Measuring Financial Planning for Retirement of Gig Workers in Malaysia: A Pilot Study

Muhammad Eddy Aizad Anuar, Shafinar Ismail, Khairunnisa Abd Samad*
Faculty of Business and Management, Universiti Teknologi MARA, Melaka, Malaysia
*khairunsamad84@gmail.com

Abstract: Financial planning for retirement for gig workers is relatively hard given their insecure employment. Factors like employer misplacement of gig workers, a lack of employer-sponsored pension plans, uncertain income, and insufficient financial guidance may make it difficult and stressful for gig workers to arrange their money for retirement. The researchers offer a relationship model in this study, with a quantitative research design chosen to validate the hypothesized elements and construct linkages between them. The main factors that may influence financial planning for retirement stated as financial literacy, retirement goals, future time perspective, social influence, and saving attitude as a mediator. To confirm that, a design questionnaire, which is reliable and acceptable, two steps of verification have followed. First, there is a validation phase in which the questionnaire is reviewed by a panel of experts. Before moving on to the next level, the feedback gathered was followed up on. Second, the pilot study proceeding to investigate the consistency of the instrument analyzed through Cronbach's Alpha coefficient reliability screening in SPSS 26 software package. Moreover, the results found that all the items were reliable and the Cronbach's Alpha coefficient above 0.7.

Keywords: *financial planning for retirement, gig workers, pilot study, questionnaire*

1. Introduction

Financial planning enables people to make decisions that will provide them with financial stability in later life, such as regular saving or home ownership (Ghadwan et al., 2022). This financial aspect contains the process of establishing retirement income objectives as well as the actions, behaviour, and decisions required to accomplish those goals (Murari et al., 2021). Retirement planning is a goal-oriented behaviour in which people try to be ready for their retirement life (Liu et al., 2021). All efforts, whether they are related to non-financial or financial areas of life, from a worker's first employment through and after retirement should be included in proper retirement planning. Yeung and Zhou (2017) emphasize that planning for retirement involves four areas, including financial, health, social life, and psychological preparation. This study places more emphasis on the components of retirement financial planning.

According to Pavia and Grima (2019), the act of looking at one's financial condition and deciding to place money aside expressly for usage in retirement is referred to as financial planning for retirement. Retirement-minded people actively choose to forego some pleasure today by not spending all of their money now in order to have a better future (Pavia & Grima, 2019). Because many people opt to retire while their pensions are still insufficient, poor financial planning also has long-term effects that might lead to issues in the future (Hutabarat & Wijaya, 2020; Jimenez et al., 2018). This issue would be much worse especially when the nature of the job is precarious such as gig workers.

The unstable employment of gig workers is a significant issue with implications for retirement. Because of its intricacy, gig labour is now a growing sector of the workforce and has gained more attention from academics (Watson et al., 2021). The misclassification of gig workers is one of the main issues that gig workers now face (Tan et al, 2021). Gig workers do not receive the same

benefits and protections as full-time employees because companies misclassify them as such. Additionally, it may be difficult and frightening for gig workers to set up their finances for retirement due to the absence of an employer-sponsored pension plan, unpredictable income, and poor financial guidance. Recent studies showing that most gig workers struggle to make financial plans for their retirement serve as evidence for this. Therefore, it is evident that gig workers must make sound financial preparations for retirement. Subsequently, numerous studies have since highlighted the elements that go into retirement financial planning such as financial literacy (Baker et al., 2020; Hutabarat & Wijaya, 2020), retirement goals (Tomar et al., 2021; Rasiah et al., 2020), future time perspective (Larisa et al., 2021; Alkhawaja & Albaity, 2020; Kimiyagahlam et al., 2019) and social influence (Shariff & Ishak, 2021; Zandi et al., 2021). At the same time, some research has focused on the function of saving attitudes as a mediating factor in retirement financial planning (Hajam, 2020; Kimiyagahlam et al., 2019).

The objective of this study was to investigate the reliability and validity of the questionnaire design of financial literacy, retirement goals, future time perspective, and social influence and saving behavior on financial planning for retirement among Malaysian gig workers. This paper has been structured in five section, in addition to this introduction in first section and conclusions in last section. In the second section, the literature review and theoretical model is discussed. In the third section, research method is discussed which includes questionnaire design and validation of questionnaire. Next is the fourth section where the pilot study result is reported. Finally, the final section where discussions of the analysis as well as contributions of this study is presented before conclusions.

2. Literature Review

Underpinning Theory: In this study, the research framework is underpinned by two theories that explain the variables such as financial literacy, retirement goals, future time perspective, social influence, and saving attitude. Hence, this section describes the theoretical orientation that helps to better understand the underpinning theories that support the research. At the same time, the theoretical orientation would help provide a clearer understanding on the relationship of the determinants of financial planning for retirement.

Interdisciplinary Financial Planning Model: The Interdisciplinary Financial Planning Model, developed by Hershey et al. in 2010, incorporates theoretical frameworks from Beach's Image Theory and Mowen's 3M Theory of Personality. The model proposes a sequence of relationships among personality constructs, cognitive constructs, and behavior related to retirement planning. The central traits, such as future time perspective, are seen as causal precursors to surface traits like goal clarity and financial knowledge, which, in turn, influence retirement planning activities. The model suggests that goal clarity partially mediates the relationship between future time perspective and financial knowledge, and all three psychological variables contribute to planning activities and savings adequacy. In addition to these core variables, the model includes social support indicators, economic variables, and background variables to further explain the influence on retirement planning behavior.

The model incorporates 10 additional variables, including three social support indicators. These indicators assess the influence of parents in early financial learning experiences, the support of a spouse or partner in retirement savings, and the support of friends and colleagues. The model suggests that the impact of social support on planning and saving adequacy is fully mediated through goal clarity and future time perspective. Social influence pathways are hypothesized to

shape beliefs, values, and social norms regarding retirement planning, as well as expectations about the timing of retirement.

Furthermore, the model includes three economic variables: perceptions of employer pension quality, possession of investment assets for retirement, and perceptions of the state's provision of pension income. These variables directly affect perceived saving adequacy. Lastly, four background variables—educational level, age, gender, and household income—are included as control variables in the model.

Overall, the Interdisciplinary Financial Planning Model integrates various psychological, cognitive, social, and economic factors to explain retirement planning behavior. It suggests that personality traits, cognitive factors, social support, economic circumstances, and background variables all contribute to an individual's retirement planning activities and savings adequacy.

Theory of Planned Behavior: The Theory of Planned Behaviour (TPB) was developed by Ajzen (1991) as an extension of the Theory of Reasoned Action. It aims to predict and understand people's behavioral choices by focusing on their intentions to engage in specific behaviors. Intentions are seen as crucial indicators of an individual's motivation and effort to perform a behavior. The theory proposes three drivers of intention: attitude toward the behavior, subjective norms, and perceived behavioral control.

Attitude toward the behavior is formed by a person's positive or negative appraisal of the behavior, consisting of affective, behavioral, and cognitive components. These components contribute to the complexity of attitudes and their relationship with behavior. Subjective norms refer to the influence of significant others, such as family, friends, and colleagues, who approve or disapprove of the behavior. Social pressure and the motivation to conform to others' expectations play a role in predicting behavior. Perceived behavioral control relates to an individual's belief in their ability to perform the behavior, taking into account past experiences and anticipated obstacles. Confidence in one's ability to perform the behavior strongly influences the likelihood of engagement. Factors like time, money, and opportunities can enhance an individual's perceived behavioral control.

In summary, the TPB suggests that stronger intentions to engage in a behavior are influenced by more favorable attitudes, subjective norms, and higher perceived behavioral control. The relative impact of these predictors may vary depending on the behavior and context. Attitudes may have a significant influence on intentions in some cases, while in others, attitudes combined with perceived behavioral control are sufficient to explain intentions. In certain situations, all three predictors contribute independently to an individual's intention to perform a behavior.

Financial Planning for Retirement: Financial planning for retirement refers to a person's long-term spending patterns and investments to get ready for their post-retirement existence (Seidl et al., 2021). Additionally, financial planning for retirement necessitates a sequence of deliberate decisions, which in turn necessitates knowledge of the options and the capacity to calculate the odds of various outcomes for each option (Rostamkalaei et al., 2022). To ensuring that people have enough funds to live the lifestyle they choose in retirement, financial planning is a crucial step (Hansson, 2019). Effective financial planning for retirement helps people to be financially independent, live comfortably, and accomplish their retirement goals (Hansson, 2019).

According to Hershey et al. (2013), three factors—capacity, willingness, and opportunity— determine how well people prepare for and save for retirement. The term "capacity" refers to the

cognitive traits—aptitude, understanding, and knowledge—that set two people apart from one another. The psychological and emotional traits that provide people the motivation to begin and keep up with retirement planning are used to describe the second component, willingness. It contains elements that define a person's self-image, such as attitude, clarity in one's financial and retirement objectives, personality traits, ethics, virtues, and rectitude. The third dimension, opportunity, involves elements that are outside of a person, such as the availability of pension plans for employees, a wide range of investing possibilities, long-term trends in the economy and financial markets, fiscal policies, and tax laws.

Additionally, there has been documented discussion of financial planning for retirement in the literature. For instance, Rasiah et al. (2020) investigated the factors that influence retirement readiness in Malaysia. A total of 200 participants in the study, which was based on the Life Cycle Hypothesis Theory, were between the ages of 35 and 60. This study used attitude towards retirement, financial literacy, goal clarity, and probable conflict in retirement as independent variables. Only financial literacy and goal clarity, with goal clarity being the most important influencing factor, were shown to significantly increase Malaysian working persons' readiness for retirement. This study also highlighted that the younger generation may not have clear goals as they begin their career, but would slowly become more aware of their goals when they move into their retirement age.

Financial Literacy: Financial literacy is the capacity to comprehend and put into practice a variety of financial abilities, including personal financial management, budgeting, and saving, that enable people to handle their money sensibly (Yong et al., 2018). Financial literacy is defined by Burchi et al. (2021) as a collection of awareness, information, ability, attitude, and behaviour needed to make good financial decisions and achieve one's financial well-being. The capacity to understand and apply knowledge about personal finances is measured by a person's financial literacy (Hauff et al., 2020). Other ideas of financial literacy also include the assumption that people will make wise financial decisions if they comprehend the connection between their personal financial situation and the state of the economy (Hastings & Mitchell, 2020).

Financial literacy aids people in deciding whether or not to invest in retirement plans (Li et al., 2017). To invest in a retirement plan that is suitable for their lifestyle, people need to be aware of the many types of retirement plans (Bacova & Kostovicova, 2018). Understanding the benefits of retirement plans, whether they are private or public, the best time to start saving for retirement, and how to properly evaluate a particular investment-linked retirement program are all examples of financial literacy (Zandi et al., 2021). Before deciding on a retirement strategy, people with financial literacy may take into account all relevant external factors. Most individuals evaluate their retirement plan based on sociological and economic factors such as risk tolerance, returns to investment, and market trends (Ali & Frank, 2019).

Retirement Goals: Retirement goals may be characterized as a long-term plan that offers a person a great deal of direction, stability, and importance (Alcaide et al., 2020). According to Ong et al. (2020), retirement objectives are a predetermined milestone that each person sets for themselves that is connected to their retirement vision and outlook on life. Clear retirement goals entail the establishment of clear financial objectives for the level and calibre of living in retirement. They also serve as a powerful motivator for individuals who have already established their goals to begin the planning process (Jiun et al., 2021). Similarly, Zhu and Chou (2018) concur that people's behaviors and attitudes regarding retirement are influenced by their ability to clearly articulate their retirement goals.

According to a research by Tomar et al. (2021), among Indian professional women planning for retirement, the retirement objective had a significant impact on financial decisions. According to the study, women who have distinct, well-defined, and realistic goals have a high degree of engagement in financial planning activities and retirement saving behaviour. It was suggested that motivating women to create exact goals at a strategic level was important. To help individuals begin retirement planning, they should estimate their post-retirement requirements. Rai et al. (2020) suggested that financial planning for retirement, whether it is long term or short term, is likely to be influenced by retirement goals. According to their study, financial planning for retirement was strongly influenced by retirement goals, financial literacy, and financial risk tolerance, all of which were interdependent for efficient operation.

Future Time Perspective: Future time perspective, also known as future orientation, is the degree to which a person considers the future, predicts potential outcomes, and makes preparations for the future before acting (Kooij et al., 2018). Future time perspective is defined by Alkhawaja and Albaity (2020) as people's desire for a long-term outlook and a long-term viewpoint of planning. The idea of "future orientation" refers to decisions taken today that will have an impact on the future or is also known as "concern for future implications" (Haron et al., 2019). According to a research by Stolarski et al. (2018), the concept behind the Time Perspective Theory is that people's sense of time is impacted by their emotions, perceptions, and actions. Time perspective models divide people's time perspective into three chronological categories which is past, present, and future.

Additionally, a key personality attribute that emphasizes how one can see the future is future time perspective (Tomar et al., 2021). People that are future-focused enjoy thinking about the future, are interested in what it has to offer, and are more inclined to make plans in advance (Eismann et al., 2019). Eismann et al. also emphasized the significance of two different forms of time perception in the context of retirement. The first one, called future time perspective, measures how much an older worker is focused on the future. The second one, referred to as projected life expectancy, concerns how long a senior worker believes the "future" will last (Eismann et al., 2019). In other words, individuals who think about the future would plan their finances more carefully as they want to have effective personal financial management practices in the future (Ponchio et al., 2019).

Social Influence: Social influences are the use of social power by people or organizations to modify the attitudes or behaviors of other individuals or groups in order to achieve a certain purpose (Awang & Abdullah, 2021). According to Cucinelli and Bongini (2019), social influence is the societal pressure placed on a person to choose whether or not to engage in a particular behaviour. The change in a person's thoughts, feelings, communication, or behaviour as a result of the thoughts, feelings, communication, or behaviour of one or more other individuals is how Kim and Hollingshead (2014) define social influence. According to Gass (2015), there are two types of social impact. The first kind is purposeful, like in the case of persuasion, which deals with how people use messages to exert influence on others. Social influence, however, may also be accidental or inadvertent, as in the instance of social proof, when people use the actions of frequently uninformed others to guide their own behaviour in ambiguous circumstances.

Social support from friends, family, and coworkers, in the context of retirement planning, enables better judgements and is useful in fostering better retirement experiences and in managing financial issues. For instance, parents have a significant role in helping children develop the skills and habits necessary to manage their finances. This may have an impact on how they behave and make decisions in the future, particularly once they are on their own (Gavurova et al., 2019). The

spouse relationship is the mark of important roles as the spouse of an individual gives a more satisfying sense of relationship, a sense of companionship, and a greater propensity to retire together in the future. In addition, family relationships are the symbol of resilience to overcome obstacles and help the pre-retiree to obtain more social support from the family itself (Awang & Abdullah, 2021).

Saving Attitude: Saving may be defined as the practice of reserving funds for future use while avoiding current expenditures (Kadir & Jamaludin, 2020). According to Fiergbor (2020), saving is the act of laying away a portion of one's current income for future needs. Meanwhile, the term "saving attitude" describes a person's purpose or propensity to save money for future requirements (Alex et al., 2019). People differ in their level of saving attitude owing to variances in mindset, behaviour, knowledge, and social environment (Rameli & Marimuthu, 2018). When someone is faced with a circumstance where there is a conflict between long-term "good" goals and short-term "bad" behaviour, saving behaviour is a suitable context example (Bucciol & Zarri, 2019).

Similarly, Bucciol and Zarri (2019) highlighted that individuals often express intentions to save and have money to cover unforeseen emergencies when planning for the long-run, but when asked about their actual saving, households often admit that they save less than originally planned. However, according to Alekam et al. (2018), the likelihood of having a positive saving attitude is highly associated to saving regularity. As an example, the act of setting aside a portion of the income as saving consistently would most likely to lead to higher probability of having positive saving attitude (Alekam et al., 2018). Similarly, Hajam (2020) proposed that someone with a high incentive to save has a tendency to set away portion of their earnings for savings.

Theoretical Model: This study creates a conceptual framework based on previous literature as well as the Interdisciplinary Financial Planning Model (IFPM) and Theory of Planned Behaviour (TPB) theories. In the context of this study, IFPM suggests that financial literacy, retirement goals, future time perspective and social influence all serve as possible underpinnings for people's financial planning for retirement activities. Comparatively, TPB in the context of this study also claimed that attitudes and subjective norms influence people's behavioral intentions. Numerous researches have also demonstrated the importance of the mediating role played by saving attitude in the correlations between all independent variables and financial planning for retirement. Therefore, combining the underpinning theories and review of literature, this present study intends to explore the relationship between financial literacy, retirement goals, future time perspective, and social influence with financial planning for retirement. This study will also explore the mediating role of saving attitude in the relationship between both variables. The proposed conceptual framework for this investigation is depicted in Figure 1.

Figure 1: Proposed Conceptual Framework for the Present Study
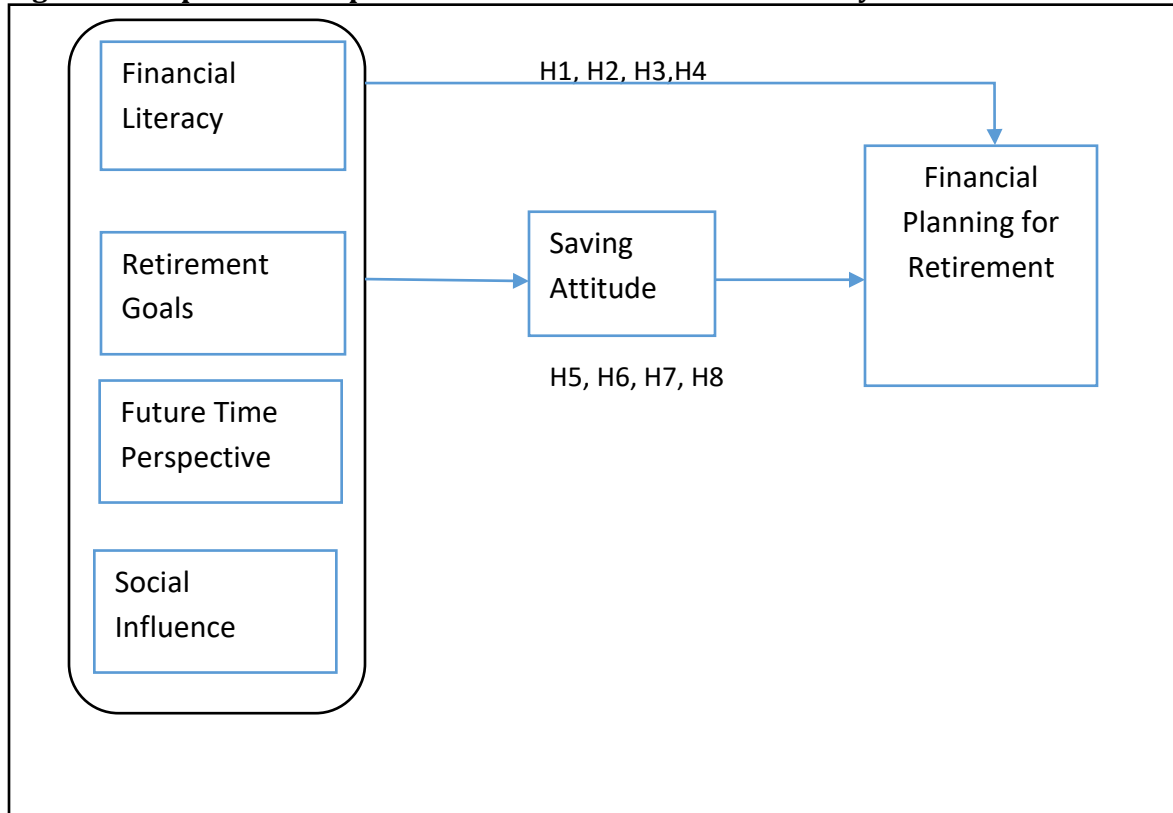
3. Methodology

Research Method: The overview of the present research indicated that it is descriptive in nature, which is a type of research design that it is purely on a theoretical basis where the individual collects data, analyses, prepares, and then presents it in an understandable manner. Therefore, cross-sectional research design was selected to examine the determinants of financial planning for retirement. A questionnaire technique was applied for data collection in order to define gig workers' views about confirming the research variables.

Questionnaire Design: All the questions were adapted from various studies that founded on the contents of every factor illustrate in Table I. For each item have Five Likert scales (strongly disagree, disagree, neutral, agree, strongly agree) used in the current study to identify the level of agreement between the respondents. Five Likert scales are one of the widely applied scales for provides an understandable view of the individual proposition in a certain aspect. Before starting the answer to the questionnaire, the questionnaire divided into 7 sections. Section I contains the demographic profiling of the respondents, followed by Section II which consists of 6 items measuring financial literacy. In Section III, there are 6 items measuring retirement goals while Section IV consists of 6 items regarding future time perspective. In Section V, there are 6 items regarding social influence while Section VI consists of 6 items regarding saving attitude. Finally, Section VII contains 6 items related to financial planning for retirement.

Table 1: Questionnaire items and sources

Factor	Number of items	Sources
Financial Literacy	6	Guptan et al. (2021), Afthanorhan et al. (2020)
Retirement Goals	6	Tomar et al. (2021), Afthanorhan et al. (2020)
Future Time Perspective	6	Kimiyagahlam et al. (2019), Tomar et al. (2021), Kooij et al. (2018)
Social Influence	6	Petkoska & Earl (2009), Kimiyagahlam et al. (2019)
Saving Attitude	6	Afthanorhan et al. (2020), Sereetrakul et al. (2013), Kimiyagahlam et al. (2019)
Financial Planning for Retirement	6	Kimiyagahlam et al. (2019), Murari et al. (2021), Tomar et al. (2021)

Validation: The validation of the questionnaires evaluated by took two steps before final distribution to ensure that the items are acceptable and understandable for respondents. First step: involves presented the questionnaire to three experts from academician and one expert from industrial. The academician experts are from UiTM for the purpose of content validation and language validation, while one industrial expert is representative from gig worker's association for the purpose of content validation. Before beginning the distribution, the researcher followed the modifications based on some suggestions and comments from experts.

4. Pilot Study Result

The purpose of this study is to check the questionnaire whether it is easy to understand and free of error. All questionnaires need to test to confirm of its feasibility and reliability. Consequently, the survey distributed among gig workers in Selangor, Negeri Sembilan and Melaka. The total of the distribution was 105 and all returned. According to Saunders et al. (2009), there are at least ten samples are used in pilot testing and the amount can reach between one hundred and two hundred in large-scale research. Therefore, the demographic information from the responses explained in Table 2 to understand the characteristics of this study sample while factors reliability for all Items explained in Table 3.

Table 2: Demographic Information of the Study Sample

Measure	Categories	Frequency	Percent	Cumulative Percent
Age	18 - 29 years old	68	64.8	64.8
	30 - 39 years old	26	24.8	89.5
	40 - 49 years old	9	8.6	98.1
	50 - 59 years old	1	1.0	99.0
	60 and above	1	1.0	100.0
Gender	Male	102	97.1	97.1
	Female	3	2.9	100.0
Residence	Kedah	1	1.0	1.0
	Selangor	24	22.9	23.8
	Putrajaya	1	1.0	24.8
	Kuala Lumpur	1	1.0	25.7
	Negeri Sembilan	12	11.4	37.1
	Melaka	65	61.9	99.0
	Terengganu	1	1.0	100.0
Race	Malay	100	95.2	95.2
	Chinese	2	1.9	97.1
	Indian	3	2.9	100.0
Marital Status	Single	57	54.3	54.3
	Married	46	43.8	98.1
	Divorced	2	1.9	100.0
Education	SPM and below	60	57.1	57.1
	Diploma degree	25	23.8	81.0
	Bachelor degree	18	17.1	98.1
	Master degree	2	1.9	100.0
Gig Company Worked For	Foodpanda	46	43.8	43.8
	Grab	48	45.7	89.5
	Grab, Foodpanda	2	1.9	91.4
	Grab, Foodpanda, Lalamove	1	1.0	92.4
	Grab, Foodpanda, Lalamove, Borzo	1	1.0	93.3
	Grab, Foodpanda, Shopee	1	1.0	94.3
	Grab, Lalamove	2	1.9	96.2
	Grab, McDelivery	1	1.0	97.1
	Grab, Shopee	1	1.0	98.1
	Lalamove	2	1.9	100.0
Gig Employment Status	Full-time	74	70.5	70.5
	Part-time	31	29.5	100.0
Monthly Income in Gig	Less than RM1,000	21	20.0	20.0
	RM1,001 - RM3000	71	67.6	87.6
	RM3,001 - RM5,000	13	12.4	100.0
Number of Working Years in Gig	Less than 1 year	48	45.7	45.7
	1 - 2 years	40	38.1	83.8
	2 - 5 years	14	13.3	97.1
	More than 5 years	3	2.9	100.0
Any Other Job	Fireman	1	1.0	1.0
	Driver	2	1.9	2.9

	Fast Food Worker	1	1.0	3.8
	Government Servant	2	1.9	5.7
	Computer Technician	1	1.0	6.7
	Factory Worker	2	1.9	8.6
	Lecturer	1	1.0	9.5
	Mover	1	1.0	10.5
	Fisherman	1	1.0	11.4
	None	88	83.8	95.2
	Not Say	2	1.9	97.1
	Part Time Islamic Law Consultant	1	1.0	98.1
	Part Time Teacher	1	1.0	99.0
	Part Time Electrician	1	1.0	100.0
Monthly Income from Other Job	None	87	82.9	82.9
	Less than RM1,000	6	5.7	88.6
	RM1,001 - RM3000	7	6.7	95.2
	RM3,001 - RM5,000	3	2.9	98.1
	RM5,001 - RM10,000	2	1.9	100.0
No of Working Years in Other Job	None	87	82.9	82.9
	Less than 1 year	6	5.7	88.6
	2 - 5 years	3	2.9	91.4
	More than 5 years	9	8.6	100.0
Total Savings Accumulated	Less than RM1,000	47	44.8	44.8
	RM1,001 - RM5,000	34	32.4	77.1
	RM5,001 - RM10,000	17	16.2	93.3
	Above RM10,001	7	6.7	100.0
Total Spend / Month	Less than RM2,000	65	61.9	61.9
	RM2,001 - RM3,000	28	26.7	88.6
	RM3,001 - RM4,000	8	7.6	96.2
	RM4,001 - RM5,000	3	2.9	99.0
	Above RM5,001	1	1.0	100.0

Table 3: Factors Reliability for all Items

Factor	Cronbach's Alpha Coefficient	Number of Items
Financial Literacy	.830	3
Retirement Goals	.918	4
Future Time Perspective	.936	5
Social Influence	.885	5
Saving Attitude	.868	4
Financial Planning for Retirement	.845	5
KMO measure of sampling adequacy	.899	
Bartlett's test of sphericity	2426.630***	
Eigenvalues	13.092	
***significant at .000		

Figure 2: Scree-plot of All Items
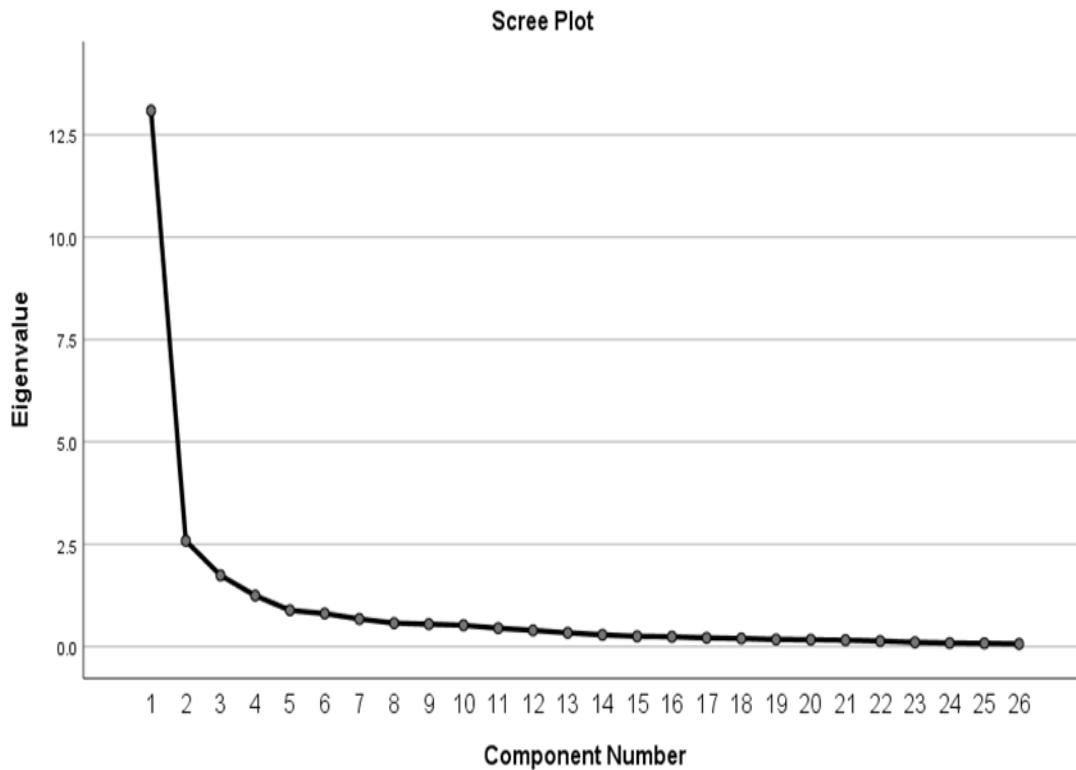
Reliability is the best method for evaluating the quality of the tools to be used in data gathering, according to Cronbach's alpha. The allowable range for Cronbach's Alpha values is between 0 and 1. A greater dependability number corresponds to a higher level of range. Brilliant values range from 0.9 and above; good values range from 0.8 and above; decent values range from 0.7 and above; uncertain values range from 0.6 and above; and bad values range from less than 0.6. The values of each component in Cronbach's Alpha were calculated for this study using the statistical package for the social sciences (SPSS) program. According to Table 3, all Cronbach's alpha values are credible. A variety of tests should be performed prior to factor extraction to determine the suitability of the respondent data for factor analysis. As a result, the exploratory factor analysis was used to determine the Kaiser Meyer Olkin (KMO) and the significant level of all factors. The KMO index, in particular, is recommended when the case-to-variable ratio is less than 1:5. The KMO index ranges from 0 to 1, with 0.50 indicating that it is acceptable for factor analysis. For factor analysis to be suitable, the Sphericity Test should be significant (p<05). Table 2 shows that the KMO of this investigation is over 0.8 value and Bartlett's test were significant. As a result, the exploratory factor analysis (EFA) taking into account within the acceptable threshold and suited for all components.

Discussion: The findings of this study suggested that the questionnaire is reliable and can be used in the main study. A successful pilot study increases the reliability of research instruments. According to Leon et al. (2011), pilot studies play a significant role in the development of interventions and, when interpreted correctly, can increase the effectiveness and validity of subsequent clinical trials by improving subject recruitment, intervention delivery, and by enabling researchers to more precisely determine the necessary sample sizes. The researcher is also able to pinpoint and remedy any research instrument flaws thanks to this investigation. To improve the

reliability of the questionnaire that will be used in the primary study, any flaws in the research instruments, especially problematic items, can be changed or eliminated. Moreover, by conducting this study, the researchers are able to determine what or how much resources are needed for the main study.

5. Conclusion

The objective of this study was to investigate the reliability and validity of the questionnaire design. All the indicators of the items were adopted from the previous studies. However, the pilot study was conducted in the context of gig workers to make sure that the instruments are valid and reliable. The content validity checked number of experts. As per the expert's opinion and suggestion, certain changes were made in the questionnaire to make it understandable and clearer to the respondents. The questionnaire distributed among 105 gig workers in Selangor, Negeri Sembilan and Melaka. Then the exploratory factor analysis and Cronbach alpha coefficient measurements were used to test the reliability of this questionnaire. The result revealed that the design of the instrument is reliable since the values of Cronbach's alpha are higher than 0.70 and the KMO values is over 0.8. Thus, it can be considered as acceptable.

This study adds to the existing literature in a number of ways. In one regard, this study adds to the body of knowledge on pilot studies since, as Teijlingen & Hundley (2002) note, comprehensive descriptions of pilot studies are uncommon in the research literature. Additionally, some of these procedures and results from both successful and unsuccessful pilot studies may be extremely helpful to others starting projects employing related techniques and tools (Hassan et al, 2006). Another crucial point is that, depending on the goals of the study and the populations it is intended to reach, pilot studies enable researchers to examine the efficacy of various data collection techniques (Watson, 2016).

References

Alekam, E., Salniza, M., Salleh, B. M., Sanuri, S., Com, W. A., Mohammed, J. & Mokhtar, M. (2018). INTERNATIONAL JOURNAL OF ORGANIZATIONAL LEADERSHIP The Effect of Family, Peer, Behavior, Saving and Spending Behavior on Financial Literacy among Young Generations. *In International Journal of Organizational Leadership*, (Vol. 7).

Alex, T. C. X., Cheong, W. L., Chong, C. J., Lee, R. & Liou, Y. H. (2019). *The individual savings behaviour in Malaysian new villages*.

Ali, S. B. & Frank, H. A. (2019). Retirement Planning Decisions: Choices Between Defined Benefit and Defined Contribution Plans. *American Review of Public Administration*, 49(2), 218–235. https://doi.org/10.1177/0275074018765809

Alkhawaja, S. O. & Albaity, M. (2022). Retirement saving behavior: evidence from UAE. *Journal of Islamic Marketing*, 13(2), 265–286. https://doi.org/10.1108/JIMA-03-2020-0072

Awang, W. Q. & Abdullah, A. (2021). Financial Literacy, Social Influence, Goal Clarity, And Retirement Experience. E-Proceeding 8th International Conference On Public Policy and Social Science (ICOPS) 2021.

Bačová -Lenka Kostovičová, V. (2018). Too far away to care about? Predicting psychological preparedness for retirement financial planning among young employed adults (Vol. 66).

Baker, H. K., Tomar, S., Kumar, S. & Verma, D. (2021). Are Indian professional women financially literate and prepared for retirement? *Journal of Consumer Affairs*, 55(4), 1416–1441. https://doi.org/10.1111/joca.12332

Bello, H. (2019). Planning towards a successful retirement: Issues and Opportunities Impact of Changing Lifestyle on Municipal Solid Waste Generation in Residential Areas: Case Study of Qatar View Project the Six Factor Building Assessment Tool: Application on the Qatar Faculty of Islamic Studies (QFIS) Building, Doha View project. https://www.researchgate.net/publication/334193308

Bucciol, A. & Zarri, L. (2019). Saving education received in early life and future orientation in adulthood. *Journal of Financial Counselling and Planning*, 30(1), 67–82. https://doi.org/10.1891/1052-3073.30.1.67

Burchi, A., Włodarczyk, B., Szturo, M. & Martelli, D. (2021). The effects of financial literacy on sustainable entrepreneurship. *Sustainability (Switzerland)*, 13(9). https://doi.org/10.3390/su13095070

Cucinelli, D. & Bongini, P. (2019). University students and retirement planning: never too early. *International Journal of Bank Marketing*, 37(3), 775–797. https://doi.org/10.1108/IJBM-03-2018-0066

Eismann, M., Verbeij, T. & Henkens, K. (2019). Older workers' plans for activities in retirement: The role of opportunities, spousal support, and time perception. *Psychology and Aging*, 34(5), 738–749. https://doi.org/10.1037/pag0000377

Fiergbor, D. D. (2020). The habit of savings among college students. Global Economics Science, 38–43. https://doi.org/10.37256/ges.11202069.38-43

Gass, R. H. (2015). Social Influence, Sociology of. International Encyclopaedia of the Social & Behavioral Sciences, 22. https://doi.org/http://dx.doi.org/10.1016/B978-0-08-097086-8.32074-8

Gavurova, B., Kubak, M., Huculova, E., Popadakova, D. & Bilan, S. (2019). Financial Literacy and Rationality of Youth in Slovakia. *Transformations In Business & Economics*, 18(3), 43–53.

Ghadwan, A., Wan Ahmad, W. M. & Hanifa, M. H. (2022). Financial planning for retirement: The mediating role of culture. Risks, 10(5), 104. https://doi.org/10.3390/risks10050104

Hajam, M. A. (2020). The Effect of Future Orientation and Financial Literacy on Family Retirement Planning Mediated by Saving Attitude. *Jurnal Sosial Humaniora (JSH) 2020*, *13*. http://creativecommons.org/licenses/by/4.0/

Hansson, I. (2019). Retirement and life satisfaction: a resource-based dynamic perspective.

Haron, H., Razali, N. N. S. M. & Mohamad, F. (2019). Factors influencing financial planning retirement amongst employees in the private sector in East Coast Malaysia: Literature Review and research agenda. KnE Social Sciences. https://doi.org/10.18502/kss.v3i22.5115

Hassan, Z. A., Schattner, P. & Mazza, D. (2006). Doing A Pilot Study: Why is it Essential? Malaysian Family Physician, 1(2). http://www.ejournal.afpm.org.my/

Hastings, J. & Mitchell, O. S. (2020). How financial literacy and impatience shape retirement wealth and investment behaviors. *Journal of Pension Economics and Finance*, *19*(1), 1–20. https://doi.org/10.1017/S1474747218000227

Hauff, J. C., Carlander, A., Gärling, T. & Nicolini, G. (2020). Retirement Financial Behaviour: How Important Is Being Financially Literate? *Journal of Consumer Policy*, *43*(3), 543–564. https://doi.org/10.1007/s10603-019-09444-x

Herrador-Alcaide, T. C., Hernández-Solís, M. & Topa, G. (2021). A model for personal financial planning towards retirement. *Journal of Business Economics and Management*, *22*(2), 482–502. https://doi.org/10.3846/jbem.2020.13978

Hershey, D. A., Jacobs-Lawson, J. M. & Austin, J. T. (2013). Effective financial planning for retirement. In M. Wang (Ed.), The Oxford handbook of retirement (pp. 402–430). Oxford University Press, Inc. https://doi.org/10.1093/oxfordhb/9780199746521.013.0133

Hutabarat, A. S. S. & Wijaya, C. (2020). Analysis the effect of financial literacy on financial planning for retirement (case study lecturers and administrative staffs in Universitas Indonesia). *International Journal of Management*, 11(5), 741–750. https://doi.org/10.34218/IJM.11.5.2020.066

Jais, J. B. & Asokumar, A. (2020). Psychological Process, Social and Environmental Influence on Retirement Planning: Malaysian Energy Industry Perspective. *Management and Marketing*, *15*(2), 134–153. https://doi.org/10.2478/mmcks-2020-0009

Jiun, T. Y., Satar, N. H. M. & Ishak, N. A. (2021). Malaysian Undergraduate Students' Expectation of Life Satisfaction After Retirement: The Role of Parental Influence and Financial Knowledge. Journal of Wealth Management & Financial Planning, 8.

Kadir, J. M. A. & Fadhilah, R. (2020). Retirement Planning and its Impact on Working Individuals Intention to Use Biodegradable Drinking Straw View Project Developing a Fuel Subsidy Framework View project. https://www.researchgate.net/publication/359576348

Kerry, M. J. (2018). Psychological antecedents of retirement planning: A systematic review. Frontiers in Psychology, 9. https://doi.org/10.3389/fpsyg.2018.01870

Kim, Y. J., & Hollingshead, A. B. (2015). Online social influence: Past, present, and future. *Annals of the International Communication Association*, 39(1), 163–192. https://doi.org/10.1080/23808985.2015.11679175

Kimiyagahlam, F., Safari, M. & Mansori, S. (2019). Influential Behavioral Factors on Retirement Planning Behavior: The Case of Malaysia. https://doi.org/10.1891/1053-3073.30.2.244

Kooij, D. T. A. M., Kanfer, R., Betts, M. & Rudolph, C. W. (2018). Future Time Perspective: A systematic review and meta-analysis. *Journal of Applied Psychology*, 103(8), 867–893. https://doi.org/10.1037/apl0000306

Larisa, L. E., Njo, A. & Wijaya, S. (2021). Female workers' readiness for retirement planning: an evidence from Indonesia. *Review of Behavioral Finance*, 13(5), 566–583. https://doi.org/10.1108/RBF-04-2020-0079

Leon, A. C., Davis, L. L. & Kraemer, H. C. (2011). The role and interpretation of pilot studies in clinical research. *Journal of Psychiatric Research*, 45(5), 626–629. https://doi.org/10.1016/j.jpsychires.2010.10.008

Li, Y., Burr, J. A. & Miller, E. A. (2019). Pension Plan Types and Financial Literacy in Later Life. *Gerontologist*, *59*(2), 260–270. https://doi.org/10.1093/geront/gnx135

Liu, C., Bai, X. & Knapp, M. (2021). Multidimensional Retirement Planning Behaviors, retirement confidence, and post-retirement health and well-being among Chinese older adults in Hong Kong. *Applied Research in Quality of Life*, 17(2), 833–849. https://doi.org/10.1007/s11482-020-09901-7

Moffatt, S. & Heaven, B. (2016). 'planning for uncertainty': Narratives on retirement transition experiences. *Ageing and Society*, 37(5), 879–898. https://doi.org/10.1017/s0144686x15001476

Murari, K., Shukla, S. & Adhikari, B. (2021). Do psychological social and financial perceptions of post-retirement life and demography influence the retirement planning behaviour? *International Journal of Social Economics*, 48(11), 1545–1566. https://doi.org/10.1108/IJSE-08-2020-0581

Nivalainen, S. (2022). From plans to action? Retirement thoughts, intentions and actual retirement: An eight-year follow-up in Finland. *Ageing and Society*, *42*(1), 112–142. https://doi.org/10.1017/S0144686X20000756

Ong, K. T., Awang, S. R., Zakuan, N., Sulaiman, Z., Chin, T. A., Mas'od, A., Jusoh, A. & Ahmad, U. N. U. (2020). Goal Clarity and Financial Literacy towards Retirement Confidence among Working Adults in Southern Region, Malaysia. *Test Engineering & Management*, 83, 9965–9971.

Pavia, S. & Grima, S. (2019). Retirement planning by Maltese nationals: A study of influential factors. In *Contemporary Studies in Economic and Financial Analysis*, 101, 227–259. Emerald Group Publishing Ltd. https://doi.org/10.1108/S1569-375920190000101016

Ponchio, M. C., Cordeiro, R. A. & Gonçalves, V. N. (2019). Personal factors as antecedents of perceived financial well-being: evidence from Brazil. *International Journal of Bank Marketing*, 37(4), 1004–1024. https://doi.org/10.1108/IJBM-03-2018-0077

Rai, K., Vidyapeeth, J., Tyagi, A. & Sahni, S. (2020). Modelling The Factors of Financial Planning for Retirement Among Individuals Using Ism. https://doi.org/10.13140/RG.2.2.15973.32484

Rameli, R. S. & Marimuthu, M. (2018). A Conceptual Review on the Effect of Attitudes towards Retirement on Saving Intentions and Retirement Planning Behavior. *SHS Web of Conferences*, *56*, 02005. https://doi.org/10.1051/shsconf/20185602005

Rasiah, R., Mathew Bilong, F., James Turner, J., Waheed, H., Somasundram, S., Pei Leng, K., Taylor, J. & Jaya, S. (2020). A Structural Equation Modelling Study of the Determinants of Retirement Preparedness. In *International Journal of Innovation, Creativity and Change. www.ijicc.net* (Vol. 11, Issue 6). www.ijicc.net

Rostamkalaei, A., Nitani, M., & Riding, A. (2022). Self-employment, financial knowledge, and retirement planning. *Journal of Small Business Management*, 60(1), 63–92. https://doi.org/10.1080/00472778.2019.1695497

Seidl, J., Neiva, E. R. & Murta, S. G. (2021). Planning and Reasons for Retirement: Focus Groups with Brazilian Workers. *Trends in Psychology*, 29(3), 456–473. https://doi.org/10.1007/s43076-021-00063-5

Shariff, N. S. M. & Ishak, W. W. M. (2021). Statistical analyses on factors affecting retirement savings decision in Malaysia. *Mathematics and Statistics*, 9(3), 243–248. https://doi.org/10.13189/ms.2021.090305

Stolarski, M., Fieulaine, N. & Zimbardo, P. G. (2018). Putting time in a wider perspective: The past, the present, and the future of time perspective theory. https://doi.org/10.4135/9781526451163.n28ï

Tan, Z. M., Aggarwal, N., Cowls, J., Morley, J., Taddeo, M. & Floridi, L. (2021). The ethical debate about the gig economy: A review and critical analysis. *Technology in Society*, 65, 101594. https://doi.org/10.1016/j.techsoc.2021.101594

Teijlingen, E. V., & Hundley, V. (2002). The importance of pilot studies. *Nursing Standard*, 16(40), 33–36. https://doi.org/10.7748/ns.16.40.33.s1

Tomar, S., Kent Baker, H., Kumar, S. & Hoffmann, A. O. I. (2021). Psychological determinants of retirement financial planning behavior. *Journal of Business Research*, 133, 432–449. https://doi.org/10.1016/j.jbusres.2021.05.007

Topa, G., Lunceford, G. & Boyatzis, R. E. (2018). Financial planning for retirement: A psychosocial perspective. *Frontiers in Psychology*, 8(JAN). https://doi.org/10.3389/fpsyg.2017.02338

Watson, F. A. (2016). Lessons learned on approaches to data collection and analysis from a pilot study. *Nurse Researcher*, 24(1), 32–36. https://doi.org/10.7748/nr.2016.e1444

Watson, G. P., Kistler, L. D., Graham, B. A. & Sinclair, R. R. (2021). Looking at the gig picture: Defining gig work and explaining profile differences in gig workers' job demands and resources. *Group & Organization Management*, 46(2), 327–361. https://doi.org/10.1177/1059601121996548

Yeung, D. Y. & Zhou, X. (2017). Planning for retirement: Longitudinal Effect on retirement resources and post-retirement well-being. *Frontiers in Psychology*, 8. https://doi.org/10.3389/fpsyg.2017.01300

Yong, C. C., Yew, S. Y. & Wee, C. K. (2018). Financial Knowledge, Attitude and Behaviour of Young Working Adults in Malaysia. In *Institutions and Economies*, 10(4).

Zandi, G., Torabi, R., Yu, O. T., Sivalingam, A. D. & Khong, T. T. (2021). Factors affecting the intention of generation y in Malaysia to invest for retirement. *Advances in Mathematics: Scientific Journal*, 10(3), 1485–1507. https://doi.org/10.37418/amsj.10.3.36

Zhu, A. Y. F. & Chou, K. L. (2018). Retirement Goal Clarity, Needs Estimation, and Saving Amount: Evidence from Hong Kong, China.