

## **The Conditional Moderated Mediation Effect of Allowance on Financial Well-Being by Financial Self-Efficacy**

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### **Abstract**

*This paper mainly discusses the personal characteristics and life event effects of allowance on financial well-being of Fujian college students by financial self-efficacy. A survey was conducted among two Fujian university students in December 2018. The items included demographic variables, allowances, financial self-efficacy and subjective financial well-being. The results show that financial self-efficacy affects financial well-being, and allowance has conditional moderating mediating effects: (1) there is a significant two-factor interaction between financial self-efficacy and gender; (2) there is a significant two-factor interaction between financial self-efficacy and students' life event; (3) there is also a significant three-factor interaction among life event, gender, and financial self-efficacy; and (4) the conditional moderated mediation effect is determined by gender value. The important originality and contribution of this paper is to find out the different effects of different life events for different gender by using conditional mediation analysis process. This is the remaining deficiency of related research on the impact of life events on well-being. It is also the first case of financial self-efficacy on financial well-being.*

**Keywords:** financial self-efficacy, financial well-being, conditional moderated mediation

### **Introduction**

Individuals having less impulsive financial decision-making are farsighted planners (Thaler & Shefrin, 1981). After the financial crisis in 2008, it is revealed that people are faced with cognitive bias, overconfidence and lack of self-control, accompanied by high financial pressure, which affects personal life satisfaction and financial stability. Since then, international policy plans and research projects engaged in the national financial literacy assessment program, such as PISA (The Programme for International Student Assessment; i.e., OECD, 2017a), GermanySAVE (Sparen und Altersvorsorge in Deutschland; i.e., Börsch, Bucher, Coppola, & Lamla, 2015), Australia HILDA (The Household, Income and Labour Dynamics in Australia; i.e., New, Ribar, Ryan, & Wong, 2020). In a different way, some policy plans and research projects engaged in financial well-being (i.e., the Financial Protection Bureau, 2017; Brügggen, Högrevé, Holmlund, Kabadayi, & Löfgren, 2017; Sorgente & Lanz, 2017). In fact, the factors that affect financial well-being are complicated. Brügggen, Högrevé, Holmlund, Kabadayi, & Löfgren, pointed out seven possible influencing factors, including situation, intervention, social population, attitude and motivation of financial skills, financial practice, personal characteristics and life events. The personal characteristics also include self-efficacy, self-expansion degree, trust tendency and values compared with self-other.

However, Sorgente and Lanz (2017) reviewed 44 papers aimed at mapping key concepts of financial well-being in research. Those 44 papers measured financial well-being by satisfaction level of income, credit-card debt or loan payment, saving. Such concepts would be not appropriate for fulltime college student in this study. In addition to that, Inglehart (2002) compared man financial well-being to women financial well-being in 65 nations, and found that young women had higher levels of happiness than young men; Middle aged women and men did not significantly differ in levels of happiness; Older women have lower levels of happiness than older men. Inglehart’s research might answer the gender-age group different but not the gender-nation group different. In fact, Batzand Tay (2018) reviewed and made including remark that mean difference of gender in subjective well-being are small effect size. Do men and women differ in levels of subjective well-being? it depends. Accordingly, research on financial well-being is still in the exploratory stage, and there are few literatures to explore how gender and life event as conditional moderators, how they interact with allowance as mediation on financial well-being by financial self-efficacy. In this study we re-search gender difference “it depends” the conditional moderated mediation effects of school life events and gender on allowances in Fujian and Taiwan.

**Literature review**

**Financial Self-Efficacy**

Individual self-control ability is related to the concepts of self-concept, self-regulation, self-discipline and self-efficacy in the field of psychology. Solomon (1999) defined self as the basis for individuals to measure their own characteristics. Belk (1988) studied the relationship between consumers' material possession and self-identity, and found that people compare themselves with others, and evaluate material possession and self-identity, which is called extended self; Compared with Belk's self-concept, Bandura regards reference to others as the result of individual's observation of environmental stimulation and imitation learning of individual's changing behavior, and the interaction among individual, environment and behavior. Self-efficacy becomes a proxy mechanism of self-control and forms a set of self-regulation and self-adjusting social cognition and belief.

Bandura defines self-efficacy as: an ability to judge whether an individual can achieve a specific performance when he is granted a specific task, and to make good use of the individual’s skills to achieve self-control and confidence in dealing with life changes (Bandura, 1977a, 1977b, 1997, 2006). Bandura (2006) also specifically mentioned that when developing the self-efficacy belief scale, the application field, situation or event of the research should be considered. There is no self-efficacy belief scale that can be used for all purposes.

In essence, individual financial self-efficacy is planned and adjusted with life events, and is related to individual values such as money, consumption and saving (Luhmann, Hofmann, Eid, & Lucas, 2012). Table 1 shows that Lown (2011) modified Schwarzer and Jerusalem (1995) general self-efficacy scale to form financial self-efficacy belief scale based on Bandura's self-efficacy concept and Prochaska's Cross psychotherapy theory and behavior change theory.

Table 1 financial self- efficacy scale

Item (degree of agreement)
1. When there are unexpected expenses, it is very difficult to stick to my spending plan.
2. Moving towards my financial goals is a challenge.
3. When unexpected expenses occur, I usually have to use a financial card.
4. When faced with financial constraints, it is difficult for me to find a solution.
5. I lack confidence in my financial management ability.
6. I am worried that the money is not enough.

**Financial Well-Being**

Compared with the concept of self-efficacy, individuals also compare themselves and others, and make positive value judgments and emotional responses to the financial possession of life experience and the desire to maintain stability, which is called financial well-being. Diener's (1984) review study divided the well-being defined in the literature into three categories: (1) Pleasant quality of life conditions, which belong to objective well-being; (2) Life satisfaction that meets personal goals and expectations, belongs to subjective Sense of happiness; (3) Pleasant positive life experience. The subjective financial well-being scale used in this article was designed by Sharma and Alter (see Table 2 below). Sharma and Alter found that in the context of economic deprivation, people will trigger cognitive and emotional reactions due to financial deprivation and financial freedom. Attributing the greater value of owning scarce substances to others' acquisition of scarce substances (Sharma & Alter, 2012), that is, people who have scarce substances evaluate the substance higher than those who do not own the substance This view of the effect of "material possession" is different from the traditional market supply and demand price theory. The "material possession" referred to in this article summarizes pocket money and individual environmental access to substances.

Table 2 Financial well-being scale

Item(degree of better or worse)
1. Compared with last year's financial situation, my financial situation this year is
2. Compared with most people of the same age, my financial is
3. Compared with last year's material possessions, my material possessions this year are generally
4. Compared with the material possessions of most people of the same age, my material possessions are
5. Compared with last year, my degree of freedom to spend money is

**The Relationship between Financial Self-Efficacy and Financial Well-Being**

Research on self-regulation also found that self-efficacy affects cognitive well-being and emotional well-being. When considering personal incomes, financial self-efficacy traits are likely to cause individuals to experience varying degrees of financial well-being, and personal incomes affect the response intensity of cognitive well-being. It is higher than the response intensity that affects emotional well-being (Luhmann, Hofmann, Eid, & Lucas, 2012; Diener, Ng, Harter, & Arora, 2010; Kahneman & Deaton, 2010; Luhmann, Schimmack, & Eid, 2011).

Hsu, Tam and Howell (2016) also confirmed that individuals regard financial well-being as a state rather than a resource, and under high financial well-being, individuals tend to increase planned consumption and reduce unexpected consumption. In this research, we assumes that financial self-efficacy is positively correlated with financial well-being. Similarly, Serido and Shim conducted a ten-year survey in Arizona, USA: APLUS (The Arizona Pathways to Life Success for University Students). Participants have participated in multiple administrations since the first year of college students (Serido& Shim, 2017; Serido& Shim, 2014; Shim &Serido, 2011; Shim &Serido, 2010), after completing college education, finding a job, leaving to live with parents, committing to a relationship, being a parent, and standing at the age of 30. The results also found that financial self-efficacy can predict financial well-being more accurately than factors such as race, gender, and socioeconomic background.

H1: Financial self-efficacy and financial well-being are positively correlated

**The Relationship between Financial Self-Efficacy and Financial Well-Being: The Conditional Moderated Mediation Effect**

According to Siu, Lu, and Spector (2007), general self-efficacy has direct and moderating effects on employees' well-being in China. We extend to test if the same between financial self-efficacy and financial well-being.

## 1. Allowance as a mediator

Farrell, Fry and Risse (2016) claims financial self-efficacy emerges as one of the strongest predictors of the type and number of financial products that a woman holds. This section mainly discusses the conditions of family pocket money, which will be affected by gender differences and life events, and financial self-efficacy is mainly related to the management and adjustment of pocket money or living allowance.

Pampeland Adams (1992) explored the impact of pocket money or basic living expenses on economic well-being, but it is not easy to compare pocket money, living allowances and other social welfare and tax systems across borders or countries. Pampeland Adams studied 18 advanced measures from 1959 to 1986. In industrial democracies, the impact of demographic changes and political structure on family living allowances emphasizes that family living allowance is related to local GDP as high as .976, but family living allowance is only .678 related to local social security. In Europe, it is also concerned about how the tax reform of family allowances or living allowances affects a country's economic stability, social participation, and national birth rate (Rainer et al., 2014). In other words, pocket money is almost completely related to family income. Pampel & Adams emphasized that in an aging society, pocket money or living allowance is only a tax and welfare policy, which is publicly transferred to the next generation of young people to reduce the burden on children. Ozawa and Hong have similar views on the implementation of the Earned Income Tax Credit (EITC) welfare policy in the United States. They advocate indirect improvement of children's pocket money by increasing family living allowances, and the overall improvement of economic security through taxation policies. National economic well-being (Ozawa, 1995; Ozawa & Hong, 2003). The tax credit for raising each child in the United States in 2019 is US\$2,000 (approximately NT\$60,000 per person per year as a living allowance, and the minimum tax rate of 10% is converted into a salary income allowance of about NT\$52,500 per month). Even if tax-declaring families do not have to pay taxes, they can still receive a federal government tax refund of US\$1,400 (approximately NT\$42,000 for living allowance, and the child's living allowance is approximately NT\$3,500 per month); for EITC-declared households, one child is raised annually. The price is US\$3,526, 2 people are US\$5,828, and 3 or more people are US\$6,557 (IRS, 2019). Taiwan's 2019 comprehensive income tax has a similar approach. The basic living allowance for taxpayers and dependent relatives is set at NT\$171,000, and the equivalent salary income allowance is NT\$14,250 per month (Taxation Office, Ministry of Finance, 2018). Based on the above comparisons, this study sets the pocket money range of college students at NT\$10,000.

H2: Mediating effect of allowance on the relationship between financial self-efficacy and financial well-being is positive

## 2. Moderating effect of life events on the relationship between financial self-efficacy and allowance

The life events referred to in this paper are defined as the fact that in order to complete the university education, the China students in Fujian and Taiwan leave to live with their parents and relocate to live in Fujian or move in Taiwan. Life events and the adjustment efficiency of financial self-control and self-regulation after resettlement, how to affect allowance and financial well-being.

Luhmann, Hofmann, Eid and Lucas (2012) reviewed 188 journals and conducted a meta-analysis of 313 samples. They found that resettlement had a positive effect on well-being, and there was no difference between cognitive well-being and emotional well-being. This phenomenon stems from the fact that the individual wants to move before moving, which leads to psychological well-being, followed by a considerable amount of work and pressure to reduce the well-being. When moving, the well-being will be improved with the reduction of work and pressure. In the months before relocation, people may overestimate the negative impact of relocation. When these worries are no longer negative, subjective well-being will gradually increase. Luhmann, Hofmann, Eid, and Lucas suggest that the ability to adjust to life events affects well-being, but we should still explore the factors derived from personal characteristics, including gender and its moderating effect.

H3: Moderating effect of life events on the relationship between financial self-efficacy and allowance is interactive.

## 3. Moderating effect of gender on the relationship between financial self-efficacy and allowance

Few literatures discuss either how college students manage allowance or the relationship between financial self-efficacy and allowance hold. Many literatures attribute the wage gap between men and women to the difference

of self-confidence between men and women (such as Risse, Farrell, & Fry, 2018). Some researches explain the difference of individual self-confidence by subjective perception of financial literacy, and point out that men's financial literacy and self-confidence are higher than women's (such as Chen & Volpe, 2002; Bannier & Schwarz, 2018); A ten-year study conducted by serido and shim (2017) on young people aged 20-30 also found that in the four waves of surveys, men's financial self-efficacy was higher than women's.

H4: Moderating effect of gender on the relationship between financial self-efficacy and allowance is interactive.

**4. College student’s financial well-being: The conditional moderated mediation effect of financial self-efficacy**

The conditional moderated mediation effect is missing in financial well-being literatures. A study by Limbuand Sato(2019), college students’ credit card self-efficacy and credit card number have moderated mediation effect on the relationship between credit card literacy and financial well-being. Continuing the suggestions of Luhmann, Hofmann, Eid, and Lucas, in this study, we conduct the Hayes Model 11 conditional moderated mediation effect test procedure (Hayes, 2018), explore how life events affect well-being, moreover, explore how the interaction effect of gender × life events × financial self-efficacy on the relationship among financial self-efficacy, allowance and financial well-being.

H5: Financial self-efficacy, gender, and life events are interactive with mediating effect of allowance on the relationship between financial self-efficacy and financial well-being.

H6: Conditional moderated mediating effect of allowance is determined by the value of women’s life events.

**Methodology**

**Participants**

The survey was conducted by web based questionnaire during December 2018.420 college students from Fujian province, including 111 students living in Taiwan, 309 students living in Fujian. Final valid questionnaires are 410.

**Measures**

The coefficient Cronbach  $\alpha$  is used for reliability test. The results, financial self-efficacy scale (.880), and the financial well-being scale (.880), indicate that research measurement scales are credible. The validity test was analyzed by exploratory factor analysis, and the significance p value of Bartlett test of sphericity was <0.001. KMO value was .860 (>.80), which indicated that the variables were very suitable for factor analysis. The eigenvalues are larger than 1. A group of variables have higher factor load (both greater than .50) in the same construct factor by the maximum variation axis method. The load of factors on the other construct is low, which makes the dimension simplified. Table 3 factor load of variable (> .50) indicates high convergence efficiency.

**Table 3 Exploratory factor analysis of FWB and FSE**

	Factor	
	FWB	FSE
FSE1 When there are unexpected expenses, it is very difficult to stick to my spending plan.	.128	<b>.774</b>
FSE2 Moving towards my financial goals is a challenge.	.018	<b>.788</b>

FSE3 When unexpected expenses occur, I usually have to use a credit card.	-.004	<b>.664</b>
FSE4 When faced with financial constraints, it is difficult for me to find a solution.	.133	<b>.786</b>
FSE5 I lack confidence in my financial management ability.	.011	<b>.702</b>
FSE6 I am worried that the money is not enough.	.177	<b>.721</b>
FWB1 Compared with last year's financial situation, my financial situation this year is	<b>.765</b>	.088
FWB2 Compared with most people of the same age, my financial is	<b>.874</b>	.088
FWB3 Compared with last year's material possessions, my material possessions this year are generally	<b>.862</b>	.048
FWB4 Compared with the material possessions of most people of the same age, my material possessions are	<b>.837</b>	.077
FWB5 Compared with last year, my degree of freedom to spend money is	<b>.760</b>	.086

### Empirical Model

Financial self-efficacy, Financial self-efficacy, demographic variables and control variables were used with a stepwise regression method. The excluded variables included school grade and residence demographic variables, such as region, school affiliated, monthly working hours, etc., as well as housing support contingency items such as residence, rent, tuition, tenancy options, living expenses, student loan options, and work options. The regression model of multiple regression analysis is as follows:

$$FWB = \beta_0 + \beta_1 FSE + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

FWB, as outcome financial well-being, with intercept  $\beta_0$  constant.

FSE, as explanatory variable, with standardized regression coefficient  $\beta_1$

$X_2$  as demographic variable, with standardized regression coefficient  $\beta_2$

$X_3$  as housing support variable, with standardized regression coefficient  $\beta_3$

Selected six independent variables were partially merged and re-decoded. Life event (W) is coded as 1 for Fujian University students and 2 for Taiwan University students; gender (Z) is coded for females as 1, and males are coded as 2; allowance (M) is coded by the 7-rank Likert scale, and the group distance is 10,000 NT dollars; financial self-efficacy (X) and financial well-being (Y) are the mean of sum by the 5-rank Likert scale; working time is a covariate of allowance, the group interval is 20 hours, ranging from 0-100 hours or more, with a total of 7 ranks. The research model is shown in Figure 1.

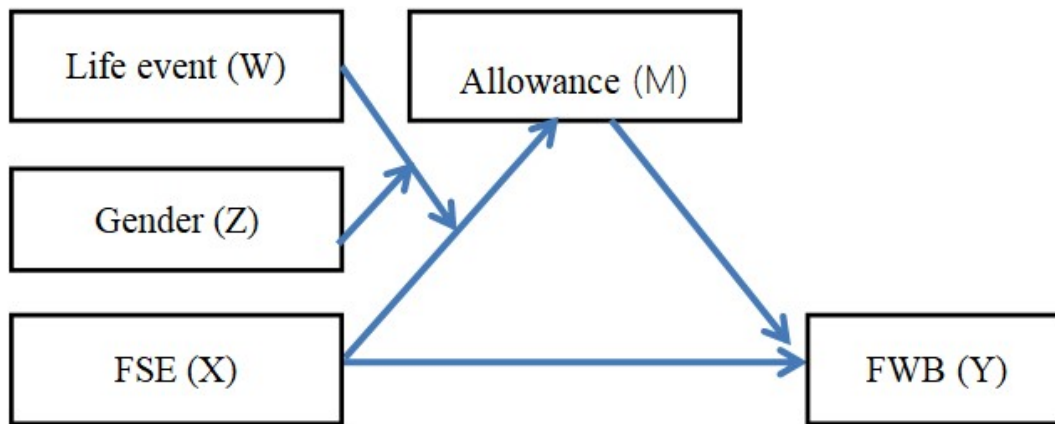


Figure 1. Research Model (Hayes Process Model 11)

This study assumes that the mediating effect of allowance is influenced by the interaction of three factors: financial self-efficacy, gender, financial self-efficacy and life events. Figure 1, according to Hayes process model 11 (see Hayes, 2018), this paper mainly tests the significance of the following regression coefficients:

1. Allowance and Financial well-being observation as outcome with direct effect.

$$\hat{Y} = i_Y + c'X + bM \dots \dots \dots (1)$$

$$\hat{M} = i_M + aX \dots \dots \dots (2)$$

2. Allowance observation as outcome with moderated moderating effect

$$\hat{M} = i_M + a_1X + a_2W + a_3Z + a_4XW + a_5XZ + a_6WZ + a_7XWZ \dots \dots \dots (3)$$

3. The moderated moderating effect of financial self-efficacy on allowance.

$$\theta_{X \rightarrow M} = a_1 + a_4W + a_5Z + a_7WZ \dots \dots \dots (4)$$

4. The indirect effect of financial self-efficacy on financial well-being

$$\theta_{X \rightarrow M} b = (a_1 + a_4W + a_5Z + a_7WZ) b = a_1b + a_4bW + a_5bZ + a_7bWZ \dots \dots \dots (5)$$

5. The indirect effect of financial self-efficacy on financial well-being by W conditional value.

$$\theta_{X \rightarrow M} b = a_1b + (a_4b + a_7bZ) W + a_5bZ \dots \dots \dots (6)$$

Life event conditional moderated mediating  $(a_4b + a_7bZ)$  coefficients is not zero.

6. The indirect effect of financial self-efficacy on financial well-being by Z conditional value.

$$\theta_{X \rightarrow M} b = a_1b + (a_5b + a_7bW) Z + a_4bW \dots \dots \dots (7)$$

Gender conditional moderated mediating coefficients  $(a_5b + a_7bW)$  is not zero.

## Results

### Descriptive and Correlation Measures

410 valid participants for online questionnaire, 39% (160) were female and 61% (250) were male. 36.6% (150) were junior, 30.7% (126) were senior. In terms of life events, 72.9% (299) of the respondents lived in Fujian and studied for Bachelor degree, while 27.1% (111) studied for double-Bachelor degree in Taiwan; The average monthly allowance of the respondents was less than 10000 NT dollars (79.3%, 325), followed by 10001-20000 NT dollars (16.3%, 67); 77.8% of the respondents were full-time students who did not need to work every week, followed by those who worked less than 20 hours a week (11.7%, 67). Most of the variables in this paper are correlated (0.1-0.3, Cohen, 1988).

Table 4 Descriptive Statistics

Variables		N	%
Gender	Female	160	39.0
	Male	250	61.0
College Student	freshman	73	17.8
	sophomore	61	14.9
	junior	150	36.6
	senior	126	30.7
Life Event	Fujian	299	72.9
	Taiwan	111	27.1
Allowance	10000 below	325	79.3
	10001~20000	67	16.3
	20001~30000	9	2.2
	30001~40000	3	0.7
	40001~50000	0	0
	50001above	6	1.5
Average monthly working hours	A/N	319	77.8
	20 below	48	11.7
	21 ~ 40	20	4.9
	41 ~ 60	6	1.5
	61 ~ 80	6	1.5
	81 ~ 100	4	1.0
	100 above	7	1.7

Table 5 Bivariate correlation coefficient

	FWB	FSE	Hours	Allowance	Life event	Gender
FWB	1					
FSE	.196**	1				
Hours	.041	.014	1			
Allowance	.124*	.020	.168**	1		
Life event	-.193**	-.134**	-.143**	.117*	1	
Gender	.205**	.112*	.004	-.069	-.030	1

\*\*p&lt;0.01 \*p&lt;0.05

## Model Test

### H1: Financial self-efficacy and financial well-being are positively correlated

The direct effect of financial self-efficacy on financial well-being is significant ( $b = 0.1832$ ,  $p < .001$ , 95% CI = 0.094–0.273, CI is not zero). Accepting the H1 hypothesis indicates that financial self-efficacy and financial well-being are positive correlated.

### H2: Mediating effect of allowance on the relationship between financial self-efficacy and financial well-being is positive

With financial well-being as outcome ( $R=0.300$ ,  $R^2=0.090$ ,  $p<0.001$ ), working hours as covariance ( $p<0.05$ , 95% CI = -0.053–0.078), financial self-efficacy and allowance as explanatory variables, the direct effect of allowance on financial well-being is significant ( $b = 0.1193$ ,  $p < .05$ , 95% CI = 0.021–0.217, CI is not zero), indicating that allowance and financial well-being is positive correlated. Taking allowance as outcome ( $R=0.300$ ,  $R^2=0.090$ ,  $p<0.001$ ), financial self-efficacy as the explanatory variable, life events as the first-order moderating



variable and gender as the second-order moderating variable, the direct effect of financial self-efficacy on allowance is significant ( $b = 1.3935, P < 0.01, 95\% \text{ CI} = 0.490 - 2.297, \text{ CI not zero}$ ), indicating that correlations of financial self-efficacy and allowance are positive. H2 is supported.

**H3: Moderating effect of life events on the relationship between financial self-efficacy and allowance is interactive.**

With allowance as outcome, the interaction between financial self-efficacy and life events is significant ( $b = -0.926, p < .01, 95\% \text{ CI} = -1.592 - -0.261, \text{ CI is not zero}$ ), accepting the H3 hypothesis, which means different life events and different financial self-efficacy will have differences allowance, that is the moderating effect of life events. In other words, the financial self-efficacy on allowance for college students studying in Fujian and Taiwan is different.

**H4: Moderating effect of gender on the relationship between financial self-efficacy and allowance is interactive.**

With allowance as outcome, the interaction between financial self-efficacy and gender is significant ( $b = -.760, p < .01, 95\% \text{ CI} = -1.303 - -0.216, \text{ CI is not zero}$ ), accepting the H4 hypothesis, which means different genders and different financial self-efficacy will have differences allowance. That is, male and female college students have different financial self-efficacy on allowance.

**H5: Financial self-efficacy, gender, and life events are interactive with mediating effect of allowance on the relationship between financial self-efficacy and financial well-being.**

With allowance as outcome, the three factors, financial self-efficacy, gender and life events, have a significant interaction ( $b = 0.510, p < .05, 95\% \text{ CI} = 0.116 - 0.902, \text{ CI is not zero}$ ), accepting the H5 hypothesis, indicating that different genders, different life events, and different financial self-efficacy have a conditional moderated mediating effect of allowance on financial well-being ( $R^2\text{-change} = 0.015, p < .05$ )

**H6: Conditional moderated mediating effect of allowance is determined by the value of women’s life events.**

Figure 2 is calculated from Table 5, showing that the indirect effects of financial self-efficacy are different between gender and life events: the financial self-efficacy of male in Taiwan for allowance is higher than that of female in Taiwan. Financial self-efficacy is higher than that of male in Fujian.

Testing the Conditional effects of the focal predictor at values of moderator, table 6 shows that the female students in Fujian have higher and significant financial self-efficacy, indicating that female college students studying in Fujian have the highest financial happiness; but when life events changes, the indirect effects of financial self-efficacy of female students in Taiwan have been reduced the most.

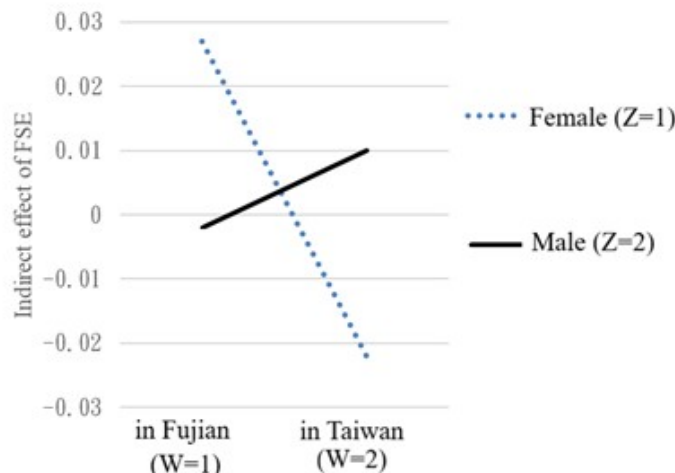


Figure 2. The indirect effect of financial self-efficacy on financial well-being

Note: The indirect effect  $\theta_{X \rightarrow M} b = (a_1 + a_4 W + a_5 Z + a_7 WZ) b = a_1 b + a_4 b W + a_5 b Z + a_7 b WZ = (1.394)(0.119) + (-0.926)(0.119)W + (-0.760)(0.119)Z + (0.509)(0.119)WZ = 0.166 - 0.110W - 0.090Z + 0.061WZ.$

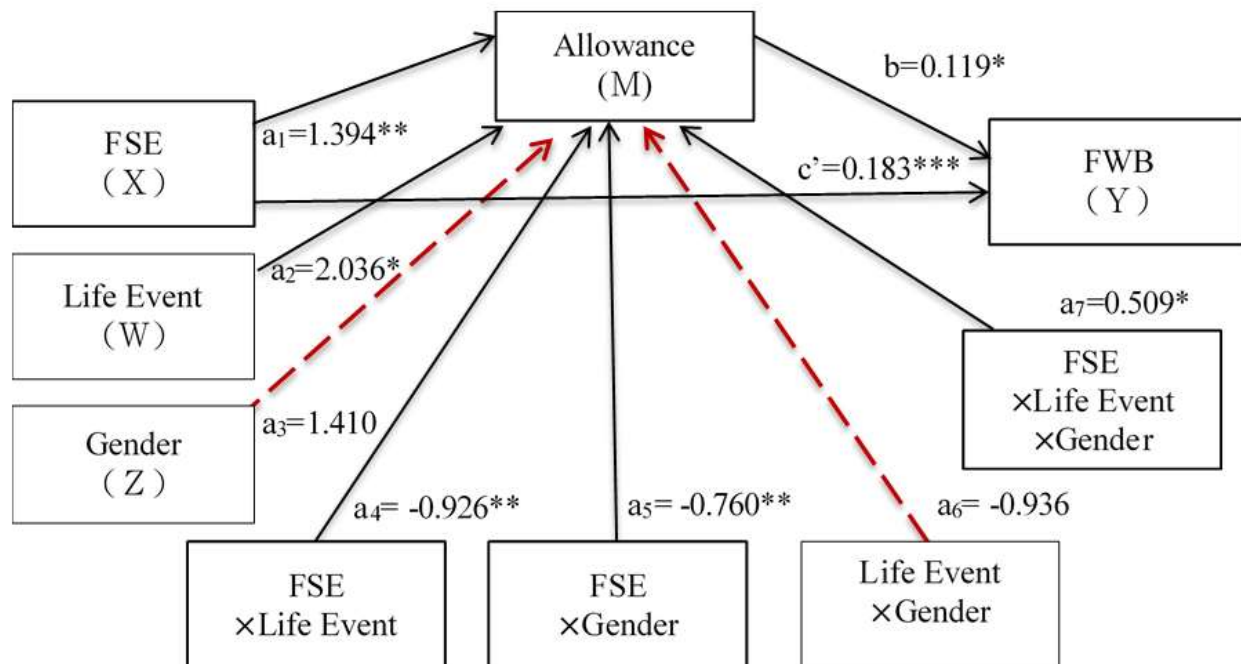


Figure 3. Path coefficient model

Table 6. The conditional moderated mediating effect of allowance on the relationship of financial self-efficacy and financial well-being

	Path	Outcome		
		Allowance	Path	FWB
Constant		-1.928(1.304)		2.623(0.151)***
FSE	$a_1$	1.394(0.459)**	$c'$	0.183(0.046)***
Life event	$a_2$	2.036(0.931)*		
Gender	$a_3$	1.410(0.793)		
FSE x Life event	$a_4$	-0.926(0.339)**		
FSE x Gender	$a_5$	-0.760(0.277)**		
Life event x Gender	$a_6$	-0.936(0.558)		
FSE x Life event x Gender	$a_7$	0.509(0.200)*		
Working hours		0.132(0.033)***		
Allowance			$b$	0.119(0.050)*
	$R$	0.300***		0.231***
			Index	95% bootstrap CI <sup>a</sup>
moderated mediating			0.061	-0.001–0.153
conditional moderated mediating				
ByEvent	Female		-0.050	-0.135–0.002
	Male		0.011	-0.018–0.038
the Conditional effects of the focal predictor		FSE		

in Fujian-female		0.217 * *		0.057–0.377
in Fujian-male		-0.034		-0.179–0.112
in Taiwan-female		-0.200		-0.465–0.066
in Taiwan-male		0.059		-0.133–0.251

Note:<sup>a</sup>Percentile bootstrap CI based on 5,000 bootstrap samples.

## Conclusion

### Financial Self-Efficacy Is Positively Correlated with Financial Well-Being.

Financial well-being is a state. When an individual is increasing planned consumption and reducing unexpected consumption, he or she is satisfied with material possession and financial stability. Financial self-efficacy is derived from Bandura's social learning theory. Self-efficacy is an individual's self-perception of the degree to which he or she can perform good behaviors, that is, an individual's self-evaluation of the degree of success of his or her behavior. The results of this study support that financial self-efficacy is positively correlated with financial well-being, and financial self-efficacy positively affects financial well-being.

Sorgente1 and Lanzl (2017) reviewed 44 studies on the financial well-being of 18-29-year-old youths, claiming that the definition of financial well-being is not the same as financial income or financial soundness. For 18-29 age, they are in the process of financial socialization. As they grow older, they will gradually reduce their financial dependence on families and increase their financial independence. Compared with the above 44 financial well-being studies, the relationship between financial well-being and other variables is explored from different macro and micro perspectives. The results of this study found the difference of financial self-efficacy of college students in Fujian and in Taiwan. The explanatory power of financial well-being has reached 23%, and the explanatory power of financial self-efficacy affecting allowance has reached 30%. In the future, we should further explore the financial socialization effects of consumer behavior and savings behavior, and the indirect effects of financial literacy on financial self-efficacy, so as to continue to explore more complex empirical models and explore related variables with more explanatory power.

### The Indirect Effect of Financial Self-Efficacy on Financial Well-Being: Conditional Moderated Mediating Effect

Based on the interaction between gender, school life events in Fujian and Taiwan and financial self-efficacy, this paper has a conditional moderated mediating effect on allowance and indirectly affects financial well-being. This paper argues that there has been a cultural determinism concept: "The poor raise a child, the rich raise a daughter" which is reflected in the OECD (2017A, 2017b) survey results. "Poor boys and rich girls" can also be explained by the empirical model of "conditional moderating mediating effect of allowance".

Firstly, the OECD (2017A) PISA global survey on financial literacy of students in 2015 shows that male students are more likely to get allowance than female students because they help with family affairs at home; Female students have a better chance of getting allowance than male students. Female do not need to help with family affairs and they receive grants from relatives and friends.

Secondly, the indirect effect of financial self-efficacy on financial well-being of female students is higher than that of male students. This result also echoes the OECD (2017b) 2015 PISA students' financial literacy self-report questionnaire survey. It is found that 68% of the students' allowance in Beijing, Shanghai, Jiangsu, Guangdong and other areas of mainland China comes from grants from relatives and friends, and 45% from their families. Female mainland students who study in Taiwan may have limited sources of money because they are away from their hometown and relatives. The indirect effect of financial self-efficacy on financial well-being is reduced due to the conditional moderated mediating effect of allowance.

In addition, different from previous studies, female student's financial self-efficacy is higher than male student's in Fujian, which may be related to WeChat payment and planned consumption habits, and more opportunities to live together with parents. On the contrary, female student's financial self-efficacy is lower than male student's in Taiwan. The indirect effect of financial self-efficacy of female students in Fujian accounted for

13% of the total effect, but the indirect effect of financial self-efficacy of female mainland students in Taiwan decreased sharply to - 14%. The reason, for why lower financial self-efficacy of Fujian female students lived in Taiwan, might be related to cash transactions in Taiwan, convenience of shopping in department stores and shopping malls, leaving hometown and living environment with higher mass transportation fee. Those leads to the weakening of financial self-efficacy. However, the effect of financial self-efficacy of female students in Taiwan is lower than that of male students, which is consistent with the findings in the literature.

Allowance is included in PISA, SAVE, HILDA and other large-scale surveys. HILDA focuses more on how to have financial independence and sense of responsibility for money management in the process of transition from teenagers to adults. HILDA also includes major life events into 17 waves of surveys, and has never been absent. Major life events are regarded as an important source of financial well-being or financial stress (New, Ribar, Ryan, & Wong, 2020); However, there is no research to establish a more explicit empirical model for these variables. This study reveals how a single life event, studying in Fujian and Taiwan, interacts with the culture of supporting "Poor boys and rich girls", which makes allowance have a conditional moderated mediating effect.

### **Suggestions for Future Research**

There are no consistent results on gender differences in subjective well-being in the literature. Batz and Tay (2018) concluded that it depends on the situation, which seems to call for the so-called "conditional moderating mediating effect of allowance" in this study. However, in addition to allowance, there are other explanatory variables highly related to financial self-efficacy and financial well-being, such as politics, economy, laws and regulations, social culture, market and so on.

In addition, as suggested by Luhmann, Hofmann, Eid, and Lucas (2012), the adaptive effect of life events, that is, the interaction between financial self-efficacy and life events, should be repeatedly measured. Not only the expected effect before life events, the current effect during the study period, but also the late retention effect should be considered.

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