Identification of factors influencing the willingness to use online Peer to Peer lending for college students

-- Taking Jiaxing University as an example

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Abstract: "Internet + financial" mode of P2P platform developed rapidly in China, however, in universities where there was a high concentration of college students, it "encountered the cold". In order to find out the reasons, the authors identified factors influencing the willingness to use Online Peer to Peer lending for college students, taking students in Jiaxing University as an example, from the following four aspects as college students' cognitive dimension, college students' consumption, Online Peer to Peer lending transaction dimension and Online Peer to Peer lending platform dimension, with a total of 11 potential factors, by using the combination method of qualitative research and quantitative analysis.

1. Introduction

According to China's national bureau of statistics, the number of students enrolled in ordinary colleges and universities reached 27,536 in 2017. Salaries for college graduates have also grown steadily in recent years. Keynes (1936) proposed in the general theory of employment, interest and money that consumers' future expected income would increase the level of current consumption expenditure. It can be seen that college students have a strong demand for advanced consumption and also have some advanced consumption strength. Wang Dongjing (2016) pointed out in the analysis of college students' P2P consumption psychology that college students were willing to accept new things and pursue fashion personality and were easy to keep up with the joneses. Because of the advantages of low application threshold, small amount of funds and simple procedures, P2P lending has a strong attraction for college students. However, in recent years, P2P lending platforms have been tepid among college students. On one hand, Tao Jingwen (2016) pointed out in the status quo and research of P2P lending in China that there were risks such as unsound legal system, lax supervision and low credit access standards in P2P platform. On the other hand, Zheng Shuxun (2016) pointed out in the comprehensive risk management solution for college students' Internet short-term loans -- a case study of Wuhan University students that college students' insufficient understanding of short-term Internet loans and poor risk identification as well

as prevention ability led to a lack of trust between college students and online loan platforms. In view of this phenomenon, this paper took the students of Jiaxing University as an example to carry out the identification study of factors affecting the willingness of P2P loan use among college students, in order to explore the relevant factors affecting the willingness of college students to use P2P platform, so as to provide reference for solving the current situation of the confusion and overlapping in the P2P lending industry.

2. Index model of influencing factors of college students' P2P lending intention

11 factors are obtained: CL1(Responsibility and credit awareness), CL2(Assessment of repayment capacity), CL4(Understanding of online peer-to-peer lending), CS3(Extra savings), CS5(Consumption concept), CS6(Consumer demand), TP3(Loan interest), TP5(Loan and repayment method), PP1(Reputation of platforms), PP2(Safety of platforms), PP5(Convenience of operating) in 4 fields--cognition level of college students, consumption of college students, transaction of peer-to-peer lending, platforms of peer-to-peer lending. The model of 11 factors in 4 fields is built as follow.
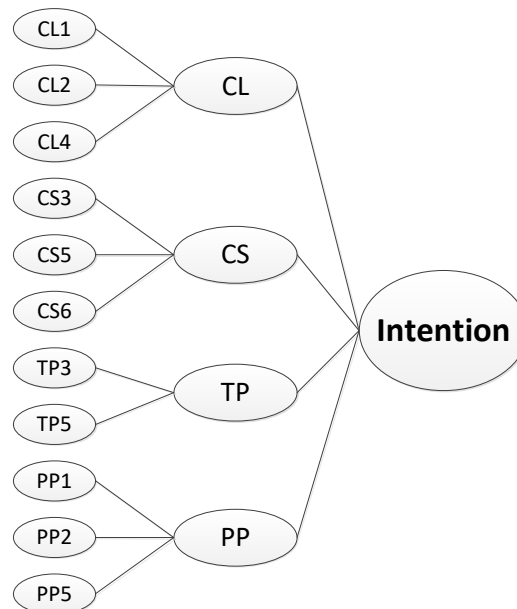

Figure 1. Research model of factors influencing college students' willingness to use online loans

In the framework model, the dependent variable is P2P lending use willingness for college students, which includes the following four aspects as college students' cognitive dimension, college students' consumption, Online Peer to Peer lending transaction dimension and Online Peer to Peer lending platform dimension. And the independent variable is the 11 factors under the 4 dimensions, what is, P2P lending awareness, self-assessment, responsibility consciousness, consumption demand, consumption concept, security of consumption, interest, reimbursement ways, network security, publicity and convenience.

3. Data collection

By adopting the Liket five-foot scale method, we designed a one-to-one questionnaire for each factor for a more reliable questionnaire. In the sampling survey of college students, a total of 367 questionnaires were issued in the form of a universal questionnaire designer (sojump.com), and 365 copies were recovered, among which 352 valid questionnaires were issued, with an effective rate of

96.4%. Among them, male accounted for 35.91% while 64.09% are female. The number of people who have used P2P lending platforms accounted for 18.1%, and the number who has not used P2P platforms is 71.9%.

4. Data analysis and test

We used SPSS19.0 statistical software to conduct quantitative statistical analysis of the data. Among them, the results of reliability analysis and validity analysis are the reliability analysis of this study, while the results of correlation analysis, regression analysis and hypothesis analysis show the correlation between various factors and the willingness of college students to use P2P lending.

4.1 Reliability analysis

There are 11 influence factors of this research which also are the dependent variables, what is, P2P lending awareness, self-assessment, responsibility consciousness, consumption demand, consumption concept, security of consumption, interest, reimbursement ways, network security, publicity and convenience. We tested the reliability of explanatory variables through SPSS software, and found that the overall reliability of Alpha scale was 0.787>0.70 which indicated better reliability of data. Therefore, the scale built in this study has good reliability and stability, which is in line with the research needs.

4.2 Validity analysis

Validity analysis is also called effectiveness analysis, that is, analyzes the degree of the final results' response to the preset considerations. In this paper, the validity of the scale was verified by factor analysis. The feasibility of factor analysis is evaluated based on the results of KMO and Bartlett sample measurement test. The higher the KMO value of the sample, the higher the feasibility of factor analysis is. Experience shows that it is not suitable for factor analysis when KMO≤0.7. Factor analysis can be done fairly when 0.7≤KMO≤0.8.The factor analysis is appropriate while 0.8≤KMO≤0.9. If KMO≥0.9, it is very suitable for factor analysis.

We conducted a validity analysis of the survey data through SPSS software. Based on the scale of KMO sampling adequacy measure inspection and Bartlett test of sphercity, it is concluded that the selection of scale and data KMO value is 0.824 > 0.8, which shows strong partial correlation between each variable, thus the scale is suitable for further analysis of the factors. In addition, Bartlett test of sphercity value is 929.879 and the significance P value is less than 0.01, indicating that the data matrix is not the identity matrix and the questionnaire has a good validity.

4.3 Correlation analysis

Correlation analysis is mainly used to measure whether there is a certain connection between different measurement items or not. By observing the correlation coefficient in the correlation analysis, we can not only know the closeness of the variables studied, but also know the action direction of the variables, thus laying a foundation for the subsequent regression analysis. This paper mainly uses the basic Pearson correlation analysis method to test the correlation between the variables in the research model. If the correlation coefficient is positive, it indicates a positive correlation between the variables and a negative correlation. The absolute value of correlation coefficient indicates the strength of the relationship between variables. See table 2 for details.

Table 2 Test results of correlation between usage intentions and 11 influencing factors

variables	1	2	3	4	5	6	7	8	9	10	11	12
use willingness	1											
P2P lending awareness	.326**	1										
self-assessment	.155**	.354**	1									
responsibility consciousness	-.145**	.082	.381**	1								
consumption demand	.345**	.182**	.109*	.015	1							
consumption concept	.367**	.310**	.300**	.170**	.303**	1						
security of consumption	.236**	.407**	.448**	.261**	.214**	.359**	1					
interest	.337**	.319**	.253**	.064	.224**	.207**	.163**	1				
reimbursement ways	.295**	.240**	.222**	.108*	.234**	.219**	.137*	.504**	1			
network security	.285**	.335**	.322**	.166**	.107*	.188**	.202**	.442**	.529**	1		
publicity	.307**	.341**	.324**	.115*	.093	.148**	.228**	.409**	.398**	.702**	1	
convenience	.099	.304**	.362**	.363**	.076	.207**	.256**	.341**	.297**	.314**	.421**	1

**. Significant correlation at the level of.01 (both sides)
*. Significant correlation at the level of 0.05 (both sides)

4.4 Regression analysis

Through the correlation analysis of the willingness to use P2P platform and the 11 influencing factors, we cannot determine whether there is a causal relationship between the two kinds of phenomena, but only conclude that there is a significant positive relationship and a close degree between the variables. The regression analysis shows the direction of the relationship at a deeper level, and explores whether there is a causal relationship between the variables at a deeper level, and at the same time determines which factors the explanatory variables are leading to the change of the dependent variable, as well as the size and direction of the influence. Therefore, in order to further verify whether there is a causal relationship between variables in the model, we made a regression analysis, as shown in table 3.

Table 3 model summary

Mode	R	quadratic R integral	Adjust quadratic R integral	Error in standard estimates	Change statistics				
					Change quadratic R integral	F change	df1	df2	Sig. F change
1	.463[a]	.214	.212	.84153	.214	91.479	1	335	.000
2	.542[b]	.294	.290	.79893	.080	37.678	1	334	.000
3	.574[c]	.329	.323	.77991	.035	17.495	1	333	.000
4	.593[d]	.351	.343	.76828	.022	11.152	1	332	.001
5	.604[e]	.365	.355	.76129	.014	7.129	1	331	.008
6	.610[f]	.372	.361	.75796	.007	3.915	1	330	.049

a. Predictive variables: (constant), security.
b. Predictive variables: (constant), safety, consumption concepts.

c. Predicted variables: (constant), security, consumption concept, consumption demand.

d. predictive variables: (constant), security, consumption concept, consumption demand, responsibility awareness.

e. Predictive variables: (constant), security, consumption concept, consumption demand, responsibility awareness, P2P lending awareness.

f. Predictive variables: (constant), security, consumption concept, consumption demand, responsibility awareness, P2P lending awareness, interest.

Table 4 Regression analysis results of willingness to use and 12 influencing factors

	Mode	The nonstandard coefficient		The standard coefficient		
		B	Std Err	Trial version	t	Sig.
1	(constant quantity)	.705	.127		5.555	.000
	security	.507	.053	.463	9.564	.000
2	(constant quantity)	.053	.161		.331	.741
	security	.445	.051	.407	8.684	.000
	consumption concept	.295	.048	.288	6.138	.000
3	(constant quantity)	-.314	.180		-1.747	.081
	security	.413	.051	.378	8.169	.000
	consumption concept	.239	.049	.233	4.896	.000
	consumption demand	.231	.055	.199	4.183	.000
4	(constant quantity)	.287	.252		1.136	.257
	security	.408	.050	.373	8.179	.000
	consumption concept	.251	.048	.245	5.206	.000
	consumption demand	.226	.055	.194	4.142	.000
	responsibility awareness	-.154	.046	-.148	-3.339	.001
5	(constant quantity)	.168	.254		.660	.510
	security	.377	.051	.345	7.422	.000
	consumption concept	.218	.049	.213	4.436	.000
	consumption demand	.217	.054	.187	4.004	.000
	responsibility awareness	-.152	.046	-.147	-3.337	.001
	P2P platform awareness	.120	.045	.127	2.670	.008
6	(constant quantity)	.078	.257		.303	.762
	security	.349	.053	.319	6.645	.000
	consumption concept	.212	.049	.207	4.323	.000
	consumption demand	.204	.054	.176	3.756	.000
	responsibility awareness	-.146	.046	-.141	-3.216	.001
	P2P platform awareness	.101	.046	.107	2.218	.027
	interest	.099	.050	.097	1.979	.049

a. Dependent variable: use intention

Through stepwise regression, 12 influencing factors were taken as independent variables to analyze. It can be seen that security, consumption concept, consumption demand, responsibility awareness, P2P platform awareness and interest can significantly affect customers' experience.

The regression equation is as followed.

Use intention =-0.78+0.349*platform security +0.212* consumption concept +0.204* consumption demand -0.146* responsibility awareness +0.101* P2P lending awareness +0.099* interest

Therefore, the six elements of platform security, consumption concept, consumption demand, responsibility awareness, P2P awareness and interest have a significant impact on the usage intention of P2P lending.

4.5 Hypothesis testing

Based on correlation analysis and regression analysis, 11 hypotheses were verified. The analysis results show that the ten factors of P2P lending awareness, self-assessment, consumption demand, consumption concept, consumption security, P2P lending interest, repayment mode, security, popularity and sense of responsibility have significant positive effects on the willingness of contemporary college students to use P2P lending. The two factors of convenience have no significant impact on the customer experience. The specific verification results are shown in table 5.

Table 5 Testing results of the hypothesis

hypothesis	Coefficient of association	significance	Testing results of the hypothesis
1：P2P lending awareness—>use intention	.326**	outstanding	support
2：self-assessment—>use intention	.155**	outstanding	support
3：Responsibility awareness—>use intention	-.145**	outstanding	support
4：consumption demand—>use intention	.345**	outstanding	support
5：consumption concept—>use intention	.367**	outstanding	support
6：consumption security—>use intention	.236**	outstanding	support
7：interest—>use intention	.337**	outstanding	support
8：repayment mode—>use intention	.295**	outstanding	support
9：security—>use intention	.285**	outstanding	support
10:popularity—>use intention	.307**	outstanding	support
11：convenience—>use intention	.099	non-significant	reject

5. Summary

Through data analysis and hypothesis verification, we found that five factors, including platform security, consumption concept, consumption demand, P2P lending awareness and interest, have significant positive correlation with their usage intention when college students choose P2P lending platform. Responsibility awareness is negatively correlated with willingness to use it. There is a strong positive correlation among the three factors of consumption security, repayment mode and popularity and their willingness to use, while the factor of convenience has no obvious influence on

their willingness to use.

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