Chapter 7 - Scheduled Tribes and Retirement Financial Behaviour

7.1 Introduction

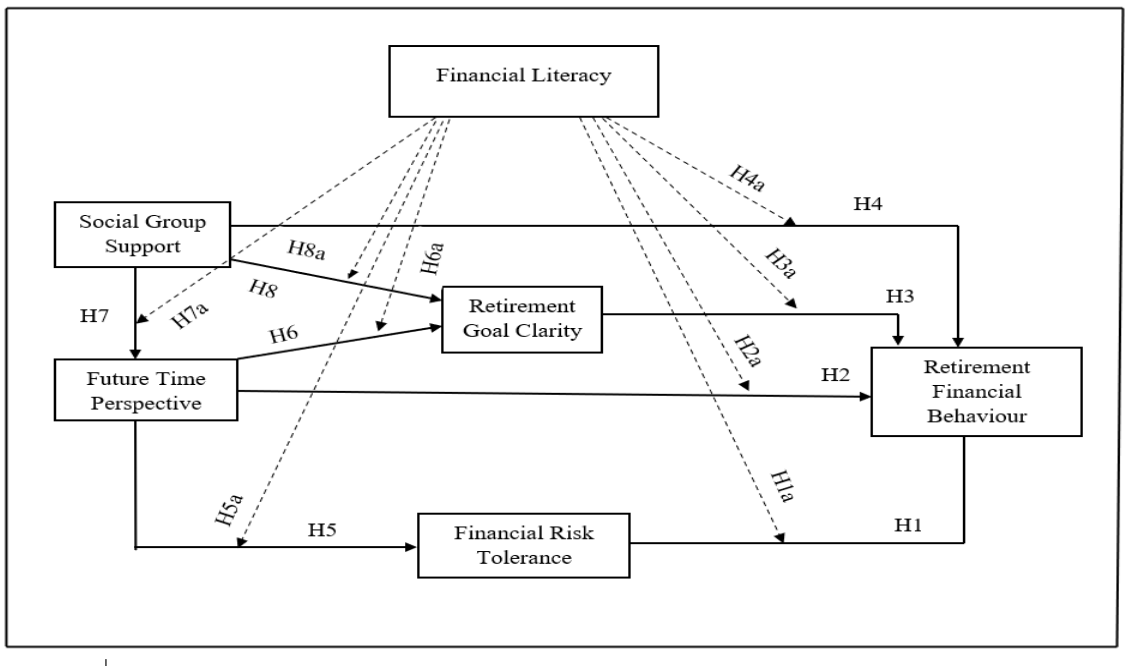
Tribal communities, as indigenous peoples, frequently face multifaceted challenges such as economic backwardness, geographical isolation, limited access to financial services, and low literacy rates. These socio-economic barriers contribute to a complex landscape that affects financial behaviour, including savings, investments, and long-term financial planning. Research has shown that low literacy rates are common among these populations (Dutta and Sarkar, 2019; Singh and Singh, 2023), significantly affecting their financial decision-making abilities. For instance, studies on financial behaviour in tribal areas, such as the work of Sadhu (2022), highlight that saving and investment behaviour remains low despite financial inclusion efforts. Similarly, Nayak (2013) found that rural households in western Odisha, with low educational levels, often lack awareness of the benefits of saving and investing for the future.

While these insights provide valuable information about the financial behaviour of tribal communities, there remains a significant gap in the literature regarding the determinants of retirement financial behaviour among scheduled tribes, particularly in the BTR of Assam. This gap highlights the need for focused research into the factors influencing retirement financial behaviour within this indigenous population. This chapter addresses this gap by investigating the psychological constructs that shape financial decision-making and their influence on retirement financial behaviour among the tribal communities in BTR.

This study makes several key contributions to the literature on financial behaviour. First, it fills an empirical research gap by exploring retirement financial behaviour among scheduled tribes, a population that has been largely underrepresented in existing literature. Second, the research examines the moderating role of financial literacy, shedding light on how financial knowledge impacts the relationship between psychological constructs and retirement financial behaviour. While financial literacy has been recognized as a crucial factor in financial decision-making in mainstream populations, its role among indigenous groups has received limited attention. This

study bridges that gap, investigating how financial literacy can either enhance or inhibit the influence of psychological factors on retirement intentions in tribal settings. Financial literacy plays a pivotal role in shaping how psychological factors impact retirement financial behaviour. This chapter delves into the concept of financial literacy, focusing on its potential to improve financial decision-making within tribal communities. Given the prevalent low literacy rates and limited access to financial education programs in these communities, financial literacy could serve as a transformative tool, helping individuals make informed and proactive decisions regarding retirement. Understanding the moderating effect of financial literacy is essential, as it can inform the development of culturally appropriate financial education and retirement related initiatives tailored to the needs of the tribal population. This study lays the groundwork for understanding the interplay between psychological constructs and financial literacy in shaping retirement financial behaviour among tribal communities in the BTR. By exploring these dynamics within the context of indigenous populations, the chapter provides valuable insights for policymakers and financial educators. These insights can guide the design of targeted financial literacy programs that address the unique challenges faced by tribal communities, ultimately fostering greater retirement security and financial well-being.

Figure 7.1 Conceptual Model



Source: Researcher's Analysis

This research proposes the following hypotheses (H):

H1: Financial risk tolerance has a significant positive influence on retirement financial behaviour.

H2: Future time perspective has a significant positive influence on retirement financial behaviour.

H3: Retirement goal clarity has a significant positive influence on retirement financial behaviour.

H4: Social group support has a significant positive influence on retirement financial behaviour.

H5: Financial risk tolerance mediates the influence of future time perspective on retirement financial behaviour

H6: Retirement goal clarity mediates the influence of future time perspective on retirement financial behaviour

H7: Future time perspective mediates the influence of social group support on retirement financial behaviour.

H8: Retirement goal clarity mediates the influence of social group support on retirement financial behaviour.

H1a – H8a: Financial literacy moderates the relationships among the model constructs.

The data and methodology for the research are spelled out in Section 7.2 while in Section 7.3, the results of the study are discussed. We conclude by summarizing our findings in Section 7.4.

7.2 Data and Methodology

As outlined in Section 3.1 of Chapter 3, the data was analyzed using SEM to examine the relationships between various variables, in accordance with the guidelines provided by Hair et al. (2019). The dataset utilized for this analysis is detailed in Section 3.1 of Chapter 3. In the study, a total of 382 respondents from Scheduled Tribe communities were identified and analyzed as a subsample drawn from the full sample comprising 641 participants. This stratified analysis ensures that insights specific to the ST respondents can be systematically examined, allowing for a focused exploration of their unique retirement financial behaviour

within the broader dataset. An overview of the variables, items, and sources used to measure the constructs is presented in Table 5.1. Additionally, the financial literacy dimension details can be found in Table 6.1.

7.3 Discussion of Results

7.3.1 Measurement Model Assessment

The measurement model results for the constructs related to retirement financial behaviour show varied levels of reliability and validity based on the indicators (items) loadings, Cronbach's alpha (α), Composite Reliability (CR), and Average Variance Extracted (AVE). The results are presented in Table 7.1.

Table 7.1 Construct Reliability and Convergent Validity Outcomes

Items	Factor loadings			α			CR			AVE		
	Full Sample	High FL	Low FL	Full Sample	High FL	Low FL	Full Sample	High FL	Low FL	Full Sample	High FL	Low FL
FTP1	0.674	0.563	0.722	0.796	0.738	0.827	0.82	0.799	0.836	0.528	0.509	0.584
FTP2	0.757	0.658	0.826									
FTP3	0.752	0.581	0.841									
FTP4	0.754	0.699	0.766									
FTP5	0.693	0.755	0.652									
FRT2	0.89	0.901	0.872	0.81	0.829	0.78	0.819	0.841	0.781	0.724	0.744	0.695
FRT3	0.842	0.848	0.819									
FRT4	0.82	0.838	0.807									
RGC1	0.816	0.805	0.829	0.889	0.892	0.887	0.891	0.898	0.887	0.752	0.756	0.748
RGC2	0.879	0.889	0.865									
RGC3	0.893	0.897	0.889									
RGC4	0.878	0.884	0.876									
SGS2	0.915	0.924	0.908	0.821	0.845	0.796	0.824	0.85	0.797	0.848	0.866	0.831
SGS3	0.927	0.937	0.914									
RFB1	0.589	0.567	0.594									
RFB2	0.803	0.753	0.86	0.894	0.895	0.89	0.901	0.901	0.903	0.58	0.584	0.573
RFB3	0.792	0.8	0.782									
RFB4	0.735	0.773	0.685									
RFB5	0.787	0.806	0.77									
RFB6	0.848	0.866	0.826									
RFB7	0.668	0.675	0.647									

RFB8	0.834	0.829	0.847									

Note: Cronbach's Alpha (α), Composite Reliability (CR), and Average Variance Extracted (AVE). Financial Risk Tolerance (FRT), Future Time Perspective (FTP), Retirement Financial Behaviour (RFB) , Retirement Goal Clarity (RGC) and Social Group Support (SGS).
Source: Researcher's Analysis

This table presents results from a measurement model analysis, including factor loadings, α, CR, and AVE for various items under different constructs, divided into three sample groups: the full sample, high financial literacy (FL) sub group, and low financial literacy sub group. The factor loadings for each item generally exceeded 0.5, indicating acceptable levels of indicator reliability. Across all constructs, there were minor variations in loadings between the high FL and low FL groups. FTP items showed loadings between 0.674 and 0.757 in the full sample, between 0.563 to 0.755 in high FL subgroup and 0.652 to 0.841 in low FL subgroup. RGC items displayed strong and consistent factor loadings, such as RGC3 with loadings of 0.893, 0.897, and 0.889 for the complete, high FL, and low FL samples, respectively. FRT items FRT2, FRT3 and FRT4 showed loadings above 0.8 in all the three groups- full sample, high Fl and low FL subgroup. Similarly, SGS and RFB demonstrated acceptable loadings above 0.5 in all the three groups. With RFB having lowest loading of 0.567 to highest loading of 0.866 across different groups. These results suggest that the constructs were adequately measured across different groups, though some lower loadings indicate potential variability in item relevance across subgroups.

Cronbach's Alpha (α), values for most constructs exceeded 0.7, indicating good internal consistency. The FTP construct had α values of 0.796, 0.738, and 0.827 across the complete, high FL, and low FL samples, respectively. Similarly, RGC and RFB constructs had high Cronbach's alpha values, such as RGC with 0.889 for the full sample. CR values for all constructs were above the 0.7 threshold, demonstrating adequate construct reliability. CR values for RGC were 0.891, 0.898, and 0.887 for full sample, high FL subgroup and low FL subgroup. And SGS showed high CR values around 0.797 to 0.850 across groups. These values confirm that the constructs are reliable across samples, with minor differences between high and low FL groups. The AVE values indicate the degree to which items measure the intended construct and thus establish convergent validity. AVE values for most constructs were above the 0.5 threshold. FTP with AVE values ranging from 0.509 to 0.584, depending on the sample group. RGC showing strong AVE values around 0.748 to 0.756 across all samples, confirming

a high level of convergent validity. The SGS and RFB constructs also met AVE thresholds, with values like 0.848 for the complete sample of SGS and 0.580 for RFB. The analysis confirms that the constructs exhibit strong reliability, with adequate factor loadings, CR, and AVE values across the complete, high FL, and low FL groups. The part A and part B of Table 7.2 provided represents the HTMT (Heterotrait-Monotrait Ratio) and Fornell-Larcker criterion evaluation of the measurement model for assessing discriminant validity.

Table 7.2 Discriminant Validity

Part A: HTMT Evaluation						
Dataset	**Constructs**	**FRT**	**FTP**	**RFB**	**RGC**	**SGS**
Full Sample	FRT					
	FTP	0.287				
	RFB	0.649	0.458			
	RGC	0.690	0.448	0.825		
	SGS	0.635	0.502	0.783	0.874	
High FL Subgroup	FRT					
	FTP	0.286				
	RFB	0.593	0.421			
	RGC	0.619	0.433	0.759		
	SGS	0.627	0.472	0.727	0.764	
Low FL Subgroup	FRT					
	FTP	0.410				
	RFB	0.792	0.484			
	RGC	0.812	0.481	0.880		
	SGS	0.694	0.517	0.842	0.889	
Part B: Fornell- Larcker Evaluation						
Dataset	**Constructs**	**FRT**	**FTP**	**RFB**	**RGC**	**SGS**
Full Sample	FRT	0.851				
	FTP	0.286	0.727			
	RFB	0.560	0.429	0.762		
	RGC	0.591	0.431	0.737	0.867	
	SGC	0.523	0.454	0.670	0.747	0.921
High FL Subgroup	FRT	0.863				
	FTP	0.325	0.655			
	RFB	0.519	0.430	0.764		
	RGC	0.541	0.459	0.681	0.870	
	SGC	0.529	0.494	0.632	0.667	0.930
Low FL Subgroup	FRT	0.833				
	FTP	0.354	0.764			
	RFB	0.665	0.425	0.757		

	RGC	0.676	0.447	0.737	0.865	
	SGC	0.550	0.444	0.705	0.846	0.911

Note: Financial Risk Tolerance (FRT), Future Time Perspective (FTP), Retirement Financial Behaviour (RFB), Retirement Goal Clarity (RGC) and Social Group Support (SGS).
Source: Researcher's Analysis

The table presents the discriminant validity results of the measurement model, specifically using the HTMT (heterotrait-monotrait) ratio, which assesses how distinct the constructs are from one another. HTMT values less than 0.9 (Hair et al., 2017) supports discriminant validity. The table displays HTMT ratios across the full sample as well as for high FL and low FL subgroups. Part A of table 7.2 indicates that the HTMT values are less than 0.9 in full sample hence satisfying the HTMT criterion in full sample. In high FL group also all the values are below 0.9 hence satisfying the discriminant validity. Similarly, in case of low FL group, the HTMT values are less than 0.9 which is below the threshold of 0.9 indicating discriminant validity in all the three groups which implies that the constructs considered for the study are distinct from one another.

The part B of the table presents the results of the Fornell-Larcker criterion for evaluating the discriminant validity of the measurement model. The provided table presents the Fornell-Larcker evaluation for FRT, FTP, RFB, RGC, and SGS across three datasets: the full sample, high financial literacy subgroup, and low financial literacy subgroup. For the full sample, the diagonal values (representing the AVE square root for each construct) are as follows: FRT = 0.51, FTP = 0.727, RFB = 0.762, RGC = 0.867, and SGS = 0.921. These values exceed the off-diagonal correlations, indicating that the constructs exhibit adequate discriminant validity for the full sample. In the high financial literacy (FL) subgroup, the diagonal values are FRT = 0.863, FTP = 0.655, RFB = 0.764, RGC = 0.870, and SGS = 0.930. Again, the diagonal values are greater than the off-diagonal correlations, showing satisfactory discriminant validity for the high FL subgroup. For the low financial literacy (FL) subgroup, the diagonal values are FRT = 0.833, FTP = 0.764, RFB = 0.757, RGC = 0.865, and SGS = 0.911, with the diagonal values exceeding the off-diagonal correlations, suggesting good discriminant validity for this subgroup as well.

In evaluating both measures of discriminant validity, the Heterotrait-Monotrait Ratio (HTMT) and the Fornell-Larcker criterion, we observed that both the HTMT criterion and the Fornell-Larcker criterion performs well across all datasets and subgroups.

To assess the structural model's reliability, the first step is to examine multicollinearity to ensure that predictor variables do not excessively overlap, which could undermine model validity. Values closer to 3 or lower are ideal for reliable assessment (Hair et. al, 2019). The table 7.3 provided presents the VIF evaluation of the measurement model.

Table 7.3 VIF Evaluation

Sample	Construct	FRT	FTP	RFB	RGC	SGS
Full Sample	FRT			1.573		
	FTP	1.000		1.291	1.259	
	RFB					
	RGC			2.642		
	SGS		1.000	2.432	1.259	
High FL Subgroup	FRT			1.525		
	FTP	1.000		1.379	1.322	
	RFB					
	RGC			2.046		
	SGS			2.091	1.322	
Low FL Subgroup	FRT			1.863		
	FTP	1.000		1.284	1.246	
	RFB					
	RGC			2.581		
	SGS		1.000	2.609	1.246	

Note: Financial Risk Tolerance (FRT), Future Time Perspective (FTP), Retirement Financial Behaviour (RFB), Retirement Goal Clarity (RGC) and Social Group Support (SGS).
Source: Researcher's Analysis

In the full sample, the constructs demonstrate acceptable VIF levels, indicating no multicollinearity concerns. Both in the high FL and low FL subgroup, the VIF values also remain within acceptable limits.

7.3.1 Model Fit

The model fit evaluation presented in Table 7.4 is a crucial aspect of assessing the appropriateness of a measurement model in SEM. Here the model fit indices for the saturated and estimated models provide insights into the goodness-of-fit for the full sample, high FL subgroup and the low FL subgroup. According to the criteria outlined by Hussain et al. (2018), the SRMR value should be below 0.08 for an optimal model fit. For the full sample, the estimated model has an SRMR of 0.069, demonstrating a good fit. Similarly, in the high FL subgroup, the SRMR is 0.072 for the saturated model and 0.073 for the estimated model, both reflecting a good fit. For the low FL subgroup, the SRMR value of 0.074 remains within the acceptable threshold, confirming a satisfactory model fit.

Table 7.4 Model Fit Estimates

Dataset	Parameter	Saturated model	Estimated model
Full	SRMR	0.069	0.069
High FL Subgroup	SRMR	0.072	0.073
Low FL Subgroup	SRMR	0.074	0.074

Note: Standardized root mean residual
Source: Researcher's Analysis

7.3.2 R^2 Values

The R-square and adjusted R-square values in Table 7.5 demonstrate the explanatory power of the independent variables in predicting the dependent variables across the full sample and its subgroups. The co-efficient of determination (R^2) measures the degree of variance explained in the dependent construct by predictor variables of the model of the study (Hair et al., 2017). Henseler et al. (2009) recommends the R^2 value of 0.67 as substantial, 0.33 as moderate, and 0.19 as weak.

For the full sample, the R^2 value of the dependent variable retirement financial behaviour is found to be 59.9 which implies that the independent predictor variables of our model is able to explain 59.9% of the variance in dependent variable. Hence R^2 value of our model is moderate and close to the substantial level, implying that the model has a strong explanatory capacity for retirement financial behaviour. The model also explains 56.9% of variance in RGC, followed by 20.6 % of variance in FTP, and 8.2% of variance in FRT. These results indicate that FRT and FTP have weak variance whereas RGC explains moderate variance.

For the high FL subgroup, the R^2 value of the dependent variable retirement financial behaviour is found to be 53.9 which implies that the independent predictor variables of our model are able to explain 53.9% of the variance in dependent variable. Hence R^2 value of our model is moderate implying that the model has a medium explanatory capacity for retirement financial behaviour. The model also explains 46.7% of variance in RGC, followed by 24.4 % of variance in FTP, and 10.6% of variance in FRT. These results indicate that FRT and FTP have weak variance whereas RGC explains moderate variance.

For the low FL subgroup, the R^2 value of the dependent variable retirement financial behaviour is found to be 69.3 which implies that the independent predictor variables of our model are able

to explain 69.3% of the variance in dependent variable. Hence R^2 value of our model is substantial, implying that the model has a strongest explanatory capacity for retirement financial behaviour in case of low financial literacy subgroup. Thus this model is a good fit to explore the retirement financial behaviour of scheduled tribe population with low financial literacy level. The model also explains 72.3% of variance in RGC, followed by 19.7% of variance in FTP, and 12.6% of variance in FRT. These results indicate that FRT and FTP have weak variance whereas RGC explains substantial variance.

Table 7.5 R^2 Values

Dataset	Construct	R-square	R-square adjusted
Full Sample	FRT	0.082	0.080
	FTP	0.206	0.204
	RFB	0.599	0.595
	RGC	0.569	0.567
High FL Subgroup	FRT	0.106	0.102
	FTP	0.244	0.240
	RFB	0.539	0.530
	RGC	0.467	0.462
Low FL Subgroup	FRT	0.126	0.120
	FTP	0.197	0.192
	RFB	0.693	0.686
	RGC	0.723	0.719

Note: Financial Risk Tolerance (FRT), Future Time Perspective (FTP), Retirement Financial Behaviour (RFB) and Retirement Goal Clarity (RGC).
Source: Researcher's Analysis

7.3.3 Effect Sizes

The f-square values presented in Table 7.6 reflect the effect sizes of the paths in the model, with higher values indicating stronger effects. The effect sizes (f^2) presented in Table 7.6 provide a detailed assessment of the relationships between various constructs in the model, offering valuable insights into how strongly the independent variables influence the dependent variables. In the full dataset, as evident from table 7.6, the path from FRT to RFB shows a small effect size of 0.04, suggesting a weak influence. Similarly, the relationship from FTP to RFB also shows a small effect size of 0.018, indicating a weak impact, while the FTP to FRT path demonstrates a small to weak effect size (0.089), suggesting a modest influence. The path

from RGC to RFB shows a moderate effect size of 0.186, signifying a notable, though not large, impact. SGS has a range of effects, with a large effect size of 0.890 on RGC, indicating a very strong influence.

In the high FL subgroup, SGS exhibits a medium effect size of 0.322 on FTP and RGC also exhibits moderate effect on RFB with an effect size of 0.170 as shown in table 7.6, showing substantial influences. Conversely, FRT to RFB in this subgroup shows only a small effect size of 0.030, and FTP to RFB is negligible (0.009). Whereas the effect of SGS on RGC has a strong effect with an effect size of 0.482.

In the low FL subgroup, SGS's effect on RGC is extremely strong (1.884), illustrating its dominant role in shaping RGC. Other relationships, such as FRT to RFB (0.074) and FTP to FRT (0.144) shows small effect. And SGS to FTP (0.246) demonstrate moderate effects, while the paths involving FTP to RFB (0.008) exhibit weak effect. In conclusion, SGS consistently emerges as a strong predictor across all subgroups, particularly in influencing RGC, while other relationships, especially those involving RFB, exhibit moderate or weaker effects, with varying levels of practical significance across different subgroups.

Table 7.6 Effect Sizes

Dataset	Path	f-square	Effect Size Interpretation
Full Sample	FRT -> RFB	0.040	Weak Effect ($0.02 \leq f^2 < 0.15$)
	FTP -> FRT	0.089	Weak Effect ($0.02 \leq f^2 < 0.15$)
	FTP -> RFB	0.018	Weak Effect ($0.02 \leq f^2 < 0.15$)
	FTP -> RGC	0.025	Weak Effect ($0.02 \leq f^2 < 0.15$)
	RGC -> RFB	0.186	Moderate Effect ($0.15 \leq f^2 < 0.35$)
	SGS -> FTP	0.259	Moderate Effect ($0.15 \leq f^2 < 0.35$)
	SGS -> RFB	0.046	Weak Effect ($0.02 \leq f^2 < 0.15$)
	SGS -> RGC	0.890	Strong Effect ($f^2 \geq 0.35$)
High FL Subgroup	FRT -> RFB	0.030	Weak Effect ($0.02 \leq f^2 < 0.15$)
	FTP -> FRT	0.118	Weak Effect ($0.02 \leq f^2 < 0.15$)
	FTP -> RFB	0.009	Weak Effect ($0.02 \leq f^2 < 0.15$)
	FTP -> RGC	0.042	Weak Effect ($0.02 \leq f^2 < 0.15$)
	RGC -> RFB	0.170	Moderate Effect ($0.15 \leq f^2 < 0.35$)
	SGS -> FTP	0.322	Moderate Effect ($0.15 \leq f^2 < 0.35$)
	SGS -> RFB	0.065	Weak Effect ($0.02 \leq f^2 < 0.15$)
	SGS -> RGC	0.482	Strong Effect ($f^2 \geq 0.35$)
Low FL Subgroup	FRT -> RFB	0.074	Weak Effect ($0.02 \leq f^2 < 0.15$)
	FTP -> FRT	0.144	Weak Effect ($0.02 \leq f^2 < 0.15$)

	FTP -> RFB	0.008	Weak Effect ($0.02 \leq f^2 < 0.15$)
	FTP -> RGC	0.023	Weak Effect ($0.02 \leq f^2 < 0.15$)
	RGC -> RFB	0.259	Moderate Effect ($0.15 \leq f^2 < 0.35$)
	SGS -> FTP	0.246	Moderate Effect ($0.15 \leq f^2 < 0.35$)
	SGS -> RFB	0.003	Weak Effect ($0.02 \leq f^2 < 0.15$)
	SGS -> RGC	1.884	Strong Effect ($f^2 \geq 0.35$)

Note: Financial Risk Tolerance (FRT), Future Time Perspective (FTP), Retirement Financial Behaviour (RFB), Retirement Goal Clarity (RGC) and Social Group Support (SGS).
Source: Researcher's Analysis

7.3.4 Predictive Relevance

To conclude this analysis of the structural models, the current study tested the model's predictive relevance presented in Table 7.7 using Stone–Geisser's Q^2 (Hair et al., 2019 and Caranzza et al., 2020). The Q^2 predict values provide a measure of how well each latent variable (LV) within the model is predicted for both the complete sample and the financial literacy (FL) subgroups. A Q^2 predict value above zero is an indicator that the model has predictive relevance, meaning the model is able to predict the corresponding construct (latent variable) with some degree of accuracy. The predictive relevance (Q^2) values in Table 7.7 provide an assessment of how well the model's constructs predict the endogenous variables, with higher Q^2 values indicating stronger predictive power. Values greater than zero are meaningful. Values higher than 0 indicates small predictive accuracy, higher than 0.25 indicates medium predictive accuracy and higher than 0.50 indicates large predictive accuracy of the PLS path model (Hair et al., 2019).

In the context of the full sample, FRT has a Q^2 predict value of 0.117, indicating small predictive relevance, which implies that the model is able to predict FRT with a small degree of accuracy. Similarly, FTP has a slightly higher Q^2 predict value of 0.198, suggesting it is more predictable than FRT, though still not as strong as other constructs in the model. RFB has a Q^2 predict value of 0.441, showing a medium predictive relevance, and RGC stands out as the most predictable construct with a Q^2 predict of 0.555, indicating it is high predictive power in this model.

In case of high FL subgroup, FRT shows a small predictive relevance with a Q^2 predict value of 0.142. However, FTP is 0.234, showing a small prediction capability. Interestingly, RFB

drops to 0.389, suggesting medium predictive relevance, but it is less predictable in this group compared to the complete sample. RGC remains medium at 0.439, which is lower than its value for the complete sample.

In the low FL subgroup, FRT shows a small Q^2 predict of 0.145, also FTP shows small prediction with value 0.182. RFB is more predictable in this subgroup, with a Q^2predict value of 0.484 indicating medium prediction, and RGC reaches its highest predictive relevance at 0.714, the strongest among all groups. This indicates that individuals with lower financial literacy levels are more predictable in their retirement financial behaviour by their goals.

Table 7.7 Predictive Relevance

Dataset	Contruct	Q^2predict
Full Sample	FRT	0.117
	FTP	0.198
	RFB	0.441
	RGC	0.555
High FL Subgroup	FRT	0.142
	FTP	0.234
	RFB	0.389
	RGC	0.439
Low FL Subgroup	FRT	0.145
	FTP	0.182
	RFB	0.484
	RGC	0.714

Note: Financial Risk Tolerance (FRT), Future Time Perspective (FTP), Retirement Financial Behaviour (RFB) and Retirement Goal Clarity (RGC) .
Source: Researcher's Analysis

7.3.5 Model Estimates

The results presented in the table 7.8 examine the relationships between key constructs such as FRT, RFB, FTP, RGC, and SGS across the entire dataset as well as within two subgroups based on financial literacy (high financial literacy and low financial literacy).

Table 7.8 Path Analysis Results

Path/ Hypothesis	Full Sample			High Financial Literacy			Low Financial Literacy		
	β	p value	Results	β	p value	Results	β	p value	Results
H1: FRT→RFB	0.15	0.003**	Supported	0.146	0.049**	Supported	0.206	0.002**	Supported
H2: FTP→RFB	0.09	0.026 **	Supported	0.075	0.294	Not supported	0.057	0.282	Not supported
H3: RGC→RFB	0.44	0.000 *	Supported	0.400	0.000 *	Supported	0.603	0.000 *	Supported
H4: SGS→RFB	0.21	0.001 **	Supported	0.251	0.001**	Supported	0.056	0.546	Not supported
FTP→FRT	0.28	0.000*	Supported	0.325	0.000 *	Supported	0.354	0.000 *	Supported
FTP→RGC	0.11	0.000*	Supported	0.172	0.001**	Supported	0.089	0.018 **	Supported
SGS→FTP	0.45	0.000 *	Supported	0.494	0.000*	Supported	0.444	0.000 *	Supported
SGS→RGC	0.69	0.000*	Supported	0.582	0.000 *	Supported	0.807	0.000 *	Supported

Note: Significance level of 1 percent (*) and 5 percent (**) respectively. Financial Risk Tolerance (FRT), Future Time Perspective (FTP), Retirement Financial Behaviour (RFB) , Retirement Goal Clarity (RGC) and Social Group Support (SGS).
Source: Researcher's Analysis

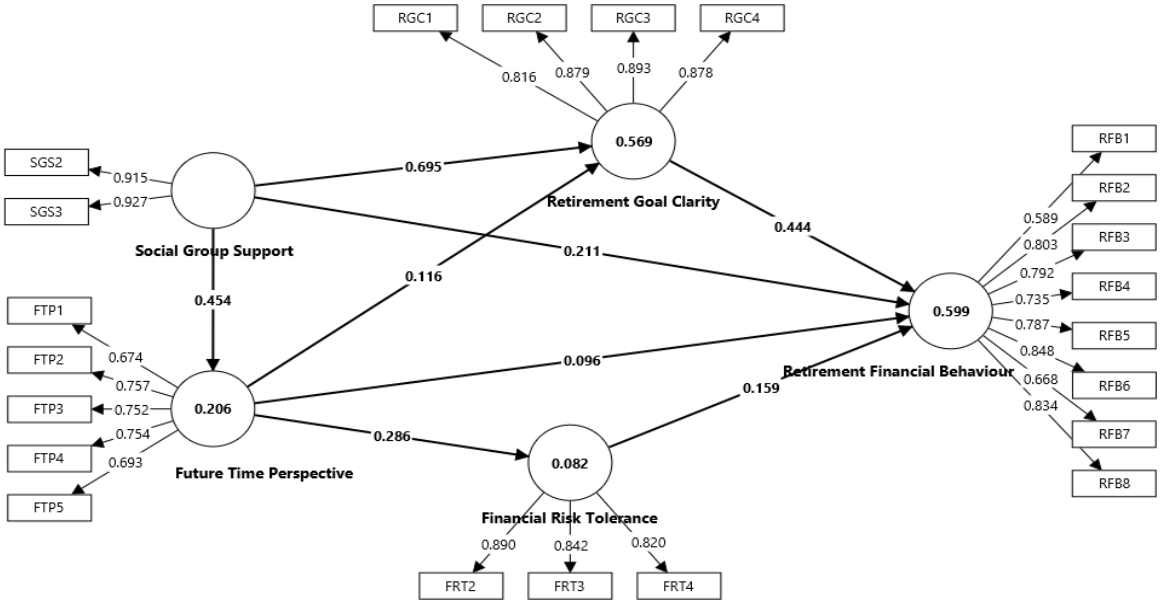
In case of full sample, FRT has a positive association with RFB(H1). The path coefficient here is 0.15, and a p-value of 0.003, confirming a significant positive relationship at the 5% significance level and thus supporting H1. This suggests that individuals who are more willing to take financial risks are more likely to engage in proactive retirement financial behaviour. This result is in line with the findings of (Grable and Joo, 1997; Jacobs-Lawson and Hershey, 2005). FTP also positively influences RFB (H2). The path coefficient for this relationship is 0.09, and a p-value of 0.026, thereby supporting H2. This result is in line with the study findings of Jacobs-Lawson and Hershey (2005) and Kimiyagahlam et al. (2019). The significant coefficient indicates that those who consider the future more seriously are more likely to exhibit responsible and planned financial behaviour regarding their retirement. Additionally, RGC positively influences RFB (H3). The path coefficient for RGC -> RFB is 0.44, and p-value is 0.000, which is highly significant. Hence H3 is also supported. This strong relationship suggests that having clear, defined retirement goals plays a crucial role in shaping how individuals approach retirement preparedness. SGS also have a significant direct effect on RFB (H4). The path coefficient for SGS -> RFB is 0.21, and a p-value of 0.001, which is statistically significant and thus accepting H4. This indicates that, social support also has direct effects on retirement financial behaviour. Here in case of full sample, the influence of RGC on RFB has the strongest significant path (β=0.44 and p=0.000) and the weakest path coefficient was between FTP and RFB (β=0.09 and p=0.026)

In case of high FL subgroup, the impact of FRT on RFB(H1) is supported with path coefficient 0.146, and a p-value of 0.049 which is significant, thus accepting H1. The impact of FTP on RFB (H2) is not supported for this group with path coefficient of 0.075, and a p-value of 0.294, thereby rejecting H2. RGC positively influences RFB (H3). The path coefficient for RGC -> RFB is 0.400, and p-value is 0.000, which is highly significant. Hence H3 is also supported. The effect of SGS on RFB (H4) is supported here. The path coefficient for SGS -> RFB is 0.251, and a p-value of 0.001, which is statistically significant and thus accepting H4.

In case of low FL subgroup, the impact of FRT on RFB(H1) is positive and supported as the path coefficient here is 0.206, and a p-value of 0.002, thus accepting H1. The influence of FTP on RFB (H2) is not supported with path coefficient for this relationship is 0.057, and a p-value of 0.282, thereby rejecting H2. RGC positively influences RFB (H3). The path coefficient for RGC -> RFB is 0.603, and p-value is 0.000, which is significant. Hence H3 is supported. The effect of SGS on RFB (H4) is not supported. The path coefficient for SGS -> RFB is 0.056, and a p-value of 0.546, which is statistically insignificant and thus rejecting H4.

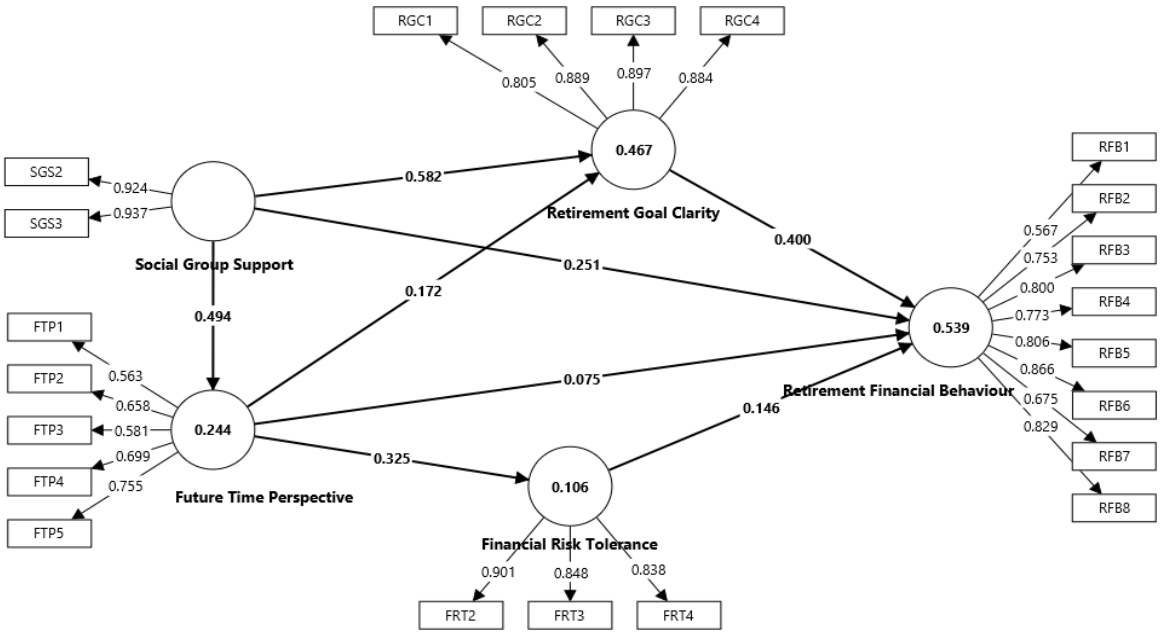
Figures 7.1, 7.2, and 7.3 provide visual representations of the relationships between financial literacy and different factors that influence RFB. These figures illustrate how financial literacy affects retirement financial behaviour in various contexts.

Figure 7.2 Structural Model Analysis (Full Sample)



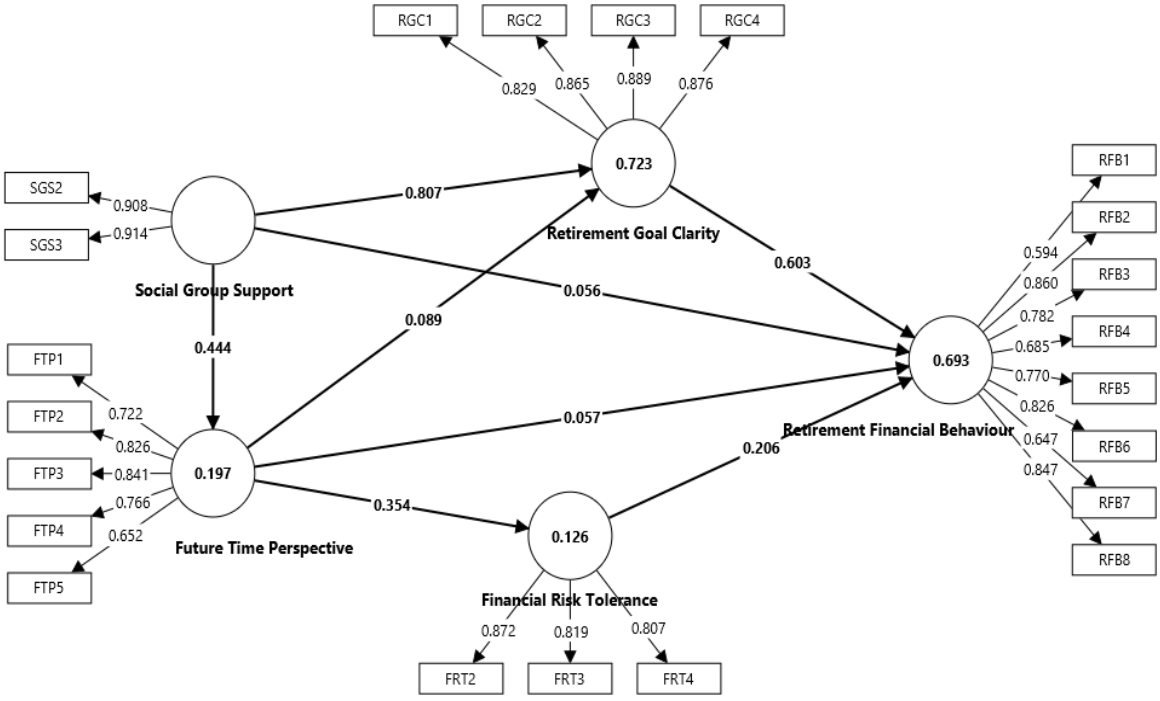
Source: Researcher's Analysis

Figure 7.3 Structural Model Analysis (High FL Subgroup)



Source: Researcher's Analysis

Figure 7.4 Structural Model Analysis (Low FL Subgroup)



Source: Researcher's Analysis

7.3.1 Indirect Path Analysis

The table 7.9 examines the specific indirect effects of various hypothesized pathways. The results of the indirect path analysis provide insights into how various variables interact within the model across different financial literacy groups (complete, high financial literacy, and low financial literacy). Each hypothesis examines the indirect effects of one variable on another through mediating paths.

For full sample, the results reveal that the path FTP -> FRT -> RFB (H5) is supported (β=0.04 and p=0.013). And since the direct effect FTP->RFB is also significant, we can infer that the risk tolerance partially mediates the effect of future time perspective on retirement financial behaviour. This suggests that individuals with a stronger future orientation are more likely to exhibit greater risk tolerance, which in turn enhances their financial behaviour, such as planning and saving for old age. Similarly, the indirect path FTP -> RGC -> RFB (H6) is also supported (β=0.05 and p=0.003) as evident from the above table 7.9 which summarizes that retirement goal clarity partially mediates the effect of future time perspective on retirement financial behaviour. Also, the path SGS -> FTP -> RFB(H7) is supported (β=0.04 and p=0.03), which shows a significant positive indirect effect of social group support on retirement financial behaviour through future time perspective. This indicates that the support individuals receive from their social networks i.e., family and friends influence how they perceive and prioritize their future. A stronger and more optimistic future time perspective, in turn, motivates better financial planning and saving behaviour for retirement. Further, path SGS -> RGC -> RFB (H8) is also significant and supported (β=0.30 and p=0.000). And since the direct path SGS->RFB is also significant from the direct path results, we can infer that retirement goal clarity partially mediates the effect of social group support on retirement financial behaviour in case of full sample.

For high FL subgroup, the results reveal that the path FTP -> FRT -> RFB (H5) is not supported (β=0.047 and p=0.11) which implies that financial risk tolerance does not mediate the influence of future time perspective on retirement financial behaviour. The indirect path FTP -> RGC -> RFB (H6) is supported (β=0.069 and p=0.013) which summarizes that retirement goal clarity fully mediates the effect of future time perspective on retirement financial behaviour as the direct path FTP -> RFB is not supported in direct path results. The path SGS -> FTP ->

RFB(H7) is not supported (β=0.037 and p=0.299). Thus, in case of high financial literacy subgroup future time perspective does not mediate the effect of SGS on RFB. And the path SGS -> RGC -> RFB (H8) is significant and supported (β=0.233 and p=0.000) as evident from table 7.9.

For low FL subgroup, the results reveal that the path FTP -> FRT -> RFB (H5), FTP -> RGC -> RFB (H6) and SGS -> RGC -> RFB (H8) are significant and supported (β=0.073 and p=0.011; β=0.054 and p=0.022; β=0.487 and p=0.000). Supported H5 reveals that risk tolerance mediates the effect of future time perspective on financial behaviour. This indicates that in case of individuals with low financial literacy, high future outlook and orientation will lead to greater risk tolerant attitude and which in turn will lead to greater financial behaviour towards retirement. Whereas the indirect path SGS→FTP→ RFB(H7) is not significant in this subgroup (β=0.025 and p=0.305).

Table 7.9 Indirect Path Analysis

Path/Hypothesis	Full Sample			High Financial Literacy			Low Financial Literacy		
	β	p value	Results	β	p value	Results	β	p value	Results
H5: FTP→FRT→RFB	0.04	0.013**	Supported	0.047	0.11	Not Supported	0.073	0.011	Supported
H6: FTP→ RGC→RFB	0.05	0.003**	Supported	0.069	0.013**	Supported	0.054	0.022**	Supported
H7: SGS→FTP→ RFB	0.04	0.03**	Supported	0.037	0.299	Not supported	0.025	0.305	Not supported
H8: SGS→RGC→ RFB	0.30	0.000*	Supported	0.233	0.000*	Supported	0.487	0.000*	Supported
SGS→ FTP→FRT	0.13	0.000*	Supported	0.161	0.000*	Supported	0.157	0.000*	Supported
SGS→FTP→RGC→RFB	0.02	0.004**	Supported	0.034	0.017**	Supported	0.024	0.026**	Supported
SGS→FTP→ RGC	0.05	0.001**	Supported	0.085	0.001**	Supported	0.040	0.020**	Supported
SGS→FTP→FRT→RFB	0.02	0.018**	Supported	0.023	0.124	Not supported	0.032	0.019**	Supported

Note: Significance level of 1 percent (*) and 5 percent (**) respectively. Financial Risk Tolerance (FRT), Future Time Perspective (FTP), Retirement Financial Behaviour (RFB) , Retirement Goal Clarity (RGC) and Social Group Support (SGS).
Source: Researcher's Analysis

7.3.2 Multi Group Analysis

Guided by Caranzza et al. (2020), multigroup analysis was conducted to assess the moderating effect of financial literacy (FL) on the relationships studied in this research. Specifically, financial literacy was categorized into two subgroups: high and low FL, and the impact of FL

on the relationships between constructs was evaluated across these groups. Henseler et al. (2016) emphasize the importance of conducting Measurement Invariance of Composite Models (MICOM) prior to performing multigroup analysis. MICOM ensures that any observed variations between the subgroups are attributable to differences in the latent variables, rather than issues related to the measurement model or data processing. The MICOM procedure follows a two-stage approach to confirm measurement invariance. Firstly, the assessment of configural invariance is done to confirm that the measurement model considered for the study for both the subgroups has the same configuration which means that the same indicators are used for both models, identical data treatment has been done, and identical algorithm settings for both the subgroups. Second, compositional invariance is evaluated as demonstrated in Table 7.10. Table 7.10 reveals that all constructs (FRT, FTP, RFB, RGC, and SGS) have permutation p-value exceeding 0.05, indicating insignificance. This confirms that the compositional variance is achieved meaning the constructs are equivalently measured across the subgroups, and any observed differences in subsequent analyses can be attributed to actual differences in the constructs, rather than measurement inconsistencies. Hence, we can proceed with multigroup analysis.

Table 7.10 MICOM Compositional Variance Assessment

Constructs	Original correlation	Correlation permutation mean	5.0%	p value
FRT	0.999	0.999	0.997	0.559
FTP	0.991	0.998	0.994	0.529
RFB	1.000	0.999	0.999	0.911
RGC	1.000	1.000	1.000	0.109
SGS	1.000	1.000	0.999	0.548

Note: Financial Risk Tolerance (FRT), Future Time Perspective (FTP), Retirement Financial Behaviour (RFB) , Retirement Goal Clarity (RGC) and Social Group Support (SGS).
Source: Researcher's Analysis

The results of the multi-group analysis presented in the table 7.11 assess the differences between the high financial literacy (High FL) and low financial literacy (Low FL) groups for each hypothesis, along with their corresponding p-values. For Hypothesis H1a, which examines the relationship between FRT and RFB, the difference is -0.060 with a p-value of 0.546, suggesting no significant difference between the two groups. Similarly, Hypothesis H2a, assessing the relationship between FTP and RFB, the difference is 0.017, with a p-value of 0.840, showing no significant difference as well. For Hypothesis H3a, which examines the

effect of RGC on RFB, reveals a notable difference of -0.203 and a p-value of 0.07, marked with asterisks, suggesting a marginally significant difference between the two groups. In Hypothesis H4a, which explores effect of SGS on RFB, shows a difference of 0.195 with a p-value of 0.103, suggesting no significant difference. Hypothesis H5a, which looks at the effect of FTP on FRT, shows a difference coefficient of -0.029 and a p-value of 0.733, indicating no significant difference. Hypothesis H6a, the relationship between FTP and RGC, the difference coefficient is 0.083 and the p-value is 0.198, again showing no significant difference. Hypothesis H7a, testing the relationship between SGS and FTP, shows a difference of 0.050 with a p-value of 0.530, indicating no significant difference. However, Hypothesis H8a, examining the relationship between SGS and RGC, demonstrates a large difference of -0.224 with a highly significant p-value of 0.000, indicating a strong difference between the two groups. As the difference coefficient is negative and significant, we can infer that in case of individuals with low financial literacy the influence of social group support on retirement goal clarity is more than in case of individuals with high financial literacy in terms of scheduled tribe population of BTR.

Table 7.11 Results of the Multigroup Analysis

Hypothesis	Difference (High Financial Literacy - Low Financial Literacy)	p-value
H1a: FRT -> RFB	-0.060	0.546
H2a: FTP -> RFB	0.017	0.840
H3a: RGC -> RFB	-0.203	0.07***
H4a: SGS -> RFB	0.195	0.103
H5a: FTP -> FRT	-0.029	0.733
H6a: FTP -> RGC	0.083	0.198
H7a: SGS -> FTP	0.050	0.530
H8a: SGS -> RGC	-0.224	0.000*

Note: Significance level of 1 percent (*) and 5 percent (**) respectively. Financial Risk Tolerance (FRT), Future Time Perspective (FTP), Retirement Financial Behaviour (RFB), Retirement Goal Clarity (RGC) and Social Group Support (SGS).
Source: Researcher's Analysis

7.4 Conclusion

In this chapter, the results underscore the multifaceted nature of RFB among the ST population in the BTR. This study provides significant insights into the complex interplay of psychological constructs, financial literacy, and RFB among scheduled tribes, highlighting the intricate and context-specific factors influencing financial behaviour in indigenous communities. The findings emphasize that individuals who are more willing to take financial risks are more likely to engage in proactive retirement financial behaviour. Also, those who consider the future more seriously are more likely to exhibit responsible and planned financial behaviour regarding their retirement. Having clear and defined retirement goals plays a crucial role in shaping how individuals approach retirement preparedness. Social support also has direct effects on retirement financial behaviour

Financial literacy emerges as a moderating factor that strengthens or weakens these relationships, suggesting that individuals with greater financial literacy are better equipped to leverage these psychological constructs in planning for retirement. The analysis reveals a nuanced role for financial literacy. Financially literate individuals are better equipped to assess the risks and returns of various retirement savings options, such as stocks, bonds, mutual funds, or annuities allowing them to confidently invest in high-return instruments potentially boosting their retirement portfolio over the long term. Financially literate individuals may rely on their social circles for affirmation of decisions or to gain insights into new financial opportunities, tax advantages, or investment strategies in terms of retirement planning and savings. High financial literacy individuals often belong to social or professional networks that share insights about markets, emerging trends, or successful retirement strategies. Social group support can connect individuals to specialized financial tools, advisors, or investment opportunities that they might not have encountered otherwise.

Results of multigroup analysis revealed that in case of individuals with low financial literacy the influence of social group support on retirement goal clarity is more than in case of individuals with high financial literacy in terms of scheduled tribe population of BTR. This indicates that in the absence of sufficient financial knowledge, individuals rely on the advice, encouragement, and shared experiences of their social networks to gain clarity about retirement goals. Hence, programs aiming to improve retirement prepareness in the BTR scheduled tribe population should focus on strengthening social group initiatives, especially for low-literacy individuals.

This insight positions financial literacy as a transformative tool, particularly for communities with traditionally limited access to financial education and resources. Understanding financial literacy as a moderator not only enriches the academic understanding of indigenous financial behaviour but also emphasizes its potential to empower underrepresented communities by enhancing informed decision-making.

The implications for policy and program design are both immediate and profound. Tailored financial literacy programs, designed with sensitivity to the socio-cultural landscape of the ST population, could play a pivotal role in empowering individuals to make informed and proactive retirement decisions. This research underscores the importance of culturally relevant, community-oriented approaches to financial education, which could address both existing barriers and empower Bodo communities to achieve greater retirement security.

In conclusion, this chapter lays a critical foundation for understanding retirement financial behaviour in tribal communities and contributes to the broader literature on indigenous financial behaviour. By identifying and examining the psychological and financial literacy dynamics influencing retirement financial behaviour in the BTR context, this research not only expands the scope of financial behaviour studies but also points toward actionable, culturally attuned strategies for promoting retirement security among indigenous populations.