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Behavioral and Psychological Factors Influencing Retirement Decisions Among Young Workers in Rural and Urban Sabah, Malaysia

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Abstract: This study examines how young workers in rural and urban Sabah, Malaysia, base their retirement choices on psychological and behavioral aspects. Numerous factors, including individual beliefs, societal conditions, and environmental settings, influence retirement, a significant life transition. While everyone should make retirement plans, workers in rural and urban areas differ from one another. Rural workers typically have lower financial literacy and less access to financial services, whereas urban workers usually enjoy greater financial education and services. To better understand the variables and challenges influencing retirement behavior in these diverse settings, this research will examine theories of aging, such as the theory of planned behavior (TPB), continuity theory, and disengagement theory. This study evaluates how current policies affect young workers' retirement planning and identifies the main factors influencing retirement savings behavior. The research will take a quantitative approach, analyze the data using the PLS-SEM model, and test validity and reliability against common method bias in two steps. The results emphasize the necessity of specialized policy interventions to guarantee the well-being and financial stability of young workers in Sabah's rural and urban settings about the need for focused financial literacy programs and retirement planning initiatives catered to Sabah, Malaysia's rural and urban areas, by offering insightful information about the behavioral and psychological factors influencing young workers' retirement decisions.

Keywords: *Retirement planning, human behavior, psychological aspects, rural and urban differences, theory of planned behavior*

1. Introduction

Retirement is a complex phenomenon that can be viewed as an act or a process (Beehr, 1986), involving a number of factors that influence people's decisions to plan for or take retirement. Because the retirement phenomenon is subjective, different people and populations may interpret it differently. People who view retirement as a good thing engage in social and other activities that they were unable to do before because of their work commitments, pressures, and lack of time, while others view retirement as a bad thing that diminishes their value in society (Saeed and Sarwar, 2016). Regardless of their perception of retirement as a good or bad thing, people usually plan for their retirement. When people retire, they typically carry over their current dispositions, attitudes, and habits. One consequence of the continuity between pre-retirement and retirement is that prospective retirees might need to before transitioning to establish a retirement lifestyle and perspective. To comprehend the problems surrounding retirement, theories of aging are frequently useful. According to Mead and Miller (1983), these include role theories of retirement, continuity theory (Atchley, 1989), and disengagement theory (Cumming et al., 1960). Retirees are less socially involved, and this lack of interaction is linked to their self-perception, according to the disengagement theory. According to the continuity theory, older adults would be more psychologically well-off if they continued to live the same lifestyle in retirement. This theory recognizes that a healthy work-life balance is linked to happiness and views retirement as a stage of life.

Role theory holds that people's roles influence their self-image and are connected to the behavioral expectations of their social environment. Employees who plan for retirement demonstrate their concerns about their post-retirement lives and prepare for their needs. The preparations for the changes that come with retirement are referred to as retirement planning (Mustafa et al., 2017; Taylor and Doverspike, 2003). Additionally, early retirement planning sets people up for success in their post-retirement years. Two crucial components of retirement planning behavior are retirement decisions (intention to retire) and retirement planning (preference) (Topa et al., 2009). Ajzen's (1991) theory of planned behavior (TPB) is essential to comprehending retirement planning behavior. To better understand the connection between attitudes, intentions, and behavior, this theory was developed. In Sabah, the differences in retirement practices between

young workers in rural and urban areas present serious obstacles to long-term financial stability. While urban workers have greater access to financial education, rural workers frequently experience lower income levels, less financial literacy, and limited access to financial services. The purpose of this study is to compare and identify the factors and difficulties affecting retirement behavior in these two different contexts and to suggest policy solutions to successfully address these problems. The factors that influence young workers' retirement savings behavior in rural and urban areas are not well-documented, and current policies may not sufficiently address the unique needs and challenges of young workers in various geographic settings. As a result, there is a lack of thorough knowledge regarding how rural and urban environments affect young workers' retirement planning behavior in Sabah. This study's primary research questions are:

- What are the key behavioral factors that influence the retirement decisions among rural and urban young workers in Sabah?
- How do psychological attitudes towards retirement decisions differ between rural and urban young workers in Sabah?
- What are the common challenges faced by young workers in rural and urban areas when making the retirement decision, and how do they address these challenges?

More specifically, this study will be carried out to meet the following objectives:

- To identify and analyze the key behavioral factors influencing retirement decisions among rural and urban young workers in Sabah.
- To examine the psychological attitudes towards retirement and assess how they differ between rural and urban young workers in Sabah.
- To explore the common challenges faced by young workers in both rural and urban areas when making retirement decisions and evaluate the strategies they employ to address these challenges.

The legal age at which employees must retire is not universally applicable. Usually, the parties involved agree on the retirement age together. A retirement age is usually set by the parties to an employment contract, either by consent or by following rules regarding retirement funds or company policies. The Retirement Age Act 2012 (MRA Act), which went into effect on July 1, 2013, stipulates that private sector workers in Malaysia must be at least 60 years old to retire. The previous retirement age was 55. The government officials' minimum retirement age was raised gradually from 55 to 56 in 2001, then to 58 in 2008, and finally to 60 in 2012. As a result, it is extremely rare for people in Malaysia to work past the age of sixty (Malay Mail, Apr 22, 2017). In Malaysia, employment plays a major role in retirement planning. It leaves out a significant section of the population that does not receive a regular income payment, such as stay-at-home moms and people working in the unorganized sector. The Malaysian government has allowed voluntary contributions to the Employees Provident Fund (EPF) from people working in the gig economy, including delivery riders and e-hailing drivers, since 2018. To encourage them to do so, a matching incentive of RM50 million (US$11.67 million) was offered. The nation currently has five well-known pension plans that cater to different kinds of workers. Malaysia inherited the British government's basic universal pension scheme. When the British introduced both public and private sector pension plans in 1951, it began to take shape. When it attained independence in 1957, it was formally established. For the protection of its workers against a variety of unforeseen circumstances, the Federal List of the Federal Constitution, Article 74, 9th Schedule, List I, Paragraph 6(d), provides for a pension plan that is funded and run by the government acting as an employer. Their terms of employment in the public sector include pension benefits. Employees in the public sector who are eligible for pensions are covered by this plan. The purpose of this program is to protect its workers from various unanticipated events. In the public sector, pension benefits are a part of the terms and conditions of employment. Public sector workers who have earned pensionable status are covered by this pension plan. The Statutory and Local Authorities Pension Act of 1980 (Act 239) and the Pension Act of 1980 (Act 227) currently govern the government pension plan. The second kind of retirement plan is provided by the Employee Provident Fund (EPF). The most popular investment choice for private sector workers looking to save for retirement is the DC plan. An employee contributes a certain amount of their pay to the account or fund under this arrangement. After that, the employer will contribute the appropriate amount to the worker's account. The primary purpose of the EPF DC scheme is to provide retirement savings. These contributions are expertly managed by EPF, which also pays out yearly

dividends to members from the profits of investments.

The total of a member's monthly contributions, employer contributions, and dividends from EPF investment returns makes up the final balance of the member's EPF account. For members who earn more than RM5,000 per month, the required minimum contribution is currently 11% and 12%, while for those who earn less, it is 11% and 13%. Under the EPF Act of 1951, the government of Malaya created the EPF, also known as KWSP (Kumpulan Wang Simpanan Pekerja). The pension fund's management is its goal. This law was later reviewed, and the Employees Provident Fund Act of 1991 currently governs it. The EPF reported that, as of December 31, 2023, its assets totaled RM1,087.94 billion, or roughly USD 250 billion, placing it among the top 10 pension fund institutions worldwide. The EPF reported that its investment income for the fiscal year that ended on December 31, 2023, was RM66.99 billion. Furthermore, the data presented shows that over the previous forty (40) years, the EPF has continuously seen an increase in its investment assets (EPF, 2024). By the end of 2023, there will be 16,073,317 registered members in the EPF. 606,187 employers actively participate in the fund, and 8,524,975 individuals among the registered members make active contributions.

Specifically created for enlisted military personnel, the Armed Forces Retirement Fund, also known as Lembaga Tabung Angkatan Tentera (LTAT), is a defined-contribution retirement plan. The Tabung Angkatan Tentera Act 1973 (Act 101) was passed in August 1972, marking the organization's founding. Commissioned officers, non-commissioned officers, and volunteers in the Malaysian Armed Forces can receive benefits through a retirement savings program from this legally established government organization. As per the plan, the government, acting as the employer, contributes 15% to LTAT, while individuals are required to donate 10% of their monthly salary to the government. Contributions from voluntary contributors must range from a minimum of RM25 to a maximum of RM2,000 per month. Dividends from investments are paid out once a year. Additionally, bonuses are given out in the form of free shares of LTAT's mutual fund subsidiaries. After they turn fifty, members can withdraw their savings, including dividends and bonuses. On the other hand, a monthly retirement stipend is funded by the government allocation. Therefore, the defined benefit (DB) and defined contribution (DC) schemes' features are both included in the LTAT scheme. PERKESO, or Pertubuhan Keselamatan Sosial, is another name for SOCSO, which is short for Social Security Organization. According to the Employees' Social Security Act of 1969, the organization was founded on January 1, 1971, as a government department under the Ministry of Labor and Manpower. It is an oversight organization that protects Malaysian workers' rights and welfare in accordance with the Employees' Social Security Act of 1969.

The law in Malaysia requires all employers to register their business and staff with SOCSO. According to the government-specified percentage, both employers and employees must contribute each month. The Employment Injury Scheme and the Invalidity Scheme are the two social security programs that SOCSO is in charge of overseeing. Employees are protected by the Employment Injury Scheme from unanticipated circumstances, including occupational diseases and mishaps that occur while traveling for work. 24/7 protection against invalidity or death from any cause is provided by the Invalidity Scheme. All employees who meet the eligibility requirements and are citizens or permanent residents of Malaysia must register. Every person working in the private sector under a contract or apprenticeship, as well as temporary or contract employees of the federal or state government and federal or state statutory bodies, is required to be registered and insured under the Social Security Organization (SOCSO). The maximum monthly payment for the contribution would be RM4,000.00.

Foreign workers, domestic servants, self-employed people, sole proprietors or owners of partnerships, spouses of sole proprietors or partners, and permanent employees of the federal and state governments are all exempt. The foundation of SOCSO Social Security Protection is the idea of collective responsibility, which entails sharing risks, pooling resources, and replacing income. According to the 1952 International Labor Organization (ILO) Convention, namely Convention 102: Minimum Standards for Social Security, it is imperative that social security protection be provided. Through the Employment Injury Scheme and the Invalidity Scheme, SOCSO's main goal is to provide social security coverage to employees and their families. As a result, the SOCSO plan essentially serves as a defined-contribution insurance retirement plan that provides benefits if accidents at work cause injuries or disabilities. Members who are injured can benefit from the system in many ways, including a lifetime monthly income. Employees can increase their retirement savings by participating in voluntary long-term savings and investment plans called Private Retirement Schemes (PRS). It aims to give

Malaysians who work for themselves or are employed more options for augmenting their retirement funds in a controlled and organized setting. PRS are private sector retirement savings plans designed to help Malaysian workers and their employers participate in the EPF program. Each PRS offers a range of retirement funds from which individuals can select based on their individual retirement needs, goals, and risk tolerance. To encourage participation, the government provided tax breaks to participants. As of the end of 2018, a little over 300,000 employees participated in 56 offers from 8 fund managers, totaling RM2.23 billion in funds.

Under section 139C of the Capital Markets and Services Act of 2007, the Private Pension Administrator (PPA) was granted authorization to act as the central administrator of Malaysia's Private Retirement Schemes (PRS). PPA and the PRS were founded on July 18, 2012, and the Securities Commission Malaysia has given PPA permission to protect PRS members' interests and educate the public about PRS. PPA's main responsibilities include keeping records, handling administrative issues, and providing members and contributors with customer service regarding their contributions to private retirement plans. Each PRS applicant needs to create a PPA account. They become PRS members after the account is successfully created. The Government Pension Plan is the only one of the five pension plans available to Malaysians that is categorized as a true Defined Benefit (DB) plan.

The defined contribution (DC) types include the EPF, SOCSO, and other PRS systems. Furthermore, the SOCSO program is primarily intended as a retirement system that provides worker protection insurance, as opposed to the EPF and PRS schemes, which are primarily focused on savings. In addition, the LTAT is a hybrid that combines elements of defined contribution (DC) and defined benefit (DB) plans. Furthermore, the vast majority of the plans under review were centered on offering benefits to people who work in the formal economy and are paid a regular salary. The DC plans ultimately placed the onus of retirement planning and saving on the workers. Theoretically, this exposes workers to a great deal of risk because they are solely in charge of choosing the investment options included in the plan. Research on retirement planning and financial literacy has already been conducted, but little attention has been paid to the behavioral and psychological aspects that affect young workers' retirement choices in Sabah, Malaysia's rural and urban areas. Current policies frequently fall short in addressing the distinct challenges in retirement savings behavior caused by the unique socioeconomic disparities between these settings. Furthermore, previous research has not fully integrated aging theories, such as the theory of planned behavior (TPB), continuity theory, and disengagement theory, to explain the cognitive and motivational components of young workers' retirement decision-making.

2. Literature Review

Therefore, the primary focus of the current research is job satisfaction to assess person-environment fit and its influence on decisions about career retention, including the anticipated retirement age. This variable is being focused on for a number of reasons, two of which are especially significant. In the field of entrepreneurship, there is currently a growing recognition that, in addition to financial rewards, many people decide to become entrepreneurs due to strong subjective motivations like independence, autonomy, and the chance to work on projects they find fulfilling (Baron and Henry, 2010; Hmieleski and Corbett, 2008). As a result of this discovery, scholars have begun to investigate non-monetary markers of entrepreneurial achievement. One important predictor of entrepreneurial success is job satisfaction. Due to increased job autonomy, flexibility, and psychological capital—all of which are strongly associated with self-employment—entrepreneurs typically report higher levels of job satisfaction (Benz and Frey, 2004; Prottas and Thompson, 2006; Schjoedt and Shaver, 2007; Stoner and Fry, 1982; Baron et al., 2016). A summary of employment status is reported by the job satisfaction measure. The relationship between job satisfaction and retirement decisions hasn't been made clear by retirement studies, though (Topa et al., 2009). According to a meta-analysis by Topa et al. (2009:49), the best indicator of retirement planning is job satisfaction. However, the worst predictor of the decision to retire was job satisfaction. Additionally, they contend that conclusions are complicated by the mandatory retirement age. Retirement planning is the process of investigating and selecting the best plans to guarantee stable post-employment living and sufficient levels of income protection in old age. Its scope can be limited to financial security alone, for example, or it can be broad to include social security, health maintenance, and generative retirement activities like volunteering and social work.

Retirement planning, according to Gutierez & Hershey (2016), is preparing for life after active employment.

According to Mohd Sidek Jantan (2019), the country's macroeconomic and fiscal stability is impacted by the aging population. This is because as the population ages, the government must spend more on healthcare, social security, and pensions, which takes money away from projects that promote productive development and education. An increase in life expectancy will make people more reliant on their retirement savings or available funds. In light of this, it is crucial to make appropriate retirement plans while still employed. Retirement planning is the process of analyzing and choosing the best ways to ensure adequate financial stability in old age and a stable way of life after leaving the workforce. It may be more comprehensive, covering topics like social security, health maintenance, and retirement activities that benefit society, like volunteering and social work, or it may be more narrowly focused, focusing only on financial security. Retirement planning, according to Gutierez & Hershey (2016), entails getting ready for the stage of life that comes after active employment. According to a 2019 study by Mohd Sidek Jantan, the country's financial and general economic stability is impacted by the growing number of elderly people. The reason for this is that the government must allocate more funds for healthcare, social security, and pensions when the population's proportion of elderly people increases. As a result, funds that were initially meant to support initiatives for productive economic growth and education are diverted. On an individual basis, a longer life expectancy will result in a greater dependence on retirement funds. In this case, it's critical to have a solid retirement plan in place during one's employment. Employers offer a variety of benefits to entice, keep, inspire, and involve workers to increase their commitment to achieving organizational goals.

Participation in programs that offer benefits beyond retirement is one of these contributions. When employees leave their jobs, most companies offer them two main retirement options. An employer-funded plan known as a defined benefit (DB) retirement scheme guarantees that workers will receive a set amount of money upon retirement. According to their length of service and income at retirement, employees are guaranteed a certain level of benefits under this program. The formula used to calculate the benefits is linked to the member's earnings and/or the length of their pensionable service. Employees are typically prohibited from taking money out before their employment ends. Instead, at a certain age predetermined by the plan's regulations, people are entitled to receive their benefit as a lump sum or, in some cases, as a lifetime annuity (Khorasanee, 1996). The employer is in charge of making decisions and bears the burden of the pension. To create the conditions and limitations required for its administration, a database's structure is usually regulated. Common law can also serve as the foundation for or the establishment of rights and limitations. Employees are always qualified to get the benefits they have accrued up to this point. The benefits that an employee has accrued up until that point are immobilized and placed in a trust when they leave their employer before they reach retirement age. Alternatively, in some circumstances, the worker might decide to transfer the value to another pension plan or receive a lump sum payment (Bodie et al., 1988; Munnel et al., 2007). Conversely, a defined contribution (DC) is a retirement plan in which a worker consistently contributes a fixed sum or a portion of their income to an account that is exclusively used to finance their retirement. Furthermore, the employer typically contributes in proportion.

However, the employer does not provide the worker with any other clear benefits. As a result, the total of the contributions and investment gains is used to determine the employee's benefits. Individual accounts, defined contributions, direct sponsor contributions to augment individual contributions, and benefit prefunding are four common features of DC schemes. Both the employer and the employee contribute, and any profits from investments made on the account's funds are added to the employee's trust account. Consequently, one way to think of a DC plan is as a money-saving strategy that is put off until later. Each contributor's future benefits are contingent on the amounts credited to their account, which are subject to change based on fluctuations in investment profits.

In a defined contribution plan, the employee or retiree bears the primary responsibility for investment risk and returns, not the sponsor or employer. According to Munnel et al., employers in the private sector favor the defined contribution (DC) plan because of organizational features, job security, and employee mobility, whereas the defined benefit (DB) plan is more common in the public sector. They argued that governments have historically implemented state-provided pensions due to political, economic, and social factors, as well as the legislative nature of government-owned businesses and their emphasis on producing non-tradable goods. In contrast, DC is more popular in the private sector since strict market discipline determines a company's ability to survive. Naturally, they are worried about financial instability and how it might impact their financial

statements and long-term ability to pay for future retirement commitments. According to Ross (2000), DB was a traditional retirement plan provided to government workers when the workforce was small. Additionally, these benefits are a crucial component of the government's shared responsibility as an employer to guarantee the financial security of its workers upon their retirement, which makes this decision reasonable.

3. Methodology

In both rural and urban areas, create and distribute structured questionnaires to a representative sample of young workers between the ages of 18 and 35. To guarantee that both rural and urban populations are represented, use stratified random sampling. Based on the population size and the required level of confidence, calculate the sample size. To determine the sample size, G-Power Analysis will be utilized. The data collection process for this study may include designing survey questionnaires, distributing surveys to chosen participants in both urban and rural areas, conducting pilot tests, and using the SMARTPLS of the instruments to analyze the data. Finalize the instruments after making revisions based on feedback. This will ensure data is collected systematically and ethically. Theoretically, this study will compare the factors that influence young workers in rural and urban Sabah when it comes to retirement, difficulties they face, and the policy implications of their choices. It will also look at the psychological and behavioral aspects of retirement.

4. Findings and Results

Starting retirement planning early is essential for Malaysians aiming to build a secure financial future. The power of compounding returns means that even modest contributions can grow significantly over time, enhancing retirement funds. Early planning also allows individuals to take advantage of various investment options and strategies to maximize their savings. The key components of retirement planning such determining retirement goals, estimating future expenses, calculating retirement income, exploring different retirement plans, seeking professional advice and reviewing plans regularly. There are a few decision-making processes that need to be emphasized such as information gathering, seeking professional advice, evaluation of options, risk assessment, considering costs and benefits of various retirement planning strategies, action plan and execution as well as monitoring and reviewing the progress of retirement savings and investments. Retirement planning is a crucial aspect of financial management that requires careful consideration of various factors. For young workers in both rural and urban areas, effective retirement planning and decision-making involve understanding their unique circumstances, setting clear financial goals, and making choices to secure a comfortable future. Understanding the context in rural areas, socio-economic challenges often mean that the young workers in rural areas often face limited access to financial resources, lower income levels, and fewer job opportunities. These factors can make it challenging to save for retirement. Financial literacy impacts the lower levels of financial literacy, which can affect their ability to make informed decisions on retirement planning. Cultural influences, where the cultural attitudes towards retirement in rural areas may emphasize family support and community living, impact retirement planning behaviors. In the context of urban areas, higher living costs impact the urban young workers typically face higher living costs, which can strain their ability to save for retirement. Access to resources, they usually have better access to financial education, advisory services and diverse investment options. Work-Related Stress, the fast-paced urban lifestyle and work-related stress can influence their retirement planning and decision-making processes.

5. Conclusion and Recommendations

The rise of the gig economy has significantly impacted retirement planning, particularly for young workers. Many gig workers, such as food delivery drivers and platform workers, face challenges in saving for retirement due to the lack of employer-sponsored retirement benefits how this issue connects with retirement adequacy and coverage. Gig workers typically experience fluctuating incomes, making it difficult to set aside a fixed amount for retirement savings. This unpredictability can result in inadequate retirement funds. Many gig workers may lack the financial knowledge needed to effectively plan for retirement, further exacerbating the issue of inadequate savings. Despite the structured approach provided by the EPF, many Malaysians face challenges in achieving adequate retirement savings. A significant number of EPFs have introduced initiatives such as the Retirement Income Adequacy (RIA) Framework, which provides guidelines for achieving different levels of retirement savings. In conclusion, retirement planning in Malaysia is a multifaceted process that

requires early planning, goal-setting and continuous review. By leveraging the resources and tools provided by the EPF and seeking professional advice, Malaysians can work towards a secure and comfortable retirement income. The EPF offers a voluntary contribution scheme called i-Saraan, which provides incentives for self-employed and gig workers to save for retirement. However, participation in this scheme is not mandatory, leading to coverage gaps. There have been calls to extend EPF coverage to all workers, including gig workers, through mandatory contributions. This would help ensure that more young workers have access to retirement savings.

The Malaysian government has introduced initiatives to encourage gig workers to save for retirement, such as matching grants and special incentives for voluntary contributions. These efforts aim to address the coverage gaps and improve retirement adequacy among the informal sector, especially the young workers. This study highlights the significant behavioral and psychological factors influencing retirement decisions among young workers in rural and urban areas of Sabah. The findings reveal that while both groups recognize the importance of retirement planning, the approaches are shaped by distinct socioeconomic conditions and access to financial resources. Rural workers face challenges such as lower financial literacy and limited access to financial services, whereas urban workers generally benefit from better financial education, financial institutions and infrastructure. The research underscores the need for tailored interventions, policies, and educational efforts that address the distinct needs of rural and urban communities by fostering greater awareness, enhancing access to financial tools, and addressing psychological barriers, stakeholders can pave the way for more informed and secure retirement planning among young workers. Early retirement planning, financial literacy and policy support ensure secure future savings and comfortable retirement income.

References

Ajzen, I. (1991). The Theory of Planned Behavior. Organizational Behavior and Human Decision Processes, 50(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T

Atchley, R. C. (1989). A continuity theory of normal aging. The Gerontologist, 29(2), 183-190. https://doi.org/10.1093/geront/29.2.183

Baron, R. A. & Henry, R. A. (2010). How entrepreneurs acquire the capacity to excel: Insights from research on expert performance. Strategic Entrepreneurship Journal, 4(1), 49–65. https://doi.org/10.1002/sej.82

Baron, R. A., Franklin, R. J., & Hmieleski, K. M. (2016). Why entrepreneurs often experience low, not high, levels of stress: The joint effects of selection and psychological capital. Journal of Management, 42(3), 742–768. https://doi.org/10.1177/0149206313495411

Beehr, T. A. (1986). The process of retirement: A review and recommendations for future investigation. Personnel Psychology, 39(1), 31-55. https:doi.org/10.1111/j.1744-6570.1986.tb00573.x

Benz, M., & Frey, B. S. (2004). Being independent is a great thing: Subjective evaluations of self-employment and hierarchy. Economica, 71(281), 175–196. https://doi.org/10.1111/j.0013-0427.2004.00364.x

Bodie, Z., Marcus, A. J., & Merton, R. C. (1988). Defined benefit versus defined contribution pension plans: What are the real trade-offs? (Working Paper No. 2882). National Bureau of Economic Research. https;//doi.org/10.3386/w2882

Cady, S. H. & Wheeler, J.V. (2019). A Proposed Theory Life Cycle Model: Standing on Shoulders of Giants, *The Journal of Applied Behavioral Science,* 55(4), 428-452. *doi:10.1177/0021886319873050*

Chong, L. L., & Ch'ng, S. Y. (2019). Retirement planning behavior of Malaysians: The influence of financial knowledge, attitude and perceived behavioral control. Journal of International Business and Management, 2(2), 19-28. *Retrieved from Journal of International Business and Management.*

Cumming, E., & Henry, W.E. (1961). *Growing Old: The Process of Disengagement*. New York: Basic Books.

Fossey, E., Harvey, C., McDermott, F. & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry*, 36, 717-732. (*https://doi.org/10.1046/j.1440-1614.2002.01100.x)*

Gutierrez, H. C., & Hershey, D. A. (2016). Age differences in expected satisfaction with life in retirement. International Journal of Aging & Human Development, 78(2), 93-114. https://doi.org/10.2190/AG.78.2.a

Hair, Jr. J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., & Danks, N.P. (2021). *Soumya Ray Partial Least Squares Structural Equation Modelling (PLS-SEM) Using RA Workbook*,

Hmieleski, K. M., & Corbett, A. C. (2008). The contrasting interaction effects of improvisational behavior with

entrepreneurial self-efficacy on new venture performance and entrepreneur work satisfaction. Journal of Business Venturing, 23(4), 482–496. https://doi.org/10.1016/j.jbusvent.2007.04.002

Jantan, M. S. (2019). Retirement insecurity: The changing setting for retirement planning [Preprint]. ResearchGate. https://www.researchgate.net/publication

Jingjing, Q. U. (2021). Job satisfaction, expected retirement financial insufficiency, and the expected retirement age of the entrepreneurs: an attraction-selection-attrition theory perspective. Journal of Entrepreneurship in Emerging Economies 14(6), 1143-1167. (doi:10.1108/jeee-06-2021-0219)

Kaur, B. & Hassan, Z. (2018). Impact of Age, Gender, Income, Education and Financial Literacy Towards Retirement Planning Among Generation 'Y' in Malaysia, *International Journal of Education, Learning and Training*, 3(1), 31-53. (*doi:10.24924/ijelt/2018.11/v3.iss1/30.53)*

Khorasanee, M. Z. (1996). Annuity choice for pension (Actuarial Research Paper No. 90). Faculty of Actuarial Science & Insurance, City University London, https://digitalcommons.enl.edu/joap/133

Kim, J. & Chatterjee, S. (2013). Childhood financial socialization and young adults' financial management. *Journal of Financial Counseling and Planning, 24*(1), 61–79. *Source - https://www.afcpe.org/wp-content/uploads/2018/10/v24_1_61-79.pdf*

Kimiyaghalam, F., Mansori, S., Safari, M. & Yap, S. (2017). Parents' Influence on Retirement Planning in Malaysia, *Family and Consumer Sciences Research Journal,* 43(3), pp. 315-325. (*doi:10.1111/fcsr.12203)*

Klapper, L., Lusardi, A., & Panos, G. A. (2013). Financial literacy and its consequences: Evidence from Russia during the financial crisis. Journal of Banking & Finance, 37(10), 3904-3923. (https://doi.org/10.1016/j.jbankfin.2013.07.014)

Kristjanpoller, W. & Olson, J., (2014). The Effect of Financial Knowledge and Demographic Variables on Passive and Active Investment in Chile's Pension Plan, *Journal of Pension Economics and Finance*, 14 1-22. (*doi:10.1017/s1474747214000213)*

Lahey, K.E., Michelson, C.N., & Bajtelsmit, V. (2008). Retirement Plans for College Faculty at Public Institutions, *downloaded from Research Gate on 9 February 2021. https://www.researchgate.net/publication/228549875_*

Lee, A., Xu, Y., & Hyde, K.F. (2016). Financial Literacy and the Limits of Financial Decision-Making, *Journal of Financial Services Marketing,* 18(2), 137-151.

Lim, C.S., Sia, B.K. & Gan,0 G.J. (2011). The Analysis of Psychological Factors Affecting Savers in Malaysia, *Middle Eastern Finance and Economics*, 12, 77-85. *Source - http://eprints.utar.edu.my/id/eprint/884*

Lim, L. (2017). Gender differences in retirement savings. Journal of Financial Planning, 30(7), 28-34. (*doi:10.1111/jonm.12586) Local Government Act 1976.*

Loibl, C., Kraybill, D. S., & DeMay, S. W. (2011). Accounting For The Role Of Habit In Regular Saving, *Journal of Economic Psychology,* 32(4), 581–592. (*doi:10.1016/j.joep.2011.04.004)*

Lian, Tai, T., & Sapuan, N. M. (2018). Retirement planning in Malaysia: Issues and challenges to achieve a sustainable lifestyle. Turkish Online Journal of Design Art and Communication, 8, 1222-1229. https://doi.org/10.7456/1080SSE/164

Lusardi, A. (2012). Numeracy, Financial Literacy, and Financial Decision Making, *Numeracy,* 5(1), 2. (*doi:10.5038/1936-4660.5.1.2)*

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

Magendans, J., Gutteling, J.M. & Zebel, S. (2017). Psychological Determinants of Finance Buffer Saving: The Influence of Financial risks Tolerance and Regulatory Focus, *Journal of Risks research,* 20(8), 1076-1093. (*https://doi.org/10.1080/13669877.2016.1147491)*

Mansor, M., Bhatti, M. I., & Ariff, M. (2015). Understanding the influence of individual and sociocultural factors on retirement planning: An empirical study in Malaysia. Asian Social Science, 11(13), 108-119. *Source - http://www.sciencedirect.com/science/article/pii/S1042443114001589*

Matenge, T., Makgosa, R. & Donatus, A. (2015). To Save or Not to Save Dilemma: Insights from a Behavioral Perspective, *Journal of Research in Business, Economics and Management,* 4(3), 403-415. (*doi: 10.5281/zenodo.3965897)*

Mead, G.H. (1934). Mind, self and society: From the standpoint of a social behaviorist. University of Chicago Press.

Miles, M., Huberman, M. & Soldana, J. (2014). *Qualitative Data Analysis – A Methods Sourcebook*. 3rd Edn., SAGE Publications, London.

Miller, D.K. (1965). A role theory approach to adjustment in old age. The Sociological Quarterly, 6(1), 37-47.

https://doi.org/10.1111/j.1533-8525.1965.tb01630.x

Mitchell O.S. & Fields G.S., (1984). The Economics of Retirement Behavior, *Journal of Labor Economics,* 2(1), 84-105. *(http://dx.doi.org/10.1086/298024)*

Munnell, A. H., Haverstick, K, & Mauricio, S., 2007, Why Defined Benefit Plans Survived in the public sector? State and Local Pension Plans, Center for Research at Boston College.

Mustafa, W.M.W., Othman, M. A., & Perumal, S. (2024). The dynamics of financial retirement planning: Financial attitude, financial literacy, and income as predictors. Journal of Financial Counseling and Planning, 35(1), pp. 123-139. https://doi.org/10.1057/s41264-024-00296-2

Ong, T. S., & Hamid, N. A. (2020). Financial literacy and retirement planning among employees in Malaysia. Journal of Economics and Financial Analysis, 4(1), 1-14. (*doi:10.1080/01900692.2019.1672078?scroll=top&needaccess=true)*

Prottas, D. J., & Thompson, C. A. (2006). Stress, satisfaction, and the work-family interface: A comparison of self-employed business owners, independents, and organizational employees. Journal of Occupational Health Psychology, 11(4), 366–378. https://doi.org/10.1037/1076-8998.11.4.366

Ross, S. G. (2000). Doctrine and Practice in Social Security Pension Reforms. International Social Security Review, 53(2), pp. 3-29. (doi: 10.1111/1468-246x.00069)

Saeed, S., & Sarwar, A. (2016). Perception about social and financial issues of life after retirement: A case study of academic staff of public sector universities in Lahore, Pakistan. Cogent Business & Management, 3(1), 1236432.

Schjoedt, L., & Shaver, K. G. (2007). Deciding on an entrepreneurial career: A test of the pull and push hypotheses using the Panel Study of Entrepreneurial Dynamics data. Entrepreneurship Theory and Practice, 31(5), 733–752. https://doi.org/10.1111/j.1540-6520.2007.00197.x

Selvadurai, V., Kenayathulla, H. B., & Siraj, S. (2018). Financial literacy education and retirement planning in Malaysia. Malaysian Online Journal of Educational Management, 6(2), 41-66. https://doi.org/10.22452/mojem.vol6no2.3

Sonuga-Barke, E. J. S., & Webley, P. (1993). *Children's Saving: A Study in the Development of Economic Behavior.* United Kingdom: Lawrence Erlbaum Associates Limited.

Stoner, C. R., & Fry, F. L. (1982). The entrepreneurial decision: Dissatisfaction or opportunity? Journal of Small Business Management, 20(2), 39–44.

Taylor, M. A., & Doverspike, D. (2003). Retirement planning and preparation. In G. A. Adams & T. A. Beehr (Eds.), Retirement: Reasons, Processes, and Results (pp. 53-82). Springer.

Tendy, M., Rina, M. & Donatus, A. (2015). To Save or not to Save Dilemma: Insight from the Behavioral Perspective, *Journal of Research in Business, Economics and Management,* 4(3), 403-415. Retrieved from *https://www.scitecresearch.com/journals/index.php/jrbem/article/view/448*

Thu, T.H. (2018). How do Psychological Factors Affect Household Savings Behavior? *Unpublished Manuscript,* Radboud University, Netherlands

Topa, G., Moriano, J.A., Depolo, M., Alcover, C.M., Morales, J.F. (2009). Antecedents and consequences of retirement planning and decision making: A meta-analysis and model. Journal of Vocational Behavior, 75(10, pp. 38-55. https://doi.org/10.1016/j.jvb.2009.03.002

Whitaker, E.A., Bokememer, J.L. & Loveridge, S. (2013). Interactional associations of gender on saving behavior: Showing gender's continued influence on economic action, *Journal of Family and Economic Issues,* 34(1), 105-119. (*doi: 10.1007/s10834-012-9307-2)*

Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and retirement planning in the Netherlands. *Journal of Economic Psychology*, 32(4), 593-608. (*https://dx.doi.org/10.2139/ssrn.1014994)*

Xiao, J. J., Tang, C., Serido, J., & Shim, S. (2011). Antecedents and consequences of risky credit behavior among college students: Application and extension of the theory of planned behavior. *Journal of Public Policy and Marketing*, *30*(2), 239-245. (*https://doi.org/10.1509/jppm.30.2.239)*