

Research on the Choice Influence Factors of Campus Finance Installment Products Based on TAM&TPB

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Keywords: Installment Products;Influence Factors;Stepwise Linear Regression; Path Analysis

Abstract: With the rapid growth of the scale of the Internet consumption and financial transactions, the product market of the campus consumption and finance installment presents a colorful situation. From the perspective of university student users, this paper takes the installment products of campus consumer finance as the research object, the technology acceptance model and the plan behavior theory as the basis of model which integrates innovation diffusion theory and consumer innovation theory. The personal innovativeness (PI), the perceived usefulness (PU), perceived ease of use (PE), compatibility (CP), subjective norm (SN) and , observability (OS), perceived risk (PR) are as independent variables, the consumer behavior (CA) is as the intermediary variable, and the behavior intention (BI) is as the dependent variable. The theoretical model and research hypothesis of this paper were built up accordingly. Through the empirical research concluded, the CA, PI, PU, CP, SN, OS and BI have significant positive effect and they are the main influential factors of students to select campus installment products, and PU, PI, CP, SN, OS and PR all directly affect BI or by influencing the CA to affect BI. Finally, according to the present situation of the current campus installment consumption platform, this paper puts forward some related management suggestions for the healthy development of the finance industry.

1. Introduction

With the rise of the Internet consumer finance, the internet installment platform for Campus Consumer Finance have been born. Since then, more than 80 Internet financial companies, represented by Ant Pay and Jingdong white, have emerged. In the surge of consumer finance user group, college students is a consumer group that can not be ignored. The existing research is mainly focused on the causes, current situation, advantages and disadvantages, and platform risks of College Students' installment consumption. However, it lacks the analysis and research on the influencing factors of consumer financial product choice for college students.

This paper bases on the analysis of the related literature acceptance and operational performance of users to find out representative correlation factor, which influence the users use the consumption financial installment platform. Then, this paper constructed the choice influence factor model of campus consumption financial installment platform, which based on the planning behavior theory and the technology acceptance model. According to the model, the paper conducts the empirical research on college students' potential user groups, analyzes the influential factors of students choose campus finance installment platform, and reveals the relationship between different factors and its extent and influence path. Then, this paper puts forward a theoretical basis for the design of the product, marketing and enterprise development of the campus consumer finance.

2. Research Hypothesis and construction of model

2.1. Research Hypothesis

According to the theory of rational action, behavior intention (BI) has a direct prominent effect on actual behavior. Therefore, in an extensive empirical study, a measure of actual behavior, generally the direct use of BI variables instead. This result in the theory of reasoned action, theory of planned behavior and technical support in the model are listed as consumer attitude (CA) the main influence factors of BI, and in a large number of empirical studies have confirmed the influence factors will influence the CA directly or indirectly influence BI. This paper set the CA as the intermediary variable, which is the the judgment based on classical theory and empirical research^[1].

(1) The influence of CA on users' use of campus financial installment products. CA refers to a subjective judgment of college students' behavior of using campus financial installment products. The more active CA is, the higher BI their choice will be. So there is the following assumption:

H1: CA is positively related to BI.

(2) A large number of studies show that the perceived usefulness (PU) has a prominent influence on the intention to use, it can not only by acting on the indirect effect of CA on BI, in certain circumstances can be a direct role in BI. The stronger students' PU on campus financial installment products is, the more active CA is, the higher BI their choice will be^[2].Therefore, there are the following assumptions:

H2:PU is positively related to BI.

H3:PU is positively related to CA.

(3) The effect of perceived ease of use PE on the users of campus financial products. A large number of studies show that PE has a positive effect on CA, which affects PU through affecting CA. and this effect was confirmed by empirical research, it showed a significant positive correlation. The stronger students' PE on campus financial installment products is, the more active CA is, the higher BI their choice will be. Therefore, there are the following assumptions:

H4:PE is positively related to BI.

H5:PE is positively related to CA.

(4)The effect of compatibility(CP) on the campus users of financial products in the installment. CP refers to the use of campus financial product installment ,the consumer finance modality that college students could feel, and how the original values, consumption patterns and consumer demand fits with it. Empirical studies have confirmed its validity of interpretation on behavior decision. The stronger CP is, the more active CA is, and the higher BI their choice will be. Therefore, there are the following assumptions:

H6:CP is positively related to BI.

H7:CP is positively related to CA.

(5) The influence of observability (OS) on users of campus financial product installment. OS refers to the perceived degree. The empirical study found that the innovative OS can significantly act on the decision-making behavior. The stronger OS on campus financial installment products is, the more active CA is, the higher BI their choice will be. Therefore, there are the following assumptions:

H8:OS is positively related to BI.

H9:OS is positively related to CA.

(6) The impact of PR on users' use of campus financial installment products. This paper holds that PR includes three aspects of financial risk, privacy risk and credit risk. And in the study, it is confirmed that PR negatively affects the intention of usage of college students about campus financial installment products. The greater PR on campus financial installment products is, the more active CA is, the lower BI their choice will be. Therefore, there are the following assumptions:

H10:PR is negatively related to BI.

H11:PR is negatively related to CA.

(7) The effect of subjective norm (SN) on the users of campus financial products. Students use installment of campus financial products in the choice installment will be affected by individual and

the group^[3]. The stronger SN on campus financial installment products is, the more active CA is, the higher BI their choice will be. Therefore, there are the following assumptions:

H12:SN is positively related to BI.

H13:SN is positively related to CA.

(8) The impact of PI on users' use of campus financial installment products. In this paper, PI refers to the tendency of college students to buy and use new products. Researches show that PI has a significant positive effect on both CA and BI of consumers. The stronger PI on campus financial installment products is, the more active CA is, the higher BI their choice will be^[4]. Therefore, there are the following assumptions:

H14:PI is positively related to BI.

H15:PI is positively related to CA.

2.2. Construction of Influencing Factors Model

By the relevant literature, TAM and TPB, the classical theories are applicable to the user's choice of influencing factors in the field of information science and technology. The scholars have been widely used in the empirical research and have been revised and enriched in practice. Many scholars have done different forms of integration research in practice to improve the validity of interpretation

This paper uses the integrated model of TPB and TAM as the main framework, then further integrating the innovation diffusion theory and PI theory in it. Many scholars applied it in the study of consumer online shopping behavior, and through empirical study confirmed the significant correlation between PI level and online shopping behavior. Considering the consumer financial attributes of college students consumption financial installment platform, most products are built in the form of online shopping, so this paper also put PI into the influence factors. The proposal of the innovation diffusion theory also has the background of the technical acceptance model. The generally accepted empirical result is that in 1984 Tornatzky studied 75 innovative features and found that there were only three factors (comparative advantage). Complexity and CP) have a significant positive impact on the BI of innovation choice, while the relative advantage, complexity is equivalent to PU and PE in the technology acceptance model. Therefore, it can add the CP factor on the basis of TAM. Meanwhile, when the group of college students gathered together, the mutual effects are more obvious and the conformity effect also more obvious. Because this paper is about studying the choice behavior of college students, it is necessary to bring the OS factor in. In addition, When scholars study the theory of innovation diffusion, it is found that the impact of PR on scientific and technological innovation products is obvious and the campus consumer finance installment platform is typical of Internet application innovation, so it also should be included.

On the basis of the characteristics of the installment consumption and the results of the preliminary qualitative study, this paper puts forward eight main variables ,including PE, PU, CA, CP, OS, PR, PI and SN. Then this paper establishes a research model (as shown Figure 1). In the model, PU, PE, CP, OS and PR can be categorized as "innovation perception". BI is the dependent variable, it jointly determined by PU, CP, OS and PR, SN. PU is affected by PE and then to affects CA.CA as intermediary variable affects BI.

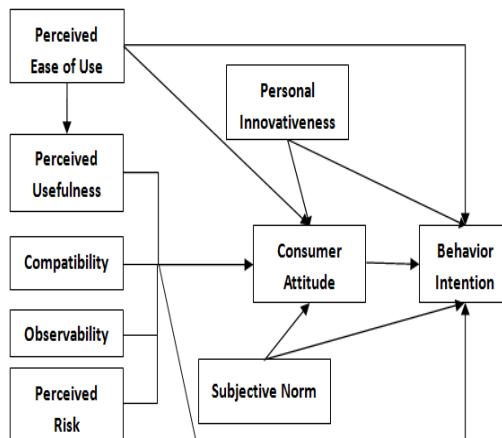


Fig.1 The research model of this paper

3. Empirical analysis

3.1. Empirical analysis process

3.1.1. Data Sources

This article surveyed university students financial installment products use. The formal questionnaire, a total of 562 copies were collected, including 502 valid questionnaires, accounting for 89.3% of the total. In the 502 surveyed, respondents from the provinces distribution, include sample data of 24 provinces (municipalities and autonomous regions), which make it showed more comprehensive and representative. There are 502 students in the survey of over 460 products, and the largest proportion of ants spend chant for 46.26 percent, and most people from shopping platform: learned on (such as Taobao, Jingdong, etc.) related to stall product. According to the gender distribution of respondents, the proportion of men and women is relatively balanced, accounting for 57.4% of the total number of females, slightly more than the number of males. Grade distribution from the point of view of respondents, the higher number sophomore / junior, accounting for 64.07 percent, followed by the number of seniors, accounting for 20.8%, the minimum number of graduate students, accounting for 2.6%. All items in the questionnaire were adopted in the form of 7 level Likert scale. "1" indicates "disagreed", "7" shows "very agree". The bigger the number is, the stronger the attitude was.

3.1.2. BI Regression Analysis

Firstly, this paper takes BI as the dependent variable and CA, PU, CP and other eight kinds of influencing factors as the independent variable with stepwise regression analysis^[5]. The correlation coefficient matrix (shown as in Table 1) and the test results are obtained. BI is positively correlated with CA, PU, PE, CP, OS, SN, PI and negatively correlated with PR. CA, PI, PU, CP, SN, OS has a good correlation.

Table 1 Correlations

	CA	BI	PR	PE	OS	PI	PU	SN	CP
CA	1	.670**	-.017	.168**	.375**	.501**	.542**	.610**	.320**
BI	.670**	1	.085	.205**	.402**	.567**	.594**	.568**	.472**
PR	-.017	.085	1	.087	.086	.086	-.029	-.069	.140**
PE	.168**	.205**	.087	1	.107*	.157**	.193**	.069	.140**
OS	.375**	.402**	.086	.107*	1	.224**	.353**	.294**	.356**
PI	.501**	.567**	.086	.157**	.224**	1	.453**	.416**	.329**
PU	.542**	.594**	-.029	.193**	.353**	.453**	1	.596**	.430**
SN	.610**	.568**	-.069	.069	.294**	.416**	.596**	1	.341**
CP	.320**	.472**	.140**	.140**	.356**	.329**	.430**	.341**	1

**. indicates a significant correlation with the 0.01 level (bilateral).

*. indicates a significant correlation with the 0.05 level (bilateral).

In the stepwise regression analysis, six stepwise regression models were obtained by the forward method. The independent variables of the regression analysis equations were selected as CA, PU, PI, CP, OS and SN, and the variance expansion coefficients (VIF) were less than 10, the F statistic is 406.395, 274.417, 216.490, 181.732, 148.720, 126.595 respectively, and the value of P is 0., indicating that the regression equation has a high significant, with statistical significance. Among them, the model 6 has more significant and statistically significant, and it has the highest goodness of fit. Therefore, it is concluded that the regression equation including CA, PI, PU, CP, SN and OS is the optimum regression equation. Because the absolute value of the standard regression coefficient reflects the degree of impact on BI, the greater the absolute value is, the greater the control can be show up. As can be seen from Table I, the degree of influence descending order of CA, PI, PU, CP, SN, OS, from Table 2, the optimum regression equation can be obtained:
 $BI = -0.688 + 0.411 * CA + 0.266 * PI + 0.159 * PU + 0.143 * CP + 0.106 * SN + 0.085 * OS$.

So it can be concluded that there is a significant positive effect of CA, PI, PU, CP, SN and OS on BI, and the strength of the explanation is positively correlated with the regression coefficient, assuming that H1, H2, H6, H8, H12 and H14 are true. In addition, PE and PR are not included in the regression model, which does not mean that they have no effect, only to show that their impact is not significant enough.

Table 2 Coefficients^a

Model	Unstd.Coeff		t	Sig.	Adj R^2	F	Coll.Stat	
	B	Std.Err					Tole	VIF
1	(Constant)	.222	.139	1.596	.111	.447	406.395	1.000 1.000
	CA	.834	.041	.670	20.159 .000			
2	(Constant)	-.183	.137	-1.333	.183			
	CA	.613	.046	.493	13.400 .000	.522	274.417	.706 1.416
	PU	.335	.038	.327	8.889 .000			.706 1.416
3	(Constant)	-.524	.140	-3.737	.000			
	CA	.502	.047	.404	10.798 .000	.563	216.490	.624 1.603
	PU	.271	.037	.264	7.278 .000			.663 1.509
	PI	.303	.044	.245	6.960 .000			.702 1.424
4	(Constant)	-.580	.136	-4.263	.000			
	CA	.486	.045	.390	10.765 .000			.621 1.609
	PU	.208	.038	.203	5.531 .000	.591	181.732	.608 1.643
	PI	.269	.043	.218	6.321 .000			.689 1.451
	CP	.166	.028	.188	5.847 .000			.789 1.267
5	(Constant)	-.624	.136	-4.580	.000			
	CA	.459	.046	.369	10.010 .000			.593 1.685
	PU	.196	.038	.191	5.198 .000	.596	148.720	.600 1.668
	PI	.273	.042	.221	6.452 .000			.688 1.453
	CP	.148	.029	.168	5.120 .000			.749 1.335
	OS	.085	.031	.087	2.714 .007			.786 1.273
6	(Constant)	-.688	.137	-5.002	.000			
	CA	.411	.049	.330	8.340 .000			.510 1.962
	PU	.159	.040	.155	3.996 .000			.528 1.893
	PI	.266	.042	.216	6.322 .000	.601	126.595	.686 1.458
	CP	.143	.029	.162	4.967 .000			.746 1.341
	OS	.085	.031	.087	2.734 .006			.786 1.273
	SN	.106	.040	.103	2.644 .008			.523 1.911
D-W value		1.935						

^aDependent Variable: BI.

3.1.3. Path Analysis

In order to analyze the causal relationship between the influence factors and BI, this paper establishes the path analysis model. The seven variables of CP, OS, PR, PI, PU, PE, PI, SN are external dependent variables, and BI is the internal dependent variable, and CA is used as the intermediate variable to establish the path analysis model. AMOS 21.0 program is used to perform operations^[6], deleting the path with no significant path coefficient one by one. When each path is deleted, a program is reoperated. The final result of the path analysis is shown as Figure 2. The fitting degree of the model parameters are shown in Table 3.

The conspicuousness probability value P is greater than 0.05 in Table 3, which accepts the null hypothesis that the hypothesis model can conform to the observed data and the ratio of the chi square degree of freedom (CMIN / DF) is greater than 1 and less than 2, in line with the good

standard fit of the model. The two parameters of RMR and RMSEA are less than 0.05. The two parameters of AGFE and GFI and the index of value-added fitness index are both greater than 0.9 and close to 1, The data fit well and the overall fit of the model has also reached a good standard. The above results show that the paths and the overall model are finally acceptable^[9].

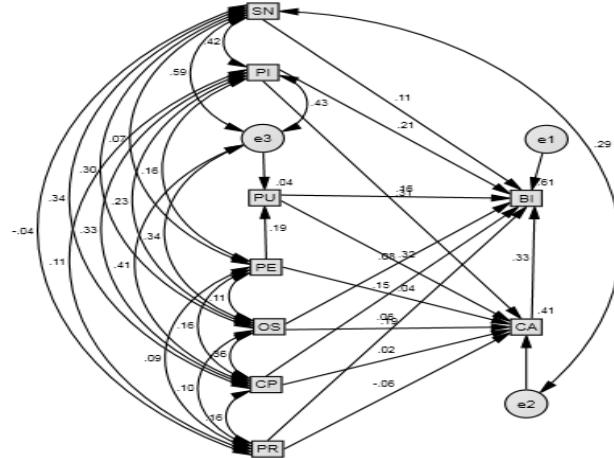


Fig. 2 The result of path analysis

Table 3 The fitting degree of the path analysis model

Absolute fitness index	RMR	CMIN/DF	AGFI	GFI	RESEA	P
Parameter value	.009	21.603	.968	.999	0.035	0.201
Value added suitability index	NFI	RFI	IFI	TLI	CFI	
Parameter value	.998	.960	.999	.985	.999	

Empirical analysis shows that: BI regression analysis shows that CA, PI, PU, CP, SN, OS and BI have a significant positive impact, which is the main factor affecting college students to choose campus stallment products. The standardized regression coefficients were 0.411, 0.266, 0.159, 0.143, 0.106, 0.085, respectively. PR and BI were negatively correlated, but the impact was not remarkable. Further, CA regression analysis showed that the effects of SN, PI, PU and OS on CA are significantly positive and the standardized regression coefficients are 0.304, 0.240, 0.129 and 0.123, respectively. In addition, path analysis finds that PU, PI, CP, SN, OS, PR all directly affect BI or act indirectly BI through acting on CA.

4. Conclusions and Management Recommendations

4.1. Open up a new business scene

Through the analysis of the previous path, the impact of PU is the most significant among the factors influencing the selection of installment products. However, the homogenization competition of campus consumer finance installment industry is more serious. Therefore, installment products should be combined with the times Trend, open up new business scenarios, not limited to cash and installments homogeneous service scene. More needs to be targeted at the needs of the characteristics of college students, mining research, tourism, part-time, training and other potential markets, the opening of new businesses, such as research reminders, train tickets, air tickets to buy, part-time agencies recommended training, renting and other related quality service scene. Second, we can develop "low-cost high-frequency" consumer scenes close to the lives of college students, such as take-out, prepaid phone recharge, city card reload, movie ticket purchase, etc. to increase the frequency of users.

Business design can be extended to the post-graduation market to achieve "working period of nutrients", that is, after the platform obtaining claims, the creditor's rights are selectively transferred to the enterprise, enterprises according to the professional and ability of students to provide the

corresponding internship positions to achieve both Win-win situation. Through the development of a variety of new business, improve the product's PU, it is possible to stand out in many competitors, in the group of students to create a differentiated brand image, and thus create their own competitive advantage.

4.2. Speed up the speed of product iteration and improve the customer's personalized experience.

PI has a path coefficient of 0.21 and it place in second of influence, which shows that reasonable and appropriate innovation of installment products can help attract students' attention and enhance their willingness to use. Accordingly, internet financial enterprises should jump out of the inherent mode of thinking of dichotomy and conform to the law of market development to form a new model of lean manufacturing and agile development. In particular, a flattened organizational structure should be formed to facilitate the rapid transfer of information and timely response, efficient integration of resources, speed up the iteration of installment products are more likely to get the favor of college students.

Acknowledgment

This research was supported by the Doctoral Scientific Research Starting Project of Harbin University of Commerce of China (Grant No.14RW27) ,the Postdoctoral Scientific Research Support Program of the Harbin University of Commerce of China (Grant No.2017BSH012) ,and the Project of Innovative and Entrepreneurial Training Program for Provincial University Students of the Harbin University of Commerce of China (Grant No.201710240028)

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