

How does P2P Online Lending Individual's Default Behavior Influence on Observer's Default Intention?

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Abstract. The existing literature shows that individuals' default behavior of Peer to Peer (P2P in abbreviation) online lending has a great influence on observers' default intention. However, how is the observer's default intention influenced by the P2P online lending defaulter? What variables mediate or moderate the relationship between the individual's default behavior and the observer's default intention? These important questions remain to be resolved. This paper aims to address these unresolved questions. Through making carefully designed two experiments, our research results show that: the individual's default behavior can rise the observer's default intention due to current imperfect Chinese P2P Online Lending punishment regulations; the observer's moral disengagement level and pragmatic self-activation level are the two mediating variables whereas the intimacy level between the defaulter and the observer is the variable moderating the relationship between the individual's default behavior and the observer's default intention. Intimacy level can also moderate the relationship between the individual's default behavior and the two mentioned mediator variables. The paper also provides some related management suggestion about P2P online lending.

Introduction

In recent years, P2P online lending platforms have been widely spread in China. Up to the end of 2016, there were 2448 platforms in China with a total deal amount of RMB2063.872 billion, growing 110% compared to that of 2015 (Report, 2016). In spite of fast growth of P2P lending platforms in China, the existing high default rate limits their further development. Chinese P2P online lending industry white book (2013) showed that the average default rate of Chinese P2P online lending platforms in 29 provinces reached 6.45% which is much higher than the default rate of traditional financial institutions. In order to the decrease default rate, most Chinese P2P online lending platforms make a black list which discloses defaulters' personnel information including their name, cell phone number and ID number. The disclosure of black list is expected to warn observers and decrease their potential default behavior. But a black list may also set up negative examples for observers to follow defaulter's behavior. Lu et al.(2012) used second hand data analysis and showed that monkey see, monkey do phenomenon exists on Chinese P2P online lending platforms. Their research only proved that a black list can really set up negative examples for observers to follow defaulter's behavior. However, how is the observer's default intention influenced by the P2P online lending defaulter? What variables mediate or moderate the relationship between the individual's default behavior and the observer's default intention? These important questions remain to be resolved. This paper aims to address these unresolved questions by making two carefully designed experiments.

Literature Review on P2P Online Lending Default Behavior Research

The existing literature about borrower's personal influencing factors is the main stream for P2P online lending default behavior research. Although scholars have conducted studies about personal level factors for quite a long time and reached certain agreements, few studies have been done about interpersonal influencing factors. The previous research findings show that individual default behavior sets up negative examples for observers to follow. But the inner mechanism about how the defaulter's behavior influences the observer's default intention still needs further exploration. Our paper aims to make some effort to fill the gaps of P2P online lending research and explore the inner mechanism of the relationship between the individual default behavior and the observer's default behavior. We will first review the related literature and propose research hypotheses in Section 2, then make two experiments in Section 3 and Section 4 to test research hypotheses, and finally conduct conclusions and suggestions in Section 5.

Research Hypothesis

Main Effect and Mediating Effect Hypothesis

Most scholars view Theory of Planned Behavior (TPB) as the most widely used fundamental theory to illustrate how behavior intention and behavior come into being. According to TPB, subjective norm is one of the three main factors influencing individual's behavior intention. Subjective norm can be divided into two types: mandatory norm and demonstration norm. Mandatory norm influences individual's behavior intention by verbal persuasion of surrounding people while demonstration norm influences individual's behavior intention by behavior demonstration of surrounding people. They are all very important types of subjective norm because both of them give pressure on individuals (Rivis and Sheeran, 2003). Thus, based on the above mentioned theory we propose the first hypothesis below:

H1: Individual's default behavior raises other observer's default intention

According to moral disengagement concept firstly proposed by Bandura (1986), individual's cognition intention reinterprets his/her behavior. Individual can believe that his/her behavior makes less damage, decreases his/her moral responsibility and makes him/her get the exemption of self-punishment. Individual's moral disengagement changes on the basis of environment (Ashforth et al., 2003). The observer's important personnel environment is composed of individuals who have the same identity as the observer. The observer views himself/herself and the individuals as a member of an inner group. As for the P2P online lending environment, individual defaulters and observers have the same identity as a borrower. Because of this clue, the observer may take defaulters as his/her inner group members. Thus, influenced by surrounding inner group interpersonal environment, the observer's default intention will rise. Scholars have studied the relationship between moral disengagement and unethical behavior. Moral disengagement can decrease individual's moral sensation (Moore, 2008), and make more unethical behavior (Yang et al., 2010). Thus, we propose the second hypothesis below:

H2: Moral disengagement is the mediator variable between the individual's default behavior and the observer's default intention

Like other mental representation, the meaning of self-concept is different according to different circumstances. Kivetz et al. (2007) put forward a pair of self-conception: pragmatic self and idealistic self. The idealistic self places values and principles above practical considerations, and therefore, is more closely related to the person's sense of true self. The pragmatic self focuses on situational opportunities and constraints for the purpose of action guidance. Since money has natural relationship with business, concept individual are more likely to think under business decision framework when priming money (Kouchaki, 2013). It also means individuals will present more rational and personal characters, and he/she will focus on calculation about benefit and make decisions with the aim of benefiting himself/herself. Such characters show that the individual's pragmatic self is active. Self-conception activation is very important for an individual to form his/her motivation (Cantor et al., 1986). Pragmatic self's emphasis on specific situation and benefit

calculation will make individual neglect moral principal and chase certain instrumental benefit. The instrumental benefit includes money, goods and other kinds of instrumental resources (Kivetz et al., 2007). Thus, we propose the third hypothesis below:

H3: Pragmatic self-activation level is the mediator variable between the individual’s default behavior and the observer's default intention.

Moderating Effect Hypothesis

According to TPB, subjective norm stands for the supporting degree of surrounding people to an individual’s certain behavior. The more important the surrounding people to the individual are, the bigger supporting degree the individual will feel (IcekAjzen, 2006), and the more likely the individual will follow the opinion of surrounding people to conduct certain behavior. As for the observer, the more intimate relationship means more sense of trust, deeper understanding and thicker emotion foundation (Li, 2015), so the more intimate relationship developed with the demonstrator, the more important will be the demonstrator influence to the observer. Thus, we propose the fourth hypothesis below:

H4: The intimacy between the individual defaulter and the observer plays a positively moderating effect between the individual’s default behavior and the observer’s default intention. It can be illustrated in this way: the more intimate relationship developed by the observer with the demonstrator, the higher will be the observers' default intention.

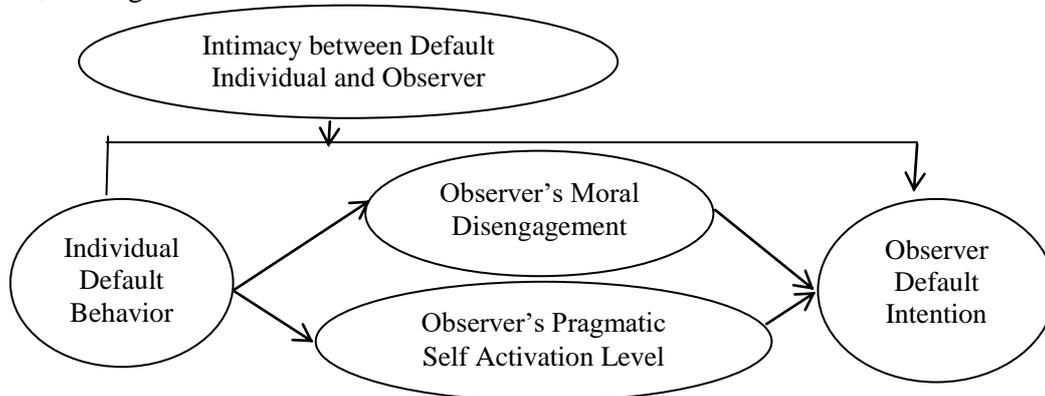


Figure 1. Theoretical research framework.

We synthesize the above six hypotheses in our theoretical research framework (see Figure 1). And then we start to test these hypotheses by making experiments in Section 4 and Section 5.

Study 1

Moral Disengagement Scale Development

Item Resources

Moral disengagement scale was originally developed by Bandura et al. (1986). With further research, some other scholars have developed more and more specific situational moral disengagement scales. Moore et al. (2008) developed an economic and management situational moral disengagement scale. Considering P2P online lending default behavior research as a kind of economic and management research, this research adopts Moore et al.’s simplest moral disengagement scale (one question for one dimension) but makes some minor necessary modification.

Pre-test

Taking the above mentioned scale, we asked 60 students randomly to complete our questionnaire in Haerbin University of Science and Technology. Another 60 questionnaires were completed by employees from Rongcheng Fishery Food Processing Corporation. Eliminating 20 invalid questionnaires, we got 100 valid questionnaires. After that, we conducted SPSS16.0 analysis and Cronbach’s α is equal to 0.94, greater than 0.8. The result of exploratory factor analysis shows that

Bartlett ball test is significant and KMO value is equal to 0.925, greater than 0.8. Thus, the factor analysis is suitable to analyze the data.

Now we use structural equation model to carry out confirmatory factor analysis. The result shows that $CMIN/DF=1.261<2$; $CFI=0.993>0.9$, $TLI=0.990 >0.9$; $RMSEA=0.051<0.08$; All path coefficient is statistically significant ($P<0.001$). Thus, this model's fitting effect is good. This signifies that every item to measure moral disengagement is valid.

Experiment Design and Subjects

Study 1 uses between group experiment (experimental group and control group) to test main effect and mediating effect hypothesis. The aim of Study 1 is to testify main effect (H1: default behavior can raise other observer's default intention.) and the mediating effect (two mediator variables: moral disengagement and pragmatic self-activation level). Study 1 makes two groups: an experimental group and a control group.

Experiment Subjects

Firstly, we organized 40 undergraduate students from Rongcheng College, Haerbin Technology University into a classroom and ask them to complete questionnaires on site. Another 90 questionnaires were collected from internet by sending the questionnaires to our wechat friends circle. Finally, we got 120 valid questionnaires.

Experiment Design

Our experiment includes three parts: 1) Brief description about P2P online lending scenario; 2) Scales filling; 3) Personnel information of experiment subject.

In the first part of P2P online lending scenario description, we create a situation that Li Ming bought 10 thousand RMB from HaoKuidai, a new established P2P online lending platform and he knows the punishment if he defaults. The punishment solution is written according Paipaidai platform's real solution.

Comparing to the control group, the experiment group is shown the following information before disclosing the above mentioned punishment information: "When the repayment day is approaching, Li Ming browses unintentionally the list of defaulters with their personnel information which is exposed online by HaoKuidai. He also finds that all of the defaulters are not prosecuted by the lenders. Except for exposing their personnel information to the public, the defaulters have no other loss at all."

In the second part of scales filling, we adopt Tang's scale (2013) to measure observer's default intention. We employ the pre-tested moral disengagement scale to measure moral disengagement. We adopt Kivetz et al.'s scale (2007) to measure pragmatic self activation level.

In the third part of personnel information, we firstly ask experiment and control subjects the following information: the perception of black list punishment severity (measured by 7 ranks likert scale), whether the subject has credit default experience or not. The answers are used to measure the object's soft and hard information.

Experimental Result Verification

Previous researches show that hard information (related to credit rating) and soft information (related to social capital) are the two main factors which influence individual's default intention. T-test result shows that the soft information of the control and experiment groups have no statistically difference: $M_{control}=3.700$, $M_{experiment}=4.033$, $t=-1.140$, $p=0.256$. The hard information of the two groups also has no difference: Pearson Chi-Square =0.069, $p=0.793$. The coefficient of Cronbach of moral disengagement scale is equal to 0.952, greater than 0.8.

Now we will verify the hypotheses one by one. For the control group, the average default intention is equal to 2.0333 whereas for the experiment group, the average default intention is equal to 3.1333. T-test shows the difference is statistically significant, namely $t=4.921$ and $p=0.000$. Thus, individuals default behavior can raise other observer's default intention. H1 is supported.

And then, we verify the mediating effect of moral disengagement between the individual's default behavior and the observer's default intention.

From Table 4, we can see that individual's default behavior can raise other observer's default intention ($t=4.921, p=0.000$). When using moral disengagement and individual's default behavior to predict observer's default intention, individual's default behavior remains a positive influence on observer's default intention ($t=3.346, p=0.000$) and the coefficient becomes smaller ($0.693 < 1.1000$). As all coefficients are statistically significant, the hypothesis 2 is verified.

Table 4. Verification of moral disengagement as a mediator variable.

	Model 1			Model2			Model 3		
	Observer Default			Observer moral			Observer Default		
	Intention			disengagement			Intention		
	b	SE	t	b	SE	t	b	SE	t
Independent variable: Individual default behavior	1.100	0.224	4.921**	0.814	0.218	3.729*	0.693	0.207	3.346*
Mediator variable: observer's moral disengagement							0.499	0.083	6.046**

Note: * $p < 0.05$, ** $p < 0.001$

Now we use the same method to verify the observer's pragmatic self activation level as another mediator variable (see Table 5).

Table 5. Verification of the observer's pragmatic self activation level as a mediator variable.

Dependent variable	Model 1			Model2			Model 3		
	Observer Default			Observer pragmatic			Observer Default		
	Intention			self activation level			Intention		
	b	SE	t	b	SE	t	b	SE	t
Independent variable: Individual default behavior	1.100	0.224	4.921**	1.333	0.294	4.534*	0.498	0.196	2.544*
Mediator variable: observer's pragmatic self activation level							0.452	0.057	7.997**

Note: * $p < 0.05$, ** $p < 0.001$

From Table 5, we can find out that individuals' default behavior can raise other observer's default intention ($t=4.921, p=0.000$). When using observer's pragmatic self activation level and individuals' default behavior to predict observer's default intention, individual default behavior keeps a positive influence on observer's default intention ($t=2.544, p=0.000$) and the coefficient gets smaller ($0.498 < 1.100$). However, all coefficients are statistically significant. Thus, the hypothesis 3 is verified.

Study 2

Experiment Design and Subjects

Experiment Subjects

The aim of study 2 is to verify the moderating effect of the intimacy between the default individual and the observer. Study 2 chooses to form an intimate group and a non-intimate group.

Firstly, we invited 55 undergraduate student volunteers from Haerbin Technology University Rongcheng College to fill out the questionnaires in a classroom. We sent the same questionnaires to

a wechat friend circle and got 85 completed scales. Deleting 20 invalid scales which were not filled out completely, we got 120 valid scales.

Experiment Design

The experiment design of Study 2 is similar to study 1. Study 2 also includes three parts: 1) Brief description about P2P online lending scenario; 2) Scales filling; 3) Personnel information of experiment subject. The first part has some differences with study 1. The rest two parts are the same as study 1.

For the part 1 of the intimacy group, in order to bring the intimate group members into the experiment scenario, we use Aron et al.'s intimacy scale (1992). Two largely overlapping circles (one circle represents self, the other represents another person) were made at the beginning of the experiment. Below the circles, we put a note that self and another person have an intimate relationship. Then each member from the intimate group is required to write down the names of the people with whom he or she reminds of an intimate relationship. He or she is also asked to write down the exact relationship between himself/herself and the reminding person. One of the defaulters observed by objects is his/her intimate persons.

For the non-intimate group, there is no intimacy relationship imagine section. The defaulters observed by objects are all strangers.

Experiment Result Verification

As we did in Study 1, our T-test result shows that there is no statistical difference in terms of soft information between the intimate group and the non-intimate group (M intimate =4.70, M non-intimate =4.35, t =-1.126, p =0.263); it is the same result in terms of hard information between the two types of groups (Pearson Chi-Square =1.294, p =0.255). The Cronbach's α of moral disengagement scale is equal to 0.947, greater than 0.8. Now we test our hypotheses one by one. We get our research results that for the control group, the average default intention of experiment subjects is equal to 2.0333, and 3.1333 for the experiment group. And T-test result confirms the significant difference exists between the two groups (t =4.921, p =0.000). Thus H1 is verified.

And then, we verify the moderating effect of intimacy between individual default behavior and observer's default intention. Our test result shows that the average observer's default intention in the intimate group is higher than that in the non-intimate group, namely 4.9333 against 3.7000. T-test also verifies the significant difference exists (t =5.211, p =0.000, see Table 7). Thus H4 is verified.

Conclusion

Our research uses the experiment method to verify that individuals' default behavior can raise other observers' default intention (Study 1). The observer's moral disengagement and pragmatic self activation level are the two mediator variables between individuals' default behavior and observers' default intention (Study 1); Study 2 verifies that the intimacy between default individuals and observers moderates the relationship between individuals' default behavior and observers' default intention.

The main theoretical contribution of our research is that it enriches the existing literature about what factors influence P2P online lending default behavior by discovering the inner mechanism of P2P online lending default behavior's 'Monkey see, monkey do' phenomenon. The practical contribution of our research is that it verified that a black list of default has a negative example effect on the observer's default intention. How to avoid the negative effect of black list needs further research. Our mediating mechanism may give some enlightenment: For the first mediator variable – the observer's moral disengagement level, we propose that Chinese P2P online lending platforms can promote some positive moral information such as disclosing some creditable examples of borrowers to decrease observers' moral disengagement level; as for the second mediator variables - pragmatic self activation level, to decrease default benefit is a good solution. If there is little available benefit arising from default behavior, it is hard for an observer to active his/her pragmatic self level. To change the disclosure content of black list would be useful. Most

Chinese P2P online lending platforms only disclose the information of defaulters who haven't been prosecuted by law. This gives observers an impression that if he/she conducts default behavior, they will have no punishment at all except for personnel information exposure which can cause him/her no economic loss. If Chinese P2P online lending platforms only publish the information of defaulters who have been prosecuted by law, observers will overestimate the default cost just as the old saying mentions, "Beat the dog before the lion". At the same time, the default benefit will decrease in accompany with the observer's pragmatic self activation level.

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