



Covid-19's Impact on Financial Planning in Short-Term and Long-Term Perspectives

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ABSTRAK

Penelitian ini mengkaji faktor-faktor psikologis termasuk bias kurang percaya diri, pendekatan pengambilan keputusan analitis/intuitif, orientasi diri/penting lain, dan orientasi waktu yang mempengaruhi perencanaan keuangan masyarakat dalam perspektif jangka pendek dan jangka panjang dalam situasi pandemi Covid-19. Data dikumpulkan dari survei online dengan menggunakan teknik convenience sampling. Sebanyak 331 tanggapan yang valid diskalakan pada 7 pertanyaan tipe Likert. Analisis regresi berganda dilakukan dalam menganalisis hipotesis. Studi ini memberikan wawasan empiris tentang hubungan antara faktor psikologis dan perencanaan keuangan dalam perspektif jangka pendek dan jangka panjang. Hasil penelitian menunjukkan baik perencanaan keuangan dalam perspektif jangka pendek dan jangka panjang berhubungan positif dengan gaya pengambilan keputusan analitis, orientasi waktu, orientasi diri, dan orientasi lainnya. Bias kurang percaya diri secara negatif terkait hanya dengan perencanaan keuangan jangka panjang tetapi, sebaliknya, tidak didukung oleh bukti untuk perspektif jangka pendek. Akhirnya, pengambilan keputusan intuitif tidak berkorelasi dengan perencanaan keuangan dalam perspektif jangka pendek. Studi ini membantu individu untuk merancang perencanaan keuangan pribadi yang lebih baik dan lembaga keuangan untuk mengembangkan layanan keuangan yang lebih relevan untuk klien yang ditargetkan. Studi ini menggunakan perspektif perilaku konsumen dan mencari celah dalam literatur perilaku konsumen, terutama menyelidiki efek bias underconfidence pada perencanaan keuangan Indonesia.

Kata kunci:

perencanaan keuangan pribadi, perilaku konsumen, gaya kognitif, orientasi diri lain, bias kurang percaya diri

ABSTRACT

This research investigates psychological factors including underconfidence bias, analytical/intuitive decision-making approach, self/significant other orientation, and time orientation that influence people's financial planning in short and long-term perspectives under the Covid-19 pandemic situation. The data were collected from the online survey by using a convenience sampling technique. A total of 331 valid responses were scaled on 7 Likert-type questions. Multiple regression analyses were performed in analyzing the hypotheses. This study provides empirical insight into the relationship between psychological factors and financial planning in the short and long-term perspectives. The results indicate both financial planning in short and long-term perspectives is positively associated with analytical decision-making style, time orientation, self, and other orientation. Underconfidence bias is negatively associated only with long-term financial planning but, in contrast, is not supported by evidence to a short-term perspective. Finally, intuitive-decision making is not correlated with financial planning in short-term perspective. This study helps individuals to design better personal financial planning and financial institution to develop more relevant financial services for targeted clients. This study uses

consumer behavior's perspective and figures out the gap in consumer behavior literature, especially investigating the underconfidence bias effect on Indonesian's financial planning.

Keywords:

personal financial planning, consumer behavior, cognitive style, self-other orientation, underconfidence bias

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INTRODUCTION

Personal finance can affect all aspects and become the driver of all economics. Personal finance can also affect everything we do as consumers; household buying power, buying groceries, eating out, paying credit, money lending, planning for retirement, and life decisions such as going to college, getting married, and having children. All those aspects need to be fulfilled by priority, and it will define the customer behavior behind it. Unfortunately, the consumer finance sector receives far less research attention than the capital markets (Ackert et al., 2015; Baker et al., 2017; Campbell, 2006; Tufano, 2009). While actually, many people need to know what variables affect the decision-making of financial needs. Frequently, human beings use unavoidable psychological feelings to make decisions. We surveyed 331 people in Indonesia about their financial decision. Moreover, the result is that they think several independent factors impact their process of decision-making. That financial planning is important, and they are interested in developing a financial plan.

Financial can be affected by internal and external factors. It means that finance is also influenced by what is happening currently. We can say the coronavirus Covid-19 pandemic brought many changes in this life, including the financial aspect.

This situation has a big impact on almost every aspect of life, especially in household finance, without knowing the end. To face it, we have to survive. To do that, we need to plan, make a spending priority, and use resources effectively and efficiently.

Personal finance is also affected by personal characteristics. The decisions have many implications, either long-term or short-term. This study will use an individual's short and long-term planning horizon (Lynch et al., 2010) as outcome variables to measure psychological determinants rooted in social science and marketing literature. It will be different also in this pandemic situation. How psychological affect the financial decision may change in this situation, long-term can be harder to make than short-term planning in this uncertain situation.

It is hard to frame one field of study or one theoretical framework to know more about financial planning. One approach that can be used to examine how people decide about their financial plan is behavioral finance approaches such as the prospect theory (Kahneman and Tversky, 1979). It helps to understand why some individual financial decisions are not balanced and conflicting with the forecasts of standard theories in financial economics (Ackert et al., 2015; Campbell, 2006; Petersen et al., 2015; Smith et al., 2015).

LITERATURE REVIEW

Financial planning is hard to be examined by one theoretical framework because many factors can affect it. Usually, consumer finance literature focuses more on the household's financial decision-making process related to moving funds, managing risk, borrowing, and investing (Tufano, 2009). Behavioral finance can be applied to determine financial planning and decision-making process. Behavioral finance uses cognitive psychology to analyze human behavior under vulnerability and perceives that our decision-making process is not generally rational (Baker and Nofsinger, 2010). This study shows the biases such as representativeness, anchoring, and framing (Tversky and Kahneman, 1986), mental accounting (Thaler, 1985), and overconfidence (Barber and Odean, 2001).

The field lacks a theory that unifies these four functions. Existing studies present limited solutions to the complex real-world between consumption and investment that consumers should choose (Ackert et al., 2015; Baker et al., 2017). Those assets can be liquid or non-liquid. It depends on the personality and priority goals of the customer itself. Behavioral finance can assist in describing and analyzing consumer finance characters. Financial planners do their job, give advice, make a strategy and plan, but the consumer does not necessarily agree and follow that plan. Many factors can influence their decision-making, such as family, friends, and other social environments. Moreover, financial literacy has important effects on financial planning (Lusardi and Mitchell,

2008, 2014). Low financial literacy can lead consumers to an inaccurate preference for financial products, and the consequences will affect the understanding of financial

advice (Anderson et al., 2017). While there is another perspective for analytical consumers who can understand something by words. An analytic person is more likely to understand context-independent thinking (Masuda and Nisbett, 2001). An analytic person is more disciplined about the mental accounting rules, such as spending the repayment on dissimilar buys, which is an example of a violation of the mental accounting principle (Hossein, 2018).

Financial literacy said that financial behavior plays an important role in making a financial decision, saving, spending, or investing (Lusardi and Mitchell, 2008). Many sources can impact that behavior, rewards (in/tangible), and risks. Moreover, it will influence the financial decision-making process in short and long-term perspectives.

Hypothesis Development

Underconfidence Bias

Underconfidence could be interpreted as a person underestimating his/her experience and competency (Pikulina et al., 2017). A few people may see themselves as to have not enough experience in decision-making, subsequently feel that they know less than they do. This kind of behavior is an example of underconfidence (Ahmad, 2019).

Three characteristics reflect the bias of individuals who suffer from underconfidence: underplacement, underprecision, and underestimation. Underplacement suggests that individuals assume themselves incompetent compared to others. Underprecision suggests that individuals are overly questioning their decision and overestimating the risk factors of their planning decisions. In comparison, underestimation means people only aware of the absence of their competence and

believe that they have limited financial literacy and capabilities rather than their real ability. It can be determined by low performance, the probability of success, the control level, and underestimating one's real capabilities – all of these attributes are called underestimation (Ahmad, 2019).

Underconfidence may affect human behavior in personal financial planning because underconfident people tend to feel that they have low financial literacy, and as a consequence, they may need some help from others to create their financial planning. Therefore, we propose below hypothesize:

H1a. Underconfidence bias (UFB) has a negative correlation with financial planning in the short-term perspective.

H1b. Underconfidence bias (UFB) has a negative correlation with financial planning in the long-term perspective.

Analytical and Intuitive decision-making approach

Both analytical and intuitive decision-making approaches indicate the decision-making capability anchored in the left and right hemispheres. Recent research demonstrates that cognitive style affects mental accounting, which is intensified for an analytical person and attenuated for an intuitive person (Hosseini, 2018).

Hosseini (2018) also shows that this effect is more powerful for utilitarian than hedonic consumption instances. The research investigates the connection between cognitive style and financial decision-making calls for additional studies (Hertzog et al., 2018; Rettig and Schulz, 1991; Rusou et al., 2016). Rettig and Schulz (1991) recommend there might be a connection

between individual cognitive styles and financial decision-making, yet given the exploratory nature of their study did not discover conclusive evidence.

Consequently, following Hosseini (2018), this study places individuals who are more left-brain dominant or analytical – for which the impact of mental accounting is intensified – would much rather plan, consider about the future, and dispense assets for long-term consumption. Further, given the observation that financial planning is about math, numbers, and examination, even short-term financial planning might be related to investigative reasoning. We accordingly hypothesize that an analytical decision-making approach will be associated with both long-term and short-term planning, although more prominently with long-term planning – as also suggested by Rettig and Schulz (1991):

H2a. Analytical decision-making (ATDM) style is positively correlated with financial planning in the short-term perspective.

H2b. Analytical decision-making (ATDM) style is positively correlated with financial planning in the long-term perspective.

In comparison, individuals who are more right-brain dominant or intuitive would much rather appreciate life now and provide for their financial planning. Intuitive persons are bound to engage in planning exercises at a much lower level, and generally in the short-term. This line of reasoning finds support in the assessments voiced by Graetz (2002) – "left-brain thinking reflects on the planning, while right-brain thinking mirrors the thinking component of decision-making." Hence, we propose the following:

H3a. The intuitive decision-making (ITDM) style is positively associated with financial planning in the short-term perspective.

H3b. The intuitive decision-making (ITDM) style is positively associated with financial planning in the long-term perspective.

Self/Other Orientation

Humans are social beings. We share our emotions and daily lives with others, e.g. family, friends, and colleagues. Our social environment influences our day-to-day decision-making. The concept of self and others, in particular significant others, has been discovered as an important element in consumer behavior literature (Belk, 1988; Bertocci, 1945; Triandis, 2000). Fundamentally, people tend to take care of themselves and their loved ones. However, the level to which a person focuses on each will differ. This occurrence is identified by Bakan (1966), who proposes two primary styles: agency and communion, to explain how people associate with their social environment (Diehl et al., 2004). Agency refers to an individual's experience of fulfillment from achievement and a sense of independence. In contrast, communion refers to a person's eagerness to closely bond with others or groups (Bakan, 1966); they also encounter fulfillment through their interrelation with others and a sense of acceptance and belonging (Guisinger & Blatt, 1994).

Mentally healthy individuals presume of self cannot be conceptualized independently from how they conceptualize others (Abele and Wojciszke, 2007; Decety and Sommerville, 2003). In this research, to capture the level to which decision-makers position themselves before others when making any life decisions, including financial decisions, will be called self-orientation. In contrast, the term significant

other orientation is used to catch the extent to which decision-makers put significant others, including family members, before themselves. Both agency and communion individuals' orientations have been assigned to different psychological individual actions: self-identity, character, styles of reasoning, and social relationships (Diehl et al., 2004). Past research indicates that locus of control – a locus of control orientation is a conviction about whether the outcomes of our actions are based on what we do or on events outside our control (Zimbardo, 1985) – influence financial behavior (Perry and Morris, 2005).

Intertemporal choice is one popular framework (i.e., decision making over time; Loewenstein, Read, and Baumeister, 2003) that verify the reason behind consumer behavior which prefer to consume now compared to save for the future; this framework also affects personal financial planning (Howlett et al., 2008).

Future-oriented perceptivity ranges from the planning of short-term related an ongoing task to long-term planning, such as retirement. However, long-term planning can be stressful because long-term future events are more uncertain and often uncontrollable compared to short-term future. Further, long-term future information is often inaccurate (Guzman and Paswan, 2019). Based on these arguments, most people do not want to harm their significant other's future. Therefore, significant other-oriented people are likely to feel uncomfortable wagering their close ones' future on uncertain and frequently inaccurate information. However, they are more willing to take risks with their "own" future (Briley and Wyre, 2002), given that even if things do not work out as planned, they can take care of it.

However, people are more comfortable taking a risk when it comes to short-term financial planning. It is rational to presume that most people would like to assure that their personal needs and their significant others' needs are fulfilled in the short-term. Most people feel in control because the information in the short-term is more accurate than in the long-term perspective, and consequences are easier to predict. Therefore, we hypothesize that self and significant other orientation have a positive correlation in the short-term perspective. While, given future uncertainty, only self-orientation is likely to be positively associated with long-term financial planning than other orientation:

H4a. Self-orientation (SOR) has a positive correlation with financial planning in the short-term perspective.

H4b. Self-orientation (SOR) has a positive correlation with financial planning in the long-term perspective.

H5a. Significant other-orientation (SFOR) has a positive correlation with financial planning in the short-term perspective.

H5b. Significant other-orientation (SFOR) has a positive correlation with financial planning in the long-term perspective.

Time Orientation

Time orientation's objective makes it an interesting psychological factor to study concerning financial planning (Guzman and Paswan, 2019). The term "time orientation" can be seen to implicitly associate with the direction, in time, towards which people orient themselves (Terhi Chakhovich, 2019). The literature on time orientation finds a positive relation between future time orientation, goal orientation, and high achievement (Gjesme, 1979). A person

with present time orientation preferred delayed payments, but a person with future time orientation preferred more immediate payments (Amyx and Mowen, 1995). A person with a strong present-time orientation may not like to plan for the future (Guzman and Paswan, 2019). He or she would much rather enjoy life now than delay gratification and may feel that the act of planning somehow takes away from enjoying life here and now. Contrarily, people with a more future time orientation are likely to delay gratification, saving money, and engage in future planning (Cheng et al., 2012; Klineberg, 1968; Wood, 1988).

Regarding time orientation, we hypothesize that future time orientation will positively affect financial planning in general. The effect is more strongly for financial planning to long-term than to short-term in particular. Therefore, we formulate the below relations:

H6a. Time orientation (TOR) positively influences financial planning in the short-term perspective.

H6b. Time orientation (TOR) positively influences financial planning in the long-term perspective.

In this study, the author analyzed the relationship between six psychological decision-making factors on financial planning in the short and long-term perspective. According to the above-described literature, underconfidence bias negatively affects financial planning decision-making. In contrast, analytical decision, intuitive decision, self-orientation, significant other-orientation, and time orientation have direct positive effects on financial planning decision-making. Hence, when underconfidence bias is minimized,

the accuracy of financial planning decision-making will be maximized. Moreover, contrary to underconfidence bias, when the other psychological factors that were conceptualized in this study are maximized, so will the accuracy of financial planning decision-making. Therefore, the conceptual model, as shown in Figure 1.

METHODS

Sampling and data collection

This study used an online self-administered survey of private employees in Indonesia's urban cities in the August 2020 period to collect primary data. Based on previous financial planning decision-making literature both in short and long-term perspectives, there were eight variables analyzed in this study. The questionnaire was developed and adapted from previous studies. Twenty people first checked the questionnaire for the comprehensiveness of context. Some minor modifications have been made to adjust some terminologies. After those adaptations, the items were included in the final version of the

questionnaire. Due to large-scale social restriction in the pandemic era of the Covid-19 situation, a convenience sampling technique was applied in this study. The 331 responses data were solely collected from the online survey in 18 days. All respondents completed each item of the survey. No missing items were found in the questionnaire. Each item of the questions was set to be mandatory answered in the questionnaire setup program. Therefore, the respondents cannot move forward to a question without completing the question before it. The final sample size of 331 respondents was used for subsequent analysis.

Measurement

The measurement items for each construct of dependent variables, the short and long-term financial planning (SFP and LFP), were borrowed from Lynch et al. (2010). These items were modified by Guzman and Paswan (2019), and they became the version that was incorporated in this study. The construct items of the independent va-

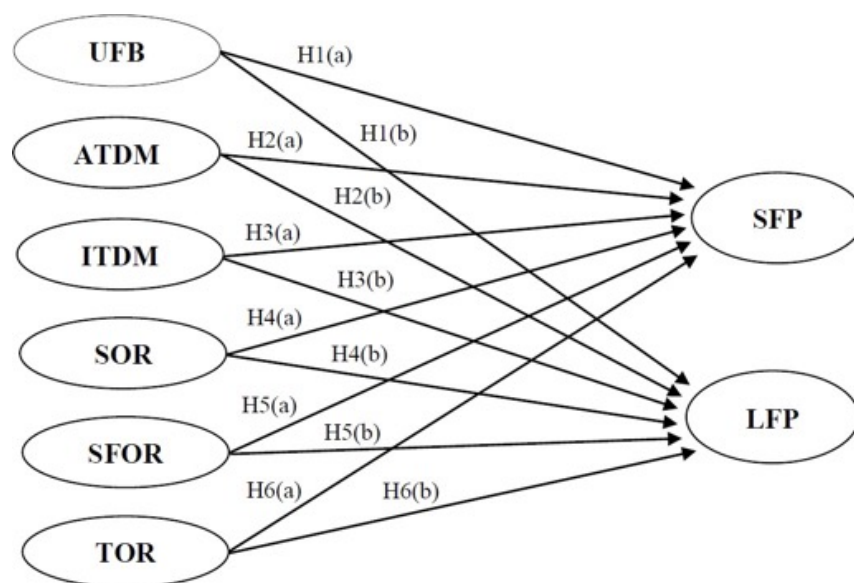


Figure 1. The framework of relationships between psychological factors to financial planning decision-making in the short and long-term perspective

riables for measuring underconfidence bias (UFB) were borrowed from Sheldrake (2016) and Ahmad (2019). Some adjustments for three items of UFB have been made from 'bias towards investment' to 'bias financial planning.' The context of short and long-term perspectives remains unchanged. The measurement items for the analytical decision-making (ATDM) together with intuitive decision-making (ITDM) were borrowed from Allinson and Hayes (1996), time orientation (TOR) from Amyx and Mowen (1995) that have been adjusted to the adaptations made by Guzman and Paswan (2019). And self-orientation (SOR) and significant other orientation (SFOR) was scaled from Guzman and Paswan (2019). This study applied the Likert scale to assess the total measurement of 36 items from those eight variables, by seven-point from 1 represents strongly disagree to 7 strongly agree.

RESULTS

Demographic Characteristics of the Respondents

Respondents of the survey came from urban cities in Indonesia. About 89.4 percent of respondent's contribution came from Jabodetabek. Among the total of 331 respondents, 45.6 percent were male, and the rest 54.4 percent were female, 47.1 percent were married, and the remaining 52.9 percent were single, so this could be considered balanced in terms of sex and marital status. The more detailed characteristics were presented in Table 1.

Factor Analysis Requirement Results

Factor analysis was used to analyze 36 items of the data responses. There was preliminary analysis before carrying out the regression analysis. A Kaiser-Meyer-Olkin value was 0.874 indicates excellent sampling adequacy for running factor analysis compared to 0.80 as the

recommended value (Hair et al., 2019).

By significance value 0.000, Bartlett's test has met the acceptance criteria i.e., <0.05 . Therefore, those results indicate that there were sufficient correlations among the variables, hence determining the appropriateness to proceed with exploratory factor analysis (Hair et al., 2013).

Scale Purification, Validity, and Reliability of the Measurements

All collected data were checked for validity and reliability. In scale purification, two questions from time orientation (TOR) variables adapted from Guzman and Paswan (2019) were eliminated as invalid data leaving three valid items. Each construct was maintained to have at least three items. After purification, the data ($N = 331$) ran simultaneously, and eight factors were extracted as the main constructs of financial planning. These eight factors explained 67.882 percent of the total variance (satisfy a specified percentage of variance explained criteria 60 percent or higher). The eigenvalues of eight factors greater than 1.0 are considered significant factors (Hair et al., 2019). All loadings were positioned on their respective factors in the matrix. The cut-off point of 0.5 was set in this study for displaying factor loadings. The varimax rotation technique was used. As a result, each of the factors has a significant loading above 0.50. Values for each loading ranged from 0.503 to 0.905 and fulfilled the criteria level above 0.40; it was considered practically significant and supported the validity (Hair et al., 2019).

The reliability was evaluated by using Cronbach's alpha in assessing the internal consistency of each item. The values of Cronbach's alpha met the acceptance criteria above

Table 4. Hypothesis Testing

Variable	Category	Frequency	%	Cumulative %
Gender	Male	151	45.6	45.6
	Female	180	54.4	100.0
Age (years)	<18	3	0.9	0.9
	18-25	75	22.7	23.6
	26-35	158	47.7	71.3
	36-45	61	18.4	89.7
	46-56	26	7.9	97.6
	>56	8	2.4	100.0
Income (monthly, in IDR; x1,000)	< 5,000	88	26.6	26.6
	5,000-10,000	106	32.0	58.6
	10,100-20,000	98	29.6	88.2
	20.100.000-30.000	19	5.7	93.9
	>30.000	20	6.0	100
Educational background	High School	38	11.5	11.5
	Diploma/Vocational degree	19	5.7	17.2
	Bachelor's degree	214	64.7	81.9
	Master's degree	60	18.1	100
Marital status	Single	175	52.9	52.9
	Married	156	47.1	100.0
Number of children	0	197	59.5	59.5
	1-2	94	28.4	87.9
	3	35	10.6	98.5
	>3	5	1.5	100
Living area	Outside the Java	22	6.6	6.6
	Jabodetabek	296	89.4	96.1
	Outside Jabodetabek	13	3.9	100.0
	on Java			

Notes: Jabodetabek: Indonesia's urban city that consist of Jakarta, Bogor, Depok, Tangerang, Bekasi (Respondents = 331)

0.70. They ranged from 0.747 to 0.919 across the eight constructs. It suggested appropriate levels of reliability (Nunnally, 1994; Hair et al., 2019). The rotated factor structure, the internal consistency of analysis, and Cronbach's alpha of eight constructs, and the eigenvalues, were presented in Table 2.

Model Fit and Multicollinearity Statistics

Psychological factors as independent variables simultaneously influence short and long-term financial planning as the

dependent variable with significant F test results (F Sig. 0.000). The adjusted R^2 was used to measure overall model predictive accuracy. The adjusted R^2 value of short and long-term perspective, each in a consecutive order as follows 0.250 ($R^2 = 0.264$) and 0.412 ($R^2 = 0.422$). This means that 25 percent of the variance in short-term financial planning (SFP) and 41.2 percent of the variance in long-term financial planning (LFP) could be explained by the UFB, ATDM, ITDM, SOR, SFOR, and TOR variables. However, the R^2 values of both SFP and

Table 2 Rotated Factor Structure and The Internal Consistency Analysis

Factor	Constructs and measurement items	Loading Factor								Cronbach's alpha
		F1	F2	F3	F4	F5	F6	F7	F8	
Financial planning in long-term perspective (LFP)										
LFP1	I like to look to my budget for the long-term future to get a better view of my spending in the future	0.669								0.901
LFP2	I decide beforehand how my money will be used in the long-term future	0.749								
LFP3	I set financial goals for the long-term future for what I want to achieve with my money	0.785								
LFP4	I actively consider the steps I need to take to stick to my budget in the long-term future	0.764								
LFP5	I consult my budget to see how much money I have left for the long-term future	0.749								
LFP6	It makes me feel better to have my finances planned out for the long-term future	0.749								
Analytical decision-making (ATDM)										
ATDM1	When making a decision, I take my time and thoroughly consider all relevant factors		0.609							0.877
ATDM2	To solve a problem, I have to study each part of it in detail		0.787							
ATDM3	Given enough time, I would consider every situation from all angles		0.821							
ATDM4	I always pay attention to detail before I reach a conclusion		0.784							
ATDM5	The best way for me to understand a problem is to break it down into its constituent parts		0.570							
ATDM6	My understanding of a problem tends to come more from thorough analysis than flashes of insight		0.745							

Factor	Constructs and measurement items	Loading Factor								Cronbach's alpha	
		F1	F2	F3	F4	F5	F6	F7	F8		
Self-orientation (SOR)											
SOR1	I believe in taking care of 'number one – me' first, before anyone else			0.881						0.919	
SOR2	I think a person should take care of themselves first, before anyone else			0.843							
SOR3	Whenever I spend money, I believe in taking care of me first, before I think of anyone else			0.905							
SOR4	I think of myself first whenever I spend money			0.869							
Financial planning in short-term perspective (SFP)											
SFP1	I consult my budget to see how much money I have left for the next paycheck period				0.595					0.814	
SFP2	I decide beforehand how my money will be used in the next paycheck period				0.767						
SFP3	I like to look to my budget for the next paycheck period to get a better view of my spending in the future				0.798						
SFP4	I actively consider the steps I need to take to stick to my budget for the next paycheck period				0.503						
SFP5	It makes me feel better to have my finances planned out for the next paycheck period				0.509					0.747	
SFP6	I set financial goals for the next paycheck period for what I want to achieve with my money				0.583						
Intuitive decision-making (ITDM)											
ITDM1	I work best with people who are spontaneous					0.636					
ITDM2	I would rather that my life was unpredictable than that it followed a regular pattern					0.733					
ITDM3	I am always prepared to take a gamble					0.780					
ITDM4	I am constantly on the lookout for new experiences					0.649					

Factor	Constructs and measurement items	Loading Factor								Cronbach's alpha
		F1	F2	F3	F4	F5	F6	F7	F8	
ITDM5	I am the kind of person who casts caution to the wind					0.661				
Time orientation (TOR)										
TOR1	If I want to buy something, I frequently make the purchase quickly and think about the consequences later (R)					0.738				0.806
TOR2	I enjoy going shopping and buying on impulse (R)					0.815				
TOR3	I tend to spend money as soon as I earn it (R)					0.739				
Underconfidence bias (UFB)										
UFB1	I feel nervous in my own financial planning opinion over opinion of my colleagues or friends							0.729		0.767
UFB2	I fell self-distrustful about my abilities to do better than others in achieving my financial goals							0.777		
UFB3	I feel my skills and knowledge of the financial budgeting are not enough to achieve my financial goals							0.800		
Significant other orientation (SFOR)										
SFOR1	Whenever I spend money, I think of my family first								0.816	0.769
SFOR2	I think of my family before myself whenever I spend money								0.880	
SFOR3	I think of significant others in my life first before I spend money on myself								0.652	
Eigenvalues		9.663	3.491	3.282	2.056	1.936	1.462	1.309	1.237	
Variance explained		26.841	9.699	9.116	5.712	5.379	4.061	3.637	3.437	
Accumulated variance explained		26.481	36.540	45.656	51.368	56.747	60.808	64.445	67.882	

LFP in this study were higher compared to previous study (adjusted $R^2 = 0.16$, $R^2 = 0.17$ (for SFP) and adjusted $R^2 = 0.34$, $R^2 = 0.34$ (for LFP)) performed by Guzman and Paswan (2019). It means that the results of this study have a better-emphasized relationship between independent variables on dependent variables. The summary of the analysis was presented in Table 3.

The analysis of Pearson's correlation coefficients in this study was conducted to ascertain that the interpretation of any single independent variable's effect was not complicated due to correlation or interrelationship among the independent variables. The correlation matrix among the eight attributes was presented in Table 4. The correlation between SFOR and UFB showed the result of $r = 0.01$ as the lowest value, and the correlation between TOR and UFB showed the result of $r = 0.387$ as the highest value. By those results, the analysis of the correlation between the independent variables, in general, indicates a low correlation because all values are less than 0.4. The interpretation based on the values suggested by Guilford (Tredoux and Durheim, 2002). Therefore this indicates no hurdle with multicollinearity.

This study also analyzed the variance inflation factor (VIF) and tolerance value to reassure the multicollinearity. The recommended value of tolerance was above 0.10 or a corresponding VIF below 10.0 (Hair et al., 2019). As presented in Table 5, the values of tolerance for each independent factor were more than 0.10, and VIF values were less than 10.0. Therefore, there were no issues of multicollinearity in this study.

Multiple Regression Analysis

This study provides support for $H1(b)$, $H2(a)$ (b), $H3(b)$, $H4(a)(b)$, $H5(a)(b)$, and $H6(a)$

(b). This study did not provide support for $H1(a)$ and $H3(a)$. In other words, all six psychological factors were found to be statistically significant on financial planning in the long-term perspective, but only four factors (ATDM, SOR, SFOR, and TOR) were significant on a short-term perspective, all analyzed at 0.05 level.

A significant negative relationship of underconfidence bias on long-term perspective has been found as presented in Table 3 ($\beta = -0.194$, $t = -4.215$, and $p = 0.000$). The opposite was found that there was no relationship evidence of underconfidence bias on short-term perspective ($\beta = -0.11$, $t = -0.204$, $p = 0.839$), lending support only to $H1(b)$.

Based on the analysis, financial planning can be influenced by analytical decision-making style in short-term ($t = 5.461$, $p = 0.000$) and long-term ($t = 6.749$, $p = 0.000$) perspective. $\beta = 0.320$ for SFP and $\beta = 0.350$ for LFP indicate that the effect was positive, which means that analytical decision styles have positive relationships both in short and long-term perspectives. Therefore, $H2(a)$ and (b) are accepted. Of six variables, ATDM is the most important variable as it has the highest beta value of the regression coefficient. The beta values of ATDM on both SFP and LFP are quite similar.

In the context of a short and long-term perspective, the hypotheses predict that an intuitive decision-making style has a positive association with financial planning. The results of the regression model in Table 3 showed that intuitive decision-making style has no significant positive influence on short-term perspective ($\beta = 0.045$, $t = 0.887$, $p = 0.376$), which means $H3(a)$ unsupported. However, compared to the previous literature, this study postulated

Tabel 3 The Results of Multiple Regression Analysis

Independent variable	Dependent variable						
	Financial planning in short-term perspective						
	Standardized Coefficients β	t-Values	Sig.	Supported	R^2	Adjusted R^2	F Sig.
(Constant)		4.150	0.000				
UFB, short-term (H1a)	-0.11	-0.204	0.839	No			
ATDM, short-term (H2a)	0.320	5.461	0.000	Yes			
ITDM, short-term (H3a)	0.045	0.887	0.376	No	0.264	0.250	19.331 0.000
SOR, short-term (H4a)	0.119	2.273	0.024	Yes			
SFOR, short-term (H5a)	0.165	3.070	0.002	Yes			
TOR, short-term (H6a)	0.157	2.768	0.006	Yes			
Financial planning in long-term perspective							
(Constant)		3.343	0.001				
UFB, long-term (H1b)	-0.194	-4.215	0.000	Yes			
ATDM, long-term (H2b)	0.350	6.749	0.000	Yes			
ITDM, long-term (H3b)	0.104	2.315	0.021	Yes	0.422	0.412	39.471 0.000
SOR, long-term (H4b)	0.129	2.764	0.006	Yes			
SFOR, long-term (H5b)	0.181	3.813	0.000	Yes			
TOR, long-term (H6b)	0.188	3.744	0.000	Yes			

Notes: N = 331

Numbers in italics are significant at p -value < 0. 05

Tabel 4 Correlations between Constructs and Descriptive Statistics

	SFP	LFP	UFB	ATDM	ITDM	SOR	SFOR	TOR	Mean	Median	SD
SFP	-								5.73	6.00	0.927
LFP	0.589**	-							5.67	5.83	0.970
UFB	-0.133*	-0.326**	-						3.71	3.67	1.465
ATDM	0.468**	0.559**	-0.209**	-					5.86	6.00	0.845
ITDM	0.065	0.094	0.151**	0.060	-				4.40	4.20	1.048
SOR	0.191**	0.218**	-0.030	0.280**	0.088	-			4.88	5.00	1.340
SFOR	0.255**	0.289**	0.010	0.303**	0.181**	-0.188**	-		5.50	5.67	1.096
TOR	0.287**	0.387**	-0.387**	0.381**	-0.244**	0.057	0.050	-	5.10	5.33	1.394

Note:

** Significant effect at p -value < 0.01 ; in 2-tailed.

* Significant effect at p -value $p < 0.05$; in 2-tailed.

Tabel 5. Multicollinearity Statistics

Item	Construct	Collinearity statistics	
		Tolerance	VIF
SFP	Financial planning in the short-term perspective	0.839	1.192
LFP	Financial planning in the long-term perspective	0.822	1.216
UFB	Underconfidence bias	0.663	1.508
ATDM	Analytical decision-making	0.875	1.143
ITDM	Intuitive decision-making	0.790	1.266
SOR	Self-orientation	0.708	1.413
SFOR	Significant other orientation	0.839	1.192
TOR	Time orientation	0.822	1.216

Note: Dependent variable includes financial planning in the short and long-term perspective.

that intuitive decision-making correlates with financial planning in the long-term perspective. As the result, there was a significant positive influence ($\beta = 0.104$, $t = 2.315$, $p = 0.021$), lending support to $H3(b)$. According to the results, financial planning decision making were associated with self-orientation as the t -value was found to be significant for both short-term ($t = 2.273$, $p = 0.024$) and long-term ($t = 2.764$, $p = 0.006$) perspective. Respectively, with a positive β value of 0.119 and 0.129 in the short and long-term perspective, self-orientation has a significant positive relationship. Therefore, $H4(a)$ and (b) are supported.

Results of the analysis show that financial planning decisions making can be influenced by significant other-orientation in short-term perspective ($t = 3.070$, $p = 0.002$), with β positive ($\beta = 0.165$), which supports $H5(a)$. Furthermore, in the context of a long-term perspective, this study also found a positive relationship to the construct ($\beta = 0.181$, $t = 3.813$, $p = 0.000$) compared to previous studies, lending support to $H5(b)$.

Finally, the time orientation has significant relationship ($t = 2.768$, $p = 0.006$) in short-

term financial planning and so does in long-term perspective ($t = 3.744$, $p = 0.000$). The beta value was positive (SFP $\beta = 0.157$ and LFP $\beta = 0.188$), which means that there was positive evidence of a correlation between time orientation with financial planning in the short and long-term perspective. Therefore, $H6(a)$ and (b) are supported. Each of SOR, SFOR, and TOR has beta values on LFP higher than SFP, which means the effect on LFP is larger than SFP.

DISCUSSION

Following the intended objectives, the relationships between six psychological factors on financial planning decision-making have been analyzed in the short and long-term. This study brings an empirical insight that analytical decision-making, self, significant-other, and time orientations have a positive correlation with financial planning in the short-term perspective. Furthermore, all six factors, including underconfidence bias, analytical and intuitive decision-making, as well as self, significant-other, and time orientation, correlate with financial planning in the long-term perspective.

This research plays a role in providing contribution benefits by enriching the literature that addresses financial planning in the short and long-term perspectives. This study reveals the influence of the psychological factors on consumer behavior regarding their financial preferences, especially ordinary people, without any particular financial background. Furthermore, the prominent results in this study are in the area of long-term financial planning aspect. And this research also examines the role of the bias's effect, which is still rarely explored in the financial literature, i.e., underconfidence bias.

This study indicates that underconfidence bias has a significant negative effect on financial planning in a long-term perspective. Hence, the results of this study are similar to previous studies that reveal a negative correlation between underconfidence bias and long-term investment decisions (Ahmad, 2019). Conversely, the impact on financial planning in the short-term perspective is not significant, which differs from those of Ahmad (2019). The possible reason explained that people tend to plan for the short-term rather than the long-term so that the bias factor does not affect decision making (Lynch, 2010). Meanwhile, people who experience underconfidence bias develop long-term financial planning inadequacy; they demonstrate not to design nor prepare financial planning to achieve their financial goals. People who suffer from underconfidence bias make them identify themselves with low financial knowledge and lack confidence in their ability to carry out financial planning (Pikulina et al., 2017).

One of the prominent results of this study is that analytical decision-making has a significant impact on financial planning. This study reveals that financial planning

is a decision-making process that is completely determined by its analytical nature, regardless of the time horizon. Analytical decision-making is a driving factor for individuals to prepare financial planning in the short and long-term perspective. This study's results further affirm the previous research conducted by Guzman and Paswan (2019) and are conformable with the literature proposed by Rettig and Schulz (1991).

Interestingly, regardless of the hypotheses disclosed in the previous literature, this study explains that intuitive decision-making styles play a role in long-term financial planning, but not in the short term. This study shows different results from previous research. The research suggests that intuition factors do not influence financial planning decision-making, both in the short and long-term perspectives (Graetz, 2002; Guzman and Paswan, 2019).

This research found that financial decisions are dominated by the left brain function that tends to think analytically, logically, and rationally. However, when the decisions are more directed into a long-term context, there is the right brain function's involvement, which leads to intuition, feeling, and emotional factors. Therefore, intuitive decision-making in this study has a significant effect on long-term financial planning. It can be explained that the feeling of aspiring to give and ensuring the needs of their loved ones are fulfilled, leading them to prepare financial planning. It can also be understood in association with the Indonesian economy, which is uncertain regarding the Covid-19 pandemic situation that has emerged suddenly and is known to last, which is unlikely to resolve quickly. Consequently, they tend to direct their attention to implementing financial

planning and prioritizing financial consideration for the future.

This research shows that people who put themselves before others and those who put their loved ones first, such as family, tend to focus on financial planning, both in the short and long-term perspectives. The latter has a bigger influence. It can be explained for the reason that a self-oriented person will always make efforts to ensure that his own needs, both in the short and long term, will always be satisfied. However, this study's results provide different results related to the effect of a significant other-orientation in the context of financial planning in long-term perspective. Based on the prior hypothesis, people who place their loved ones before themselves will only focus on short-term financial planning. The results of this study indicate that Indonesians, especially workers who live in urban areas, tend to focus on both short and long-term financial planning. It can be affected by cultural factors, where Asian people tend to express deep concern for their families. When making decisions, Indonesians tend to consider other people, especially the people they care about, not just themselves. This Indonesian culture directs someone to respect others' interests when making decisions, so they tend to focus on both short and long-term planning (Paik et al., 2017; Mau, 2000).

Furthermore, this study also reports that time orientation has a significant effect on short-term and long-term financial planning. The impact on long-term financial planning is greater than on short-term perspectives. These findings are related and further strengthen Guzman and Paswan (2019) research on how an individual behaves when making decisions that have financial consequences. They tend to think

about the present and the future (Amyx and Mowen, 1995).

This study also indicates a tendency that psychological factors have more influence on long-term financial planning perspective. This result can be explained by the fact that Indonesia's economic uncertainty has made people more aware of the importance of wealth that can be obtained from wiser financial planning. The condition of the Covid-19 pandemic, which is not known when it will end, is predicted to bring a real impact on individuals' financial condition. Thus, they began to plan as early as possible and anticipate future events with long-term financial planning. It is reasonable given the uncertain economic conditions in Indonesia, especially in a pandemic situation, even more, the respondents' contribution to this study, which was conducted within six months since the first case of coronavirus patient was announced in Indonesia (Kominfo RI, 2020).

The result of financial planning decision-making in this research is dominated by analytical thinking. These findings have implications for regulatory authority as policymakers and the financial services industry in making financial policies, products, and services. Further, the individual's attitudes in the ongoing pandemic situation can represent and contribute to the right consumer approach. Hence, regulatory authorities as policymakers and financial institutions are on the right track to targeting this group. Because the group tends to develop a future orientation, not only for themselves but also for those they care about, by leading financial planning which will ultimately provide certainty of financial health and future financial adequacy.

For the implementation of long-term decision making, it can be prioritized through logical and rational promotional efforts, but emotional elements should be included and supported with creative ways because there are still some bias and intuition factors involved. This long-term approach's success can also be related to its role in providing benefits considering moments of uncertain economic conditions. Likewise, an implementation approach to short-term decision making can be composed more persuasive with providing more informative benefits because the analytical aspects are more prominent and are not affected by bias or intuition.

Financial planning is personal decision-making. Therefore, factors that can interfere with it both in the short and long-term perspective need to be considered, including those that will affect the achievement of an individual's financial goals and welfare.

CONCLUSION

In conclusion, this study shows that the analytical decision-making style that brings rational, logical, and well-planned nature is the dominant factor that influences short and long-term financial planning decisions compared to the other five psychological factors. The results of this study affirm the literature and prior research results even in Covid-19 pandemic conditions. Apart from the analytical decision-making style, other psychological factors also influence an individual's financial planning decision making and become an inseparable element of achieving an individual's financial goals. This result emphasizes the beneficial contribution to policymakers and financial institutions in designing policies on developing financial products and services that consumers will quickly absorb.

Eventually, the differences generated by this study, when compared with previous studies, particularly significant results dominance from a long-term perspective, might be affected by differences in cultural factors in each country. Also, this research was held in a Covid-19 pandemic situation so that it could provide destined for each result, and this study can be the basis for further research.

LIMITATION

Some limitations are highlighted in this report. The appropriateness of statistical measures has been taken in many steps to ensure validity and reliability due to the data collected from convenience samples; however, there might still be a subject of limitedness related to the generalization of the results. Indonesia's top-5 big cities are out of the study's scope that was conducted for a limited time. Hence, larger periods should be included for further studies, including consideration of using random sampling. In designing the questionnaires, this study only focused on quantitative methods based on the previous studies that have not been strengthened by qualitative data. Other studies could explore how qualitative data will enrich the contributing factors that can interfere with financial decision-making.

The researchers believe that financial planning behaviors are not only directed by rational thinking. They also come from psychological powers outside of our conscious awareness, with roots that run deep into our past. Therefore, the researcher suggests future research to explore personal and family histories' effect on financial planning in a short and long-term perspective. Furthermore, regarding the segmentation target, this study's focus was

primarily on the middle-class worker as the majority segment of the Indonesian population, specifically private employees. Future research could focus on other segments, such as lower-economic social groups, to examine if they behave in an attitude similar to what this study reveals. Ultimately, the construct of underconfidence

bias, analytical decision making, intuitive decision making, self-orientation, significant other orientation, and time orientation has strong cultural roots in Indonesia. Future research should replicate and investigate this study in different countries or across different subcultures within a country. ◀

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