Title

Are Some Stories Worth More Than Others? The Influence of Narratives on Pro-Social Lending

Permalink

https://escholarship.org/uc/item/0g18x3s7

Author

Etheredge, Justin

Publication Date

2019-04-01

By

A capstone project submitted for
Graduation with University Honors

University Honors
University of California, Riverside

APPROVED

_____
Dr.
Department of

_____
Dr. Richard Cardullo, Howard H Hays Jr. Chair, University Honors

Abstract

Acknowledgements

I would like to express my gratitude and appreciation for my faculty mentor, Dr. Elaine

Wong, of the School of Business at the University of California: Riverside for her support

throughout the entirety of this research project. Over the course of this work, I have learned a lot

about the research process and even more about myself. Without the guidance and support of Dr.

Wong, I would not be the person I am today and this project would not have come to fruition.

Additionally, I would like to thank Dr. Margaret Ormiston for helping us to gather our data on

the narratives used in this research. Lastly, I would like to thank Kiva for allowing their data to

be available to the public. Without this data, the results of this project would not be possible. The

findings exhibited in this work were presented at the UCR 13th Annual Undergraduate Research,

Scholarship, and Creative Activity Symposium on May 15, 2019.

Table of Contents

Introduction

In recent years, technology and innovation have allowed for a growing number of businesses that are built on the economic contributions of people all around the world for people with limited financial mobility. Companies like Amazon allow consumers to purchase products from businesses in all corners of the world while sites like GoFundMe allows people to fundraise and crowdfund. One interesting case of crowdfunding is Kiva.org. Kiva allows borrowers (typically of lower economic status/location) to seek out zero-interest loans from anyone who chooses to contribute. Furthermore, lenders on Kiva.org are not necessarily making investments because there is no opportunity for them to make a profit. Rather, if a borrower is successful in using their loan profitably, the lender can receive their money back. On the other hand, if the borrower is unsuccessful, the lender loses the money they loaned. With the possibility of profit gone, it is beneficial to understand the motivations and factors that drive people to lend money to those in need.

With the microlending phenomena continuing to grow, the amount of research surrounding microlending behavior has begun to add up. Much has been studied in order to understand the motivations that predict lending behavior. This includes content analysis of narratives present on borrower profile pages. While there is a large body of literature on the content of narratives as predictors of lender behavior, the effects of cognitive complexity have yet to be understood, particularly in the scope of gender moderation. We sought to fill the gap in this literature, establishing a base of understanding for future studies to follow. In the sections to follow, we hope to understand the effects of cognitive complexity in society with respect to gender, leading to our focus on how cognitive complexity and gender affect the rate of funding and number of lenders for borrowers using Kiva.org.

A potentially influential piece of data that could persuade a greater number of lenders to contribute their money at a faster rate is borrowers' narrative data. Narratives are a sequentially structured discourse that gives meaning to events that unfold around a given character (Herzenstein, Sonenshein, & Dholakia 2011). Thus, narratives serve as a medium to express a borrower's past, present, and future plans. In the case of Kiva, every loan posted on their site has an accompanying narrative. These narratives can range in length and content, are often written from a third person perspective, and serve to provide insight to the borrowers' backgrounds and plans for the loans that they receive. The narratives allow for lenders to develop a legitimate relationship with the borrower (Galek, Small, & Stephen, 2011). Lenders may feel as though they are providing the borrower with an opportunity for happiness and success, should they choose to pursue that relationship (Moodie, 2013). Since there is no profit for the lenders on Kiva, the primary benefit is that positive feeling of an emotional-social bond without actually meeting the person, allowing an interesting dynamic of distance and closeness (Moodie, 2013). In other cases, lenders may feel a sense of social responsibility, religious duty, or altruism as the reason for why they are lending (Liu, Chen, Chen, Mei & Salib, 2012). Others may see it not necessarily as an emotional tie, but an effective method of promoting global development (Liu et al., 2012). Regardless of why a given lender is choosing to relinquish some of their personal funds to help a borrower they have never met, it is important to understand to whom they are choosing to lend, especially with such a wide variety of lending opportunities available.

Prior research has identified a multitude of factors, including aspects of borrower's narratives that play an influential role in crowdfunding. For example, borrower's impression management through identity claims presented in borrower narratives, such as claiming to be

4

trustworthy, responsible, and driven are key contributors to how lenders react to an opportunity (Herzenstein et al., 2011). Specifically, claiming a greater amount of identities leads to a higher chance of being funded at a faster rate and receiving a lower interest rate on a similar site to Kiva called Prosper.com. On the negative side, showing a sense of accomplishment prior to receiving the loan results in a decrease in funding speed (Allison et al., 2013).

Beyond the impression borrower's wish to craft in their narratives, narrative rhetoric associated with timelines are also indicative of faster loan fulfillment (Allison, McKenny, & Short 2013). Narratives can incorporate elements of the past, present, and future to explain the borrowers' background and plans. Borrowers whose narratives have a focus on the present have a tendency to get their loans fulfilled more quickly (Allison et al., 2013). On the other hand, overall emotional tone of the narrative has surprisingly no impact on lending rate (Genevsky & Knutson, 2015). Funding on microlending sites has received much attention in the research, but typically only focuses on how the narrative makes the lender feel towards the borrower. It is apparent that characteristics of the borrower matter based on the literature. However, the notion to which the lender understands not only the borrowers' situation but how the borrower understands their own situation and plans. This notion of cognitive complexity has yet to receive the attention it needs.

Cognitive Complexity

Cognitive complexity is a measurement of how strongly a person can both recognize and integrate a variety of different concepts, variables, or perspectives in a given situation or environment (Halford, Wilson, & Phillips, 1998). Research has shown that displaying low cognitive complexity prior to a task or role will attract more followers (Tetlock, 1981). In politics, presidential candidates who exhibit issues and plans in more simplistic ways were more

likely to be elected than those who presented the issues in a more complex manner. However, during their presidency, the cognitive complexity of their statements became increasingly more complicated (Tetlock, 1981). This is expected as candidates hope to gain favor from voters. Upon election, the president will either address or realize that policies are far more complicated than previously reported. Similar observations could be seen in the microlending sector. Just as voters respond more positively to candidates with simple narratives in presidential elections, we might expect that lenders more readily fund borrowers whose narratives are more simple. Thus, narratives may exhibit borrower plans in a simplistic manner in order to attract the donations of lenders. It is possible that context plays a role in whether high or low cognitive complexity is favored. With regards to likability and gaining support, it may be more productive for people to exhibit low cognitive complexity, as seen in presidential candidates (Tetlock, 1981). Additionally, success or failure could be predicted based on the ability for a borrower displaying low cognitive complexity to shift to a higher level of complexity. For cognitive complexity, higher levels of cognitive complexity have been positively linked to business performance in comparison to people who are unidimensional or inflexible in their approach to solving business problems (Cheng & Chang, 2009). Additionally, business leaders who exhibit greater ability to integrate a variety of project are found to be both more cognitively complex, better at leading, and have stronger performance in detailed project tasks (Green, 2004). Furthermore, organizations whose leaders possess higher integrative complexity also display higher corporate social performance which is in turn positively related to greater financial performance (Wong, Ormiston, & Tetlock, 2011). This is because they are better able to understand and integrate information from a wide range of stakeholders. Based on these findings, it appears that the benefits of higher or lower complexity may depend on the situation. Gaining lenders would be

most akin to gaining voters in a presidential race. Therefore, we can expect that lower levels of cognitive complexity would be positively correlated with funding time and number of lenders.

In the lens of funding at Kiva, cognitive complexity would be the borrowers' ability to understand information from those involved in their venture, including the lenders. While these sources focus primarily on people expected to have high cognitive complexity (i.e. Presidential Candidates, Business Leaders), it has also been found that cognitive complexity also affects the overall social status of general individuals on a global level (Foels & Reed, 2010). More specifically, those who are at a lower social status display higher cognitive complexity such that they have a need to be well informed and equipped to succeed and rise in social status.

Hypothesis 1: Borrowers who exhibit lower cognitive complexity will receive funding faster.

Hypothesis 2: Borrowers who exhibit more cognitively complex borrower narratives will yield more lenders due to greater need.

Gender and Cognitive Complexity

On a global scale, women have a lower social status in comparison to men (Sidanius & Pratto, 1999). Additionally, there have been observed differences in cognitive complexity between men and women (Foels & Reed, 2010). Per the Identifiable Victim Effect, Kiva lenders seek to lend to people who they identify as a victim and can exact the most positive impact upon by creating a beneficial entrepreneurial relationship (Galek, Small, & Stephen, 2011). Women who have higher complexity are better able to accurately recall information (Jackson & Hymes, 1985) and better at processing contextual information to solve problems (MacGeorge, 2003). Despite this, men are still expected to have a higher social status and be more successful than women (Sidanius & Pratto, 1999). Thus, men who display higher cognitive complexity but are in

7

need of funding violate most people's expectancies. Expectation Violation Theory suggests that if an expectancy is violated, people typically react negatively and often rate the violator as less desirable (Burgoon & Walther, 1990). Thus, men who have high cognitive complexity leave potential lenders wondering why they have not found their own success and deciding not to lend. The lender will then seek out a borrower who fits their expected notion of a borrower in need (Plaks, Grant, & Dweck, 2005). In association with the Identifiable Victim Effect, it is likely that those who display lower cognitive complexity are expected by lenders to require a greater need for funding, as they do not have the cognitive speed and flexibility to be successful on their own in comparison to those with higher cognitive complexity. Additionally, because women typically have a lower social status to begin with, it is likely that they will also be perceived as needing funding to a greater degree than their male counterpart, with less regard to their cognitive complexity levels because highly cognitively complex men are expected to succeed independently.

Hypothesis 3: Gender will moderate the relationship between cognitive complexity and time to funding, such that men using higher cognitively complex narratives will take longer to fund than women.

Hypothesis 4: Gender will moderate the relationship between cognitive complexity and number of lenders, such that men using higher cognitively complex narratives will require more lenders to fund than women.

Methods:

Sample

The sample used in our research consisted of funded loans gathered from a data snapshot found on build.kiva.org (N=162). To narrow down the sample size, the loans used were

8

randomly selected from the year 2016. Data from the year 2016 was used for this study as it was the most recently complete set of data. The loans were then balanced out to represent a matched sample of men and women. The end sample consisted of 82 funded male loans and 83 funded female loans. Of the 82 males, 45 reported their age while 41 of the possible 83 females reported their age. The total age range consisted of 18-73 year olds (M=39.42, SD=11.84). A variety of industries are included in the data collected. The agriculture (23.1%), food (14.7%), and retail (20.5%) industries made up a bulk of the loans gathered but other industries (41.7%) were also present in the dataset. The complete sample consisted of thirteen different industries, however none of the other industries were as substantial as those listed previously with none surpassing 9%. Loans were also gathered from a variety of countries ranging from locations such as the Philippines (22.1%), United States (6.4%), Kenya (16.7%), Armenia (6.4%), and other nations (48.4%). The sample was made up of thirty different countries. However, none of the other nations surpassed the representations of the four countries listed above or 6%. Our sample includes only loans with narratives presented in English as prior research has shown that untranslated loan requests take substantially longer to be funded in comparison to translated and English requests (Chen, 2012).

Independent Variables

Cognitive complexity. Cognitive complexity is a measurement of how well a person can both recognize and integrate a variety of different concepts or variables in a given situation or environment (Halford, Wilson, & Phillips, 1998). Essentially, this is a measurement of the intricacies of a person's assessment of their setting, including the other people who may be involved. The data gathered for cognitive complexity was achieved using Linguistic Inquiry and Word Count (LIWC). LIWC gave us the ability to analyze the text present in each borrowers'

narrative that is displayed on Kiva's website. It calculates the proportion of a variety of categories of words that are in a given text. Words that are indicative of cognitive complexity include consequence, obscure, contradict, solution, etc.

Dependent Variables

Time to funding. Time to funding refers to the amount of time that it takes for a loan to be funded from the moment it is posted on Kiva until the loan amount is fulfilled by lenders. This variable was calculated by taking data from the kiva database. Specifically, the length of time between the date that the loan was posted and the day the loan was funded was calculated. The two calendar dates were converged to form a number that signified the amount of days the loan was up on Kiva's website. The whole number is followed by a series of decimal points which represent the hours, minutes, and seconds that the loan was up. For example, if a loan was posted March 20, 2016 at midnight, and the loan was funded on March 25, 2016 at noon, the resulting time to fund would be 4.5 (108 hours divided by 24 hours per day).

Number of lenders. Number of lenders refers to the specific amount of people that lent funds to a single loan. This variable was provided by the kiva database. Lending starts at as little as 25 dollars but lenders are open to supply as much funding as they wish.

Controls

Due to the variety of factors on the Kiva site and its users, we chose to control for several that could have an influence on the observations we are making. We controlled for the most abundant regions in our dataset: Philippines (22.1%), Kenya (16.7%), United States (6.4%), Armenia (6.4%), and other regions (48.4%). We also controlled for the most prevalent industries: Agriculture (23.1%), Food (14.7%), Retail (20.5%), and other industries (41.7%). Lastly, we controlled for various demographic factors that could affect the relationship including age

(Range: 18-73, M=39.42, SD = 11.84), whether or not the borrower has children (Range: 0-11,

M = 1.88, SD = 2.30), marital status (Married = 93, Not Married = 72), and for whom the loan is

intended (i.e., self vs. other). Within our dataset, 18 loans were clearly stated to be used for

another person while 147 were intended for the borrower.

Results

In Hypothesis 1, we suggested that higher borrower narrative cognitive complexity would

play a significant factor in the slower speed at which a loan is funded, with gender moderating

that relationship. We tested that hypothesis by employing a linear regression model. The results

of our model provide support for our hypothesis. We began by regressing our dependent

variable, time to funding, on the control variables. The results of model 1 displayed that the

controls play no significant factor in predicting time to funding ($R^2 = 0.052$, $p > .05$).

In model 2, we regressed our dependent variable on the control variables and the

independent variable, cognitive complexity. The results support Hypothesis 1, higher cognitive

complexity in borrowers' narratives indicated a higher time necessary to fulfill the loan ($R^2 =$

0.34, $b = 1.35$, SE = .189, t = 7.125, $p < .001$).

Model 3 was used to understand the interaction between gender and cognitive complexity

predicted in Hypothesis 3. This included regressing the dependent variable on the controls,

independent variable, and the interaction of our independent variable and gender. In parallel with

model 2, gender played a significant factor in moderating the relationship between cognitive

complexity and funding time ($R^2 = 0.362$, $b = .791$, SE = .358, t = 2.207, $p < .05$). It appears that

male borrowers in general take a longer amount of time to fulfill their loans in comparison to

females (Figure 1). Additionally, higher cognitive complexity results in higher funding times,

with the effect having more negative impact among male borrowers (Figure 1).

In Hypothesis 2, we suggested that higher borrower narrative cognitive complexity would additionally result in a higher number of lenders in order to fully fund the loan, also with gender as a moderator between the two factors. We tested this hypothesis through a linear regression model, mirroring the methods for Hypothesis 1. Our first model involved regressing our dependent variable, number of lenders, on our control variables. The results of model 1 suggest that the controls play no significant role in predicting number of lenders ($R^2 = 0.064$, $p > .05$).

In model 2, we regressed number of lenders on the controls and our independent variable, cognitive complexity. The results of our model provides support for our Hypothesis 2. Borrower's narratives that contained more cognitive complexity also required a higher number of lenders to fulfill that loan ($R^2 = 0.205$, $b = 1.97$, $SE = .732$, $t = 2.619$, $p < .01$).

With model 3, we tested Hypothesis 4 in the hopes of seeing similar results to our gender interaction for Hypothesis 3. We regressed number of lenders on the controls, cognitive complexity, and the interaction between cognitive complexity and gender. Our results indicated that, contrary to Hypothesis 3, our interaction did not play a significant factor in predicting number of lenders ($R^2 = 0.205$, $b = -0.198$, $SE = 1.005$, $t = -0.197$, $p > .05$).

Discussion

The results of our study indicate that cognitive complexity has been overlooked in the realm of microlending. With the magnitude of microlending continuously growing, it is suggested by our data that cognitive complexity should be considered in future research pertaining to microlending. Our results displayed that not only does cognitive complexity present in borrower narratives significantly predict time to funding and number of lenders in funding, but this is a significant predictor regardless of various demographic controls such as age, marital status, location, and industry. Furthermore, the gender that a borrower identifies as also affects

12

the amount of time required to fund a loan, particularly in men displaying higher cognitive complexity.

In this work, we dove into the literature surrounding the effects of borrower narrative content on receiving funding on the popular lending site, Kiva.org. We acknowledge the research gap of the role of cognitive complexity on lender decision making and found support that not only does it play a significant factor, but is also significantly impacted by gender. It is key to understand these factors in order to understand lender decision making processes. With the amount of female leaders in the business world on the rise, it would be beneficial to understand how cognitive complexity affects the performance and perception of female leaders in comparison to male leaders in association with prior research and the current findings. Understanding how cognitive complexity impacts the emotions of the lenders upon reading the narratives could also be critical. Much of prior research has focused on emotional contexts and identities. However, the complexity with which these emotions are conveyed could affect the way that lenders perceive them.

Furthermore, this finding, in association with prior research, allows Kiva the opportunity to understand their users' behaviors and how it affects the distribution of funding across their website. In doing so, Kiva has the potential to alter the narratives that they or their users generate, in order to stem funding across all industries and genders equally. Based on our results, this can be done by reducing cognitive complexity across narratives. By simplifying the content displayed in the narrative, borrowers can attract more lenders and achieve their funding goals more quickly by avoiding over complications in their plans. As for the lenders themselves, it is important to consider the way the lenders' plans are articulated and whether or not that is influencing them subconsciously. It is also key to acknowledge that higher cognitive complexity

13

is linked to higher performance. Therefore, when making a lending decision, the lender should account for the circumstances that the borrower is in and what they plan to do, in association with the borrowers' cognitive complexity. Furthermore, it would be beneficial from a societal standpoint to vary one's lending patterns in order to account for the lending gap between cognitively complex and cognitively simple narratives to allow opportunity for a wider spread of the population.

Limitations and Future Directions

Although our results are promising, this study is not without limitations. Firstly, these analyses should be performed again using a larger amount of loans. The current study is composed of 162 loans. This is problematic as Kiva funds hundreds of thousands of loans every year. Therefore, our dataset was not representative of the magnitude that Kiva operates and may not encompass the amount of variability that their full user base portrays. Kiva has a continuously updated database consisting of millions of loans. Therefore, these results should be duplicated using a larger sample size. Typical research conducted using Kiva's data use over 10,000 loans in their studies.

Additionally, this study focused primarily on funded loans. While a majority of loans on Kiva do get funded, there is still room to examine those that do not. It is likely that there is a legitimate reason as to why some loans go unfunded. Therefore, it would be critical to observe these loans not only in the scope of our current research, but past research as well.

Lastly, we were unable to obtain repayment data from Kiva. Due to this, we are not currently able to confirm the success or failure of the borrower in relation to their cognitive complexity both before and after they obtained their loan. Future directions can counter this by incorporating the actual success rate of borrowers. This could include potential cognitive shifts

14

that take place after starting their business. Post-loan, the cognitive complexity of future reports may increase. This can be observed through their updates provided to lenders in concordance with their repayment speed and success. It is possible that the simplicity exhibited in the narrative does not encompass the difficulty of the venture that the borrower is seeking, thus leading to potential failure as cognitive complexity and performance in business are positively linked. We were unable to attain this data during the course of this work, thus it would require further pursuit in the future. It would be ultimately beneficial to understand the storyline from the loan being posted, the loan being acquired or expired, and success or failure after using the loan.

Conclusion

The intentions of this study were to better understand the microlending phenomena from the perspective of the lenders. We did this by analyzing the effects of gender and cognitive complexity present in borrower narratives as predictors for time to funding and number of lenders. Our results provided support for our hypotheses thus filling the gap in the literature and providing insight as to how lenders make lending decisions based on narrative content.

References

Allison, T. H., McKenny, A. F., & Short, J. C. (2013). The effect of borrowerial rhetoric on microlending investment: An examination of the warm-glow effect. *Journal of Business Venturing*, *28*(6), 690-707.

Burgoon, J. K., & Walther, J. B. (1990). Nonverbal expectancies and the evaluative consequences of violations. *Human Communication Research*, *17*(2), 232-265.

Chen, R. W. (2012). Social Identity and Cooperation.

Cheng, S. L., & Chang, H. C. (2009). Performance implications of cognitive complexity: An empirical study of cognitive strategic groups in semiconductor industry. *Journal of Business Research*, *62*(12), 1311-1320.

Foels, R., & Reid, L. D. (2010). Gender differences in social dominance orientation: The role of cognitive complexity. *Sex Roles*, *62*(9-10), 684-692.

Galak, J., Small, D., & Stephen, A. T. (2011). Microfinance decision making: A field study of prosocial lending. *Journal of Marketing Research*, *48*(SPL), S130-S137.

Genevsky, A., & Knutson, B. (2015). Neural affective mechanisms predict market-level microlending. *Psychological science*, *26*(9), 1411-1422

Green, G. C. (2004). The impact of cognitive complexity on project leadership performance. *Information and Software Technology*, *46*(3), 165-172.

Halford, G. S., Wilson, W. H., & Phillips, S. (1998). Processing capacity defined by relational complexity: Implications for comparative, developmental, and cognitive psychology. *Behavioral and Brain Sciences*, *21*(6), 803-831.

Herzenstein, M., Sonenshein, S., & Dholakia, U. M. (2011). Tell me a good story and I may lend you money: The role of narratives in peer-to-peer lending decisions. *Journal of*

Marketing Research, *48*(SPL), S138-S149.

Jackson, L. A., & Hymes, R. W. (1985). Gender and social categorization: Familiarity and ingroup polarization in recall and evaluation. *The Journal of social psychology*, *125*(1), 81-88.

Liu, Y., Chen, R., Chen, Y., Mei, Q., & Salib, S. (2012, February). I loan because...: Understanding motivations for pro-social lending. In *Proceedings of the fifth ACM international conference on Web search and data mining* (pp. 503-512). ACM.

MacGeorge, E. L. (2003). Gender differences in attributions and emotions in helping contexts. *Sex Roles*, *48*(3-4), 175-182.

Moodie, M. (2013). Microfinance and the gender of risk: The case of Kiva. org. *Signs: Journal of Women in Culture and Society*, *38*(2), 279-302.

Plaks, J. E., Grant, H., & Dweck, C. S. (2005). Violations of implicit theories and the sense of prediction and control: implications for motivated person perception. *Journal of Personality and Social Psychology*, *88*(2), 245.
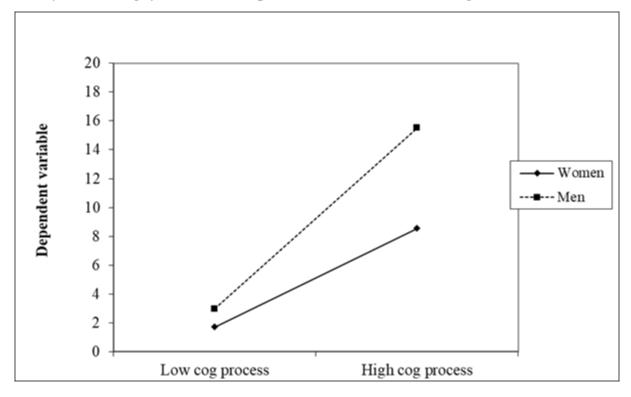
Sidanius, J., & Pratto, F. (2001). *Social dominance: An intergroup theory of social hierarchy and oppression*. Cambridge University Press.

Tetlock, P. E. (1981). Pre-to postelection shifts in presidential rhetoric: Impression management or cognitive adjustment. *Journal of Personality and Social Psychology*, *41*(2), 207.

Wong, E. M., Ormiston, M. E., & Tetlock, P. E. (2011). The effects of top management team integrative complexity and decentralized decision making on corporate social performance. *Academy of Management Journal*, *54*(6), 1207-1228.

Appendix

Figure 1: This figure displays the positive relationship between cognitive processes (x-axis) and days to funding (y-axis), with respect to the difference between genders.

Correlation Table

Pearson Correlation	days to fund	number of lenders total	Married	Kids	Age	ForOther	Agriculture	Philippines	Kenya
days to fund	1.000	0.422**	-0.100	-0.049	-0.077	0.056	0.097	-0.035	0.065
number of lenders total	0.422**	1.000	-0.143*	-0.217**	-0.201**	0.074	0.066	-0.203**	-0.13*
Married	-0.100	-0.143*	1.000	0.390**	0.261**	-0.205**	0.109	0.239**	-0.040
Kids	-0.049	-0.217**	0.39**	1.000	0.456**	-0.148*	0.153*	0.232**	0.072
Age	-0.077	-0.201**	0.261**	0.456**	1.000	-0.107	0.050	0.290**	-0.083
ForOther	0.056	0.074	-0.205**	-0.148*	-0.107	1.000	0.192**	0.236**	0.000
Agriculture	0.097	0.066	0.109	0.153*	0.050	0.192**	1.000	0.046	0.110
Philippines	-0.035	-0.203**	0.239**	0.232**	0.290**	0.236**	0.046	1.000	-0.164*
Kenya	0.065	-0.13*	-0.040	0.072	-0.083	0.000	0.110	-0.164*	1.000
Pakistan	-0.037	-0.020	0.188**	0.042	0.109	-0.515**	-0.159*	-0.208**	-0.111
United States	-0.099	-0.025	-0.197**	-0.092	0.093	0.068	-0.087	-0.088	-0.047
Armenia	-0.008	0.026	0.068	-0.001	0.058	0.047	0.204**	-0.149*	-0.080
Retail	-0.039	-0.152*	0.180*	0.109	0.126	0.066	-0.254**	0.274**	0.040
Food	0.070	-0.061	0.003	0.056	0.065	-0.022	-0.221**	0.025	-0.055
certain	-0.033	0.029	-0.189**	-0.107	-0.155*	-0.164*	-0.006	-0.211**	-0.008
borrower gender recoded	0.239**	0.176*	-0.358**	-0.2345**	-0.224**	0.206**	0.035	-0.213**	0.125
cogproc	0.507**	0.226**	-0.001	0.114	-0.052	0.031	0.135*	0.080	0.105
genderxcogproc	0.444**	0.224**	-0.294**	-0.138*	-0.189**	0.151*	0.063	-0.171*	0.158*

Pearson Correlation	Pakistan	United States	Armenia	Retail	Food	certain	borrower gender recoded	cogproc	genderxcogproc
days to fund	-0.037	-0.099	-0.008	-0.039	0.070	-0.033	0.239**	0.507**	0.444**
number of lenders total	-0.020	-0.025	0.026	-0.152*	-0.061	0.029	0.176*	0.226**	0.224**
Married	0.188**	-0.197**	0.068	0.180*	0.003	-0.189**	-0.358**	-0.001	-0.294**
Kids	0.042	-0.092	-0.001	0.109	0.056	-0.107	-0.235**	0.114	-0.138*
Age	0.109	0.093	0.058	0.126	0.065	-0.155*	-0.224**	-0.052	-0.189**
ForOther	-0.515**	0.068	0.047	0.066	-0.022	-0.164*	0.206**	0.031	0.151*
Agriculture	-0.159*	-0.087	0.204**	-0.254**	-0.221**	-0.006	0.035	0.135*	0.063
Philippines	-0.208**	-0.088	-0.149*	0.274**	0.025	-0.211**	-0.213**	0.080	-0.171*
Kenya	-0.111	-0.047	-0.080	0.040	-0.055	-0.008	0.125	0.105	0.158*
Pakistan	1.000	-0.060	-0.101	-0.028	0.116	0.082	-0.324**	-0.071	-0.277**
United States	-0.060	1.000	-0.043	0.029	-0.065	0.039	0.086	-0.143*	-0.011
Armenia	-0.101	-0.043	1.000	-0.126	0.031	0.007	0.133*	-0.099	0.040
Retail	-0.028	0.029	-0.126	1.000	-0.190**	-0.159*	-0.224**	-0.067	-0.172*
Food	0.116	-0.065	0.031	-0.190**	1.000	-0.079	-0.109	0.063	-0.089
certain	0.082	0.039	0.007	-0.159*	-0.079	1.000	0.103	0.155*	0.139*
borrower gender recoded	-0.324**	0.086	0.133*	-0.224**	-0.109	0.103	1.000	0.093	0.846**
cogproc	-0.071	-0.143*	-0.099	-0.067	0.063	0.155*	0.093	1.000	0.456**
genderxcogproc	-0.277**	-0.011	0.040	-0.172*	-0.089	0.139*	0.846**	0.456**	1.000