note: Significance level of 1 percent (*); 'N' is the number of observations.
Source: Researcher's Analysis

The analysis reveals significant influences of age, marital status, education, income, and employment type on retirement financial behaviour. Older age groups, married individuals, higher education levels, higher incomes, and stable employment correlate with more proactive retirement savings and planning. However, gender, number of children, and caste do not show significant effects, suggesting these factors may not be critical in influencing retirement financial behaviour.

The hypotheses regarding the association between various demographic factors and retirement financial behaviour are fundamental to understanding how these characteristics influence retirement financial behaviour. $H_0$1 examines the association between age and retirement financial behaviour. Based on the inferential analysis, this hypothesis is rejected ($p = 0.000$), indicating a significant relationship exists, suggesting that age is an important factor influencing retirement financial behaviour. $H_0$2 examines the relationship between gender and retirement financial behaviour, and the analysis shows no significant association ($p = 0.743$), leading to the acceptance of the null hypothesis. This implies that gender does not play a substantial role in influencing retirement financial behaviour. $H_0$3 focuses on marital status and its impact on retirement financial behaviour. The analysis rejects the null hypothesis ($p = 0.048$), revealing a significant association, suggesting that marital status likely influences how individuals plan and save for retirement. $H_0$4 investigates the number of children and its potential effect on retirement financial behaviour The hypothesis is accepted ($p = 0.197$), indicating no significant impact, which may suggest that the number of children does not directly affect retirement financial behaviour. $H_0$5 explores the influence of caste on retirement financial behaviour, with the null hypothesis accepted ($p = 0.829$), indicating that caste does not significantly affect retirement financial behaviour. $H_0$6 demonstrates a strong association between education level and retirement financial behaviour, as the null hypothesis is rejected ($p = 0.000$), underscoring the critical role of educational attainment in shaping financial behaviour regarding retirement. $H_0$7 identifies a significant relationship between income level and retirement financial behaviour ($p = 0.000$), leading to the rejection of the null hypothesis,

which emphasizes the necessity of financial resources in retirement planning and savings. $H_0$8 examines the type of employment and its relationship with retirement financial behaviour, resulting in a rejection of the null hypothesis ($p = 0.000$). This indicates that employment status significantly influences retirement financial behaviour. Collectively, these hypotheses elucidate the complex interplay between demographic factors and retirement financial behaviour, offering valuable insights for financial planning and policy development aimed at enhancing retirement preparedness.

4.3.2 Non-Parametric Approach

The Kruskal-Wallis Test is a widely used non-parametric test in statistical analysis designed to evaluate whether there are statistically significant differences among the medians of two or more independent groups (Ostertagová, 2014). This test is particularly valuable when the assumptions of a traditional one-way ANOVA, such as normally distributed data, may not be valid.[2] Given its non-parametric nature, the Kruskal-Wallis test makes no assumptions about data normality and is well-suited for ordinal or ranked data. In the context of this study, the test is applied across several demographic variables to understand how each impacts retirement financial behaviour. By examining factors such as age, gender, marital status, number of children, caste, education, income, and type of employment, we aim to uncover which variables play significant roles in influencing individuals' retirement financial behaviour.

The test results presented in Table 4.9 reveal a significant association between age and retirement financial behaviour, with older age groups demonstrating progressively higher mean ranks. Specifically, the mean ranks for each age category are as follows: 18-29 years (277.66), 30-39 years (304.66), 40-49 years (378.95), 50-59 years (380.40), and 60 years and above (372.97). The chi-square value of 35.195 with a p-value of 0.000 underscores the statistical significance of age in influencing retirement financial behaviour. The results suggest that as individuals age, their focus on retirement tends to intensify. For younger individuals, retirement

[2] The results from the Kolmogorov-Smirnov and Shapiro-Wilk tests of normality guided by Kim (2017) and Mishra et. al. (2019) across various demographic variables (Age, Gender, Marital Status, Number of Children, Caste, Education, Annual Income, and Type of Employment) indicate that scores significantly deviate from a normal distribution, with only a few subcategories showing normality. This suggests that non-parametric tests would be more appropriate for analyzing the scores across these demographics. The results of the normality tests performed using SPSS 26 are produced in Appendix C.

may seem too distant to warrant immediate attention, while those closer to retirement age are more aware of the need for financial security post-retirement. This observed increase in focus on retirement with age highlights an essential aspect of financial preparedness that develops over a person's life course, emphasizing the importance of introducing age-appropriate retirement education early on to encourage sustainable long-term financial security.

Table 4.9 Age and Retirement Financial Behaviour

Age	N	Mean Rank
18-29 years	213	277.66
30-39 years	210	304.66
40-49 years	121	378.95
50-59 years	82	380.4
60 years and above	15	372.97
Total	641	
Chi-Square		35.195
p-value		0.000*

Note: Significance level of 1 percent (*); 'N' is the number of observations.
Source: Researcher's Analysis

When examining gender, the test presented in Table 4.10 finds no significant difference in retirement financial behaviour between males and females, with males having a mean rank of 322.83 and females at 317.25. The p-value for gender is 0.719, which is well above the standard threshold of 0.05, indicating that gender does not have a statistically significant impact on retirement financial behaviour. This finding may reflect broader societal trends toward increasing financial independence and planning behaviour among both men and women, as gender roles in personal finance continue to evolve. Gender equality efforts have increased awareness and resources for financial literacy among women, which may account for the similar levels of engagement in retirement financial behaviour between genders. These results suggest that, at least within this sample, gender-based differences in retirement financial behaviour are not substantial, underscoring a shift towards a more egalitarian approach to retirement planning and savings.

Table 4.10 Gender and Retirement Financial Behaviour

Gender	N	Mean Rank
Male	431	322.83

Female	210	317.25
Total	641	
Chi-Square		0.13
P-Value		0.719

Note: ‘N’ is the number of observations.
Source: Researcher’s Analysis

Marital status shows a statistically significant impact on retirement financial behaviour, with married individuals showing a higher mean rank (337.10) compared to single (293.44) and divorced individuals (272.00) as presented in Table 4.11. With a chi-square value of 8.685 and a p-value of 0.013, the test reveals that marital status is associated with differences in retirement financial behaviour. Marriage often brings financial stability, shared goals, and long-term planning responsibilities that may influence an individual's approach to retirement. Married individuals may feel more pressure or motivation to plan and save for retirement to ensure financial security for their spouse and family. Conversely, single and divorced individuals may face different financial priorities, which could impact their engagement in retirement planning and savings. This significant effect of marital status highlights how interpersonal relationships and family structures can shape financial priorities and planning behaviour.

Table 4.11 Marital Status and Retirement Financial Behaviour

Marital Status	N	Mean Rank
Single	226	293.44
Married	408	337.1
Divorced	7	272
Total	641	
Chi-Square		8.685
p-value		0.013**

Note: Significance level of 5 percent (**); ‘N’ is the number of observations.
Source: Researcher’s Analysis

The analysis of the number of children as a demographic factor reveals no statistically significant influence on retirement financial behaviour as presented in Table 4.12. The mean ranks across categories (No Children: 310.63, 1 Child: 311.12, 2 Children: 358.68, and More than 2 Children: 324.86) do not vary substantially, and the p-value of 0.078 exceeds the threshold for statistical significance. Although having children could influence financial planning priorities, the results suggest that the number of children does not markedly impact

retirement financial behaviour. This finding may be attributed to varying financial strategies among parents, some of whom may prioritize short-term expenses related to children's education and upbringing, while others may still focus on long-term retirement goals regardless of family size. Thus, while raising children may affect overall financial planning, it does not appear to significantly alter retirement-specific behaviour.

Table 4.12 Number of Children and Retirement Financial Behaviour

No of Children	N	Mean Rank
No Children	300	310.63
1 Child	182	311.12
2 Children	127	358.68
More than 2 Children	32	324.86
Total	641	
Chi-Square		6.812
p-value		0.078

Note: Significance level of 1 percent (*); 'N' is the number of observations.
Source: Researcher's Analysis

In terms of caste, the Kruskal-Wallis test results as presented in Table 4.13 indicate no significant difference in retirement financial behaviour across caste groups, with mean ranks relatively close (ST= 323.79, General= 320.28, Scheduled Caste = 296.87, Other Backward Classes = 319.36) and a p-value of 0.878. The lack of significant variation suggests that caste may not be a determinant factor in retirement financial behaviour. While caste may influence other aspects of socioeconomic life in certain societies, it appears to have limited bearing on retirement financial behaviour. This result points to a potential shift toward more uniform retirement financial behaviour across diverse caste backgrounds, which may be partly due to increased financial awareness and access to retirement financial behaviour across social strata.

Table 4.13 Caste and Retirement Financial Behaviour

Caste	N	Mean Rank
Scheduled Tribe	382	323.79
General	134	320.28
Scheduled Caste	34	296.87
Other Backward Classes	91	319.36

Total	641
Chi-Square	0.681
p-value	0.878

Note: Significance level of 1 percent (*), 'N' is the number of observations.
Source: Researcher's Analysis

Education level has a significant effect on retirement financial behaviour, with mean ranks increasing alongside higher educational attainment (Upto Matriculation: 263.30, Higher Secondary: 266.57, Graduate: 343.22, Post Graduate: 342.07, Above Post Graduate: 373.98). The chi-square value of 25.813 with a p-value of 0.000 confirms that education level is a substantial factor in determining retirement financial behaviour. The test results are presented in Table 4.14. Education enables individuals to understand the importance of saving and investing for retirement, equipping them with the tools to make informed financial decisions.

Table 4.14 Education and Retirement Financial Behaviour

Education	**N**	**Mean Rank**
Upto Matriculation	69	263.3
Higher Secondary	123	266.57
Graduate	252	343.22
Post Graduate	168	342.07
Above Post Graduate	29	373.98
Total		641
Chi-Square		25.813
p-value		0.000*

Note: Significance level of 1 percent (*); 'N' is the number of observations.
Source: Researcher's Analysis

Income level also significantly influences retirement financial behaviour, with mean ranks rising as income increases (Up to Rs 2,50,000: 290.25; Rs 2,50,001 – Rs 5,00,000: 313.94; Rs 5,00,001 – Rs 10,00,000: 386.15; Above Rs 10,00,000: 382.11). The chi-square value of 28.96 and p-value of 0.000 demonstrate that income is a key factor in shaping retirement financial behaviour. The test results are presented in Table 4.15.

Table 4.15 Income and Retirement Financial Behaviour

Income	N	Mean Rank
Up to Rs 2,50,000	310	290.25
Rs 2,50,001 – Rs 5,00,000	163	313.94
Rs 5,00,001 – Rs 10,00,000	103	386.15
Above Rs 10,00,000	65	382.11
Total		641
Chi-Square		28.96
p-value		0.000*

Note: Significance level of 1 percent (*); 'N' is the number of observations.
Source: Researcher's Analysis

Higher-income groups are more likely to have disposable income, allowing them to allocate resources toward retirement savings without compromising other financial obligations. This trend reflects the advantages of financial stability in supporting retirement-focused investments, highlighting income as a critical enabler of robust retirement financial behaviour. Financial advisors often recommend building retirement savings proportionate to income, as individuals with higher earnings are better positioned to pursue retirement goals effectively.

The type of employment significantly impacts retirement financial behaviour, as indicated by a chi-square value of 73.536 and a p-value of 0.000. The mean ranks vary notably, with government employees having the highest mean rank (377.07) and gig workers the lowest (206.87). This finding suggests that traditional, stable employment roles such as those in the government sector—are more conducive to retirement planning and savings than more precarious positions, like gig work. The test results are presented in Table 4.16.

Table 4.16 Type of Employment and Retirement Financial Behaviour

Type of Employment	N	Mean Rank
Government Sector	124	377.07
Public Sector	105	265.4
Private Sector	104	358.68
Business	102	339.64
Professionals	102	369.39
Gig Worker	104	206.87
Total	641	
Chi-Square		73.536

p-value	0.000*

Note: Significance level of 1 percent (*), 'N' is the number of observations.
Source: Researcher's Analysis

Employment stability plays a substantial role in retirement financial behaviour. Government employees, often benefiting from stable salaries, pensions, and employer-sponsored retirement plans, are likely to engage more actively in retirement financial behaviour. In contrast, gig workers may lack such benefits and experience income volatility, making it more challenging to consistently allocate funds toward retirement planning and savings. This outcome emphasizes the importance of employment stability in fostering retirement preparedness and may suggest the need for targeted retirement resources for those in non-traditional employment.

The Kruskal-Wallis Test reveals significant differences in retirement financial behaviour based on age, marital status, education, income, and type of employment, while gender, number of children, and caste appear to have no significant effect. These findings emphasize the roles of financial stability and life-stage factors—such as age, education, and income level—in shaping individuals' financial behaviour towards retirement. Employment type also influences retirement financial behaviour, with stable, traditional roles correlating with greater involvement. The results underscore the importance of early education in retirement financial behaviour and the need for targeted financial planning resources for various demographics to promote financial preparedness and security across different life circumstances.

The hypotheses concerning the relationship between various demographic factors and retirement financial behaviour are essential for understanding how these factors may shape retirement financial behaviour. $H_0$1, which posits no association between age group and retirement financial behaviour, is rejected due to the significant result ($p = 0.000$), indicating that age significantly influences retirement financial behaviour, with variations in planning strategies across different age groups. $H_0$2, stating no association between gender and retirement financial behaviour, is supported by the p-value of 0.719, showing no significant difference and suggesting that gender does not significantly impact retirement financial behaviour. $H_0$3, which examines marital status, reveals a significant difference ($p = 0.013$), leading to the rejection of the null hypothesis, suggesting that marital status plays a role in shaping retirement financial behaviour, with married individuals potentially having different planning and savings approach compared to single individuals. $H_0$4, regarding the number of children, results in a p-value of 0.078, leading to the acceptance of the null hypothesis, implying that parental status does not significantly affect retirement financial behaviour. $H_0$5, concerning

caste, is supported by a p-value of 0.878, indicating no significant influence on retirement financial behaviour and suggesting uniformity in approaches towards retirement across different caste groups. $H_0$6, which examines education level, is rejected with a significant result (p = 0.000), emphasizing the crucial role of education in influencing retirement financial behaviour, with individuals possessing higher levels of education being more proactive. $H_0$7, which assesses income level, is also rejected due to the significant result (p = 0.000), indicating that income plays a critical role in shaping retirement financial behaviour, with higher income levels enabling more substantial and effective planning. Finally, $H_0$8 which assesses employment type, is also rejected due to the significant result (p = 0.000), indicating that the type of employment plays a crucial role in shaping retirement financial behaviour. Overall, these results suggest that age, marital status, education level, and income significantly impact retirement financial behaviour, while gender, number of children, and caste have no influence.

4.4 Conclusion

This chapter compares the parametric (one-way ANOVA) and non-parametric (Kruskal-Wallis Test) approaches in analyzing retirement financial behaviour, highlighting their complementary insights and mutual findings. The results from both tests reveal consistent patterns in retirement financial behaviour, pointing to specific demographic variables—age, marital status, education, income, and type of employment—as significant determinants of retirement financial behaviour, while gender, number of children, and caste show no substantial effects. This consistency suggests a robust pattern across the data, affirming the role of financial stability and life-stage factors as crucial in motivating individuals to engage in retirement planning and savings.

Both the parametric and non-parametric analyses demonstrate that age significantly influences retirement financial behaviour, with older individuals displaying more proactive retirement financial behaviour. This age-related trend aligns with findings by Moorthy et. al., 2012 et al. (2012) and Stawski et. al., (2007), who highlight that individual nearing retirement tend to be more cognizant of the need for financial security. In this study, the consistency across both analyses reinforces the role of age as a key determinant in retirement financial behaviour. The increase in scores with age suggests that as individuals approach retirement, they become more aware of the importance of securing financial resources, a pattern that appears independent of the analytical approach used.

Marital status emerges as another critical factor, with married individuals showing higher levels of focus on retirement than their single or divorced counterparts. Both one-way ANOVA and Kruskal-Wallis results indicate a statistically significant difference based on marital status, which suggests that married individuals may be motivated by shared financial goals and family stability to engage more actively in retirement planning and savings. This finding implies that having a family structure and shared responsibilities may encourage individuals to prioritize retirement security, potentially enhancing the overall financial preparedness within households. This in line with the findings of Afthanorhan et al. (2020).

Education level also positively correlates with retirement financial behaviour across both tests, suggesting that individuals with higher educational attainment are more likely to engage in proactive financial behaviour. These finding are in sync prior research by Joo and Pawels (2002) and Afthanorhan et al. (2020), which suggests that education is a strong predictor of retirement planning behaviour. Higher education levels may enhance awareness of financial products and strategies, equipping individuals with the knowledge necessary for effective retirement planning. This finding underscores the importance of educational attainment, which in turn fosters long-term financial preparedness.

Income is another significant driver of retirement financial behaviour across both parametric and non-parametric analyses, with higher-income individuals more actively engaging in retirement planning and savings. This consistency across approaches supports previous research, such as studies by Moorthy et. al., (2012) and Hassan et al. (2016), which emphasize the role of income in determining an individual's retirement confidence and savings behaviour. Higher income likely provides more disposable resources for retirement contributions, thus promoting a greater focus on retirement. This trend illustrates the critical link between income levels and retirement security, where individuals in higher-income brackets have the means and possibly the motivation to allocate resources toward their retirement.

Type of employment, particularly stable roles such as government positions, also shows a strong correlation with retirement financial behaviour in both the parametric and non-parametric tests. Individuals in stable employment situations appear more inclined to engage in retirement planning and savings, possibly due to structured benefits or retirement plans offered in such roles. The consistency of this finding across both analytical approaches suggests that employment stability fosters a sense of financial security that encourages proactive

retirement financial behaviour. This pattern is particularly relevant in contexts where employment benefits play a significant role in shaping retirement outcomes.

On the other hand, gender, number of children, and caste do not show significant impacts on retirement financial behaviour in either analysis. This lack of significance contrasts slightly with broader literature on gender differences, where men are generally observed to have higher retirement savings and confidence compared to women (Hogart, 1991; Huberman et al., 2007). However, the non-significance of gender in this specific sample may reflect unique demographic or cultural factors, indicating that gender differences may not universally affect retirement financial behaviour. Similarly, the findings suggest that the number of children and caste do not substantially influence retirement financial behaviour within the sampled population, reinforcing that these demographic factors may have limited bearing on financial preparedness in the context studied.

While both one-way ANOVA and the Kruskal-Wallis Test yield similar findings, their methodological differences add depth to the analysis. In this context, the Kruskal-Wallis Test may offer a more accurate depiction of typical retirement financial behaviour, particularly when the sample exhibits varied distributions. By using a rank-based view, the Kruskal-Wallis Test accommodates real-world demographic diversity, providing insights into RFB patterns that may be more representative of general populations. This flexibility makes the non-parametric approach valuable when analyzing data that may not meet the strict assumptions of parametric testing.

The parametric approach, as in one-way ANOVA, typically assumes a normal distribution and equal variances across groups, which may limit its applicability if these assumptions are not fully met. In contrast, the non-parametric Kruskal-Wallis Test does not rely on such assumptions, making it more adaptable to data with skewed distributions or heterogeneity. The use of mean ranks in the Kruskal-Wallis Test instead of mean scores, as in parametric analysis, makes it less susceptible to the influence of outliers, which can enhance the robustness of findings in cases where the data includes extreme values, such as individuals with very high incomes or late-career professionals with substantial retirement contributions.

Both tests ultimately paint a consistent picture of retirement financial behaviour, emphasizing the significance of age, marital status, education, income, and employment type. The findings support targeted financial resources and interventions aimed at different demographic profiles to foster proactive retirement financial behaviour. Recognizing the consistent influence of these

demographic factors across both parametric and non-parametric analyses strengthens the understanding of retirement financial behaviour as influenced by age, education, income, and employment stability. In practical terms, this research suggests that tailored financial planning resources for individuals at various life stages, education levels, and income brackets can enhance retirement preparedness across diverse demographic groups, contributing to more comprehensive financial security and well-being in retirement.