

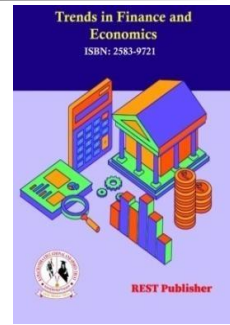
Trends in Finance and Economics

Vol: 1(3), September 2023

REST Publisher; ISSN: 2583-9721(Online)

Website: <https://restpublisher.com/journals/tfe/>

DOI: <https://doi.org/10.46632/tfe/1/3/6>



Psychological Foundation of financial Planning

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Abstract: Psychological foundation of financial planning. Knowing how people's ideas, emotions, and behaviors affect their financial decisions constitutes the psychological basis for financial planning. It acknowledges that a person's opinions, beliefs, and personality characteristics greatly influence their financial objectives, risk tolerance, and saving habits. Financial decision-making is influenced by psychological elements such as biases in thought, feelings, self-control, and knowledge of finances. For instance, people may display biases like fear of loss or overconfidence, which can result in poor investment decisions. Furthermore, psychological theories stress the significance of establishing financial literacy, impulse control, and realistic goal-setting. Financial planners are able to comprehend their clients' motives, handle their particular issues, and offer customized advice by taking psychological factors into account. This will help people make wise financial decisions. The psychological underpinnings of financial planning are important for research because they can help us better understand and influence people's financial decisions and behaviors. Researchers can pinpoint cognitive biases, emotional drives, and personality qualities that influence financial decisions by investigating the psychological aspects that affect financial planning. By creating financial literacy programs, tools for individualized financial planning, and interventions that target particular psychological barriers, this knowledge can help develop strategies and interventions that effectively encourage good financial habits. Financial advisers can better assist clients in attaining their financial objectives by comprehending the psychological underpinnings underlying financial planning, which can help policymakers improve financial security and economic outcomes for both individuals and society. A technique for analyzing complicated decision-making issues and assessing the interplay between numerous components is the Decision-Making Experiment and Evaluation Laboratory (DEMATEL). It offers a methodical way to evaluate the causal connections between various variables and their impact on a particular issue. DEMATEL builds a model of structure and measures relationships between elements using surveys or expert opinions. DEMATEL aids in the identification of important factors and the visualization of causal links using cause-and-effect diagrams, considering both the cause and effect features. The technique is frequently used to enhance decision-making processes, prioritize actions, and boost overall effectiveness in a variety of industries, including supply chain management, emergency management, and healthcare. Understanding complicated systems and making decisions based on interconnections between variables is made easier with the help of DEMATEL. Future Time Perspective scored the first rank and Planning Activity Level got the last rank. In this Paper Psychological foundation of financial planning Future Time Perspective scored the first rank and Planning Activity Level got the last rank.

Keywords: Future Time Perspective, Retirement Goal Clarity, Financial Knowledge

1. INTRODUCTION

Knowing about and addressing the different psychological aspects that affect our financial behaviors and decision-making processes is the psychological basis for financial planning. It acknowledges that our feelings, opinions, attitudes, and biases have a significant impact on the financial decisions we make and the outcomes we achieve. Understanding how we interact with money is crucial. Our thoughts and attitudes regarding money can be influenced by our upbringing, experiences, and cultural influences, which in turn shape our spending, saving, and investing behaviors. The influence of cognitive biases is another significant psychological aspect. Humans are prone to biases such as present bias (preferring instant pleasure over long-term goals),

overconfidence (underestimating our abilities), and loss aversion (fearing loss more than desiring gains). Being aware of these biases enables us to make more rational and informed financial decisions. Additionally, emotions such as fear, greed, and jealousy can have a significant impact on our financial behavior. Emotionally-driven choices can lead to impulsive purchases, excessive risk-taking, or a complete disregard for financial planning. Maintaining financial stability requires an understanding of and ability to manage these emotions. The psychological underpinnings of financial planning emphasize the value of self-awareness, emotional intelligence, and cognitive discipline. By recognizing and addressing these psychological factors, individuals can make more informed, rational, and effective financial decisions to achieve their long-term goals and improve overall financial well-being.

2.PSYCHOLOGICAL FOUNDATION OF FINANCIAL PLANNING

The psychological processes involved in retirement financial planning were explored in this study since they are a little understood topic. In order to predict saving behaviour, previous research on financial planning has mostly relied on demographic characteristics like age, gender, and income. This study, however, intends to test a model that takes into account psychological elements as mediators among demographic variables and saving practises. The model takes into account variables including retirement goal clarity, future time perspective, and self-assessed financial literacy. Data from 265 middle-aged individuals with jobs were analysed using path analysis techniques. The findings provided strong evidence for the importance of psychological elements in the pension planning process. These results have practical consequences for people attempting to comprehend the psychological dynamics that motivate saving and planning behaviours and also theoretical implications for the creation of psychologically oriented planning models. We were able to foresee this substantial amount of confirmation since key interpersonal links in the model have prior empirical support. This work fills an opening in theoretically grounded multivariate psychological representations of saving behaviour in the setting of retirement planning by successfully integrating these variables into a larger psychological model [1]. Numerous studies have shown the pervasive issue of poverty amongst women in retirement. Even though retirement planning has been extensively studied, the advent of behavioural finance and the incorporation of psychological ideas into budgeting and saving practises have increased the significance of this problem. This study focuses on how psychological traits such as financial literacy, risk tolerance, retired objective clarity, a future viewpoint, views on retiring, and social support influence women's behaviour when it comes to retirement planning. Despite having more financial risk, research shows that women are fewer involved in retirement financial preparation. In the absence of governmental interventions to enhance women's retirement planning and general financial well-being, the ageing population, mounting pressure on pension systems, and a lack of savings present a serious threat to their financial security. In order to build efficient strategies and retirement system reforms, it is crucial to study the current retirement landscape, understand women's retirement planning behaviour in greater detail, and use this knowledge [2]. The goal of this study is to better understand the psychological factors that influence older workers' later-in-life retirement planning behaviour. We investigate how self-perceptions of ageing and understanding of the ageing process affect financial planning for retirement utilising information gathered from the initial wave of the Irish Longitudinal Research of Ageing, which comprised 1,946 participants aged 50 to 65. Our findings show that self-perceptions of ageing considerably influence the chance of participating in financial planning behaviour, even after controlling for variables like age, gender, job contract, and sector. Particularly, older workers are prone to plan their finances for retirement if they believe they can control some aspects of ageing. People who are restless, as opposed to always cognizant of the ageing process, were less inclined to make these financial plans. The goal of our research is to better understand the psychological elements that influence a person's motivation to save money for retirement. Notably, we concentrate on a sizeable sample of older employees between the ages of 50 and 65, a cohort whose retirement planning is crucial, with the majority of people starting to do so by the age of 48 [3]. The number of retirees has increased as a result of the long-term retiring in developed nations, placing pressure on the efficiency of social security programmes and the entire social safety net. A variety of actions are included in financial planning for retirement (FPR) with the goal of building wealth to cover post-retirement expenses. Inadequate FPR spreads to not only people but additionally to their households and families, ultimately having a short-, medium-, and long-term negative impact on society as a whole. The ability-preference-opportunity model and motivational change theory are coupled to provide a framework for studying the FPR's process, causes, and effects. Despite the potential of this model, there are still a lot of factors that need to be taken into account, opening up fresh opportunities to improve our comprehension of FPR. We may advance our scientific knowledge of FPR by investigating each aspect of the model, the impact of ageing and psychosocial factors in relation to demographic data like gender, health status, and migration [4]. This study investigates how future-focused financial behaviours and saving affect the wellbeing of young people. We validated a psychological

process model that includes parental norms, perceived behavioural control, and financial planning horizon as antecedents components using longitudinal data gathered before and after the economic crisis including 748 participants. Our findings show that kids have greater motivation to participate in such behaviours when they have good attitudes towards financial behaviours and a positive impression of parental expectations. Furthermore, we saw that the financial behaviours that were really engaged in at Time 2 were related to the behavioural intentions that were stated at Time 1 and afterwards had a favourable relationship with the current wellbeing of the young. Additionally, both behavioural intentions and actual behaviour were influenced by perceived behavioural control and financial planning horizon. The relationship among past and present wellbeing was attenuated by the perceived effects of the economic crisis, but the model's hierarchical progression was unaffected [5]. This study has two objectives: Initially, to expand Hodges' model, which looks at retirement financial planning and the connection among psychosocial variables to predict either subjective as well as objective financial planning measures. Second, using information from the SHARE study's initial wave and a representative sample of immigrants in Europe, apply the model. 1,272 migrants in Europe were the subject of organised interviews and questionnaires for the study. The results of structural equation modelling (SEM) analyses showed that variables like bad health, the length of the migration period, and employment demands had an impact on the overall predicted pension amount. Additionally, variables including pay, duration of employment, and the length of the migration period were used to forecast the total number of years of pension contributions. Work duration has been emphasised as an important component in migrant populations' financial retirement planning, which encompasses both economic factors like higher income and attitude-based factors like stronger work dedication [6]. It is crucial to discuss the cost of cancer treatment with patients, advise them of the financial effects of treatment decisions, and offer assistance with financial planning where necessary. This is crucial for young-age (YA) cancer patients in particular since they have lower financial knowledge, skills, and management abilities than older patients and are more likely to experience financial hardship after cancer treatment. The American Society for Clinical Oncology advises physicians to directly discuss financial concerns with patients and factor cost into treatment options. Evidence currently available, however, indicates that such conversations are deficient and that patients and healthcare professionals have different perspectives on how to communicate treatment costs. The results highlight the detrimental effects of financial toxicity on several elements of the YA cancer experience, emphasising the need for immediate action to address the high expense of cancer care by giving patients the knowledge and assistance they require for financial planning [7]. The affluent and other persons with comparatively high earnings and net worth were the focus of the study, which specifically looked at their financial psychology, demographics, and financial behaviours. The goal was to pinpoint any existing distinctions between these groups. The findings showed that wealthy people had much lower levels of psychological traits such as loss aversion, worry about money, and avoidance of money. Additionally, they had higher levels of internal control, financial literacy, and life and financial pleasure. The wealthy also demonstrated a strong drive to follow their passions and accumulate more fortune. When it comes to their latest purchases, the wealthy spent more money than the rest of the group. They did not, however, show isolated trends or a higher chance of financial dependency on non-work income [8]. In the context of personal finance, this study especially looked at the Three Good Things positive psychology intervention's efficacy. To determine its effect on happiness, financial contentment, and financial self-efficacy, a randomised controlled-group pretest-posttest experiment study was carried out. Three great things training, three excellent financial things training, and three financial things training were among the interventions. 993 Amazon MTurk employees provided information during December 2018 and January 2019. The results indicate the fact that the Three Good Things activity was more effective at boosting happiness and that changes in financial satisfaction were comparable to those shown in workouts that focused on specific domains. The only impacts of the Three beneficial intervention that remained over time were the good ones. Both interventions, meanwhile, failed to show a meaningful impact on financial self-efficacy [9]. Hershey and Mowan (2000) focused on the capacity to manage financial demands in retirement when they examined the association between a range of affective and cognitive ID (individual differences) characteristics and financial preparation in a prospective cross-sectional approach. According to the study, financial planning also refers to one's self-assessed understanding of how to plan as measured utilising a scale that will be utilised in future research. In addition, the authors added an indicator of retirement involvement with a distinct answer format in terms of semantics. Two unique aspects were found via exploratory factor analysis: Leisure relevance and "leisure affective reactions" are the first two. According to a correlation analysis, "Financial Planning" had a better link ($r = .57$) with financial preparedness than "Retirement Vulnerability" [10]. Farmers face the difficulty of making their own personal financial decisions while handling complex and challenging circumstances on their farms and in their families. Utilising a random sample survey of 1044 individuals, this study intends to examine the connections among financial stress, financial risk tolerance, locus of control, financial self-efficacy, and life satisfaction among farmers. The objective is to offer financial services experts, including financial planners and counsellors, information on how

to better assist people in the agriculture sector. The results showed that worry over money had a negative influence on life satisfaction, yet farmers had a somewhat smaller impact than non-farmers. Locus of control also improved life satisfaction, albeit this impact was less pronounced for farmers compared to non-farmers. Additionally, differences in marginal effects between farmers and non-farmers were highlighted by demographic parameters such as age, education level, and gender. In general, self-identification as a farmer reduced both the favourable link between locus of control and life satisfaction and the favourable connection between financial stress and life satisfaction [11]. Financial market competition has grown as more market participants provide a wide variety of investment possibilities. Consequently, it has become crucial to comprehend how people behave when buying financial items. To investigate the underlying ideas and feelings that affect people's investment decisions, 30 exploratory semi-structured interviews were carried out. Open coding was used to examine the rationales behind decision-making from verbal data collected during the interviews. In-depth interviews found that individual investors' financial investing selections are influenced by a variety of ideas and preferences. Instead of being flaws, these biases reflect certain aspects of investor views. This study emphasises how crucial it is to comprehend individual investors' psychological makeup in order to understand how they make financial decisions [12]. With a sample size of 918 persons, we carried out an in-depth study spanning four decades utilising the Dunedin Study. First, even after accounting for academic achievement, polygenic scores generated from genetic markers indicated economic outcomes in adulthood. Second, because children with higher polygenic scores tended to come from wealthier families, we saw connections between genes and the environment. Third, analyses of social mobility revealed that people with higher polygenic scores had more opportunities for upward mobility regardless of their socioeconomic class of origin. Fourth, polygenic scores exhibited longevity predictive value, affecting early language and reading skills, regional mobility, partner choice, and retirement planning. Last but not least, psychological characteristics including intelligence, self-control, and interpersonal skills acted as mediators in the relationships between polygenic scores and life outcomes [13]. The way that religion is viewed has a significant impact on how businesses make financial and economic decisions. Numerous academics, including Iqbal and Mirakhor (2011) and Schoon and Nuri (2012), claim that religious views have an impact on how financial instruments are created and how businesses engage with stakeholders. Usury is not permitted, for instance, in Judaism, Christianity, Islam, Buddhism, or Hinduism. In addition, persons who consider as religious are more likely to behave differently from non-religious people due to their religious beliefs. According to Porter and Stein's research from 2003, a sizeable majority (79%) of American investors identify as religious or spiritual, and 62% of them factor their faith when making financial and investment decisions. However, about 33% of investors describe themselves as secular or agnostic [14]. Different family groups employ distinct financial tactics, each of which is evident in their particular financial holdings and liabilities. The study was based on a survey of 1,000 randomly chosen Swedish households, having an answer rate of 50.3%. The availability of various financial strategies was investigated utilising k-means cluster analysis upon 35 standardised dichotomous variables assessing various sorts of savings and loans. The strategies found were residual savings approach, cautious investment strategy (3.2%), and 'other' methods (6.0%). These techniques can be distinguished by a variety of criteria, such as time choices, financial planning and control, financial interest, action and creativity, attitudes towards financial risk, propensity for saving, life cycle types, and financial wealth and home ownership [15].

3. DEMATEL METHOD

The Science and Human Affairs Programme of the Battelle Memorial Institute in Geneva developed the DEMATEL (Decision Testing and Evaluation Laboratory) technique in its earliest stages between 1972 and 1976. Its goal is to offer answers to problem groups that are intricately interwoven and complex. This method has been widely applied in many fields since its creation. Some examples of its broad range of applications include emergency management, evaluation of the web advertising's impacts, auditing and risk management in business resource planning, cross-effects analysis in e-learning programmes, recognising important variables for hospital quality of service, evaluation of performance criteria for employment service outreach programmes, choosing cost-effectiveness models, choosing of mobile banking system services, evaluation of the quality cost models, and identification of key factors for hospital service quality [16]. In several disciplines, the Decision Testing and Evaluation Laboratory (DEMATEL) method is used to pinpoint important variables in straightforward systems. However, because they work well for basic systems, current DEMATEL techniques are only useful for dealing with choice problems in complicated systems. By establishing a hierarchical DEMATEL technique for complex systems with many components, different types of impacts, and hierarchical structures, this research intends to address this problem. In order to make the DEMATEL problem in complex systems simpler, a hierarchical decomposition strategy is presented. It contains vertical decomposition to

address the existence of hierarchy and a significant number of system elements as well as horizontal decomposition to manage various forms of effects. To create initial direct-relationship (IDR) matrices for the parts of each subsystem, a direct impact analysis is also suggested. By combining the ITR matrices across all pairings of subsystems, an ultimate ITR matrix is formed and created. The multilevel subsystem structure was taken into account, and the Super IDR matrix was incorporated into the DEMATEL process, to create a three-step hierarchical DEMATEL technique to find the essential variables [17]. It's critical to identify strategies to enhance contemporary global managers' skill sets in order to meet the rising demand for those skills. Despite the many competency models that have been put forth, managers find it difficult to develop several different competencies at once. Therefore, in order to allow steady skill development, it is necessary to divide these skills into digestible portions. To address this issue, we put up a practical strategy that combines fuzzy logic alongside the Decision Testing and Evaluation Laboratory (DEMATEL) in order to separate out the necessary capabilities and improve the skill growth of global managers [18]. In comparison to other affluent nations, Taiwan's people now have access to high-quality medical treatment because of the National Health Insurance Programme, which went into effect there in March 1995. By attending to each patient's unique needs, hospitals can manage their patient populations more efficiently. At ShoChwan Memorial Hospital in Changhua City, Taiwan, this study used research utilising the SERVQUAL methodology to uncover seven crucial characteristics crucial to patients and their families. A second survey was then carried out utilising the Decision Testing and Evaluation Laboratory (DEMATEL) approach to determine the causal links between the criteria and gauge their significance from the viewpoint of hospital administration [19]. Due to its efficacy in describing and handling ambiguous information, Dempster-Shafer evidence theory is frequently employed in the discipline of information fusion. The Dempster rule frequently has unfavourable effects when it is used to merge contradictory facts, though. The goal of contemporary dispute resolution research is resource convergence, however real-time system requirements are impossible given the computing complexity of present approaches. Therefore, it's important to research novel, efficient, and affordable techniques. This article suggests a novel method based on DEMATEL that alters the original model of evidence and takes evidence weights into account. This approach involves figuring out significant and significance level, calculating the total-correlation matrix using evidence similarity, and then applying Dempster's additive rule to provide a weighted average additive result [20]. Supply chain management (SCM) strategies have grown significantly during the 1990s as businesses have realised the potential for sizable gains via effective and efficient SCM. In these procedures, supply chain relationship coordination is greatly aided by supplier selection. Improving organisational performance in logistics and manufacturing requires making precise and effective supplier selection decisions. This work presents a ground-breaking way for identifying influencing elements in SCM supplier selection utilising a Fuzzy Decision Making Experiment and Evaluation Laboratory (DEMATEL) method. The DEMATEL method offers a novel decision-making information approach for choosing SCM suppliers by analysing supplier performance and identifying critical criteria for performance improvement. A nonspecific DEMATEL questionnaire was distributed to seventeen industry professionals with expertise in purchasing within the electronics business in order to gather data [21]. The decision-making process is crucial to safety and risk assessments because it takes into account a variety of informational sources, including field observations and subject-matter specialists. For the purpose of identifying risks, choosing the most effective intervention strategies, and setting priorities for risk reduction initiatives, several team-based decision-making techniques have been created. Yet, most of those approaches rely on idealistic presumptions, such as treating risk variables independently and presuming that each factor operates in a vacuum. Risk variables and information sources do, in fact, show considerable relationships and correlations. A structure for making decisions that incorporates these biases is necessary to address this. To do this, the study suggests combining a DEMATEL approach with the Bayesian Network (BN), Best-Worst approach (BWM), and BWM. Within the DEMATEL system, integration is implemented on two different levels [22]. Comprehensive analyses that analyse the entire system rather than concentrating on specific operations are required because to the large losses brought on by unanticipated natural disasters across the world. Additionally, a number of factors influence emergency management efficacy, making it difficult for practitioners to concurrently improve all areas. Given the limited resources available, it becomes crucial to figure out how to enhance emergency management by methodically optimising complicated impacting aspects. An efficient approach integrating fuzzy logic and the DEMATEL is put forth to address this issue and take into consideration the subjectivity of human judgements. This fuzzy DEMATEL technique creates a structural model that accurately represents the interactions between variables and depicts cause-and-effect linkages graphically. Critical success factors (CSFs) for efficient emergency management can be determined based on the outcomes of this strategy [23]. The advancement of the semiconductor industry depends on the growth of the integrated circuit (IC) design services sector. In order to investigate the underlying advantages of this developing industry, this study concentrates on a top IC design service provider. Seven core competencies have been identified throughout the study. The DEMATEL

technique is used in this paper to specifically analyse the intricate links between these critical competencies. These talents are divided into interrelated groups, revealing how they interact and offering suggestions for enhancing overall performance. The results show that the most crucial core competency is knowledge of intellectual property (IP) design. Performance will increase overall as the causative group's five competences are strengthened. The DEMATEL method have additionally shown to be a useful method for investigating these relationships [24].The Employment Service Outreach Programme was put into place as a result of proactive steps made by the Department of Employment and Vocational Training, Labour Affairs Council of the Executive Yuan, in reaction to the economic and financial crisis that is to blame for Taiwan's unemployment. The programme works to reduce unemployment by finding, preparing, and managing outreach workers in charge of various jobs. These duties include locating unemployed people, giving them job information, utilising community resources to advertise job openings, and setting up business conferences or workshops for job searchers. This study employs a decision-making exercise along with a laboratory approach to rate the efficacy of outreach workers. In addition to determining the relative importance of various criteria, this method builds cause-and-effect connections between these criteria in order to measure the efficacy of outreach workers [25].

Evaluation Parameters

Future Time Perspective:The term "future time perspective" describes an individual's outlook and orientation towards the future. It encompasses beliefs, perspectives, and expectations regarding upcoming events, goals, and outcomes. It influences a person's motivation, decision-making, and behavior as it provides a framework for organizing plans, setting objectives, and taking actions to achieve desired outcomes. Future time perspective is a significant psychological concept that impacts various aspects of life, including education, employment, interpersonal relationships, and personal well-being. Please note that the paragraph is grammatically correct as it is.

Retirement Goal Clarity:Retirement goal specificity refers to the level of detail and clarity concerning an individual's retirement plans and objectives. This includes having a clear understanding of one's desired lifestyle, financial needs, and leisure activities during retirement. Having clarity about retirement goals allows individuals to make informed decisions about retirement funds, investment strategies, and lifestyle choices. It provides a sense of purpose and direction, enabling them to plan and prepare for a fulfilling and financially secure retirement.

Financial Knowledge:The term "financial literacy" pertains to an individual's understanding of various financial ideas, concepts, and strategies. It encompasses skills in financial risk management, budgeting, investment, and personal finance. Financial literacy is essential for making informed and prudent financial choices, such as effective budgeting, wise investment decisions, comprehending financial products and services, and planning for long-term financial goals. It empowers individuals to take control of their finances, manage them wisely, and achieve financial prosperity.

Planning Activity Level:The planning activity level of an individual refers to the extent to which they engage in systematic and effective planned behaviors across various aspects of life, such as goal-setting, career advancement, and personal finance. This involves the ability to think ahead, establish clear objectives, and create actionable plans to achieve desired outcomes. High-level planners are inclined to set specific goals, develop action plans, monitor their progress, and make necessary adjustments along the way. They are highly motivated, well-organized, and successful in attaining their intended results. The planning activity level is crucial for both personal and professional development as it enables individuals to consider options, prioritize tasks, and work towards long-term goals.

Voluntary Savings Contributions:Individuals who voluntarily set aside a portion of their paychecks or resources for savings are making voluntary savings contributions. This practice involves making deliberate choices to allocate a specific amount of money to retirement accounts, savings accounts, or other investment vehicles. These contributions are made willingly, without any legal obligation to do so. By making voluntary savings contributions, individuals can work towards achieving their financial goals and securing their financial future. This proactive approach helps to enhance their financial security and build a safety net for unforeseen events or future financial needs. Engaging in savings initiatives allows individuals to establish a solid foundation for their financial well-being.

4. ANALYSIS AND DISCUSSION

TABLE 1. Psychological foundation of financial planning

	Future Time Perspective	Retirement Goal Clarity	Financial Knowledge	Planning Activity Level	Voluntary Savings Contributions	Sum
Future Time Perspective	0	1	4	2	2	9
Retirement Goal Clarity	3	0	2	1	1	7
Financial Knowledge	2	1	0	3	2	8
Planning Activity Level	2	3	2	0	2	9
Voluntary Savings Contributions	2	1	1	2	0	6

Table 1 shows the Psychological foundation of financial planning which incorporates the evaluation criteria: Future Time Perspective, Retirement Goal Clarity, Financial Knowledge, Planning Activity Level, Voluntary Savings Contributions.

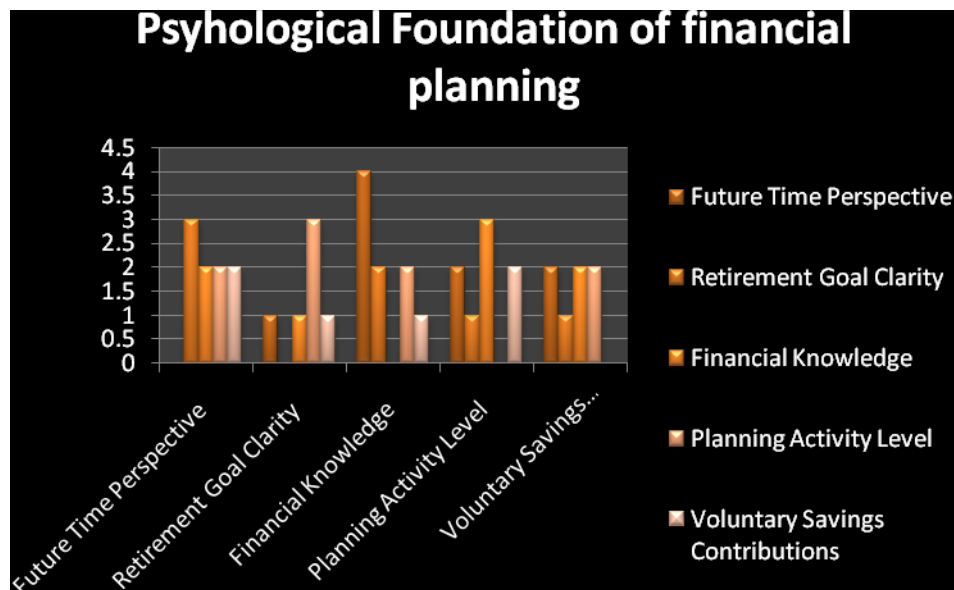


FIGURE 1. Psychological foundation of financial planning

FIGURE 1 shows the graphical representation of Psychological foundation of financial planning which incorporates the evaluation criteria: Future Time Perspective, Retirement Goal Clarity, Financial Knowledge, Planning Activity Level, Voluntary Savings Contributions.

TABLE 2. Normalisation of direct relation matrix

Normalisation of direct relation matrix					
	Future Time Perspective	Retirement Goal Clarity	Financial Knowledge	Planning Activity Level	Voluntary Savings Contributions
Future Time Perspective	0	0.111111	0.444444	0.222222	0.222222
Retirement Goal Clarity	0.333333	0	0.222222	0.111111	0.111111
Financial Knowledge	0.222222	0.111111	0	0.333333	0.222222
Planning Activity Level	0.222222	0.333333	0.222222	0	0.222222
Voluntary Savings Contributions	0.222222	0.111111	0.111111	0.222222	0

Table 2 Shows the Normalisation of Direct Relation matrix of Psychological foundation of financial planning for the evaluation parameter By the DEMATAL approach.

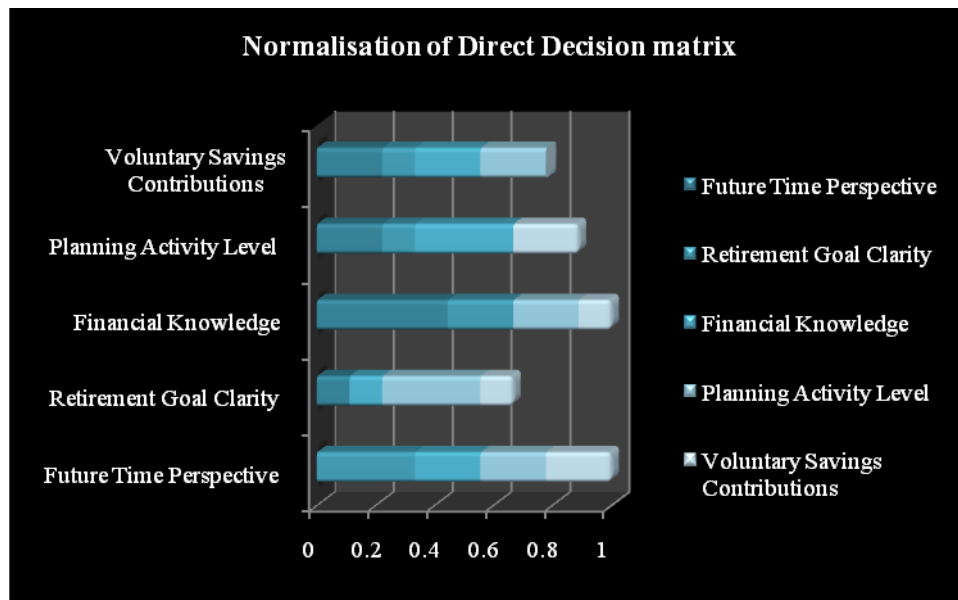


FIGURE 2. Normalisation of direct relation matrix

Figure 2 Shows the graphical representation of Normalisation of Direct Relation matrix of Psychological foundation of financial planning for the evaluation parameter By the Dematal approach.

TABLE 3. Identity matrix (I)

1	0	0	0	0
0	1	0	0	0
0	0	1	0	0
0	0	0	1	0
0	0	0	0	1

Table 3 Shows the Identity matrix for the 5*5 matrix.

TABLE 4. Y matrix

0	0.11111	0.44444	0.22222	0.22222
0.33333	0	0.22222	0.11111	0.11111
0.22222	0.11111	0	0.33333	0.22222
0.22222	0.33333	0.22222	0	0.22222
0.22222	0.11111	0.11111	0.22222	0

Table 4 Shows the Y matrix for Psychological foundation of financial planning which is same as Normalisation of Direct Relation matrix by the Dematal approach.

TABLE 5. (I-Y)-1 matrix

2.563954	1.238059	1.961149	1.698956	1.520671
1.550483	1.924781	1.54827	1.341277	1.200526
1.610641	1.15361	2.489439	1.627206	1.400895
1.734834	1.378271	1.790029	2.465153	1.484241
1.306509	0.923441	1.282217	1.255176	1.956795

Table 5 shows the (I-Y)-1matrix for Psychological foundation of financial planning by the Dematal approach.

TABLE 6. Total Relation matrix

	Total Relation matrix (T)				
	Future Time Perspective	Retirement Goal Clarity	Financial Knowledge	Planning Activity Level	Voluntary Savings Contributions
Future Time Perspective	1.563954	1.238059	1.961149	1.698956	1.520671
Retirement Goal Clarity	1.550483	0.924781	1.54827	1.341277	1.200526
Financial Knowledge	1.610641	1.15361	1.489439	1.627206	1.400895
Planning Activity Level	1.734834	1.378271	1.790029	1.465153	1.484241
Voluntary Savings Contributions	1.306509	0.923441	1.282217	1.255176	0.956795

Table 6 shows the Total Relation matrix for Psychological foundation of financial planning for all the evaluation parameter by the Dematal method.

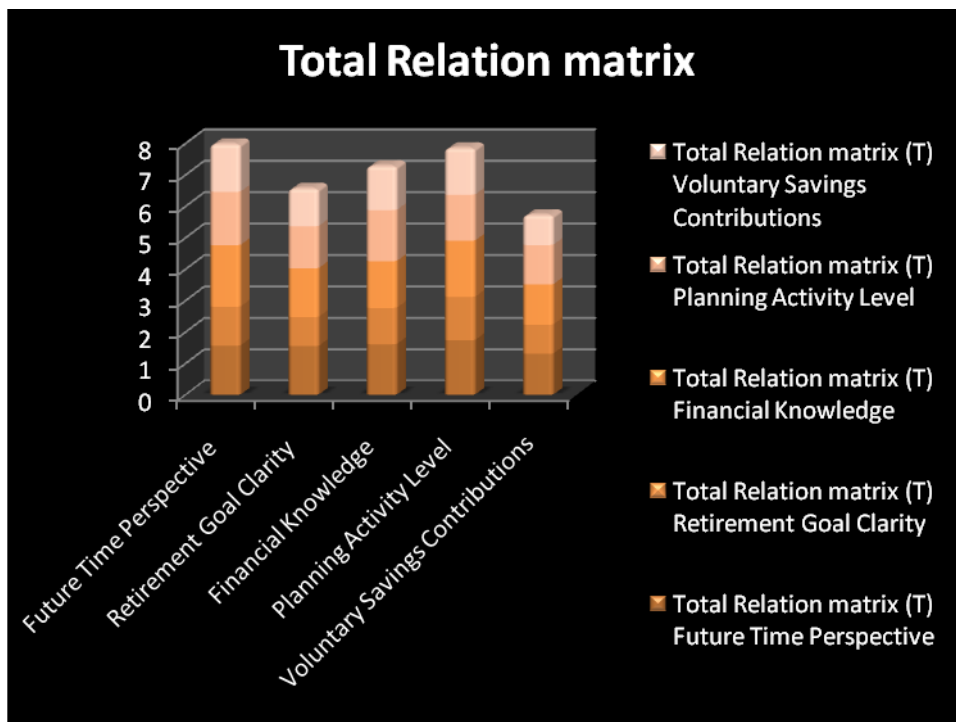


FIGURE 3. Total Relation matrix

Figure 3 shows the Graphical representation for Total Relation matrix for Psychological foundation of financial planning for all the evaluation parameter by the DEMATAL method.

TABLE 7. Ri,Ci

	Ri	Ci
Future Time Perspective	7.98279	7.766421
Retirement Goal Clarity	6.565336	6.202466
Financial Knowledge	7.281791	4.651983
Planning Activity Level	7.852527	3.041343
Voluntary Savings Contributions	5.724139	9.289299

Table 7 show the Ri can Ci for Psychological foundation of financial planning for all the evaluation parameter by the Dematal method.

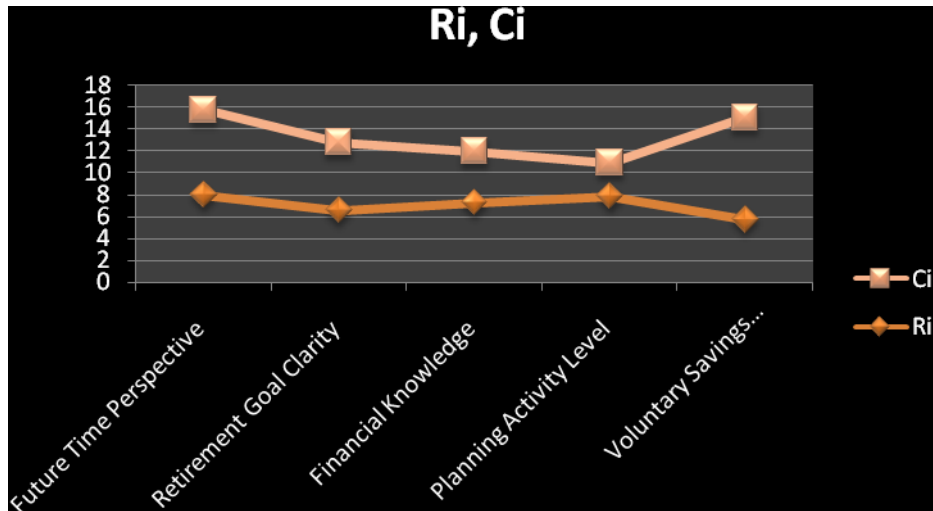


FIGURE 4. Ri, Ci

Figure 4 Shows the graphical representation of Ri can Ci for Psychological foundation of financial planning for all the evaluation parameter by the Dematal method.

TABLE 8. Ri+Ci, Ri-Ci, Rank and Identity

	Ri+Ci	Ri-Ci	Rank	Identity
Future Time Perspective	15.74921	0.21637	1	cause
Retirement Goal Clarity	12.7678	0.36287	3	cause
Financial Knowledge	11.93377	2.629808	4	cause
Planning Activity Level	10.89387	4.811184	5	cause
Voluntary Savings Contributions	15.01344	-3.56516	2	effect

Table 8 Shows the Ri+Ci, Ri-Ci, Rank and Identity for Psychological foundation of financial planning for all the evaluation parameter by the Dematal method

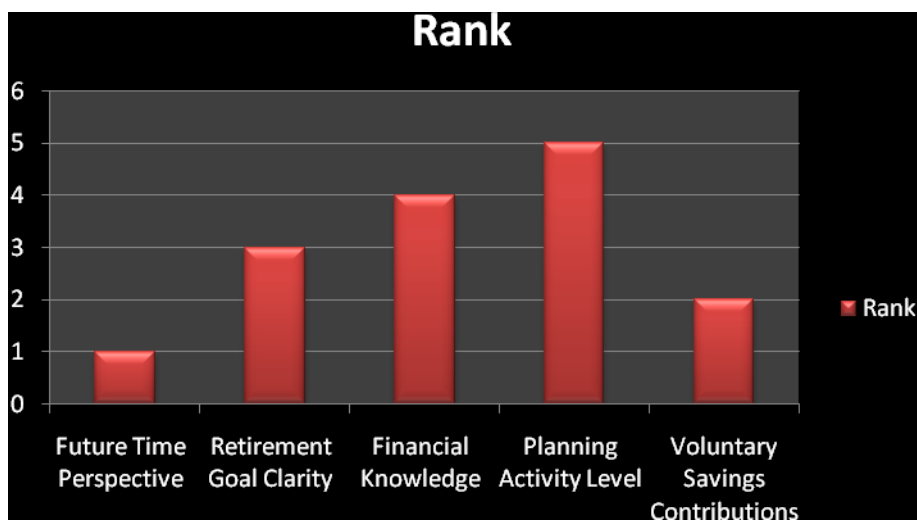


FIGURE 5. Rank

Figure 5 Shows the graphical representation of Rank for Psychological foundation of financial planning in which Future Time Perspective scored the first rank and Planning Activity Level got the last rank.

5. CONCLUSION

The psychological processes involved in retirement financial planning were explored in this study since they are a little understood topic. In order to predict saving behaviour, previous research on financial planning has mostly relied on demographic characteristics like age, gender, and income. We were able to foresee this substantial amount of confirmation since key interpersonal links in the model have prior empirical support. This work fills an opening in theoretically grounded multivariate psychological representations of saving behaviour in the setting of retirement planning by successfully integrating these variables into a larger psychological model. The ability-preference-opportunity model and motivational change theory are coupled to provide a framework for studying the FPR's process, causes, and effects. Despite the potential of this model, there are still a lot of factors that need to be taken into account, opening up fresh opportunities to improve our comprehension of FPR. We may advance our scientific knowledge of FPR by investigating each aspect of the model, the impact of ageing and psychosocial factors in relation to demographic data like gender, health status, and migration. The affluent and other persons with comparatively high earnings and net worth were the focus of the study, which specifically looked at their financial psychology, demographics, and financial behaviours. The goal was to pinpoint any existing distinctions between these groups. The findings showed that wealthy people had much lower levels of psychological traits such as loss aversion, worry about money, and avoidance of money. Additionally, they had higher levels of internal control, financial literacy, and life and financial pleasure. The wealthy also demonstrated a strong drive to follow their passions and accumulate more fortune. When it comes to their latest purchases, the wealthy spent more money than the rest of the group. They did not, however, show isolated trends or a higher chance of financial dependency on non-work income. By establishing a hierarchical DEMATEL technique for complex systems with many components, different types of impacts, and hierarchical structures, this research intends to address this problem. In order to make the DEMATEL problem in complex systems simpler, a hierarchical decomposition strategy is presented. It contains vertical decomposition to address the existence of hierarchy and a significant number of system elements as well as horizontal decomposition to manage various forms of effects. To create initial direct-relationship (IDR) matrices for the parts of each subsystem, a direct impact analysis is also suggested. By combining the IDR matrices across all pairings of subsystems, an ultimate IDR matrix is formed and created. The multilevel subsystem structure was taken into account, and the Super IDR matrix was incorporated into the DEMATEL process, to create a three-step hierarchical DEMATEL technique to find the essential variable.

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