

## The Role of Self-Control in Reducing Financial Threat Perception at The Onset of Covid-19 Pandemic

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**Abstract-** In this study we attempt to understand how people manage their condition during uncertainty, such as the economic crisis induced by the Covid-19 pandemic. In short, we analyze the relationship between self-control, good financial behavior, and financial threat perception at the onset of the Covid-19 pandemic. A web-based survey was conducted to collect the sample (n = 589) in Indonesian people. This study found that self-control not only encourages good financial behavior but also reduces financial threat perception in the middle of uncertainty. However, good financial behavior cannot mediate the effect of self-control and financial threat perception. Our study provides evidence that at the onset of a financial crisis, self-control is needed to cope with acute stress that arises from sudden uncertainty. Having good financial behavior cannot fully alleviate financial threat perception. Self-control has a direct mechanism in coping with financial threats during COVID-19.

**Keywords:** *personal finance; self-control; Covid-19; pandemic; financial stress*

### INTRODUCTION

COVID-19 affects not only the health aspect but also the economic condition. Many countries, such as the United States (Voanews.com, 2020) and Singapore (Aravindan & Geddie, 2020) have officially declared recession. Indonesia has experienced signals of recession, such as employee dismissal (Karunia, 2020a), the increase of primary goods (Karunia, 2020b) and the surge of criminality (Wijayaatmaja, 2020). Suryahadi et al., (2020) estimated that COVID-19 would reduce Indonesia's economic growth to between 1 and 4 percent. They added that under the mild scenario, the poverty rate would become 9.7 percent by the end of 2020, and under the most severe projection, the Indonesia poverty rate would become 12.4 percent.

Economic downturn creates a financial threat for people since it will lead to financial problems, such as job insecurity, overindebtedness, and investment losses (Deaton, 2012). Based on previous studies, personal financial problems may lead to some psychological problems, such as psychological distress and mental illness (Fitch et al., 2014; Jenkins et al., 2008) and depression (Mirowsky & Ross, 2001). Compared to previous crises, the current economic downturn may have a greater impact on psychological conditions since it is triggered by the disease pandemic. Therefore, it will increase the burden on the individual mental state since it forces people to figure out a solution for their financial problems while considering the risk of COVID-19 infection.

Having good financial behavior could be a cure to relieve financial threats in a crisis. The saving activity could be a solution to release financial threats in crisis since it encourages an adequate amount of money to survive. Financial planning and budgeting also provide financial resilience since individuals that conduct a propensity to plan tend to have more wealth (Ameriks et al., 2003).

Based on the Behavioral Life-Cycle Hypothesis (BLCH), saving and consumption activity for life is determined by the ability to control impulsive behavior (Shefrin & Thaler,

1988). Financial planning, budgeting, and saving activities need time, effort, and willpower. Thus, self-control is needed to provide discipline and persistence. Self-control is the ability to break bad habits, resist temptations, and overcome impulsive behavior (Baumeister, 2002; Roberts & Manolis, 2012). Having strong self-control may support an individual to adopt good financial behavior as a habitual activity. In short, having strong self-control will lead to good financial behavior. Then, it will reduce the financial threat as they have well prepared to face uncertainty, such as accumulating their wealth more (Biljanovska & Palligkinis, 2016). However, the psychological paradigm views stress can occur to each individual though they have resources to reduce the impact of the crisis. At the onset of a crisis, self-control is needed to cope with the shock. Self-control helps people to remain calm and not panic even though they cannot overcome the problem (Rosenbaum, 1989, 1993).

Indonesia has been chosen as our research focus because Indonesian people are quite unique. Indonesia is considered one of the countries that view life in a positive view (Helliwell et al., 2020). In the context of the COVID-19 pandemic, our research is relevant as to whether stress could emerge in a society that has high life satisfaction.

This study aims to extend the application of the BLCH paradigm by not only explaining financial behavior but also mitigating the financial threat in crisis. Specifically, we examine whether self-control could promote good financial behavior, such as saving and planning activities. Then, we investigate whether self-control and financial behavior reduce the financial threat perception.

There are two contributions to this study. First, our study has successfully shown the role and the mechanism of self-control in reducing financial threats. However, good financial behavior cannot be a mediator. Self-control is not only creating discipline that can increase their wealth accumulation, but also it reduces the shock and burden, though they do not possess the capacity to resolve the issue. Second, different from other studies that analyze the impact of self-control on several psychological or health perspective (Camp et al., 2023; Cao & Li, 2022; Ling et al., 2024; Schnell & Krampe, 2020), our study investigates the impact of self-control in the economic perspective. Thus our study may enlarge the literature on self-control.

## LITERATURE REVIEW

Modigliani & Brumberg (1954) proposed the Life Cycle Hypothesis (LCH) to explain that financial goals as the motivation for saving activity. This hypothesis explains that saving activity is conducted by a rationally farsighted individual to compensate for the consumption expenditure of their retirement. By having savings, individuals could maintain their consumption level as the same as the amount of their productive age, though their income was significantly reduced in retirement age.

The life cycle hypothesis, however, was criticized by Shefrin & Thaler, (1988). They proposed a hypothesis that is famously called the Behavioral Life-Cycle Hypothesis (BLCH). They stated that saving activity might not well occur though the individuals are rationally farsighted. BLCH stated that individuals treat their wealth as non-fungible. As a consequence, wealth was assumed to be divided into mental accounts, such as current income and future income. Current income is income that is categorized to be consumed immediately, whereas future income is income that becomes a source of funding for the various expenses that could occur in the future. This mental accounting, indeed, helped individuals manage their money. However, mental accounting could become a potential source of individuals suffering framing, causing inefficiencies in saving activity. Take, for example, individuals who treated regular income as a source of consumption activity, while bonuses as a source of saving. In other

words, people spend regular income more easily than a bonus though the bonus is a temporary (Shefrin & Thaler, 1988).

To overcome those problems, BLCH stated that individuals should have good self-control. By having good self-control, individuals could realize better strategies in saving, such as putting the remaining current income spending into saving accounts and reducing unplanned consumption. Self-control is needed to overcome impulses (Baumeister, 2002; Roberts & Manolis, 2012). Having saving behavior as a habitual activity was quite challenging since psychological conditions could affect it; for example, happier people tend to save more and spend less (Güven, 2012). By having high self-control, individuals could apply saving activity as habitual behavior, then they would have an adequate amount of money to maintain their consumption in retirement. This amount of money could also become a resource to face unexpected conditions.

Based on the BLCH paradigm, self-control could encourage good financial behavior, which might lead to financial resilience (reduce financial stress). Empirical evidence supported this paradigm though they only focused on specific parts of this paradigm. Some studies found a positive linkage between self-control and good financial behavior. Using an internet survey, Strömbäck et al., (2017) found that self-control encouraged good saving behavior in Swedish people. Some studies showed the relationship between good financial behavior and financial resiliency. Ameriks et al., (2003) found that the propensity to plan encourages individuals to accumulate wealth. Fernandes et al., (2014) also found that financial planning has encouraged people to plan more abstract financial goals, such as the goal of having money that can fund their emergency and future retirement. Empirical studies that found the linkage of self-control and financial resiliency also have been conducted. Biljanovska & Palligkinis, (2018) employed Health and Retirement Survey (HRS), a US households survey dataset. They analyzed the relationship between self-control failure and wealth accumulation. They found that self-control failure reduced the amount of household wealth. Strömbäck et al., (2017) also found that individuals who have strong self-control tend to have a positive perception of their financial security.

Based on a psychological perspective, self-control may have a direct effect on stress. Individuals who have strong self-control could conduct process-regulating cognitions (PRC) by ignoring the disturbance. In short, self-control prevents individuals from overthinking. This mechanism is called the redressive function (Rosenbaum, 1989, 1993). By ignoring the disturbance, individuals will easier to seek and process the information.

## METHODOLOGY

### Data Collection

A web-based survey was conducted to collect data. The period of collecting data was one month, from May 4th, 2020 to May 31st, 2020 at the onset of COVID-19 cases in Indonesia. We finished our period of collecting data before June 2020 since the new normal was applied on June 1st, 2020 (Idris, 2020). Before June 1st, 2020, Indonesia applied partial lockdown. In other words, the Indonesian government prohibited the entertainment industry, such as restaurants, cafes, and malls from operating. However, businesses that provided primary needs, such as traditional markets and supermarkets were operated for a limited time. In the new normal period, the entertainment industry can operate based on new normal protocols, such as keeping their distance from the customer, instructing customers to wear masks, and providing hand sanitizer or soap in the corner of their business. Therefore, we

assume the period before June 1st, 2020 creates more pressure, increasing more financial threats than the new normal period.

Our respondents are 589 Indonesian adults (more than 18 years old), working people, and not a student. These criteria are applied because adults and working people are assumed to have responsibility for managing their own lives, unlike students who are mostly relying on their parents. It is also more relevant for adults and working people to create planning and have a farsighted point of view in conducting their activity instead of students. To ease an understanding of our sample characteristics, we show descriptive statistics in Table 1.

**Table 1.** Descriptive Statistics of Respondents

<b>Criteria</b>	<b>Number of Respondents (n = 589)</b>
<b>Status</b>	
Married	369
Single or unmarried (reference)	220
<b>Sex</b>	
Male	263
Female (reference)	326
<b>Age</b>	
18 or more to 35 years old	452
more than 35 to 50 years old	111
more than 50 years old (reference)	26
<b>Education</b>	
Higher education	512
Less than higher education (reference)	77
<b>Income</b>	
equals less than IDR 3 million	280
more than IDR 3 million to IDR 5 million	174
more than IDR 5 million to IDR 10 million	97
more than IDR 10 million (reference)	38

**Source :** (Authors, 2024)

### Measurement

Self-control (self\_con) measurement was adopted from Strömbäck et al., (2017). This measurement employed a 5 Likert scale, ranged 1 (totally disagree) to 5 (totally agree). The original measurement consisted of 9 items. However, we had to drop two items, namely “I live more for the day of today than for the day of tomorrow” and “My convenience plays an important role in the decisions I make” since the score of factor loading is below 0.4. After dropping those two items, there was no value below 0.4 in factor loading, indicating acceptable internal validity.

Our studies used six items of attitude to money, adopted from Fernandes et al., (2014) to measure good financial behavior (good\_fin\_behav) that respondents conducted. Compared to other studies (Gathergood, 2012; Kim & Hanna, 2017; Lusardi, 2012; Rha et al., 2006), our study provided more diverse good financial behavior since our study measured not only saving

behavior but also financial planning and budgeting. The scale range for this variable is 1 (totally disagree) to 5 (totally agree).

Financial threat perception (*fin\_threat*) was adopted from Marjanovic et al., (2013). This measurement was tested by them during 2009 and 2010, at the height of the recession. Thus, this measurement might reflect financial threat perception well. The scale of this measurement is ranged from 1 (not at all) to 5 (a great deal).

For control variables, we include socio-demographic variables. these variables measure the characteristics of individuals in the community. Socio-demographic variables were hard to change since individuals tended to have less control over them. Socio-demographic variables included in this study were income, age, education, sex, and marital status.

Sex (*sex*) reflected the gender of the respondent. This variable was measured using a dummy variable. It was valued as 1 if the respondent was male, and 0 if the respondent was female. This binary scale was also used on the marriage status and education. Status (*status*) was a variable that reflects whether the respondents were currently married when they were being surveyed. The value of this variable was 1 for having married when being surveyed, and 0 was vice versa. Education (*edu*) was a variable that represented the respondent's level of education degree. This variable was measured using binary scales. It valued 1 if the respondent has higher education and 0 if the level of education of the respondent was below higher education.

The number of children (*children*) was the only socio-demographic variable that did not use a binary scale as the basis of the measurement. This variable reflected the number of children that the respondent has, which currently still depends on the respondent.

Age and monthly income were control variables that were employed by categorizing those variables into a specific group. Each specific group would be measured using a dummy variable. It implied the datum will be valued as 1 for entering into a specific group and 0 for vice versa.

Age was categorized into three categories. Thus, two dummy variables were included in our regression. The reference category was more than 50 years old. The remaining categories were 18 years old or more to 35 years old and more than 35 years old to 50 years old.

Monthly income was reflected by three dummy variables. Those variables were grouped into four groups. The reference group was more than IDR 10 million. The other group was equal less than IDR 3 million, more than IDR 3 million to IDR 5 million, and more than IDR 5 million to IDR 10 million.



**Table 2.** Validity and Reliability Test

Items	Factor Loading
<b>Self-Control</b>	
I have a hard time breaking bad habits	0.708
I get distracted easily	0.712
I am good at resisting temptation	0.584
I do things that feel good in the moment but regret later on	0.644
I often act without thinking through all the alternatives	0.763
I only focus on the short-term	0.763
The future will take care of itself	0.533
<i>Cronbach Alpha: 0.802</i>	
<b>Good Financial Behavior</b>	
I do financial planning for the future	0.781
I put money aside on a regular basis for the future	0.832
I save now to prepare for my old age	0.776
I keep track of my money	0.748
I follow a careful financial budget.	0.835
I am very prudent with money	0.674
<i>Cronbach Alpha: 0.867</i>	
<b>Financial Threat</b>	
How uncertain do you feel about your current financial situation?	0.809
How much do you feel at risk about your current financial situation?	0.853
How much do you feel threatened about your current financial situation?	0.877
How much do you worry about your current financial situation?	0.884
How much do you think about your current financial situation?	0.810
<i>Cronbach Alpha: 0.902</i>	

**Source :** (Authors, 2024)

### Estimation strategy analysis

We applied ordinary least squares (OLS) robust standard error as our estimation method since it can reduce the impact of heteroscedasticity. To analyze the effect of self-control on financial threat and whether good financial behavior is a mediator of their relationship, we adopt a method that was suggested by (Baron & Kenny, 1986). First, the regression that investigates the relationship between the independent and the dependent variable is applied (1). Second, the regression which investigates the relationship between the mediator and dependent variable is conducted (2). Third, the regression which analyzes the relationship between an independent variable and mediator is conducted (3). If the coefficient of the independent variable is significant in explaining the dependent variable in model 1 and the mediator variable in model 3, while the coefficient of the mediator variable is significant in explaining the dependent variable in model 3, model 4 can be conducted (4). In Model 4, independent and mediator variables are included in the model. Mediation exists if the mediator variable could explain the dependent variable.

In this study, we include control variables in the regression model, such as socio-demographic variables, as in behavioral economic literature, socio-demographics play an important role in explaining individual behaviors and mitigating omitted variable bias. Furthermore, we also show a regression model without control variables to follow behavioral management and psychological literature. We expect that by showing the result using various

paradigms, we could show the consistency of our results. Below are the regression models that we will conduct:

$$fin\_threat = \alpha + \beta_1 self\_con + \gamma C + \varepsilon \dots\dots\dots(1)$$

$$fin\_threat = \alpha + \beta_1 fin\_behav + \gamma C + \varepsilon \dots\dots\dots(2)$$

$$fin\_behav = \alpha + \beta_1 self\_con + \gamma C + \varepsilon \dots\dots\dots(3)$$

$$fin\_threat = \alpha + \beta_1 self\_con + \beta_2 fin\_behav + \gamma C + \varepsilon \dots\dots\dots(4)$$

Financial threat perception is reflected by *fin\_threat*. This variable is the dependent behavior. *Fin\_behav* refers to good financial behavior. This variable is the mediator variable. *Self\_con* is a self-control measure which becomes the independent variable in our study. *C* refers to a vector of control variables. Model 1 is conducted to analyze the relationship between self-control and financial threat perception. Model 2 is applied to analyze the relationship between good financial behavior and financial threat perception. Model 3 is a regression that investigates the effect of self-control and good financial behavior on financial threat perception. Model 4 is applied to analyze the relationship between self-control and good financial behavior.

## RESULT

### Multicollinearity

Before we conduct the main analysis, we show the correlation matrix result in Table 3. This analysis is conducted to show whether any multicollinearity exists. The correlation matrix shows that there is no multicollinearity since there is no value that is higher 0.8 or below than -0.8.

### Self-control, Good Financial behavior, and Financial Threat Perception

Table 4 shows the relationship of self-control (*self\_con*) on financial threat perception (*fin\_threat*) and the relationship of self-control (*self\_con*) on good financial behavior (*good\_fin\_behav*). Model 1A shows that self-control (*self\_con*) has a negative effect on financial threat perception (*fin\_threat*) (P-value<0.01). This result is unchanged though control variables are included (see, Model 1B). In Model 2A, self-control (*self\_con*) is positively affected by good financial behavior (*good\_fin\_behav*) (P-value<0.01). This result remains though control variables are applied (see, Model 2B). In Table 5, good financial behavior has a significant negative coefficient, indicating a negative relationship between good financial behavior (*good\_fin\_behav*) and financial threat perception (*fin\_threat*) (P-value<0.01).

For control variables, there is no significant coefficient in model 1B and model 3B. In contrast, in model 2B, several control variables have significant coefficients. Education (*edu*) (P-value<0.05) and Sex (P-value<0.10) have a positive significant coefficient, while Status (P-value<0.01), and income equals less than IDR 3 million (P-value<0.01) negative significant coefficient.

The value of the F-test is significant in all models (P-value<0.01). It implied that the ability of all independent variables to simultaneously explain the dependent variable was significant. In other words, we had to include the right independent variable to explain the dependent variable.

**Table 3. Multicollinearity Test**

Source : (Authors, 2024)

	<b>fin_threat</b>	<b>fin_behavior</b>	<b>self_con</b>	<b>sex</b>	<b>married</b>	<b>child</b>	<b>edu</b>	<b>18-35 years old</b>	<b>&gt;35-50 years old</b>	<b>&lt;= IDR 3M</b>	<b>&gt;3-IDR 5 M</b>	<b>&gt; 5-IDR 10M</b>
<b>fin_threat</b>	1											
<b>good_fin_behavior</b>	-0.1415	1										
<b>self_con</b>	-0.2048	0.4066	1									
<b>sex</b>	-0.0539	0.1037	0.065	1								
<b>status</b>	-0.0333	-0.0968	0.0901	0.0652	1							
<b>Child</b>	-0.0252	-0.1123	0.0269	0.015	0.6152	1						
<b>edu</b>	-0.039	0.105	0.1234	0.0343	0.3252	0.1974	1					
<b>18-35 years old</b>	0.0454	0.018	-0.0681	0.0176	-0.3586	-0.4946	-0.1301	1				
<b>35-50 years old</b>	-0.0215	0.0138	0.0453	-0.0049	0.3003	0.390	0.0967	-0.8753	1			
<b>&lt;= IDR 3M</b>	0.0956	-0.1202	-0.0784	-0.1028	-0.1505	-0.1917	-0.1754	0.2183	-0.1545	1		
<b>&gt;3-IDR 5 M</b>	-0.067	0.0355	0.0374	-0.0351	0.0922	0.126	0.0193	-0.1015	0.0971	-0.6164	1	
<b>&gt;5-IDR 10M</b>	-0.0059	0.0843	0.0479	0.126	0.0779	0.0476	0.1586	-0.1131	0.067	-0.4227	-0.2875	1



**Table 4.** Regression of Self-Control on Financial Threat Perception and Good Financial Behavior on Financial Threat Perception

VARIABLES	(Model 1A) fin_threat	(Model 1B) fin_threat	(Model 2A) good_fin_be hav	(Model 2B) good_fin_be hav
self_con	-0.310*** (0.063)	-0.295*** (0.063)	0.417*** (0.045)	0.409*** (0.044)
Sex		-0.069 (0.078)		0.086* (0.048)
Status		-0.002 (0.104)		-0.178*** (0.063)
Child		0.010 (0.047)		-0.045 (0.033)
Edu		-0.005 (0.124)		0.173** (0.069)
Age (Reference: more than 50 years old)				
18 or more to 35 years old		0.161 (0.211)		0.192 (0.164)
more than 35 to 50 years old		0.138 (0.218)		0.248 (0.161)
Income (Reference: more than IDR 10 million)				
equals less than IDR 3 million		0.248 (0.154)		-0.177* (0.105)
more than IDR 3 M to IDR 5 M		0.093 (0.157)		-0.068 (0.106)
more than IDR 5 M to IDR 10 M		0.205 (0.163)		-0.023 (0.105)
Constant	4.401*** (0.215)	4.052*** (0.351)	2.408*** (0.155)	2.309*** (0.226)
Observations	589	589	589	589
R-squared	0.042	0.053	0.165	0.219
F test	23.90***	3.12***	85.59***	15.78***

**Source :** (Authors, 2024)

Standard errors in parentheses (). Asterisk (\*\*\*), (\*\*) and (\*) indicate statistically significant at 1%, 5%, and 10% significance level.

**Table 5.** Regression of Good Financial Behavior on Financial Threat Perception

VARIABLES	(Model 3A) fin_threat	(Model 3B) fin_threat
good_fin_behav	-0.209*** (0.064)	-0.200*** (0.067)
Sex		-0.067 (0.079)
Status		-0.058 (0.105)
Child		0.011 (0.047)
Edu		-0.008 (0.124)
Age (Reference: more than 50 years old)		
18 or more to 35 years old		0.234 (0.205)
more than 35 to 50 years old		0.208 (0.214)
Income (Reference: more than IDR 10 million)		
equals less than IDR 3 million		0.220 (0.159)
more than IDR 3 M to IDR 5 M		0.073 (0.162)
more than IDR 5 M to IDR 10 M		0.197 (0.169)
Constant	4.153*** (0.247)	3.807*** (0.380)
Observations	589	589
R-squared	0.020	0.033
F test	12.00***	1.77***

Source : (Authors, 2024)

Standard errors in parentheses (). Asterisk (\*\*\*), (\*\*) and (\*) indicate statistically significant at 1%, 5%, and 10% significance level.

### Testing the Role of Good Financial Behavior as a Mediator

In this section, we attempt to reveal whether good financial behavior mediates the relationship between self-control and financial threat perception. We can continue to analyze the mediation pattern as the result of model 1, model 2, and model 3 do not violate Barron and Kenny's mediation test. To prove our hypothesis, we include self-control and good financial behavior into one model to explain financial threat perception. The result of the regression is shown in Table 6.

**Table 6.** Regression of Self-Control and Good Financial Behavior on Financial Threat Perception

VARIABLES	(Model 4A)	(Model 4B)
	fin_threat	fin_threat
self_con	-0.267*** (0.069)	-0.255*** (0.069)
good_fin_behav	-0.103 (0.071)	-0.097 (0.074)
sex		-0.061 (0.078)
status		-0.020 (0.104)
child		0.006 (0.047)
edu		0.012 (0.125)
Age (Reference: more than 50 years old)		
18 or more to 35 years old		0.179 (0.205)
more than 35 to 50 years old		0.162 (0.213)
Income (Reference: more than IDR 10 million)		
equals less than IDR 3 million		0.231 (0.152)
more than IDR 3 M to IDR 5 M		0.086 (0.155)
more than IDR 5 M to IDR 10 M		0.203 (0.162)
Constant	4.648*** (0.282)	4.277*** (0.403)
Observations	589	589
R-squared	0.046	0.057
F test	12.65***	2.93***

**Source :** (Authors, 2024)

Standard errors in parentheses (). Asterisk (\*\*\*), (\*\*), and (\*) indicate statistically significant at 1%, 5%, and 10% significance level.

Our finding shows that self-control (self\_con) has a strong positive effect on financial threat perception (P-value<0.01), while a good financial behavior coefficient is insignificant in every model. This result remains though control variables are applied. This finding shows that mediation does not exist since the good financial behavior variable is not significant. Our

finding also shows that all of the control variables have an insignificant relationship with financial threat perception.

## DISCUSSION

Our studies found that there is no mediation pattern between the relationship between self-control, good financial behavior, and financial threat perception. To explain this phenomenon, we should use a physiological perspective rather than economic theory. According to Rosenbaum (1989) and Rosenbaum, (1993), self-control has a role in controlling disturbance which reduces overthinking. Thus, it reduces individual anxiety or stress. This function is called the redressive function. This function helps people to cope with uncertainty and stress though they may not have the capacity or resources to solve the problem.

Although mediation does not exist, our results provide some interesting findings in regressions that were conducted as a requirement for mediation analysis. Our result in Model 1 shows that there is a negative relationship between self-control and financial threat perception. Indeed, there are no previous studies that investigate financial threat perception since it needs specific situations to reflect threat (e.g., economic downturn). However, related previous studies exist though they are conducted in normal conditions, such as financial security perception. (Strömbäck et al., 2017) And our result is close with them. Furthermore, our finding in model 2 is similar. Biljanovska & Palligkinis, (2018) Self-control could encourage good financial behavior. In addition, as shown in model 4, our finding also shows that financial behavior cannot mediate the relationship between self-control on financial threat perception.

We also find some interesting findings in the control variables. In explaining financial threat perception, monthly income variables are relatively insignificant in every category. This finding is quite unique. This finding reflects that though people who have high incomes tend to have higher resources than individuals who have lower incomes, they tend to have relatively the same amount of afraid or anxiety to lose their wealth. This phenomenon is in line with prospect theory. (Kahneman & Tversky, 1979). This theory states that individuals suffer loss aversion. Specifically, individuals tend to react excessively in facing loss rather than profit.

Furthermore, our result shows that married people tended to have worse financial behavior than single or unmarried. We presumed that the needs of married people are higher than single or unmarried. Thus, they tend to conduct less saving behavior or less concern in conducting financial planning and budgeting. This finding is similar to Rha et al., (2006). Another finding is higher education helped individuals to have better financial behavior. This finding aligns with Rha et al., (2006). We assumed education increased the ability of individuals to be more responsible in spending their money.

## CONCLUSION

Our finding indicates that having good financial behavior is not enough to reduce stress or anxiety in facing a crisis. Indeed, having strong self-control will stimulate good financial behavior. However, good financial behavior cannot keep individuals to remain calm in facing uncertainty. Self-control is a direct mechanism for coping with stress. Strong self-control will prevent individuals from overthinking. Thus, it reduces stress and anxiety though they do not have the capacity to solve the problem as individual can ignore their problem easily. In addition, if they choose to overcome their problem, self-control may help them to gain information and asses strategy to formulate the solution as it promotes a clear mind.

## LIMITATION AND IMPLEMENTATIONS

For practical implication, regulators cannot presume good financial behavior as a solution to reduce panic and stress in an economic downturn. In other words, regulators cannot expect personal finance curricula to provide mental resilience in facing uncertainty. Perhaps, to overcome this problem, the regulator should take a look at the physiological paradigm to obtain the recommendation.

For further studies, financial stress can be conducted in experimental research. The researcher could make a simulation by giving them a dilemma which may raise their panic or anxiety. Furthermore, that kind of study could be conducted in normal conditions, providing an advantage to be conducted at any time.

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