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THE SOURCES AND EFFECTS OF RETIREMENT PLANNING: AN EMPIRICAL STUDY OF SANDWICH-GENERATION EMPLOYEES IN INDONESIA

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Abstract

This research aims to analyze the retirement planning of employees belonging to the sandwich generation by considering financial literacy, collectivist culture, and family financial responsibility that promote financial and psychological well-being. We run the SEM-PLS to analyze the data from 200 sandwich-generation employees between 25-55 years old. The results demonstrate that financial literacy positively affects financial and psychological well-being, collectivist culture positively affects family financial responsibility, family financial responsibility affects retirement planning and psychological well-being, as well as retirement planning positively affects financial and psychological well-being. These findings indicate that personal and financial factors contribute to retirement planning for sandwich generation employees. It is hoped that planning for retirement early can break the chain of births of the next sandwich generation in the family, so that financial and psychological well-being can be achieved. This paper implies that sandwich-generation employees must plan their retirements early and wisely to achieve financial well-being and even break the chain of the next sandwich-generation.

Keywords: Sandwich Generation; Retirement Planning; Financial Literacy; Financial Well-Being; Collectivist Culture

JEL Classification: G40, G53, I31

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INTRODUCTION

Indonesia is a country with the phenolmenon of the large sandwich generation, a group of middle-aged adults who care for both their aging parents/ siblings and their own children. The Indonesian Central Statistics Agency survey results for 2020 demonstrate that the dependency ratio is 47.7% in 2020 (Anggorowati, 2022). Then, based on the survey results from the Kompas Research and Development Institution in 2022, the population of the sandwich generation in Indonesia reached 67 percent. Nearly 92 percent of the sandwich generation are 24-58 years old. This age range is relatively wide compared to developed countries (generally 30s to 40s) (Harmadi, 2022). This condition has the potential to reduce the capacity for human investment at the household level, including meeting the costs of education and health. The financial difficulties for the sandwich generation can be mitigated by well-established parents having sufficient assets to support their children's lives. Nonetheless, for parents who are not prepared to save for old age and emotional maturity upon retirement, this could give rise to the sandwich generation (Hernandez, 2019).

In several Asian countries such as Indonesia, this is the norm when children support their parents and siblings, as it symbolizes the importance of giving back and serving the family (Luo et al., 2013). A collectivist culture where members are integrated into strong and integrated group ties throughout their lifespans to protect each other (Kaur & Noman, 2015). Therefore, this behavior is not inherently harmful, given that one's financial and psychological circumstances are supportive. Kurniati et al. (2020) placed Indonesia as a nation with high collectivist cultural. A collectivist culture can affect a person's financial behavior which is likely to be different compared to someone who is part of an individualistic culture (Danes & Yang, 2014). However, the issue becomes serious when financially dependent individuals with poor financial management must bear the double financial burdens. This stress potentially diminishes the quality of individuals' financial well-being in old or retirement age and causes physiccal and mental health issues (Abramson, 2015; Turgeman-Lupo et al., 2020).

Employees who rely on regular monthly salaries must consider financial and non-financial stability in their old age. Having financial and psychological well-being is a goal for employees approaching retirement age (Adam et al., 2017). Various factors contribute to employees' financial well-being (Mahdzan et al., 2019; Mokhtar & Husniyah, 2017) and psychological well-being (Veronese & Pepe, 2017), one of them is retirement planning (Adam et al., 2017). Furthermore, preferences for retirement planning are influenced by a person's level of risk acceptance (Zakaria et al., 2017). Individuals with a high risk tolerance are more willing to bear uncertain returns from high-risk investments (Wang & McGroarty, 2022), and they prepare for their retirements better to secure their financial well-being in their old age.

Szinovacz (2003) identified three factors that optimally affect individuals' adjustments to retirement demands: personal, social, and financial. In this study, employees' financial literacy operationalizes the personal factor, family financial responsibility is a proxy of the financial factor, and collectivist culture represents the social factor. However, the obligation to provide for the nuclear and extended families can also impose a psychological burden (Fujinami et al., 2015; Udoh et al., 2021). On the other hand, individual financial literacy affects retirement planning positively (Niu et al., 2020), which can even contribute to attaining future financial security (Philippas & Avdoulas, 2020).

The phenomenon of the sandwich generation has become the subject of research in the fields of psychology and health. However, there are still relatively limited studies in the field of finance. To the best

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of our knowledge, only a few studies simultaneously analyze the interrelationships between the antecedent and consequence variables in a model in investigating sandwich-generation employees' retirement planning. This research aims to empirically test: (a) the effects of financial literacy and retirement planning on financial well-being, (b) the outcome of financial literacy and family financial responsebility on retirement planning, (c) the influence of collectivist culture on family financial responsibilities, (d) the effects of family financial responsibilities and retirement planning on psychological well-being, and (e) the moderating role of financial risk tolerance in the relationship between retirement planning and financial well-being.

LITERATURE REVIEW

The effects of financial literacy and retirement planning on financial well-being

Financial literacy indicates the extent to which an individual understands financial concepts and can manage finances when making short-term and long-term decisions by the economy's dynamics and conditions (Ouachani et al., 2021; Selim & Aydemir, 2014). Sound financial literacy potentially improves individuals' financial well-being by enabling them to meet their current and future needs (Lee et al., 2023; Moolman, 2023). Financially literate individuals can make optimal investment decisions, resulting in higher returns, when faced with various investment options (Grinblatt et al., 2016) that positively affect their financial well-being. Likewise, when employees are offered various retirement product options, financially literate ones can select suitable products for their financial capacity and future requirements. Employees will ultimately feel financially secure due to their current financial decisions.

Retirement planning as a process/ phase, includes identifying income sources, estimating expenses, implementing savings programs, and managing assets (Earl & Archibald, 2014; Muratore & Earl, 2015). Retirement planning involves an analysis of present-day options for future financial security, including determining retirement incomes and the actions and choices required to reach this objective. Financial well-being refers to meeting one's current and prospective financial obligations. Individuals with a high level of financial well-being can make various financial decisions that enable them to live decently. Individuals can achieve financial security in their old age if they still have income sources after retirement. Hence, retirement planning secures income sources for retirement, and financial security is the outcome of retirement planning (Adam et al., 2017). Retirement planning involves managing finances to safeguard individuals against uncertain future economic conditions. It is crucial for their financial security in their old age, particularly if enrolled in a defined contribution retirement plan (Ali & Frank, 2019). Based on the arguments and prior studies, we propose the following hypotheses:

H1: Financial literacy positively affects financial well-being.

H2: Retirement planning positively affects financial well-being.

The effects of financial literacy and family financial responsibility on retirement planning

Financial literacy affects retirement financial planning behavior, influencing one's financial well-being at a retirement age (Hauff et al., 2020). Financial literacy is a major factor in retirement planning that enables individuals to understand interest rates, inflation, and financial risks. Thus, financially literate individuals will likely have superior retirement planning.

Family financial responsibility refers to the costs incurred to meet the family's primary, secondary, and tertiary needs to maintain a decent standard of living

(Mitterer et al., 2021). Family considerations, including family financial responsebilities, parental care obligations, and the significance of family environments, affect individuals' financial decisions regarding investment and retirement planning (Svynarenko, 2019). Individuals accustommed to being responsible for the needs of a large family in addition to the obligations of their own family tend to constantly consider the needs of their extended family, even after retirement age. Family is the main consideration for someone in determining their age and retirement program (Matthews & Fisher, 2012). Based on the arguments and prior studies, we propose the following hypotheses:

H3: Financial literacy positively affects retirement planning.
H4: Family financial responsibility positively affects retirement planning.

The effects of a collectivist culture on family financial responsibility

Individuals' cultural backgrounds can affect their attitudes and behaviors in fulfilling their family's financial responsebilities (Tran, 2022). A collectivist culture is a way of life that emphasizes family unity (tradition), obedience, conformity, and security in interpersonal relationships (Haslam et al., 2020; Hofstede, 2011). Individuals are firmly integrated and unified in groups from birth, and throughhout their lives, members of society continue to protect one another without question. Prioritizing group welfare over personal welfare encourages individuals living in a collectivist culture to be responsible for their extended families' welfare, despite having their own nuclear families. Therefore, a collectivist culture encourages individuals to manage the extended family's finances. Based on the arguments and prior studies, we propose the following hypotheses:

H5: The collectivist culture positively affects family financial responsibility.

The effects of family financial responsibility and retirement planning on psychological well-being

Psychological well-being measures the extent to which a person has and clearly defines one's life goals and the degree to which that person feels they have succeeded in fulfilling them (Hills & Argyle, 2002). One of the factors that may influence psychological well-being is one's economic condition (Ghazali et al., 2020), which includes family financial responsibilities. A close sense of family will encourage someone to voluntarily continue to help meet the needs of the extended family, even if that person has their own family. Fulfilling one's family financial responsibilities manifests an individual's love and devotion to their parents and extended family (Jeske, 2018). A person with a great sense of responsibility for their family finances will prioritize financial decisions for the benefit of the entire family (Ballet et al., 2017).

The economic factor is one of the determinants of individuals' psychological well-being. Retirement benefit programs can provide individuals who have reached retirement age with a sufficient income. Therefore, it is believed that retirement planning improves one's psychological well-being. Retirement planning includes accumulating sufficient funds to cover post-retirement living expenses. The savings from retirement planning affect not only the lives of individuals but also their extended families. Individuals will experience tranquility, happiness, and psychological fulfillment when they believe that the quality of their lives and their families lives are assured through retirement planning (Topa et al., 2018). Based on the arguments and prior studies, we propose the following hypotheses:

H6: Family financial responsibility positively affects psychological well-being.
H7: Retirement planning positively affects psychological well-being.

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The role of risk tolerance in moderating the effects of retirement planning on financial well-being

Individuals can achieve financial security in their old age if they still have an income source after retirement. Adam et al. (2017) concluded that retirement planning positively affects financial well-being in old age. Financial risk tolerance likely affects individuals' decisions to participate in retirement programs to improve their financial well-being in old age. Financial risk tolerance refers to the maximum level of uncertainty one is prepared to accept when making a financial decision (Kusairi et al., 2019; Mishra & Mishra, 2014), and it involves a trade-off between risk and profit (Dohmen et al., 2011). The prospect theory proposed by (Kahneman & Tversky, 1979) explains how individuals choose between alternatives with varying risks and distinct unknown outcomes. Individuals prioritize psychological factors and unsystematic behavior as realistic preferences when making financial decisions. The risk variable is related to the psychological aspect because each individual has a unique perspective on the risks and returns associated with a financial decision. Individuals' financial risk tolerance will affect their investment decisions, including retirement planning. Those with a high-risk tolerance tend to be confident that a retirement plan will guarantee their livelihoods in old age, so they do not hesitate to invest in a retirement program with fluctuating benefits (defined as a contribution retirement plan), and tend to allocate more assets and be more aggressive as security for retirement, even though the rate of return fluctuates (Mahdzan et al., 2017). Individuals with a high risk tolerance will enjoy greater financial security at retirement age than risk-averse ones (Harahap et al., 2022). High financial risk tolerance will allow a person to take investment opportunities in retirement which will impact the accumulation of wealth in old age. Based on the arguments and prior studies, we propose the following hypotheses:

H8: Financial risk tolerance strengthens the effect of retirement planning on financial well-being.

Figure 1 illustrates the conceptual framework in this study.

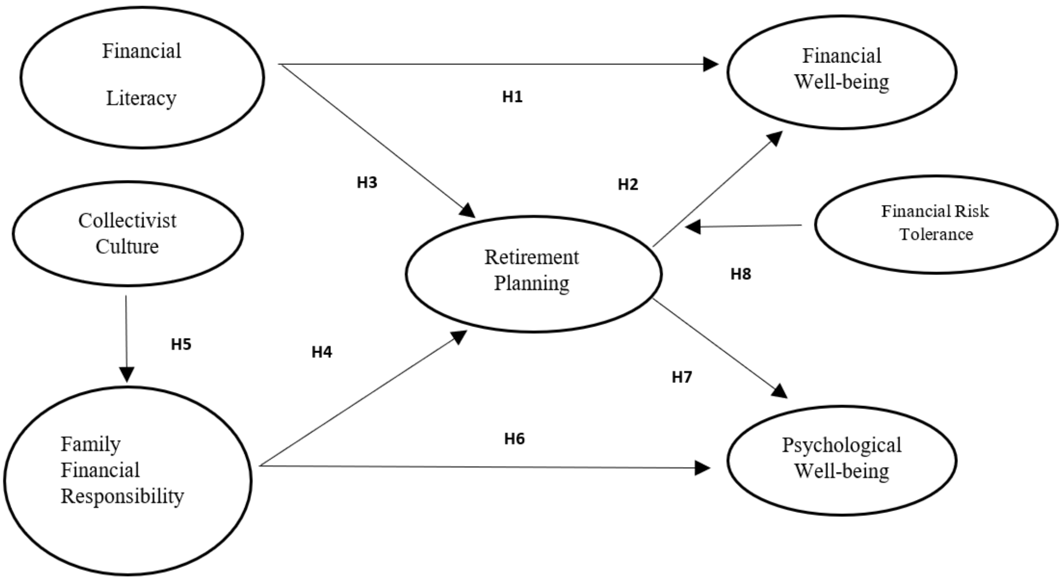

Figure 1. Conceptual framework
Source: Developed by researchers (2023)

RESEARCH METHODS

Sample and Data

The population consisted of male and female sandwich-generation employees. Purposive sampling was utilized as the non-probability sampling technique to collect the sample size. This research was conducted on employees in the sandwich generation (between the ages 25-55 years old) who work in various big cities in Indonesia (Jakarta, Semarang, Bandung, and Surabaya). The target respondents were at least 150, which met the sample adequacy requirements of the research model consisting of ≤ 7 constructs, a moderate level of communality (0.5), and no under-identified constructs (Hair et al., 2014). A pilot test with 30 respondents was conducted to determine the instrument's validity and reliability. The survey was conducted onsite and online using a Google Form for the respondents who wanted to skip the questionnaire onsite. The data collection for the pilot test was conducted onsite by enumerators who assisted the participants in completing the questionnaire and clarified the meaning of each question.

Constructs and instruments

The research model contained three exogenous, three endogenous, and one moderating variable. We adopted four financial literacy indicators from Remund (2010). Financial well-being indicates individuals' financial security consisting of objective (amount of money) and subjective (financial satisfaction and ability to mitigate financial pressure) measures and was measured with four indicators following Shim et al. (2009). Retirement planning was measured with four indicators from Noone et al. (2010). Family financial responsibility is financial support to satisfy primary, secondary, and tertiary needs for a decent standard of living, as measured by four indicators from Mitterer et al. (2021). Next, a collectivist culture was measured with four indicators from Haslam et al. (2020). Psychological well-being was proxied by four indicators from Hills and Argyle (2002). Lastly, indicators of financial risk tolerance followed (Grable & Joo, 2004; Mishra & Mishra, 2014). The respondents answer options for questions using the Likert Scale approach (interval scale) were categorized into six scores, ranging from 1 ("strongly disagree") to 6 ("strongly agree"). Prior studies have widely utilized six-scaled answer options for each question because an odd number of scales will lead to social bias, particularly in Indonesian culture. The respondents' reluctance to provide a low score is converted to a middle value, as this option is more secure to reduce social bias (Pimentel & Pimentel, 2019).

Data Analysis

This study used the PLS-SEM method with WARP-PLS software to process the primary data. The aim of using PLS-SEM is to predict relationships between constructs, confirm theory and can also be used to explain whether or not there is a relationship between latent variables in the model (Hair Jr et al., 2014). An evaluation model conducted before testing the hypothesis were developed. The average variances extracted (AVE), composite reliability coefficients (CRC), full collinearity VIF used to validate the measurement model.

RESULTS AND DISCUSSION

Descriptive Statistics

Table 1 presents the 200 sandwich-generation employees profiles based on their demographic characteristics. The respondents were dominate by female. The majority of respondents (40%) were in the age range of 35-<45 years old. The dominant ethnicity of the population was Javanese (50%), and more than 50% of respondents had postgraduate education. Among these respondents, 86% are permanent employees, and 61% are civil servants. Moreover, based on their marital status, most respondents are married

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(97%), and 33% of married or widowed individuals have two offspring, while 25% have only one. About 60% of the respondents "already have" a pension plan to ensure their financial security in retirement.

Instrument Validity and Reliability Test Results

The initial step of data analysis starting with the instrument validity and reliability test, followed by the descriptive statistics of respondents and each construct. Then, lastly conducted the hypothesis testing to validate the research model.

Table 2 demonstrates that all the indicator loading scores are above 0.60, ranging from the lowest at 7.14 to the highest at 0.945. Then, the AVE value for each construct 5 exceeds 0.5, meeting the convergent validity criterion. Similarly, the CRC values are greater than 0.70, ensuring internal consistency reliability. The VIF full collinearity test results for each construct are very good, as the VIF is less than 10, indicating no collinearity issue with the model. Furthermore, the VIF values of each latent variable above 3.3 indicate the presence of common method bias (Kock, 2015). The results of the full collinearity test for this model show that the VIF value is in the range of 1.32 to 1.97, which means this model is free from common method bias.

The respondents were assigned a score between 1 and 6 for each question within these constructs. Scores closer to 1 indicate that the respondent strongly disagrees; conversely, scores closer to 6 imply that the respondent strongly agrees. In general, Table 3 exhibit a high level of financial literacy (4.68), family financial responsibility (4.60), collectivist culture (5.00), financial well-being (4.64) and psychological Well-being (5.08). Only retirement planning (4.20) and financial risk tolerance (3.84) is at moderate level.

The respondents were assigned a score between 1 and 6 for each question within these constructs. Scores closer to 1 indicate that the respondent strongly disagrees; conversely, scores closer to 6 imply that the respondent strongly agrees. The descriptive statistics for each construct are summarized in Table 3.

Table 1. Respondents' profiles

Explanation	N (%)
Sex:	
- Male	92 (46%)
- Female	108 (54%)
Total	200 (100%)
Age:	
- 25 – < 35 years	61 (30%)
- 35 - < 45 years	79 (40%)
- 45 - 55 years	60 (30%)
Total	200 (100%)
Ethnic group:	
- Java	100 (50%)
- Chinese	19 (9%)
- Kalimantan	10 (5%)
- Balinese	3 (2%)
- Bataknese	19 (9%)
- Betawi	4 (2%)
- Bugis	7 (4%)
- Palembang	19 (9%)
- Sundanese	16 (8%)
- Acehnese	3 (2%)
Total	200 (100%)
Education level:	
- High school/ equivalent	3 (1%)
- Diploma/vocational	9 (4%)
- Bachelor	77 (39%)
- Postgraduate (Master/PhD)	111 (56%)
Total	200 (100%)
Employment status:	
- Permanent	171 (86%)
- Contract	29 (14%)
Total	200 (100%)
Occupation:	
- Private-sector employee	78 (39%)
- Civil servant	122 (61%)
Total	200 (100%)
Marital Status:	
- Married	194 (97%)
- Widow/ widower	6 (3%)
Total	200 (100%)
Number of children:	
- 0	43 (21%)
- 1	51 (26%)
- 2	67 (33%)
- ≥ 3	39 (20%)
Total	200 (100%)
Already have a pension plan?	
- Yes	121 (60%)
- No	79 (40%)
Total	200 (100%)

Source: Primary data, processed (2023)

Table 2. Model evaluation test outputs

Construct	Indicator	Loading	Average Variances Extracted (AVE)	Composite Reliability Coefficients (CRC)	Full Collinearity VIF
FL	FL1	0.832	0.63	0.87	1.87
	FL2	0.831			
	FL3	0.767			
	FL4	0.750			
CC	CC1	0.727	0.56	0.83	1.73
	CC2	0.718			
	CC3	0.767			
	CC4	0.772			
FFR	FFR1	0.737	0.58	0.73	1.52
	FFR2	0.730			
	FFR3	0.755			
RP	RP1	0.854	0.61	0.82	1.56
	RP2	0.726			
	RP3	0.729			
FW	FW1	0.714	0.60	0.81	1.95
	FW2	0.889			
	FW3	0.743			
PW	PW1	0.789	0.66	0.89	1.97
	PW2	0.785			
	PW3	0.869			
FRT	FRT1	0.873	0.51	0.75	1.32
	FRT2	0.945			
	FRT3	0.884			

Source: Primary data, processed (2023)

In general, our respondents exhibit a high level of financial literacy, ranging from a better comprehension of fundamental financial concepts than others to the ability to manage personal finances prudently and make prudent financial decisions. The respondents bear a high financial responsibility for their families, and satisfying primary needs takes precedence over secondary requirements. Spending much money to make family members happy falls into the high category, indicating that the family is a priority for both male and female employees' satisfaction. In addition, Table 3 explains the collectivist culture profile among respondents from various ethnic groups. In general, the respondents perceive themselves as having a highly collectivist culture, which is viewed from the high scores of the answers for the seven variable characteristics. Several indicators demonstrate: avoiding conflict, voluntarily following rules, prioritizing group/family interests, and adhering to religious customs/teachings. Individuals who adhere to a collectivist culture will likely prioritize their groups and families over their personal interests and will have a unique relationship characterized by interdependence among group members. When it comes to retirement planning, employees who do not want their families to be burdened when they retire will likely be more proactive in preparing their retirement plans.

Table 3. Descriptive Statistics for Each Construct

Construct	Average Score	Category
Financial Literacy (FL)	4.68	High
Family Financial Responsibility (FFR)	4.60	High
Collectivist Culture (CC)	5.00	High
Retirement Planning (RP)	4.20	Moderate
Financial Risk Tolerance (FRT)	3.84	Moderate
Financial Well-being (FW)	4.64	High
Psychological Well-being (PW)	5.08	High

Note: 1.00 - < 2.70: Low; 2.70 - < 4.30: Moderate; 4.30 – 6.00: High
Source: Primary data, processed (2023)

Turning to the sandwich-generation employees' retirement planning profile, the results revealed that one indicator has a moderate score (visiting a website or consulting a financial planner), while the other two indicators have high scores (identifying plans for income and expenses during retirement and owning assets for rent/sale). The high retirement planning score cannot be separated from the profile of the respondents, where the majority (60%) of the respondents stated that they already had a retirement plan and 40% stated that they did not have a retirement plan. Next, the indicators of a portfolio of risky/volatile assets and the consistency of investments in depreciating assets fall into the moderate category. The finding is consistent with their high level of financial literacy, which helps them understand that an investment is not always associated with the highest profit and that there is a risk associated with each investment option.

The average score for financial well-being is in the high category, indicating that most respondents are satisfied and appreciative of their current financial situation, can fulfill their financial obligations easily, and have access to viable financial solutions when experiencing financial difficulties. Psychological well-being has a higher average score than financial well-being. The indicators of individuals' psychological maturity include their ability to help others, their gratitude for basic things and their existence, and their optimism about the future despite its uncertainty.

Hypothesis Test Result

Table 4 and Figure 2 summarize the results of testing eight hypotheses proposed in this study.

Table 4. Summarized hypothesis testing results

Path	Coefficient	T-value	P-value	Conclusion
H1: FL→ FW	0.31***	3.194	<0.01	H1 supported
H2: RP → FW	0.25***	2.520	<0.01	H2 supported
H3: FL → RP	0.43***	5.877	<0.01	H3 supported
H4: FFR → RP	0.14**	1,974	0.03	H4 supported
H5: CC → FFR	0.56***	6.783	<0.01	H5 supported
H6: FFR → PW	0.35***	3.505	<0.01	H6 supported
H7: RP → PW	0.32**	5.177	<0.01	H7 supported
H8: RP*FRT → FW	-0.07	0.962	0.17	H8 *rejected*

T-table $_{\alpha 5\%}$: 1.972; *Source*: Primary data, processed (2023)

Where: FL: financial literacy; FW: financial well-being; RP: retirement planning; FFR: financial family responsibility; CC: collectivist culture; PW: psychological well-being: FRT: financial risk tolerance.

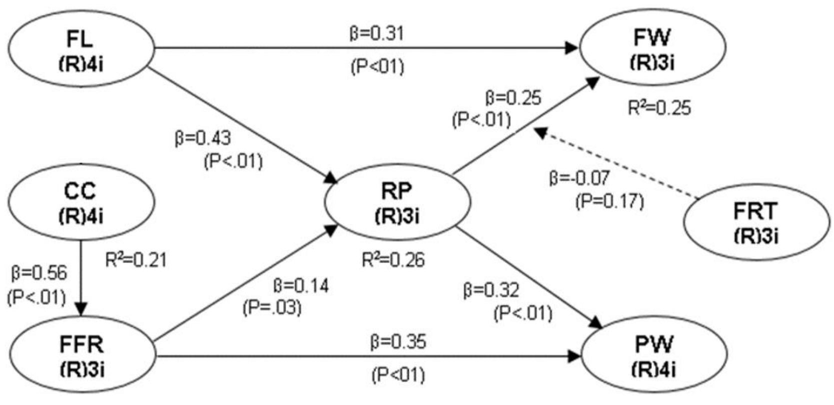

Figure 2. Structural equation analysis results
Source: Primary data, processed (2023)

Seven of the eight proposed hypotheses were accepted, and only H8 was not supported in this study. Table 4 and Figure 2 indicate that H1 is supported. Financial literacy significantly affects financial well-being (p-value <0.01), with a path coefficient=0.31 showing that financial literacy positively affects financial well-being. A higher level of financial literacy will increase financial well-being. The result also supported H2. Retirement planning impacts financial well-being significantly (p-value < 0.01). Path coefficient=0.25 indicates that retirement planning will enhance financial well-being. Furthermore, the result demonstrated that retirement planning is significantly affectted by financial literacy (p-value < 0.01) and financial family responsibility (p-value < 0.05), which means H3 and H4 are also supported. Financial literacy (path coefficient=0.43) and financial family responsibility (path coefficient=0.43) positively impact retirement planning. Therefore, increasing financial literacy and financial family responsibility might boost the desire to prepare for retirement planning. Further results indicate that H5 (p-value<0.01, path coefficient=0.56) and H6 are supported (p-value<0.01, path coefficient=0.35). A strong collectivist culture affects the growth of financial family responsibility, and higher financial family responsibility may boost psychological well-being. Furthermore, retirement planning positively affects psychological well-being (p-value<0.05, path coefficient=0.32), which means that retirement planning could stimulate psychological well-being. Meanwhile, the result did not support H8, which failed to prove that financial risk tolerance strengthens the effect of retirement planning on financial well-being.

Discussion

The testing of hypothesis 1 indicates that financial literacy positively affects financial well-being, implying that better cognitive abilities will aid them in attaining financial prosperity. Consistent with previous literature that found that, financial literacy encourages financial behaviors that generate assets and accumulate wealth like savings, retirement planning, investments, participation in capital markets, and debt management that will eventually promote financial well-being (Grinblatt et al., 2016; Lusardi & Mitchell, 2014).

The testing of hypothesis 2 indicates that retirement planning is positively associated with financial well-being. Future financial needs during the retirement age are fulfilled when they still have revenue sources generated from sound retirement planning. Individuals with retirement planning are shown to have twice as much wealth as those without retirement planning (Van Rooij et al., 2012). Retirement planning is crucial for financial well-being at an old age, especially when individuals participate in a defined contribution plan.

The testing of hypothesis 3 reveals that better financial literacy improves retirement planning. The result is consistent with Li et al. (2019) and Harahap et al. (2022). Sound financial literacy motivates individuals to make future financial plan, including retirement planning and optimizes financial planning in one's retirement age because individuals will understand financial products like unit links and investment returns. Consequently, their financial needs at the retirement age will be more secure because of their available assets (Larisa et al., 2020; Lusardi et al., 2017).

Then, the testing of hypothesis 4 demonstrates that greater family financial responsibility motivates employees to prepare for their retirement early (Szinovacz, 2003). Those with greater family financial responsibility without an established and sustainable social security system, have responsibility to take care of their elders (Zhang et al., 2019). No doubt that someone in a collectivist culture cares about his family.

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The testing of hypothesis 5 reveals that a stronger collectivist culture is associated with greater family financial responsibility. The finding is consistent with Trieu (2016). Indonesians exhibit a strong collectivist culture characterized by a strong attachment to the group and the elevation of group objectives over individual welfare. Zhang et al. (2019) concluded that Asian children with a strong collectivist culture exhibit much higher financial responsibility for family care than American or European children.

The testing of hypothesis 6 indicates that family financial responsibility positively affects one's psychological well-being. Greater family financial responsibility promotes psychological well-being because of a collectivist cultural background and strong familial ties in fulfilling family financial responsibility (Hofstede, 2011). Family responsibility can be a "cultural resilience factor" that positively affects family welfare (Telzer et al., 2014). Individuals who have internalized their family values, including those related to financial matters, will feel more closely connected to their support systems and feel happier and comfortable, eventually leading to psychological well-being.

The testing of hypothesis 7 indicates that retirement planning positively affects psychological well-being. They have to prepare their incomes for retirement age through retirement planning to ensure they can meet their needs and preserve their life quality at the retirement age. A secured life quality at the retirement age will promote calmness, happiness, and psychological well-being (Thuku, 2013; Topa et al., 2018).

Lastly, the testing of hypothesis 8 demonstrates that financial risk tolerance does not strengthen the effect of retirement planning on financial well-being. These finding is not in line with prospect theory. Due to the average respondent showed moderate financial risk tolerance, thus they did not significantly strengthen the effect in the causality path. The majority of respondents tend to avoid investments that are risky and fluctuate in investment value. The respondents feel that the pension guarantee provided by the institution where they work is sufficient for their retirement needs, so they do not want to increase investments or other pension products. According to prospect theory, individuals who are in favorable conditions tend to avoid risk. Based on the prospect theory, the decision making model is based on the S curve which states that an individual's decision making is based on the profits and losses faced, not based on total wealth (Kahneman & Tversky, 2013). It means that each individual will make decisions not only based on the expected final results, but also based on the conditions each individual faces and how these conditions can influence the surrounding environment in making decisions. The finding is attributable to the fact that most of the sample contains employees who have participated in employer retirement funds and consequently do not consider financial risks in their retirement planning to enhance their well-being. Of the 60 percent of employees participating in employer retirement funds, only half have had self-financed retirement programs. Individuals' decisions to promote their financial well-being by using retirement planning are not only affected by their financial risk tolerance but more by social influences and their personal expectations (Sharma et al., 2020).

CONCLUSION

This study seeks to test the interrelation of retirement planning of sandwich generation employees in Indonesia. The results demonstrated evidence supporting seven hypotheses. In response to the complex financial burdens that must be borne by the sandwich generation, particularly by employees, it is necessary to create a sound retirement plan so that the sandwich generation's old age does not place a burden on the generations below them. Financial education in the workplace can prompt employees to begin planning for retirement at a younger age. Retirement planning will arguably break the sandwich generation cycle in families and promote the financial well-being of employees and their families. These findings demonstrate that financial literacy and family financial responsibility positively affect employees' retirement planning, while financial literacy and retirement planning positively contribute to financial well-being. They will be satisfied with their financial situations and believe they can overcome any financial obstacles they encounter with excellent financial planning. This awareness is inextricable from individuals' financial literacy.

Recommendation

Based on the findings of the study, sandwich-generation employees' families are highly encouraged to invest in financial education. The media that companies can use to increase awareness and escalate employee financial literacy are webinars, workshops, email blasts, posts on company social media channels, articles on the company website, and infographics via online videos. Apart from that, a positive financial discussion culture can also be implemented in the workplace, thereby creating alternatives and solutions for handling financial problems among fellow employees. Employees are also suggested not only to rely on the pension program required by their institution, but also to prepare a reserve fund to finance an independent pension program to be more prosperous in retirement. Firms or retirement institutions can also consider different retirement planning behaviors when providing investment instruments that match employee profiles.

Future Research Development

This research had several limitations. It did not conduct specific tests based on the respondents' demographic characteristics (e.g., gender), arguably providing more diverse and in-depth findings. Besides, this study was constrained by the homogeneity of respondents clustered based on specific demographic characteristics (e.g., ethnicity, employment status, education level, and employment status), preventing the demonstration of behavioral variations. Future research can investigate gender differences in retirement planning behavior (Muthia et al., 2021), consider ethnicity/ traditional kinship systems and examine differences in retirement schemes (defined benefits and specified contribution plans) (Tamborini & Kim, 2020).

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