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Sustainable Financial Education and Consumer Life Satisfaction

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Abstract: Sustainable financial education is defined as the continuous input of money and time on financial knowledge education after formal schooling. The purpose of this paper is to examine the impact of sustainable financial education on consumer life satisfaction. Utilizing the dataset of Household Consumer Finance of Chinese Urban Residents in 2012 by the China Financial Research Center of Tsinghua University, the variable of sustainable financial education is constructed through the variables of the necessity of financial education, the money spent on financial education, and the time spent on financial education. To improve the estimation results, order probit regression is utilized. The results indicate that financial education is significantly positive to consumer life satisfaction only for a consumer with higher education. Consumers who regard financial education to be of high necessity will feel more satisfied. The results also show that consumers who spend more money and time on financial education after formal schooling will be more satisfied. Moreover, the sustainable impacts of financial education on consumer life satisfaction are verified. In addition, this study provides empirical evidence that suggests that sustainable financial education positively contributes to consumer life satisfaction. The results have implications for policymakers to take measures in enhancing sustainable financial education to improve consumer life satisfaction.

Keywords: sustainable financial education; consumer life satisfaction; the necessity of financial education; ordered probit regression

1. Introduction

In recent decades, consumer financial education has drawn the attention of consumer financial researchers, policymakers, and practitioners [1–4]. Consumer financial education is related to forms of education in terms of basic financial knowledge for consumers in academic institutions and workplaces. Improving the degree of consumer financial literacy and their degree of financial capability through sustainable financial education is believed to play a significant role in enhancing consumer life satisfaction [5,6].

Life satisfaction is defined as a comprehensive psychological indicator that measures the quality of life of a person [7]. It can be divided into two kinds, namely, general life satisfaction and special life satisfaction [8]. General life satisfaction refers to the subjective evaluation that sets the standards for one's quality of life. Special life satisfaction refers to the specific evaluation that is based on different areas of life, such as family satisfaction, health satisfaction, job satisfaction, school satisfaction, community satisfaction, or consumer satisfaction. According to its definition and classification, special life satisfaction is more specific than general life satisfaction. This study differs from previous research

in that it focuses on the roles of sustainable financial education in a special domain of consumer life satisfaction.

As one aspect of consumer subjective wellbeing, consumer life satisfaction refers to a subjective state in which consumers allocate economic resources to live a desirable life [9]. Subjective wellbeing incorporates positive emotions, negative emotions, and life satisfaction, and is defined as a broad category of phenomena that includes people's emotional responses, domain satisfaction, and global judgments of life satisfaction [10]. Moreover, Malhotra [11] suggested that consumer life satisfaction is related to the consumers' subjective evaluation regarding their quality of life based on set criteria and is used to measure important parameters of a society's life. Although consumer life satisfaction is a specific domain of life satisfaction, it is usually interchangeable with consumer happiness or subjective wellbeing [12]. Hence, consumer life satisfaction is the content of the study of consumer subjective wellbeing and an important cognitive component of consumer subjective wellbeing. Consumer life satisfaction is also considered to be an important part of positive psychology [13], as well as a cognitive and judgmental sense of wellbeing based on personal expectations of how one's life matches certain internal standards [14]. Hence, consumer life satisfaction is a comprehensive judgment of consumers' daily life. As a cognitive factor, it affects consumers' emotional experiences, thereby affecting the orientation of consumer life goals and the orientation of behavioral pursuits, which will have an important impact on most consumers and even the society. In this study, consumer life satisfaction was measured by consumers' responses to their overall subjective evaluation of their current living situation, which incorporated the consumers' cognitive, judgmental, and emotional sense of subjective wellbeing.

Consumer financial education is defined as the basic financial knowledge education for consumers in high schools, universities, and workplaces [15]. In the United States, policymakers improve and strengthen consumer financial capabilities through education on basic financial knowledge. A survey from the undergraduates at an Australian university showed that financial education led to a positive increase in objective and subjective financial literacy, which improved personal financial decision-making [16]. In general, financial education can be divided into professional financial education and public financial education [17]. Professional financial education refers to the financial knowledge found in professional education for college students and other groups by the methods of teaching. Public financial education refers to education for all citizens about the common sense of financial knowledge and financial science. Public financial education has a wide range of content, mainly including educating citizens to correctly use financial knowledge, choosing a reasonable way for managing their money, effectively avoiding financial risk, and improving their financial awareness and financial literacy. In this study, financial education refers to consumers' professional knowledge from academic education as well as common knowledge and sense from public training and workplace education. With the emergence of more financial products, consumers make their financial decisions increasingly through financial knowledge. However, Wagner and Walstad [18] argued that financial education appeared to have more positive and stronger effects on long-term behaviors with less timely feedback, and the benefits of financial education may differ based on the time horizon for the financial behaviors. Hence, sustainable financial education is of significance for improving consumers' financial literacy and capability, which should end in good financial decision-making. Unlike prior research, this study focuses on the impact of the sustainability of financial education on consumer life satisfaction.

Previous studies primarily focused on the relationship between financial education and workplace satisfaction [19], job satisfaction [20], and financial satisfaction [21]. This paper further studies the impact of sustainable financial education on consumer life satisfaction. To the best of our knowledge, there is no study that focuses on the definition of sustainable financial education and its impact on consumer life satisfaction. In terms of the comprehensive definition developed by Moore et al. [22], sustainability is considered as follows: (1) after a defined period of time, (2) a program and/or implementation strategies continue to be delivered and (3) individual behavior change is maintained; (4) the program and individual behavior change may evolve or adapt while (5) continuing to produce benefits for individuals. To be more specific, in this study, sustainable financial education is defined as

after a period of time of learning financial knowledge, consumers improve their financial knowledge and behaviors, and are available to make rational financial decisions, which positively contributes to life satisfaction. It is practically significant for policymakers and consumers to investigate the impact of sustainable financial education on consumer life satisfaction. This study contributes to encouraging policymakers to formulate policies to strengthen the guidance and promotion of financial education, as well as promote financial intermediaries and practitioners to actively improve the level of consumer financial education and further enhance consumer life satisfaction.

The purpose of this study is to examine the impact of sustainable financial education on consumer life satisfaction. The remainder of this paper is structured as follows. Section 2 reviews the literature about financial education and consumer life satisfaction, and then presents the hypotheses with regard to the impact of sustainable financial education on consumer life satisfaction. Section 3 describes the sample data, model specification, variable measurements, and statistical descriptions of this study. Section 4 presents the empirical results. Section 5 offers the conclusions and implications.

2. Previous Research and Hypothesis

2.1. Previous Research on Consumer Life Satisfaction

Life satisfaction is a subjective and comprehensive evaluation index that is influenced by various factors. As early as the 1990s, Diener [23] discussed the factors influencing the life satisfaction of American residents from four aspects, including one's family relationships, entertainment, social life, and health status by self-evaluation. These factors have been divided into three categories: personal characteristics, microeconomic variables, and macroeconomic variables. In detail, the personal characteristics include sex, race, age, health, marital status, education level, personality, and interpersonal relationships. Microeconomic variables include income, employment status, and so on. Macroeconomic variables include the state of one's employment situation, inflation, social support, political system, and political identity. For cross-country level research, scholars investigated the determinants of life satisfaction from political, economic, institutional, and human development and cultural aspects [24].

More specifically, scholars have paid more attention to examine the influence factors of life satisfaction. Fu et al. [25] analyzed gender differences in life satisfaction in Taiwan and Australia and suggested that the life satisfaction of women in both countries was higher than that in men. Age and health status are also considered as important indicators of people's life satisfaction. Utilizing data from 1033 farmers in three areas of Beijing, Liaoning, and Hebei and an ordered logic model, Li et al. [26] suggested that age and health status had a significant positive impact on life satisfaction. They indicated that the positive correlation between age and life satisfaction can be explained by the expectation theory. The older people had experienced the development of China's reforms and opening-up to the world for more than thirty years and had a more profound experience of life change, so their life satisfaction was higher. Meanwhile, Li et al. also indicated that the healthier the residents, the higher the life satisfaction they would have.

Income situation is one of the most important factors affecting consumer life satisfaction in microeconomic variables. Vita et al. [27] compared the various household groups by testing the influence of socio-economic variables that were typically associated with consumer life satisfaction and suggested that the positive influence of income was verified. In general, income is positively correlated with consumer life satisfaction. Employment brings consumers not only an increase in income but also an improvement in their life satisfaction. Through an analysis of data from 94 countries, Stanca [28] suggested that in some wealthier and highly employed countries, unemployment had a greater negative impact on people's life satisfaction. Furthermore, after controlling for individual-specific fixed effects, previous studies indicated that unemployment has a large and negative effect on life satisfaction by creating non-pecuniary and psychological costs [29].

The two main goals of contemporary macroeconomic regulation and control are to increase employment and stabilize prices. Therefore, unemployment and inflation are negatively related to

consumer life satisfaction. Utilizing a Latin American dataset on life satisfaction, Ruprah and Luengas [30] found that the unemployment rate and inflation would reduce consumer life satisfaction. In addition, using data for 2001 to 2011, Abounoori et al. [31] investigated the impact of the unemployment rate and inflation on life satisfaction of European Union countries and Iran, and they concluded that the unemployment rate and inflation had a significant negative impact on life satisfaction, and the negative effect from unemployment was much higher than that of inflation. Therefore, in order to increase consumer life satisfaction, increasing employment is the preferred policy. In addition to the above two macroeconomic variables, social support, the political system, and political identity will affect consumer life satisfaction as well.

2.2. Previous Research on Financial Education

In recent decades, consumer financial education has been increasingly highlighted in the United States, and it has gradually developed globally as well. Policymakers consider financial education as a necessary solution to the increasingly complex financial decisions of consumers. In addition, financial education has a significant impact on the research of financial decision making [32]. Financial education enables consumers to learn financial knowledge and improve their financial literacy. With the continuous deepening of finance knowledge needed and the quantity of financial products continuing to increase, the financial market continues to present a trend of greater complexity, which puts forward higher requirements on consumers' financial knowledge. However, there is evidence that consumers lack this financial knowledge [33,34], and this often leads them to make mistakes in substantial financial decision-making. Prior studies have also suggested that even those with higher education may be as ignorant as those with lower education in financial knowledge [35,36]. Therefore, it is particularly important for consumers to strengthen financial education. Hastings and Mitchell [37] argued that consumers having trouble with financial decisions were specific to various cohorts; for instance, although the improvement in financial literacy through financial education was significantly correlated with wealth, it appeared to be a weaker predictor of sensitivity to framing in investment decisions. In addition, these financial education courses, which are related to financial knowledge, have a long-term positive effect on consumers [38]. Thus, sustainable financial education in the long-term is of significance in improving consumer life satisfaction.

Financial education positively contributes to increasing and improving consumer participation in the financial market and then enables consumers to choose financial assets rationally. With the development of the financial market, consumers are increasingly active in the financial market, and the field of consumer finance has been significantly focused on this [39]. Yin et al. [40], by using the dataset of the Chinese Household Finance Survey (CHFS), found that the promotion of financial knowledge would promote consumer participation in the financial market. Chen et al. [41] suggested that consumers with a higher education tend to participate in the financial market and are thereby more satisfied. With an increase in investment experience, the probability of consumer investments in risky assets also improves. More specifically, using the family survey data from the Central Bank of Holland, Rooij et al. [42] indicated that many family members have low financial knowledge. In particular, the lack of financial knowledge will restrict the participation of these families in the stock market, and the proportion of asset selection will be reduced accordingly.

Financial education is positive in promoting the stability of the market and further promoting the healthy development of national finances. By improving consumers' financial knowledge and then improving their financial literacy, financial education positively contributes to eliminate uncertainties and risks, and thereby to decrease consumer losses when investing in risky financial assets [43]. From the world financial crisis in 2008 and the turbulence of China's stock market in 2015, it is shown that most consumers do not invest rationally, so the coming of the financial crisis has brought serious shock to these consumers [44]. At the same time, the outbreak of the financial crisis also caused stock market unrest, leading to the paralysis of the national financial system. Prior studies have suggested that the improvement of the level of financial education for the residents of a country or region is

positive in enlarging the demand for complex financial products by local residents [45]. The experience of this kind of demand further promotes the country's continuous development of financial products, and thus promotes the positive development of national finance.

2.3. The Impact of Sustainable Financial Education and Consumer Life Satisfaction

Most previous studies have suggested that financial education is positive in increasing consumers' financial knowledge and financial literacy, cultivating consumers' sense of rational investment, and improving their life satisfaction [46–48]. There is evidence that higher requirements of financial education contribute to increase individuals' financial knowledge, and thereby, are positively associated with fewer defaults and higher credit scores among young adults [46]. It can also promote the stability of the market, and thus promote the healthy development of the national financial picture. In addition, financial education enables consumers to learn about financial knowledge and improve financial literacy, and thus to raise consumer life satisfaction. Hira and Loibl [47] examined the relationship between financial education and consumer life satisfaction in the workplace by analyzing the sample survey data of employees in the national insurance company, and the result revealed that employees who participated in financial education are more likely to have a high level of financial literacy. In addition, they also suggested that employees with financial education are more confident about future financial conditions, and therefore have higher job satisfaction and life satisfaction. In addition, Chin and Williams [48] examined the impact of online financial education on consumers' financial decisions, and the results showed that older participants and first-time home buyers are more likely to look up home-buying and mortgage education websites when framing financial decisions. Thus, financial education in the long-term is of importance in consumers' daily financial decisions, which are closely associated with their life satisfaction.

In this study, sustainable financial education is defined as after a period of time of learning financial knowledge, incorporating formal education in high school or university and informal education in workplaces, communities, and training programs organized by government sectors and financial institutions. In this way, consumers improve their financial knowledge and behaviors and are able to conduct desirable financial behaviors and thereby make rational financial decisions. More specifically, this study constructs two types of variables, subjective and objective, to measure sustainable financial education. The subjective measure is specific to consumers' overall evaluation about the necessity of financial education. Moreover, the objective measure is the resource input in financial education, such as time and money. Using the sampling data of survivors of domestic violence, Postmus et al. [49] indicated that survivors of domestic violence improved their personal financial management skills through training courses of financial education, and ultimately, improved their own life satisfaction. There is also evidence that some social workers had their living costs increased due to the global recession, and their real incomes had declined [50]. However, because of a lack of financial knowledge, these social workers found it difficult to make reasonable investment decisions and plan their own funds, and hence their life satisfaction decreased as well. Focusing on the disagreement regarding the effectiveness of financial education programs, Lusardi et al. [51] investigated how financial education programs optimally shape key economic outcomes and showed that the more effective programs provided a follow-up in order to sustain the knowledge acquired by employees via the program. In such an instance, financial education delivered to employees around the age of 40 can raise savings at retirement by close to 10%, while one-time education programs produced short-term and only a few long-term effects on life satisfaction. Hence, sustainable financial education is important and positive for improving consumer life satisfaction in the long-term. According to Peeters et al. [52], prior knowledge and intended behavior, namely, having accepted financial education and considering the necessity of financial education in this study, had positive effects on sustaining financial knowledge. In addition to the subjective measure of sustainable financial education, this paper proposes the two following hypotheses:

Hypothesis 1 (H1). *Given economic resources and other control variables, consumers who have accepted financial education have a higher life satisfaction.*

Hypothesis 2 (H2). *Given economic resources and other control variables, consumers who think it is more necessary to receive financial education will be more satisfied.*

Xiao and Porto [53] explored the direct or indirect effects of financial education on consumers' financial satisfaction by using the data of the National Financial Capacity Study (NFCS) in 2012, and the indirect effects were mediated by financial literacy, financial behavior, and financial capabilities. The results showed that financial education may indirectly affect consumers' financial satisfaction through financial knowledge, financial behavior, and financial capacity. Therefore, policymakers are encouraged to initiate and establish some effective financial education programs to improve consumer life satisfaction. Atkinson et al. [54] also indicated that financial education can improve the level of consumer financial literacy and encourage consumers to conduct rational financial behavior, thereby improving consumers' financial ability and improving their life satisfaction. It is evident that the changes in financial behaviors require a period of time, and programs involving financial education may cause an increase in training costs [52]. From the objective perspectives of measuring sustainable financial education, this implies that the higher the financial education level of consumers, the more money and time they spend on sustainable financial education after their formal schooling is complete, and the higher their life satisfaction is. Thus, we put forward the following hypotheses:

Hypothesis 3 (H3). *Given economic resources and other control variables, money and time input in financial education after formal schooling positively contributes to consumer life satisfaction.*

Hypothesis 4 (H4). *Given economic resources and other control variables, sustainable financial education is positively associated with consumer life satisfaction.*

3. Methodology

3.1. Data

The dataset in this study is from the survey data of Household Consumer Finance in China's Urban Residents in 2012. Because the survey has no updated dataset, only cross-sectional data from 2012 is used in this study, which was published by the Center of China Financial Research of Tsinghua University. The sample is distributed in 24 cities across China. The cities are Anqing, Baiyin, Baotou, Beijing, Guangzhou, Guilin, Haikou, Jilin, Jinan, Kunming, Luoyang, Nanchang, Panzhihua, Quanzhou, Shanghai, Shenyang, Shuozhou, Urumqi, Wuhan, Xi'an, Xuzhou, Yichun, Chongqing, and Zhuzhou. The cities in this study are from 24 provinces, respectively, that cover more than 75% of provinces all over China. Hence, the dataset can be considered to be nationally representative. The respondents were all over the age of 25. The survey involved family assets and liabilities, income and expenditure, financial planning, financial education, and so on. In order to avoid systematic errors caused by the inconsistency among questionnaires among household members, this study primarily utilizes the survey data of each household head. Therefore, the sample size is 3122. The dataset incorporates the basic information of the household members, the situation of the respondents' financial education, and their subjective attitudes.

3.2. Model Specification and Variables

This study primarily investigates the impact of sustainable financial education (*susfin_edu*) on consumer life satisfaction (*lifeSat*). Based on our hypotheses, the basic regression model is specified as follows:

$$lifesat_i = \alpha_0 + \sum_{j=1}^{N} \phi_j * susfin\_edu_{j,i} + \sum_{k=1}^{M} \varphi_k * cv_{k,i} + \varepsilon_i \tag{1}$$

In Equation (1), the subscript i of the variables represents sampling consumer individual, the superscript N stands for the numbers of sustainable financial education-related variables, and the superscript M is the number of control variables. In addition, ε represents the random disturbance term.

In detail, $lifesat$ indicates consumer life satisfaction and $susfin\_edu_j$ represents the related variables of sustainable financial education with the subscript j. For instance, sustainable financial education-related variables incorporate whether considering that financial education is necessary or not (*the necessity of financial education*), money and time spent on financial education after formal schooling (*the money spent on financial education* and *the time spent on financial education*) (see Table 1). In addition, whether household members have ever accepted financial education (*having accepted financial education*) is introduced as well. More specifically, cv_k denotes the control variable k. In this study, control variables incorporate age, gender (two categories: female vs. male), marital status (two categories: married and not married), education (three categories: high school or lower, undergraduate and some college, and master degree or higher), household size, health status of household members (1—not at all healthy, 4—very healthy), having stationary income (1—not at all stationary, 10—extremely stationary), and work in government or general firms. To address the associations between household assets and life satisfaction, the three asset-holding behaviors include having a house, having a private business, and having a car.

Table 1. Variable specification.

Variable label	Attribute
Consumer life satisfaction	"Are you satisfied with your current life?" 1—not at all satisfied, 10—extremely satisfied
Having accepted financial education	"Have you or your spouse ever received financial education about professional knowledge in national education?" 1 = yes, 0 = no
The necessity of financial education	"Do you think it is necessary for your household to receive financial education?" 0 = no answer, 1 = not necessary, 2 = ordinary necessary, 3 = necessary, and 4 = extremely necessary
The money spent on financial education	"How much monthly income does your household spend on financial education?" 1 = no money input, 2 = less than 5%, 3 = 5%–10%, 4 = 10%–15%, and 5 = more than 15%
The time spent on financial education	"How much time do you spend on learning financial knowledge each week?" 1 = no time input, 2 = less than 1 h, 3 = 1 to 2 h, 4 = 2 to 3 h, 5 = 3 to 5 h, and 6 = more than 5 h
Sustainable financial education	A sum of the products of *Z*-scores of the necessity of financial education, the money spent on financial education, and the time spent on financial education with their specific variance contribution ratios, respectively
Age	The age of the respondents; all of the sampling respondents are older than 25 years
Gender	1 = male, 0 = female
Being Married	1 = married, 0 = not married
High school or lower	1 = yes, 0 = no
Undergraduate and some college	1 = yes, 0 = no
Master degree or higher	1 = yes, 0 = no
Household size Health status of household members	The population size of the household 1—not at all healthy, 4—very healthy

Table 1. *Cont.*

Variable label	Attribute
Monthly income	1 = 1001 to 1500 Yuan, 2 = 1501 to 2000 Yuan, 3 = 2001 to 2500 Yuan, 4 = 2501 to 3000 Yuan, 5 = 3001 to 4000 Yuan, 6 = 4001 to 5000 Yuan, 7 = 5001 to 6000 Yuan, 8 = 6001 to 10,000 Yuan, 9 = 10,001 to 15,000 Yuan, 10 = 5,001 to 20,000 Yuan, 11 = 20,001 to 30,000 Yuan, 12 = 30,001 to 50,000 Yuan, and 13 = greater than 50,000 Yuan
Having stationary income	"If the stability of your household income has been divided into 10 levels, which level is identical to your family?" 1—not at all stationary, 10—extremely stationary
Having a house	1 = yes, 0 = no
Having a car	1 = yes, 0 = no
Having a private business	1 = yes, 0 = no
Work in government or general firms	1 = yes, 0 = no

Note: All of the binary variables are appropriately recoded specifically to the corresponding variables from the original dataset.

3.3. Estimation Method

According to the survey data, the variable of consumer life satisfaction (*lifesat*) is not a continuous variable, but an ordered discrete variable (ranging from 1—not at all satisfied to 10—extremely satisfied). If the traditional OLS method is utilized for regression estimation, there may be problems of robustness and accuracy. Therefore, in this study, the OLS regression method is conducted and then ordered probit regression is applied to improve the estimated results. Let $lifesat* = X'\beta + u$, and $lifesat*$ is anon-observable variable, $X' \in (susfin\_edu, cv)$ and $u \in (u_1, u_2, \cdots, u_n)$. Meanwhile, assume that the choices of consumer life satisfaction ($lifesat^*$) follow the following rules,

$$lifesat_i = \begin{cases} = 1, & if\ lifesat_i^* < u_1 \\ = 2, & if\ u_1 < lifesat_i^* < u_2 \\ = 3, & if\ u_2 < lifesat_i^* < u_3 \\ \quad \vdots \\ = Q, & if\ lifesat_i^* > u_n \end{cases} \tag{2}$$

In Equation (2), $u_1 < u_2 < u_3 \cdots < u_n$ are parameters to be estimated, which are also considered as the cutoff points. In addition, Q is the quantity of the choices of consumer life satisfaction. Assume that u follows the probit distribution N (0, 1), thus

$$\begin{aligned} \Pr(lifesat_i = 0|X) &= \Pr(lifesat_i^* \le u_1|X) \\ &= \Pr(X'\beta + \varepsilon \le u_1|X) \\ &= \Pr(\varepsilon \le u_1 - X'\beta) = \phi(u_1 - X'\beta) \end{aligned} \tag{3}$$

Furthermore,

$$\begin{aligned} \Pr(lifesat_i = 1|X) &= \phi(u_2 - X'\beta) - \phi(u_1 - X'\beta) \\ \Pr(lifesat_i = 2|X) &= \phi(u_3 - X'\beta) - \phi(u_2 - X'\beta) \\ &\quad \vdots \\ \Pr(lifesat_i = n|X) &= 1 - \phi(u_{n-1} - X'\beta) \end{aligned} \tag{4}$$

Through ordered probit regression to improve the results of OLS regression, the probability distribution function of consumer life satisfaction is more identical to the characteristics of dependent variable data, which ensures the robustness and accuracy of the empirical results. In addition, the

ordered probit regression is utilized to solve the likelihood function, and the MLE estimator can be obtained, which further improves the accuracy of the empirical results.

3.4. Statistical Description

Consumer life satisfaction is a subjective indicator that reflects a consumer's attitude with regard to overall life evaluation. Therefore, this study primarily employs the subjective answer of "Are you satisfied with your current life?" to measure a consumer's level of life satisfaction (1—10 points scale, 1—not at all satisfied, 10—extremely satisfied). In terms of the survey data, 8.46% of the consumers are very satisfied, 31.90% are at the 8 and 9 points of satisfaction, 41.90% are at the 5–7 degree of satisfaction, 15.63% are at the 2–4 degree of satisfaction, and 2.11% of the consumers are not at all satisfied.

Table 2 presents the results of the descriptive statistics. For the dependent variable, the mean score of consumer life satisfaction is 6.6297 out of 10, which implies a significantly high degree of subjective life evaluation. More than one-half of the sampling respondents have accepted financial education with a mean value of 0.5317. The mean value of the variable to measure consumer's attitude with regard to the necessity of financial education is 3.2434 out of 4, which indicates that most of the consumers consider financial education to be important. In addition, the mean values of the variables to measure money and time spent on financial education are 2.1935 out of 5 and 2.8786 out of 6, which also indicates a comparatively high input in financial education after formal schooling.

Table 2. Descriptive Statistics.

Variable	Obs.	Mean	Std. Dev.	Min.	Max.
Consumer life satisfaction	3122	6.6297	2.1751	1	10
Having accepted financial education	3122	0.5317	0.4991	0	1
The necessity of financial education	3122	3.2434	0.7247	0	4
The money spent on financial education	3122	2.1935	0.8248	1	5
The time spent on financial education	3122	2.8786	1.1958	1	6
Sustainable financial education	3122	0.0000	0.6403	−2.8020	1.5609
Age	3122	34.2425	7.6305	25	78
Gender	3122	0.7104	0.4536	0	1
Being married	3122	0.8395	0.3671	0	1
High school or lower	3122	0.1230	0.3285	0	1
Undergraduate and some college	3122	0.7601	0.4271	0	1
Master degree or higher	3122	0.1169	0.3214	0	1
Household size	3122	3.1038	1.3059	1	15
Health status of household members	3122	3.6730	0.5129	1	4
Monthly income	3122	8.1720	2.2129	1	13
Having stationary income	3122	5.4151	2.6561	1	10
Having a house	3122	0.9052	0.2930	0	1
Having a car	3122	0.5676	0.4955	0	1
Having a private business	3122	0.3738	0.4839	0	1
Working in government or general firms	3122	0.8238	0.3810	0	1

Source: The results of descriptive statistics are from the 2012 Household Consumer Finance in China's Urban Residents.

Table 3 presents the results of the frequency and percentage of categorical and dummy variables. A total of 53.17% of the consumers have accepted financial education, and 71.04% of household heads are male. For marital status, more than 80% are married. In terms of education, only 12.30% are at the level of junior school or lower. For household assets, 90.52% have a house, 57.76% have a car, and 37.38% have a private business. Moreover, more than 80% work in the government sectors or in general firms, which indicates that most of the consumers have stable work.

Table 3. Frequency and percentage of categorical and dummy variables.

Categorical Variable	Frequency	Percentage (%)
Having accepted financial education		
Yes	1462	53.17
No	1660	46.83
Gender		
Male	2218	71.04
Female	904	28.96
Marital status		
Being married	2621	83.95
Not married	501	16.05
Education		
Junior school or lower	384	12.30
High school and some college	2373	76.01
Undergraduate and higher	365	11.69
Having a house		
Yes	2826	90.52
No	296	9.48
Having a car		
Yes	1772	57.76
No	1350	43.24
Having a private business		
Yes	1167	37.38
No	1955	62.62
Working in government or general firms		
Yes	2572	82.38
No	550	17.62

Note: Sample size = 3122.

4. Empirical Results

4.1. Results of Correlation Analysis

Table 4 reports the correlations among the variables of having accepted financial education, sustainable financial education-related variables, and consumer life satisfaction. Most correlations are as expected. Consumer life satisfaction is positively associated with having accepted financial education, and the correlated coefficient is 0.0648 at a significance level of 1%. For sustainable financial education-related variables, consumers who consider financial education to be necessary are significantly satisfied, and the money and time spent on financial education are significantly and positively correlated with consumer life satisfaction. More specifically, sustainable financial education is significantly positive to consumer life satisfaction, and the correlated coefficient is 0.1681 at a significance level of 1%. Since sustainable financial education is constructed through the variables of the necessity of financial education, the money spent on financial education, and the time spent on financial education, the correlated coefficients are high and significant. To avoid multi-collinearity, sustainable financial education is independently introduced in empirical estimation. In addition, the variables of the necessity of financial education, the money spent on financial education, and the time spent on financial education are positively correlated at the significance level of 1%.

Table 4. Correlations between sustainable financial education and consumer life satisfaction.

Variables	Consumer Life Satisfaction	Having Accepted Financial Education	The Necessity of Financial Education	The Money Spent on Financial Education	The Time Spent on Financial Education	Sustainable Financial Education
Consumer life satisfaction	1.0000					
Having accepted financial education	0.0648 ***	1.0000				
The necessity of financial education	0.0968 ***	0.1452 ***	1.0000			
The money spent on financial education	0.1859 ***	0.1571 ***	0.1415 ***	1.0000		
The time spent on financial education	0.1862 ***	0.1447 ***	0.2197 ***	0.5257 ***	1.0000	
Sustainable financial education	0.1681 ***	0.1936 ***	0.8938 ***	0.5685 ***	0.4543 ***	1.0000

Notes: Sample size = 3112. ***, ** and * denote statistical significance at 1%, 5%, and 10%, respectively.

4.2. Financial Education and Consumer Life Satisfaction

Table 5 presents the estimation results of the regressions of financial education on consumer life satisfaction. In Column (1), only the control variables are entered. In Columns (2) and (3), whether or not household members have ever accepted financial education (*having accepted financial education*) is incorporated. More specifically, Column (2) shows the results of OLS regression, and Column (3) presents the results of ordered probit regression. In Column (4), the items of education interacting with having accepted financial education are added. To eliminate the impacts of city and year heterogeneity on estimation results, the dummy variables of city and year are controlled in all of the estimations. In addition, to get more accurate and robust regression results, robust standard errors are reported in the parentheses.

Table 5. Results of regressions of financial education on consumer life satisfaction.

	(1)	(2)	(3)	(4)
Variable	**Consumer Life Satisfaction**	**Consumer Life Satisfaction**	**Consumer Life Satisfaction**	**Consumer Life Satisfaction**
Having accepted financial education		0.0903 (0.0743)	0.0465 (0.0371)	
Undergraduate and some college × Having accepted financial education				0.0431 (0.0389)
Master degree or higher × Having accepted financial education				0.2381 *** (0.0695)
Gender	−0.1994 *** (0.0773)	−0.1964 ** (0.0773)	−0.0861 * (0.0450)	−0.0856 * (0.0449)
Age	−0.1125 *** (0.0311)	−0.1105 *** (0.0310)	−0.0550 *** (0.0184)	−0.0546 *** (0.0184)
Squared_Age/100	0.1391 *** (0.0386)	0.1371 *** (0.0385)	0.0682 *** (0.0225)	0.0671 *** (0.0226)
Being married	0.2382 ** (0.1052)	0.2343 ** (0.1051)	0.1204 ** (0.0496)	0.1162 ** (0.0497)
Undergraduate and some college	0.2218 * (0.1291)	0.2163 * (0.1292)	0.0797 (0.0708)	
Master degree or higher	0.5618 *** (0.1612)	0.5531 *** (0.1615)	0.2645 *** (0.0865)	
Household size	−0.1117 *** (0.0346)	−0.1118 *** (0.0346)	−0.0541 *** (0.0172)	−0.0535 *** (0.0173)
Health status of household member	0.4467 *** (0.0740)	0.4431 *** (0.0741)	0.2264 *** (0.0373)	0.2271 *** (0.0374)
Monthly income	0.2125 *** (0.0215)	0.2118 *** (0.0215)	0.1065 *** (0.0119)	0.1094 *** (0.0114)
Having stationary income	0.1129 *** (0.0145)	0.1121 *** (0.0145)	0.0598 *** (0.0082)	0.0602 *** (0.0083)
Having a house	0.8602 *** (0.1357)	0.8513 *** (0.1363)	0.4174 *** (0.0726)	0.4195 *** (0.0728)

Table 5. *Cont.*

Variable	(1) Consumer Life Satisfaction	(2) Consumer Life Satisfaction	(3) Consumer Life Satisfaction	(4) Consumer Life Satisfaction
Having a car	0.3816 *** (0.0922)	0.3837 *** (0.0921)	0.1882 *** (0.0461)	0.1909 *** (0.0464)
Having a private business	0.4022 *** (0.0771)	0.3961 *** (0.0772)	0.2151 *** (0.0406)	0.2139 *** (0.0406)
Working in government or general firms	0.1827 * (0.0997)	0.1771 * (0.0997)	0.0820 * (0.0496)	0.0897 * (0.0491)
Constant	3.4865 *** (0.7141)	3.4498 *** (0.7138)		
Observations	3122	3122	3122	3122
City fixed	Yes	Yes	Yes	Yes
Adjusted $R2$	0.1405	0.1406		
Pseudo $R2$			0.0379	0.0375
Chi-squared			814.7994	793.7917

Notes: Reference category is high school or lower. ***, ** and * represent 1%, 5%, and 10% significance level, respectively, and the data in parentheses are robust standard errors. In Columns (3) and (4), since ordered probit regression is utilized, there is no result about constant items to be reported. For OLS regression utilized in Columns (1) and (2), the statistics of adjusted R^2 is reported. Additionally, for ordered probit regression, the statistics of pseudo R^2 and chi-squared are reported.

In Column (1), most of the control variables are significant. Accordingly, the coefficients for gender are all negatively significant, which is identical to prior studies [55]. Compared to female consumers, male consumers feel lower life satisfaction. For age and its squared item, the coefficients are significantly negative and positive, respectively, which implies that there is a nonlinear relationship between age and consumer life satisfaction. Consumers that are married are more satisfied since the coefficients are significantly positive. With regard to education, consumer life satisfaction tends to rise rather than for those who only accept high school or lower education. For household size, a greater household member population is significantly negative to consumer life satisfaction. The health status of a household member is positively associated with consumer life satisfaction. Meanwhile, consumers who have higher and more stationary income will be more satisfied. For household assets, such as having a house, having a car, and having a private business, all of them are significantly positive to consumer life satisfaction. Finally, consumers who work in the government sectors or general firms feel more satisfied.

In Columns (2) and (3), consumers who have accepted financial education insignificantly feel more satisfied. However, the signs for the coefficients are positive. To further investigate the relationship between whether a household member has ever accepted financial education or not and consumer life satisfaction, Column (4) reports the estimation results after adding the interacting item of education and having accepted financial education. For consumers who have accepted financial education and received the national education of undergraduate or some college, the coefficient is still insignificantly positive. However, for consumers who achieved a master's degree or higher, the coefficient is positive at the significance of 1%. This implies that a consumer who has received a higher education combined with financial education will be more satisfied. Thus, the result is identical to H1.

4.3. Sustainable Financial Education and Consumer Life Satisfaction

To further investigate the impacts of sustainable financial education on consumer life satisfaction, this study constructs one variable specific to sustainable financial education in terms of the subjective perspective of the necessity of financial education, and of the objective perspective of the money and time spent on financial education. Based on the approach of principle component analysis (PCA), the

variance contribution ratios are calculated as the weights. Then, the index of sustainable financial education equals a sum of the products of *Z*-scores of the above-mentioned variables with regard to the corresponding weights of variance contribution ratios. Moreover, to verify the sustainable impacts of financial education on consumer life satisfaction, the dependent variable of consumer life satisfaction is replaced by the variables of income expectation in the next year and consumer life satisfaction for the previous year. In addition, to check the long-term effects of financial education on consumer life satisfaction, this study also replaces the dependent variable by the variable of high return through own long-term efforts, since there is no question with regard to consumer life satisfaction in the long term in the survey of Household Consumer Finance in China's Urban Residents in 2012. It is evident that a high return is positively associated with consumer life satisfaction [55]. Thus, if sustainable financial education is positive to consumers' response of achieving high returns through their own long-term efforts, the indirect and long-term effects of financial education on consumer life satisfaction can be demonstrated.

Table 6 presents the results of the regressions of sustainable financial education on consumer life satisfaction. Similarly, ordered probit regression is utilized and robust standard errors are reported to get more accurate and robust estimation results. In Column (1), the variable of the necessity of financial education is entered. The result shows that consumers who consider financial education to be necessary will feel more satisfied. Thus, the result is identical to H2, namely, consumers who consider it is more necessary to receive financial education will be more satisfied. In Columns (2) and (3), the variables of money and time spent on financial education after formal schooling are introduced, respectively. The results indicate that both of them are significantly positive to consumer life satisfaction. Hence, the results primarily follow H3. Moreover, in Column (4), the variable to proxy sustainable financial education is added. According to the estimation result, the coefficient is positive to consumer life satisfaction at the significance level of 1%, which indicates that sustainable financial education is of substantial importance in improving consumer life satisfaction. Thus, H4 is also supported by constructing a new variable to proxy sustainable financial education. To further verify the sustainable impacts of financial education on consumer life satisfaction, two additional regressions are conducted in Columns (5) and (6). When the dependent variable is replaced by the variable of income expectation in the next year, the coefficient of sustainable financial education is positively significant. It implies that sustainable financial education sustains higher consumer life satisfaction, and the sustainable impacts of financial education on improving consumer life satisfaction are verified. In Column (6), the dependent variable is replaced by the variable of consumer life satisfaction for the previous year, and the coefficient of sustainable financial education is significantly positive and is less than the coefficient in Column (4). Thus, sustainable financial education sustains an increasing effect on consumer life satisfaction. Furthermore, to check the long-term effects of financial education on consumer life satisfaction, one additional regression is conducted in Column (7). When the dependent variable is replaced by the variable of high return through their own long-term efforts, the coefficient is significantly positive. It provides indirect evidence that financial education has positive and long-term impacts on consumers investing return, and thereby positively contributes to consumer life satisfaction in the long term.

Table 6. Results of regressions of sustainable financial education on consumer life satisfaction.

Variable	(1) Consumer Life Satisfaction	(2) Consumer Life Satisfaction	(3) Consumer Life Satisfaction	(4) Consumer Life Satisfaction	(5) Income Expectation in the Next Year	(6) Consumer Life Satisfaction for the Previous Year	(7) High Return Through Own Long-Term Efforts	(8) Consumer Life Satisfaction
The necessity of financial education	0.0678 ** (0.0266)							
The money spent on financial education		0.1464 *** (0.0223)						
The time spent on financial education			0.0869 *** (0.0189)					
Sustainable financial education				0.1496 *** (0.0283)	0.1014 *** (0.0311)	0.1421 *** (0.0289)	0.2271 *** (0.0329)	1.1727 *** (0.2673)
age	−0.0546 *** (0.0183)	−0.0575 *** (0.0182)	−0.0550 *** (0.0180)	−0.0542 *** (0.0183)	−0.0937 *** (0.0189)	−0.0466 ** (0.0192)	−0.0519 *** (0.0196)	−0.0517 *** (0.0178)
Squared_Age/100	0.0676 *** (0.0225)	0.0717 *** (0.0223)	0.0685 *** (0.0221)	0.0675 *** (0.0225)	0.0993 *** (0.0231)	0.0592 ** (0.0238)	0.0564 ** (0.0245)	0.0724 *** (0.0218)
Gender	−0.0858 * (0.0453)	−0.0910 ** (0.0450)	−0.0933 ** (0.0456)	−0.0861 * (0.0456)	−0.0099 (0.0408)	−0.0631 (0.0423)	−0.0058 (0.0464)	−0.0817 * (0.0454)
Being married	0.1189 ** (0.0491)	0.1259 *** (0.0477)	0.1157 ** (0.0490)	0.1178 ** (0.0486)	0.0469 (0.0669)	0.0968 * (0.0503)	−0.0362 (0.0725)	−0.0216 (0.0586)
Undergraduate and some college	0.0818 (0.0714)	0.0593 (0.0703)	0.0699 (0.0704)	0.0729 (0.0716)	0.2111 *** (0.0683)	0.1220 * (0.0673)	0.2044 *** (0.0612)	0.0377 (0.0723)
Master degree or higher	0.2655 *** (0.0863)	0.2356 *** (0.0867)	0.2334 *** (0.0863)	0.2504 *** (0.0866)	0.3292 *** (0.0958)	0.2674 *** (0.0827)	0.2290 *** (0.0785)	0.1895 ** (0.0887)
Household size	−0.0527 *** (0.0171)	−0.0575 *** (0.0170)	−0.0546 *** (0.0172)	−0.0531 *** (0.0170)	0.0264 (0.0227)	−0.0468 *** (0.0173)	−0.0020 (0.0209)	−0.0544 *** (0.0171)
Health status of household member	0.2213 *** (0.0375)	0.2274 *** (0.0374)	0.2246 *** (0.0375)	0.2167 *** (0.0376)	0.0679 * (0.0405)	0.2528 *** (0.0364)	0.2280 *** (0.0420)	0.2261 *** (0.0368)
Monthly income	0.1046 *** (0.0118)	0.1012 *** (0.0121)	0.0996 *** (0.0121)	0.1011 *** (0.0120)	0.0273 ** (0.0119)	0.0855 *** (0.0116)	0.0457 *** (0.0119)	0.1013 *** (0.0121)
Having stationary income	0.0595 *** (0.0082)	0.0609 *** (0.0081)	0.0607 *** (0.0081)	0.0594 *** (0.0081)	0.0133 * (0.0077)	0.0629 *** (0.0074)	−0.0155 ** (0.0076)	0.0589 *** (0.0083)

Table 6. *Cont.*

Variable	(1) Consumer Life Satisfaction	(2) Consumer Life Satisfaction	(3) Consumer Life Satisfaction	(4) Consumer Life Satisfaction	(5) Income Expectation in the Next Year	(6) Consumer Life Satisfaction for the Previous Year	(7) High Return Through Own Long-Term Efforts	(8) Consumer Life Satisfaction
Having a house	0.4191 *** (0.0723)	0.4004 *** (0.0725)	0.4077 *** (0.0727)	0.4094 *** (0.0727)	0.0431 (0.0719)	0.3552 *** (0.0704)	0.0711 (0.0762)	0.4188 *** (0.0733)
Having a car	0.1837 *** (0.0459)	0.1640 *** (0.0464)	0.1638 *** (0.0454)	0.1726 *** (0.0460)	0.0812 (0.0531)	0.1478 *** (0.0453)	0.1235 ** (0.0516)	0.1756 *** (0.0459)
Having a private business	0.2146 *** (0.0402)	0.1897 *** (0.0407)	0.1886 *** (0.0425)	0.2015 *** (0.0405)	0.1693 *** (0.0433)	0.1379 *** (0.0399)	0.1396 *** (0.0490)	0.2231 *** (0.0400)
Working in government or general firms	0.0799 (0.0493)	0.0728 (0.0492)	0.0736 (0.0502)	0.0723 (0.0493)	−0.0044 (0.0638)	0.0637 (0.0528)	−0.0179 (0.0517)	0.0720 (0.0487)
City fixed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3122	3122	3122	3122	3122	3122	3122	3122
Pseudo *R*2	0.0383	0.0406	0.0398	0.0397	0.0293	0.0334	0.0335	0.0397
Chi-squared	773.1113	849.1438	813.3024	759.7835	291.6308	621.6645	292.6813	836.6658

Notes: Reference category is high school or lower. ***, ** and * represent 1%, 5%, and 10% significance level, respectively, and the data in parentheses are robust standard errors. In Column (8), the variables of spouse education and the knowledge for the rates of various saving types are considered as instrument variables, and 2SLS estimation is utilized to eliminate the endogeneity. For the first stage of OLS regression, the statistics of $F_{(4, 3117)} = 20.4500$, which is larger than 10. Therefore, the influence of weak instrumental variables can be negligible.

4.4. Endogeneity and Robustness Check

This study also realizes that the problem of endogeneity may apply to the above regression models since the coefficients cannot determine the causality between sustainable financial education and consumer life satisfaction. For some consumers, it is possible for them to accept financial education after formal schooling since they are highly satisfied and have high incomes or substantial assets to be invested. Therefore, the potential endogeneity of sustainable financial education must be treated with care. This study employs the following instrument variables and conducts a 2SLS estimation to eliminate the impacts of endogeneity on the estimation results.

The 2012 Household Consumer Finance in China's Urban Residents designed two questions as follows. The first is about the education status of a consumer's spouse, and the second is with regard to the consumer's knowledge for the rates of various saving types. The spouse's education status is associated with consumer sustainable financial education and is almost exogenous. Meanwhile, the consumer's knowledge of the rates of various saving types is also correlated to consumer sustainable financial education, and that knowledge is also exogenous to consumer life satisfaction. This study first performed a regression on consumer sustainable financial education on a spouse's education and knowledge for the rates of various saving types. According to the result of first stage regression, the coefficients of the spouse's education and knowledge for the rates of various saving types are positively significant, and $F_{(4, 3117)} = 20.4500$, which is far beyond the critical values. This implies that the impact of weak instrumental variables can be negligible. Then, an ordered probit model with instrumental variables was conducted (see Column [8] in Table 6). In terms of the 2SLS estimation result, the estimate of the coefficient on the instrument of sustainable financial education is positive and statistically significant, with the signs of other variables almost remaining unchanged. The coefficient of sustainable financial education in Column (8) is greater than that in Column (4), which implies that the endogeneity problem indeed exists, and instrument variables eliminate the impacts of endogeneity and make the estimation results more accurate. Thus, H3 and H4 are still supported.

To examine the robustness of the estimates, this study firstly replaced the independent variable by the variable of financial knowledge acquisition for the participating stock market. Second, this study also replaced the estimation approach of ordered probit regression by OLS and ordered logit regression. Third, to eliminate the impacts from outliers by age, this study kept the samples of age between the bottom 10% and the top 10%. Finally, this study also deleted the samples where the monthly income is 0 or greater than 50,000 Yuan, which will decrease the impacts from outliers of income. Table 7 presents the results of the robustness check.

Table 7. Robustness check.

Variable	(1)	(2)	(3)	(4)	(5)
	Consumer Life Satisfaction	**Consumer Life Satisfaction**	**Consumer Life Satisfaction**	**Consumer Life Satisfaction**	**Consumer Life Satisfaction**
Financial knowledge acquisition for participating stock market	0.1321 ** (0.0659)				
Sustainable financial education		0.2571 *** (0.0587)	0.2680 *** (0.0495)	0.1611 *** (0.0324)	0.1488 *** (0.0324)
Age	−0.0547 *** (0.0181)	−0.1089 *** (0.0312)	−0.1069 *** (0.0295)	−0.0227 (0.0676)	−0.0481 *** (0.0153)
Squared Age/100	0.0676 *** (0.0223)	0.1356 *** (0.0387)	0.1348 *** (0.0357)	0.0242 (0.0967)	0.0593 *** (0.0191)
Gender	−0.0875 * (0.0450)	−0.1961 ** (0.0770)	−0.1428 * (0.0798)	−0.0733 * (0.0422)	−0.0799 ** (0.0378)
Being married	0.1271 *** (0.0491)	0.2300 ** (0.1047)	0.2281 *** (0.0870)	0.1110 * (0.0594)	0.1362 ** (0.0558)
Undergraduate and some college	0.0846 (0.0706)	0.2043 (0.1289)	0.1923 (0.1199)	0.1555 ** (0.0735)	0.0702 (0.0654)
Master degree or higher	0.2687 *** (0.0862)	0.5264 *** (0.1605)	0.4670 *** (0.1467)	0.3319 *** (0.0918)	0.2249 ** (0.0875)
Household size	−0.0551 *** (0.0170)	−0.1098 *** (0.0344)	−0.0865 *** (0.0304)	−0.0516 ** (0.0210)	−0.0519 *** (0.0184)
Health status of household member	0.2270 *** (0.0371)	0.4255 *** (0.0741)	0.3675 *** (0.0655)	0.2424 *** (0.0399)	0.2032 *** (0.0367)
Monthly income	0.1066 *** (0.0118)	0.2018 *** (0.0215)	0.1773 *** (0.0208)	0.0891 *** (0.0115)	0.1003 *** (0.0110)
Having stationary income	0.0608 *** (0.0082)	0.1110 *** (0.0144)	0.1087 *** (0.0137)	0.0576 *** (0.0089)	0.0621 *** (0.0085)
Having a house	0.4215 *** (0.0720)	0.8366 *** (0.1357)	0.7065 *** (0.1268)	0.3420 *** (0.0735)	0.3793 *** (0.0686)
Having a car	0.1850 *** (0.0463)	0.3554 *** (0.0924)	0.3100 *** (0.0796)	0.2178 *** (0.0491)	0.1755 *** (0.0540)
Having a private business	0.2160 *** (0.0403)	0.3713 *** (0.0773)	0.3422 *** (0.0711)	0.1801 *** (0.0481)	0.1945 *** (0.0432)
Working in government or general firms	0.0844 * (0.0494)	0.1607 (0.0996)	0.1414 * (0.0838)	0.0639 (0.0716)	0.0846 (0.0523)
Constant		3.7094 *** (0.7185)			
City fixed	Yes	Yes	Yes	Yes	Yes
Observations	3122	3122	3122	2433	3004
Adjusted $R2$		0.1455			
Pseudo $R2$	0.0381		0.0416	0.0401	0.0362
Chi-squared	788.2551		817.9563	554.9422	655.7412

Notes: Reference category is high school or lower. ***, ** and * represent 1%, 5%, and 10% significance level, respectively, and the data in parentheses are robust standard errors. In Columns (1), (4) and (5), since ordered probit regression is utilized and ordered logit regression in Column (3) is utilized, there is no result about constant items to be reported. For OLS regression utilized in Column (2), the statistics of adjusted R^2 is reported. Additionally, for ordered probit and logit regression, the statistics of pseudo R^2 and chi-squared are reported.

In Column (1), the coefficient of financial knowledge acquisition for the participating stock market is positive and statistically significant. In Columns (2) to (5), the coefficients of sustainable financial education remain significantly positive for all specifications. In terms of the robust results reported in Table 7, there is a robust relationship between sustainable financial education and consumer life satisfaction, namely, sustainable financial education significantly and positively contributes to consumer life satisfaction.

5. Conclusions and Implications

In the process of the rapid development of the financial industry, substantial kinds of financial products have emerged and, meanwhile, higher requirements for consumers' financial knowledge and financial literacy have been put forward. However, consumers' financial knowledge is generally scarce, financial awareness is relatively weak, and financial planning ability is relatively low, such that most consumers cannot rationally participate in the financial market. This reality not only constrains the development of the financial industry but also produces serious shocks on consumer life satisfaction. Therefore, sustainable financial education after formal schooling can not only make consumers rationally participate in the financial market and then to promote the healthy development of financial markets but also has a positive impact on improving a consumer's life satisfaction. Therefore, utilizing the survey data of Household Consumer Finance in China's Urban Residents in 2012, this study examines the impact of sustainable financial education on consumer life satisfaction.

This study provides empirical evidence suggesting that accepting financial education, especially when the consumers already have a high level of education, is positively associated with greater consumer life satisfaction. The result is identical to H1, especially for consumers with a higher education level. The results also indicate that consumers who consider financial education to be necessary and also spend more money and time on financial education after formal schooling will be more satisfied, which is as hypothesized in H2 and H3. This study provides a systematic perspective to investigate the impacts of financial education on consumer life satisfaction, which will significantly enrich the literature in the related field. In addition, based on the variables of the necessity of financial education, the money and time spent on financial education, a variable to proxy sustainable financial education from subjective and objective aspects, are developed. The estimation results suggest that sustainable financial education positively contributes to consumer life satisfaction, which is identical to H4. The construct of the variable of sustainable financial education contributes to the literature on the effects of financial education in the long-term and provides a new insight to develop a variable of financial behavior from subjective and objective perspectives. In addition, the sustainable impacts of financial education on consumer life satisfaction are adequately verified.

This study has two limitations. The first is that this study employs cross-sectional data to investigate the impact of sustainable financial education on consumer life satisfaction. Moreover, there is almost no panel data of a related survey with regard to this topic. Hence, it is difficult to capture the dynamic changes in the relationships between sustainable financial education and consumer life satisfaction. Meanwhile, it is also difficult to eliminate estimation errors due to using cross-sectional data. However, this study has offered a comprehensive robustness check to make adequate and accurate results. For further study, more panel surveys and updated survey data need to be developed and conducted to support related research in this field. The second limitation is that ordered probit regression is the only data analysis used. More sophisticated approaches, such as panel ordered logistic regression, can be used in future research when panel data on sustainable financial education and consumer life satisfaction are available.

Based on the conclusions, how to enhance sustainable financial education to promote consumer life satisfaction may be strategically considered from the following perspectives. First, increase the input of financial education and highlight the necessity of financial education. Based on the results of this study, both the time and money spent on financial education positively contribute to consumer life satisfaction. Moreover, if consumers consider financial education being of necessity, they will be more satisfied. Therefore, increasing the input of money and time on financial education and making consumers aware of the necessity of financial education will be positive to consumer life satisfaction. Second, take the rapid development of the financial industry as an opportunity to increase financial knowledge publicly, improve consumer financial literacy and financial awareness, and improve financial behavior such as consumer financial planning. If consumers have low financial education ability, it is difficult for them to manage their assets rationally, which will degrade their life satisfaction. Third, the policymakers should properly carry out sustainable financial education after

formal schooling on financial market investment to help consumers accumulate experience in financial assets investment, and to improve consumer life satisfaction. In addition, developing sustainable financial education can enhance the cognition level of consumer financial risks, thereby improving consumer financial welfare and life satisfaction.

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