

## Willingness Behavior of the Rural Poor to Participate in MFIs: Evidence from Bangladesh

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### Abstract

The main focus of this study is to examine the willingness behavior of the rural poor to participate in MFIs in Bangladesh. In so doing, the study uses the modified Theory of Planned Behavior (TPB) as underlying theory. The study employs nine factors including seven demographic variables. Data are collected from 424 individuals from six regions of Bangladesh through face to face interview based on random sampling procedure. The results indicate that among nine variables seven are observed to be statistically significant to influence attitude toward willingness to participate in MFIs. Among seven significant variables five affect attitude negatively. Attitude variable also influences willingness to participate in MFIs negatively. This outcome would help the authorities of MFIs to understand the real forces that inhibits participatory attitude towards MFIs and mitigate those negative forces accordingly.

**Keywords:** Attitude, willingness to participate, rural poor, MFIs

### Introduction

Participation in a targeted credit program is the function of client-related (demand-side) and program-related (supply-side) factors (Ashraf, 2014; Ferdous and Uddin, 2010; Karim, 2011; Evans et al, 1999). While the client-related aspects hinge on the self-evaluation of eligible clients about the costs and benefits of taking part in the MFIs, the program-related aspects rest on the decisions taken by the MFIs to operate in particular rural areas and to target clients for the program (Ferdous and Uddin, 2010; Zaman, 1997). Though determinants of participation can be categorized from different perspectives, its simplest form of nomenclature can be distinguished between participation and nonparticipation (Zohir, 2001).

However, field level data of the present study have other information on nonparticipants who are willing to participate or not to participate in MFIs. Thus, the survey facilitates to have three sets of clients: (i) those who are currently participating, (ii) those who are currently nonparticipants but are willing to participate and (iii) nonparticipants who are not willing to participate in MFIs. This study includes the last two categories of the participants in its analysis in order to explore the determinants that can potentially influence the willingness of the rural poor to participate in MFIs

Recently revealed data show that at least 45 million people of Bangladesh live under the poverty line which is specified by the UNDP and the World Bank as equivalent to below the income of \$ 1.25 per day (Ashraf and Ibrahim, 2013). There have also been evidences that at least half of these rural poor are still remaining as nonparticipants and many are unwilling to participate in MFIs (Razzaque, 2010). It leads to the question on why these poor people are not willing to participate in microfinance programs which were primarily designed to bring the rural poor out of the poverty line and to improve their standard of living. Identification of the factors that explain the behavior of rural poor with regard to their attitude toward willingness to participate in MFIs is, thus, an important issue that needs to be addressed adequately (Ashraf and Ibrahim, 2013).

In a paper, Ashraf and Ibrahim (2013) investigated the barriers of participation in MFIs in Bangladesh but used the original TPB model incorporating eight potential independent variables as the antecedents of attitude, subjective norms and perceived behavioral control explaining intention of the rural poor towards actual participation in MFIs. Because the data collected as part of the doctoral research report had been originally concentrated for other purposes, the findings from that initial study were focused otherwise. For the present study, it includes determinants that enabled testing of other aspects of the decomposed-TPB as it relates to the particular behavior of the currently nonparticipating rural poor's willingness to participate in MFIs.

The purpose of this paper is thus to examine the factors that are responsible for affecting attitude toward willingness of the rural poor to participate in MFIs in Bangladesh. Specifically, how individual perceives about their preferences, fear of getting into the risk of loans and the impact of some demographic factors on participation that affect attitude the rural poor toward their willingness to participate in MFIs. In so doing, a theoretical framework using the theory of planned behavior (TPB) as its basis was established. Using measurement scales created to assess different aspects of the stated explanatory variables, as well as attitude and willingness to participate in MFIs, a survey instrument was developed to test the various relationships implied by

TPB. Data were collected from six districts of Bangladesh such as Moulavibazar, Satkhira, Shariatpur, Kishoreganj, Nilphamary and Bogra. The analysis of these data helps answer questions about the relationship of perceptions of the rural poor about explanatory variables to attitude toward willingness of the rural poor to participate in MFIs in Bangladesh.

The plan for this paper is as follows: first, the TPB is briefly reviewed, as are the relevant literatures on nonparticipation and willingness to participate in MFIs in Bangladesh. Next, the research model and hypotheses are presented, followed by a discussion of the research method and findings from the data analysis. A discussion of the meaning of the results and their implications ends the paper.

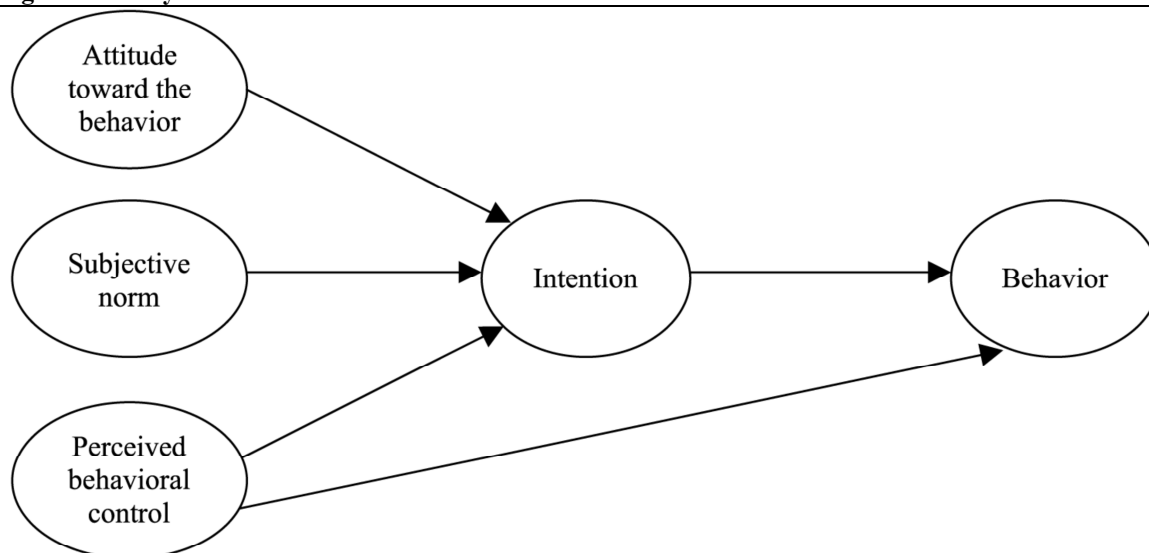
#### Theoretical Model and Literature Review

TPB (Ajzen, 1985, 1991) is a modified model of the Theory of Reasoned Action (TRA) (Ajzen and Fishbein, 1980) which includes attitude and subjective norm (SN) as the antecedents of intention towards certain behavior. Ajzen (1988, 1991) introduces perceived behavioral control (PBC) to TRA as another antecedent of intention in addition to attitude and SN in order to complete the lacking of the model with volitional control of an individual on the particular behavior (e.g. Figure 1). Thus, TPB has been established as a robust model for explaining the nomenclature of particular behavior in social psychology. It has now an extensive use in many wider fields of research such as information technology literature (George, 2002, 2004; Khalifa and Limayem, 2003; Song and Zahedi, 2001), Sports (Naylor, 2011), health science (Alselaimi, 2010) and microfinance participation (Ashraf, 2014; Ashraf and Ibrahim, 2013).

According to TPB, the performance of a targeted behavior of an individual depends on intention to perform that behavior. Intent is determined by attitude towards the behavior, SN about performing the behavior and perceptions whether one can successfully engage in the behavior (George, 2004). According to Ajzen (1991), an attitude toward any behavior is the result of positive or negative assessment of performing that behavior. Attitudes are influenced by attitudinal beliefs, norms are influenced by subjective beliefs and PBC is influenced by beliefs about what an individual used to have any opportunities, skills and resources required to perform any particular behavior (Ajzen, 2008).

In TPB, there is also a direct link between PBC and the actual behavior. Based on Ajzen (1991), for two individuals who have equal level of intention to be engaged in certain behavior, the individual who has more self-confidence in her/his capability is more likely to successfully perform the behavior than the one who has suspicion (George, 2004). TPB is a comprehensive theory which does not specify any precise antecedent of intention toward any particular behavior, so selecting those antecedents is hinged on the ultimate evaluations of the researchers (Ajzen, 1991).

**Figure 1** Theory of Planned Behavior



**Source:** From Azjen (1991)

The current study incorporates the antecedents in the modified model of TPB such as individual preference, fear of getting into risk of loans and some demographic variables that influence the rural poor's willingness to participate in MFIs in Bangladesh. A modified TPB model can provide a robust theoretical basis for testing such of antecedents which can determine the status of willingness to microfinance participation (Rice,

2011). It also provides a framework for testing whether individual preference and fear as attitudinal beliefs and also demographic factors influence willingness to participate in MFIs.

There have been empirical evidences suggesting that normative beliefs have little or no influence on actual behavior of an individual human being such as Ashraf (2014), George (2004) and Armitage and Conner (2001). In the study done by Ashraf (2014), subjective norms are found to have no significant impact on intended behavior of participation of the rural poor in MFIs in Bangladesh. Similar results have been observed by George (2004) and Armitage and Conner (2001) who report that the subjective norm construct is generally found to be a weak predictor of intentions. According to them, this is partly attributable to a combination of poor measurement and the need for expansion of the normative component. Thus, in this study, subjective norm has been excluded from its conceptual model used for analyzing data in microfinance participation.

Similarly, PBC has also been excluded from this framework in order to simplify the model and to observe the impact of only attitude and demographic variables on the willingness of the poor women to participate in MFIs. Demographic variables include gender, age, marital status, education, income, amount of land and asset of the client's household.

An underlying premise of the current study is that beliefs about fear of getting into risk of micro loans and individual preference of the rural poor inform attitudes toward willingness to participate in MFIs. TPB provides a robust theoretical basis for testing such a premise, along with a framework for testing whether attitudes and demographic information are indeed related to engage in a particular behavioral willingness to participate in microfinance programs.

### **Fear of Getting into Risk of Loans**

There has been a long history of experimentation and compliance of participatory approaches in alleviating poverty and rural development (Ashraf, 2014; Huq 2001). Unfortunately, some of these approaches resulted into an intervention which led to coercion (Karim, 2011; Ferdous and Uddin, 2010). Empirical studies observe that borrowers of development organizations having their assets of livestock and cooking pots seized and resold off to repay loans (Ashraf, 2014; Karim, 2011; Ferdous and Uddin, 2010; Dyal-Chand, 2007; Rahman, 2001; Halder and Mosley, 2004). Thus, this thwarting scenario of borrowing micro loans pushes the rural poor borrowers into a difficult juncture and creates conflict between the MFIs' staffs and their clients.

There have been many daunting incidences in relation to microlending programs in rural Bangladesh taken place in the case of default in loan repayment. In the extreme cases, having no other alternative many poor women finally decided to commit suicide (Ferdous and Uddin, 2010; Dyal Chand, 2007). This type of incidence creates havoc in the mind of the poor people in the rural areas for which they become confused and afraid of taking micro loans from the MFIs. This factor, thus, influences attitude towards willingness of the rural poor women to participate in microfinance programs.

### **Individual Preference**

Human behaviors are frequently influenced by subjective preferences (Kawasaki and Yamaguchi, 2012). As there is a controversy around group lending or joint liability versus individual lending in MFIs, many studies report that individual lending is more preferable to group lending (Kodongo 2013). According to Sengupta and Aubuchon (2008, p.20), 'practitioners and theorists alike have now realized that these mechanisms can operate with individual contracts and in certain cases offer better repayment results than group lending schemes.' Similar evidence is also available in the case of outer Bangladesh. Armendariz de Aghion and Morduch (2000) report two cases which offer evidences of success of individual loans. Utilizing data collected from Eastern Europe and Russia, the authors observe that individual loans facilitate repayment rates greater than 90 percent in Eastern Europe and above 95 percent in Russia. A group contract can be inefficient because it imposes a ceiling on the loan size equal to that given to the poorest members of any potential group.

Building upon an empirical research Huq (2001) explores individual-lending versus group-lending processes of microfinance in northern regions of Bangladesh. The author argues that individuals, through empowerment, are able to transform social relationships and interactions vis-à-vis society. By empowerment, the study highlights individual's ability or awareness, reflection and interaction to bring social change. According to the author, individuals in society should not be seen in isolation. Rather, an individual should be seen as aware and reflexive and able to act with others to rebuild the formation or order of society. In this sense, individuals are considered as *persona* or a 'social actor'.

### **Gender**

The gender dimension of program participation is an important concern in microfinance literature, because participation is essentially part of a household's livelihood strategy (Ashraf, 2014; Mahmud, 2000). In fact, much less is known about why some poor households apparently choose not to participate in MFIs. So, program effects are contingent on who (either male or female member of the households) actually participate or not. This

issue implies that the gender aspects are important in microfinance participation. The reason behind this concern is to select the option which incurs the least possible opportunity cost. In this regard, female member of the household is the right option to be involved in microfinance activities.

There are also some other factors emerged from program design which enforces the decision to participate. According to the general restrictions imposed by MFIs, only one member of each poor household can be a member of them. By and large, female memberships are encouraged specifically by MFIs which require a few membership responsibilities such as joining a group, attending meetings, depositing weekly savings and making regular loan repayments. Besides, there are also some other additional program requirements such as participating in awareness raising and non-formal education programs, skills training and so on. Thus, program membership incurs an opportunity cost in terms of an individual's time and effort which households that wish to participate must be willing to bear (Mahmud, 2000).

In fact, in poor rural households, the opportunity costs of program membership will not be the same for men and women family members. Nevertheless, these costs will not be the same for all women in those households that wish to participate. These relative costs will be subject to other socio-economic characteristics of the households such as sources of income, asset and land ownership patterns, family size, and so on. Individual costs may also be related to age, marital status and number of children, literacy and health status. So, households that have credit need decide about which family member will go to borrow funds from MFIs. Thus, based on the relative opportunity costs and credit need, households decide whether female or male will join the program or not.

### **Age**

Age is an important demographic indicator which possesses multi-dimensional aspects such as social, cultural, political, psychological and above all economic condition (Huq, 2000). Nonetheless, this factor also relates another important notion that is vulnerability which particularly refers to risk being emerged from natural catastrophe and existing complex socio-political-cultural and economic phenomena. For example, child labor due to lack of regular income and poverty, early or teen-age marriage can change the entire outlook of an individual about the real world phenomena. Hence, it is easily understandable that age can be an important determinant to influence individual attitude and also toward willingness to participate in certain behavior.

### **Marital Status**

Many of the directions of human life are resulted from the practice of marriage. Though teen-age marriage is discouraged, it is a practice in poor families especially in rural areas in South Asian regions. This type of marriage is decided by the father and influenced by kinships (Huq, 2001). After the marriage, husbands used to dominate over any decisions taken by the family. As in the case of microfinance borrowing, usually female spouse is dictated by the husband to collect the loans from MFIs and the loans are used by the husband in whatsoever he likes (Ashraf, 2014; Karim, 2011).

Thus, marital status, especially for the poor, is determined by issues linked to the safety of women. They are also dominated by dowry requirements and issues related to livelihoods. Though the form that dowry takes as a part of the cultural practice is varied, it is still root cause of the vulnerability of women (Huq, 2001). Hence, it can be said that marital state can influence the attitude of the rural borrowers toward willingness to participate in MFIs.

### **Education**

Education is a vital factor that is responsible for influencing the overall attitude of an individual. Yet, children from socio-economically poor families are getting deprived from having proper education in the formal schools. In such cases, one of the dominant factors is stereo-typed mindset of the rural poor parents. Parents used to think that children's education is useless and especially girl children's education is considered bad in the eyes of society. Education is of no use to girls, because after the marriage they would do the same thing whether literate or not, such as cooking, child rearing, maintaining family and housekeeping works. In fact, poverty is causally an influential element in depriving children of education leading toward vulnerability, as they have to work for their living (Huq, 2001).

Education is deemed to be influential weapon by which a person can have an opportunity to self-help and can fight against vulnerability. It spurs awareness and aspires for a better life (Ashraf, 2011). As in the case of microfinance participation, the rural poor who are aware about their own position in society can make a better decision in their daily lives and livelihoods. Thus, it is evident that education can dominantly influence the overall attitude of the rural poor toward the willingness to participate in MFIs.

### **Income**

By and large, poverty is defined in terms of income level of the households. The rural poor, especially women

folk, are poor due to natural, socio-cultural and economic factors. Empirical evidence suggests that there has been a strong correlation between income and access to resources as well as people's ability to protect themselves and recover from disasters (Huq, 2001). Nevertheless, unequal income distribution is the root-cause of poverty and substandard livelihoods. Thus, the elimination of poverty is a long term goal involving questions of social justice and equality.

Microfinance movement is fundamentally driven by the spirit of poverty eradication from rural society. As mentioned earlier, poverty is considered primarily to be the function of the level of income and raising income level of the rural poor remains at the hub of poverty elimination strategy. The empirical case study confirms that poor conditions of women can be linked to an overall environment characterized by a lack of regular income and unprotected employment (Huq, 2001). Hence, self-employment rather than wage employment can be a better source of income for which microfinance programs emerge and working for about four decades in Bangladesh.

Social scientists routinely treat income as an explanatory variable (Daniel, Gerber and Green, 2006). Research evidences show that income can predict about health outcomes (Ecob and Smith, 1999), subjective well-being (Lane, 2001), voter choice (Brooks and Brady, 1999) and attitude toward participation in MFIs (Ashraf, 2014). Thus, income level of the rural poor especially rural women can be a decisive factor for attitude toward willingness to participate in MFIs (Daniel et al., 2006).

### **Assets**

Asset-base is an important factor for determining social as well as economic status of human being. In reality, assets play a dominant role in the poverty stricken family and particularly in the situation of women in Bangladesh. The result of empirical study suggests that asset-base and affluence can change individual attitude which is subjective in nature (Daniel, et al., 2006). There is evidence that MFIs generally exclude the extreme poor from the microfinance lending, because they are considered to be risky clients (Ashraf, 2014). This exclusion of the rural from the microfinance activities can also be characterized from the clients' perspective as well, because there have been many rural poor who are eligible for getting microfinance and they are not involved in MFIs. Besides, many of the rural poor who possess a small-scale asset-base are observed not to be willing to be the members of MFIs in Bangladesh (Ferdous and Uddin, 2010). Hence, it is evident that the level of asset could be a factor of changing attitude toward willingness to participate in MFIs.

### **Land**

Traditionally, land is the primary source of income in the rural areas. However, in Bangladesh, about 71 percent people of the country are poor, landless and marginally landless (New Age, 2012). These type of landless poor are left with only their physical labor and limited skills for livelihoods. MFIs have a key role to provide small loans and to raise their income level. However, crude fact is that there are many poor in the rural areas who hold scanty size of land but are not willing to be involved in MFIs in Bangladesh (Ashraf, 2014). Thus, land could be a vital factor for the rural poor for changing attitude toward willingness to participate in MFIs.

### **Research Model and Hypotheses**

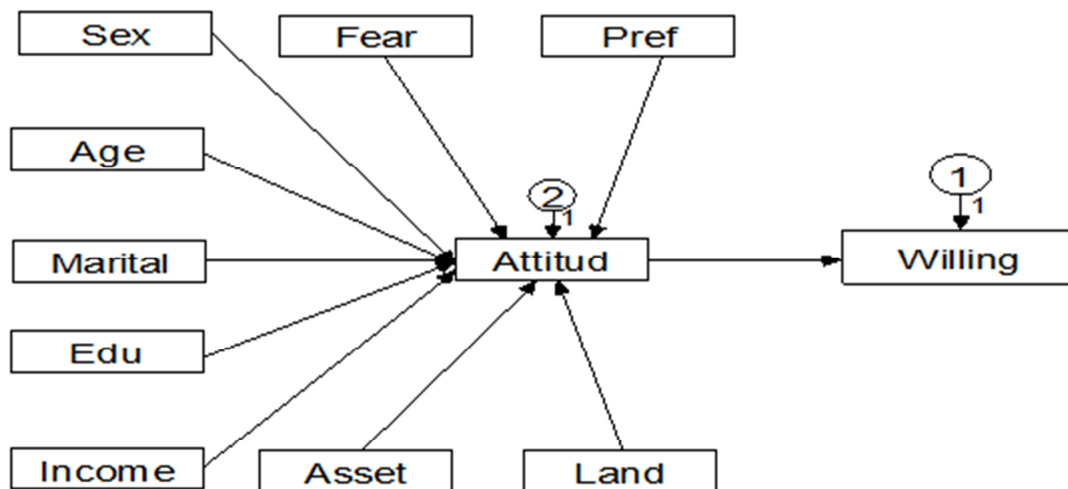
The research model used in this study, shown in Figure 2, is based on TPB. The actual behavior in question is willingness toward participating in MFIs. However, the research model has been modified based on Ashraf (2014) which studies attitudinal impacts on participation in MFIs in Bangladesh having modified the theory of reasoned action advanced by Fishbein and Ajzen (1975). As cited earlier, the classic TPB model would include the intention to check out the willingness toward participation in MFIs as an antecedent to willingness behavior. However, George (2004) maintains that if the data are collected at one point in time, it is not possible to include both intention to perform a behavior and the behavior itself in the model. As intentions reflect future behavior, reports of actual behavior reflect what happened in the past. Past behavior can be considered at best a substitute for future behavior and not always a good one (George, 2004). Therefore, intention does not appear in the model and instead there is a direct path from attitudes towards willingness to participate in MFIs.

In addition to the concepts above, based on Neidhart (2005), the model adds seven socioeconomic variables are used to assess whether they have any significant impact on attitude toward willingness to participate in MFIs. These variables are gender, age, marital status, education, household income, household asset, amount of land. The rationality of inclusion of the socioeconomic variables was first preached by Verba and Nie (1972) and later used by Patterson and Rose (1996) saying as, "the social status of an individual—his job, education, and income—determines to a large extent how much he participates. [...] A good deal of the variance in how much and in what ways people participate is explained by their social-status characteristics, mediated by the intervening effect of their civic attitudes" (Verba and Nie, 1972, pp. 13-14). Thus, the model has developed ten hypotheses that help to determine their impacts on attitude toward willingness to participate in MFIs. These hypotheses are:

*H1:* There is a positive relationship between attitude and willingness to participate in MFIs.

*H2:* There is a relationship between individual preference and attitude toward willingness to participate in MFIs

**Figure 2: Conceptual Framework**



*H3:* There is a relationship between fear of getting into risk of borrowing and attitude toward willingness to participate in MFIs.

*H4:* There is a relationship between sex and attitude toward willingness to participate in MFIs.

*H5:* There is a relationship between age and attitude toward willingness to participate in MFIs.

*H6:* There is a relationship between marital status and attitude toward willingness to participate in MFIs.

*H7:* There is a relationship between education and attitude toward willingness to participate in MFIs.

*H8:* There is a relationship between household income and attitude toward willingness to participate in MFIs.

*H9:* There is a relationship between household asset and attitude toward willingness to participate in MFIs.

*H10:* There is a relationship between land and attitude toward willingness to participate in MFIs.

### Research Design

The data collection exercises were aimed at gathering information on the impact of ten factors including the demographics that may affect attitude toward willingness to participation of the rural poor in MFIs in Bangladesh. To this aim, data were collected by face to face interview from six major areas of Bangladesh using closed-end questionnaire interviewing 424 respondents who are participating (144 respondents) and nonparticipating (280 respondents) in MFIs in Bangladesh. The questionnaires were constructed in a 5-point scale except the willingness variable which is dichotomous as 1 indicates yes and 2 indicates no. In the measurement for other variables, scale 1 indicates strongly disagree and scale 5 indicates strongly agree.

The respondents of this study are the rural villagers who are nonparticipating and participating in MFIs in six different districts of Bangladesh. These areas of data collection were selected based on the poverty concentration and considerably long duration of microfinance operations. The poverty index was collected from the public and academic sources of information recorded in the Bangladesh Bureau of Statistics and several research journals.

**Table I Sample Statistics**

	Valid Percent
<b>Gender</b>	
Male	13.8
Female	86.2
<b>Age</b>	
15-25	11.2
26-40	56.4
41-55	23.1
56-60 and above	9.3
<b>Marital Status</b>	
Single	9.3
Married	89.3
Divorced	1.7
<b>Education</b>	
Primary	64
Secondary	26.7
Higher Secondary	5.5
Bachelor	3.8
<b>Yearly Household Income (in Taka)</b>	
0-20000	11
20001-40000	11.6
40001-70000	23.6
70001-100000	27.6
More than 100000	26.2
<b>Total Land including Home (in Decimal)</b>	
0	25
1-33	36.9
34-66	20
67-100	9.3
More than 100	8.8
<b>Other Assets (in Taka)</b>	
0-20000	60.2
20001-40000	4.5
40001-70000	7.6
70001-100000	6.7
More than 100000	21

Participating rural poor (also referred to as members of the MFIs) are defined as those individuals who have been presently getting microloans from the MFIs. Nonparticipating rural poor (also referred to as non-members or drop-outs from the MFIs) are those individuals who choose not to be involved in borrowing microcredit from their local existing MFIs (Ashraf, 2014). The sample statistic of the present study is provided in Table I indicating valid percentage of the demographic parameters.

The model used in the study is a modified TPB model with decomposed belief structure that is based on Neidhart (2005) and Rice (2011). Measures of attitude (12 items), individual preference (five) and fear of getting into risk of borrowing loans (four) are all based on an instrument developed by Ashraf (2014). A dichotomous (yes/no) measure of willingness to participate along with seven demographic variables such as sex, age, marital status, education, income, asset and landholding size included in this model has also been adapted from Ashraf (2014). Descriptive statistics for the constructs are depicted in Table 2.

The data are analyzed using structural equation modeling (SEM). First, the model in Figure 2 has been run. The measurement model appears in Figure 3. The statistical significance of the paths in the model has also been tested. Using one-tailed tests, eight of ten paths were statistically significant, three at the  $p < 0.10$  level, three at  $p < 0.05$  and two at  $p < 0.01$ , providing support for H1, H2, H3, H5, H7, H8, H9 and H10. The evaluated

model is shown in Figure 4, with adjusted t-statistics and path coefficients listed in Table IV. The summary of model fit indices is presented in Table V.

### Results and Discussion

Several previous research have reported that attitude-behavior context is a dominant domain of TPB model to predict about the future such as Ashraf (2014), Rice (2011), Smith, Terry, Manstead, Louis, Kotterman and Wolfs (2008), George (2004). These studies employ several factors that influence the specific human behavior. Ashraf (2014) uses multiple factors including individual preference and fear of getting into the risk of borrowing micro loans to influence attitude towards certain behavior of microfinance participation, but none of these studies including Rice (2011), Smith et al (2008), George (2004) and others have examined the influence of demographic factors to influence attitude toward willingness to participate in MFIs. This study has examined whether the demographic variables are important concerns over the use of personal data possessed by the rural poor, for shaping attitudes toward willingness to participate in MFIs in Bangladesh. It shows that all factors except sex and marital status have significant impacts on attitude to influence willingness to participate in MFIs.

**Table II Descriptive Statistics for Constructs**

Variables	n	Minimum	Maximum	Mean	Std. Deviation
1. Willingness	424	1.00	4.00	1.4387	.51089
2. Attitude	424	1.00	5.00	3.4994	.92820
3. Preference	424	1.00	5.00	2.5755	.71473
4. Fear	424	1.00	5.00	3.1431	.88294
5. Sex	424	1.00	2.00	1.3774	.48530
6. Age	424	1.00	4.00	2.3113	.79136
7. Marital	424	1.00	3.00	1.9245	.32099
8. Education	424	1.00	4.00	1.4858	.76556
9. Income	424	1.00	5.00	3.4646	1.28959
10. Asset	424	1.00	5.00	2.2241	1.66433
11. Land	424	1.00	5.00	2.3868	1.20927

**Table III Correlation Matrix and Reliability Coefficients (on diagonal)**

	1	2	3	4	5	6	7	8	9	10
1	-									
2	-.571	.79								
3	.314''	-.367''	.62							
4	.215''	-.207''	.089	.71						
5	-.126''	.011	-.007	.028	-					
6	.053	-.054	-.002	-.032	-.147''	-				
7	.001	.024	-.073	-.048	.153''	.316''	-			
8	.119'	.051	.006	.114'	-.113'	-.332''	-.322''	-		
9	.092	-.129''	.090	-.012	-.073	.087	.022	-.014	-	
10	-.079	.070	.009	-.007	-.210''	-.179'	-.145''	.282''	.084	-
11	-.053	.018	-.020	.107'	-.068	.104	-.040	.011	.432''	.058''

Note: '' and ' indicate statistically significant at .01 and .05 level



Figure 3: Path Analysis along with the Path Coefficients

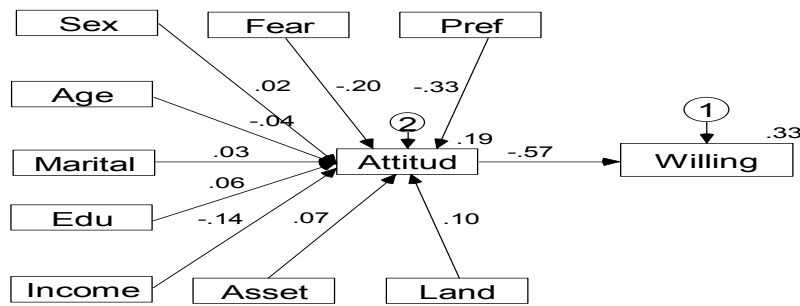


Figure 4 Evaluated Model

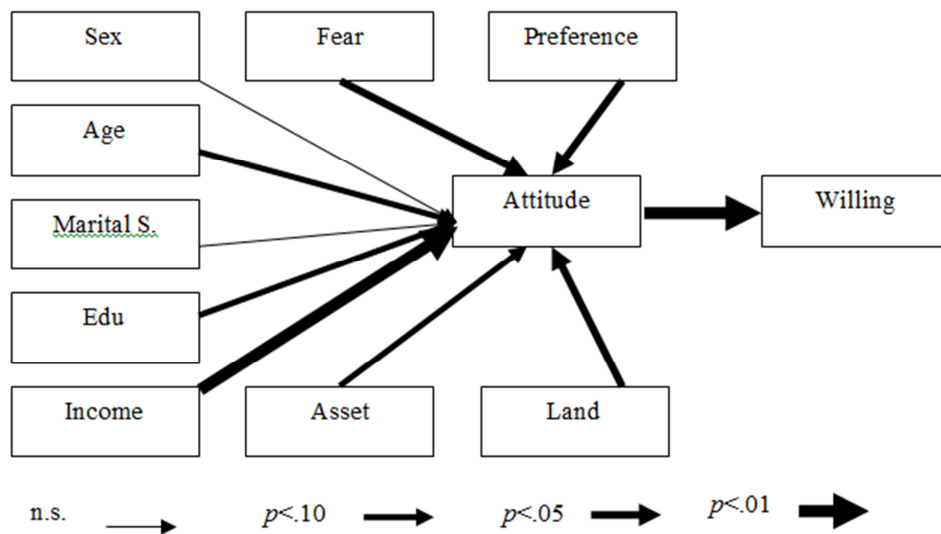


Table IV Adjusted *t*-statistics and Standardized Path Coefficients for Hypothesized Paths in the Model

Path	Path Coefficients	<i>t</i> -value
H1: Attitude to willingness***	-.57	-12.110
H2: Preference to attitude**	-.33	-2.773
H3: Fear to attitude**	-.20	-2.510
H4: Sex to attitude <sup>ns</sup>	-.02	-.720
H5: Age to attitude*	-.04	-1.251
H6: Marital S. to attitude <sup>ns</sup>	.03	.787
H7: Education to attitude*	.06	1.209
H8: Income to attitude***	-.14	-3.367
H9: Asset to attitude*	.07	1.789
H10: Land to attitude**	.10	2.510

Note: \*\*\*statistically significant at  $p < .01$ , \*\* statistically significant at  $p < .05$   
 \*statistically significant at  $p < .10$  <sup>ns</sup> not statistically significant

The results indicate that attitude of the rural poor is significant negatively at the  $p < 0.01$  level to influence willingness toward participation in MFIs supporting that there is a strong relationship between them (H1). It implies that overall attitude of the rural poor in Bangladesh tends to be negative to be willing to participate in MFIs. The potential reasons reflected in the present study which affects attitude are fear of getting into risk of borrowing micro loans, individual preference as well as lack of education. This outcome is supported by Ashraf (2013), Ashraf (2014a) and Ashraf (2014b).

Individual preference of the poor toward attitude which affects willingness behavior of the clients of MFIs is also observed to be statistically negatively significant at  $p < 0.05$  supporting the study hypothesis two (H2). As microfinance programs possess some distinct membership features such as group-lending, weekly

repayment of loans, amount of land and others which the rural poor do not like to be a binding principle. All these conditions are believed to be risky in the rural areas (Ashraf, 2014b). Owing to these sorts of binding conditionality, the rural poor are found to be afraid in taking loans from MFIs. This perception is confirmed by the result of the present study which demonstrates that fear of getting risk is significant negatively at  $p < 0.05$  to influence attitude of the poor (*H3*).

As mentioned earlier, only two variables belonging to demography such as sex and marital status of the poor microfinance borrowers do not affect attitudinal construct to influence willingness behavior (no supports for *H4* and *H6*). Though sex has no significant impact on attitude, it is observed to have negative sign. Age structure of the participants and nonparticipants of MFIs also negatively affects their attitude toward willingness behavior (*H5*). Similar outcome is observed in the case of the rural poor's household income which has strong negative influence ( $p < 0.01$ ) on attitudinal construct (*H8*). It implies that more household income of the rural poor enforces them not be involved in MFIs.

Other demographic factors such as education, asset and amount of land have significant positive relations with attitude towards willingness behavior of the rural poor. These outcomes support the hypotheses *H7*, *H9* and *H10*. The implication in the respect of education is that the more the people are educated, the more they become inclined to be willing to participate in MFIs. Research reports suggest that MFIs have been observed to possess selectivity negative bias toward the extreme poor to provide microfinance, because they are risky borrowers (Ashraf, 2013; Karim, 2011, Ferdous and Uddin, 2010). Thus, the rural households who possess a positive intercept of household land and other assets are observed to get micro loans from MFIs (Ashraf, 2013).

The summary of overall model fit indices (Table V) demonstrates that absolute fit measures (*AFM*) such as Chi-square statistic ( $\chi^2 = 387.20$ ,  $df = 45$ ,  $p = 0.000$ ) is statistically significant at the  $p < 0.01$  level. However, other fit measures of *GFI* (0.93) and *RMSEA* (0.13) indicate acceptable fits of the model constructs (Hair et al., 2009). Yet, incremental fit measures such as normed fit index, *NFI* (0.95) and comparative fit index, *CFI* (0.95) indicate that the model has a good fit. Besides, parsimonious fit measures (*PFM*) - parsimony goodness of fit index *PGFI* (0.89) and parsimony normed fit index, *PNFI* (0.65) also exhibit an acceptable model fit. This outcome of fit indices in merely an acceptable range rather than remain in good fit may result due to inherent lack of data adequacy of the survey (Hair et al. 2009).

**Table V Structural Model Fit Indices**

Fit Indices	Model	Cut-off Values
<b>Absolute Fit Measure (AFM)</b>		
Chi-square ( $\chi^2$ ) goodness-of-fit statistic with associated $p$ value	$\chi^2 = 387.20$ ( $df = 45$ , $p = 0.000$ )	$p > .10$
Goodness of Fit Index (GFI)	0.93	<.90 is an acceptable fit
Root Mean Square Error of Approximation (RMSEA)	0.13	$\leq .10$ is a poor fit $\leq .06$ is a good fit
<b>Incremental Fit Measure (IFM)</b>		
Normed Fit Index (NFI)	0.95	>.90 is an adequate fit >.95 is a good fit
Comparative Fit Index (CFI)	0.95	
<b>Parsimonious Fit Measure (PFM)</b>		
Parsimony Goodness-of-Fit Index (PGFI)	0.89	<.90 is an acceptable fit
Parsimony Normed Fit Index (PNFI)	0.65	

In the present study, the modified TPB model serves as a useful foundation for helping explain willingness behavior of the rural poor, even though the model used here departed from TPB traditions by not including intention, subjective norm and perceived behavioral control. The relationship between attitudes towards willingness and the actual behavior of participation in MFIs was strong, even though it is not mediated by intention. Similar approach is also followed by George (2004) and gets the same type of outcomes which reaffirm the robustness of the results of the present study.

#### **Implications for Research and Practice**

From a research perspective, the study results show the robustness of the TPB for helping to explain willingness behavior toward participation in MFIs in Bangladesh. Other studies have also successfully used the TPB or the

TRA as a theoretical framework from which to explain intention toward participation in different sorts of socio-economic, sports and political activities (Ashraf, 2014; Shrestha, Bums, Deng, Confer, Graefe and Covelli, 2012; Lee, 2011; Zinni, 2002; Neidhart, 2005; Rice, 2011). In addition to the importance of attitudes toward the behavior in question, some of these studies have found them also to be important (Geroge, 2004, 2002; Knabe, 2012). Both cases demonstrate the increased power of the TPB over the simple TRA. As more and more studies of willingness toward participation behavior and its antecedents are done within the TPB framework, we are more able to discover and confirm which antecedents are most important, helping us build a robust theory of microfinance participation.

From a practical perspective, as a cumulative body of work on microfinance willingness behavior emerges, it will help policy makers on the elements they need to address in order to increase the rural poor participation in MFIs. In this study, the one area of findings that may help MFIs the most concerns demographic characteristics of the rural poor. The study finds that attitudes toward willingness to participate in MFIs are negative. The implication is that MFIs can focus on promoting the participation behavior and in doing so, they can generate positive attitudes toward MFIs.

### Directions for Future Research

This study considered only two antecedents to attitudes excluding other seven demographic variables. There may well be others that should be considered in future research, such as other aspects of variables, such as Byford's (1998) social relationship and perceived control measures. Valid and reliable scales for these constructs need to be developed, however, in order to include them in future studies (George, 2002).

Future research could also include measures of both intention and willingness to participate in MFIs. As intention measures future behavior and willingness observed in the past, there should be a time lag between when intention is measured and when behavior is measured. How long such a time lag should be is not always clear (George, 2004). For example, Davis et al. (1989), which was based on TRA, waited 14 weeks between measuring intention and measuring behavior. Fourteen weeks may be too long a duration to wait between measures of intention and of actual behavior, but some time lag is needed (George, 2004). Having measures of both intention and behavior strengthen the results of almost any TPB-based study, even though past studies have typically demonstrated a strong relationship between these two constructs (George, 2004; Azjen, 1991).

### References

- Ajzen, I. (2008). Consumer Attitudes and Behavior. In C. P. Haugtvedt, P.M. Herr and F.R. Cardes (Eds.) *Handbook of Consumer Psychology* (pp. 525 – 548). New York: Lawrence Earlbaum Associates.
- Ajzen, I. (1985). From Intentions to Action: A Theory of Planned Behavior. In J. Kuhl and J. Beckman (Eds.), *Action Control: From Cognition to Behavior*, 11 – 39, Berlin, Germany: Springer.
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50: 179 – 211.
- Ajzen, I. (1988). Attitudes, Personality and Behavior. Chicago: Dorsey.
- Alselaime, A. (2010). Using the Theory of Planned Behavior to Investigate the Antecedents of Physical Activity Participation among Saudi Adolescents. Ph.D. Thesis, UUM, Malaysia.
- Armendáriz de Aghion, B. and Morduch, J. (2000). Microfinance beyond group lending. *The Economics of Transition* 8(2): 401– 420.
- Ashraf, M. A. and Ibrahim, Y. (2013). An Investigation into the Barrier to the Rural Poor Participation in MFIs: The Case of Bangladesh. *International Journal of Research in Social Sciences*, (IJRSS), 1(2): 1 – 15.
- Ashraf, M. (2011). Demystifying Income/Nonparticipation in MFIs: Towards a Paradigm Shift. Germany / New York: Lambert Academic Publishing.
- Ashraf, M. A. (2014a). Attitudinal Dynamics for the Rural Poor toward Participation in MFIs in Bangladesh: Implications for Islamic MFIs. *Journal of Developing Country Studies*, 4(11): 110 – 124
- Ashraf, M. (2014b). An Investigation into the Barrier to the Rural Poor Participation in MFIs: The Case of Bangladesh. An Unpublished Thesis in the Northern University of Malaysia, Kedah Darul Aman, Malaysia.
- Armitage, C. J. and Conner, M. (2001). Efficacy of the Theory of Planned Behavior: A Meta-Analytic Review. *British Journal of Social Psychology*, 40: 471 – 499.
- Barakat, A. (2012). Number of Poor, Landless Increasing Gradually. *Daily New Age*, October 21, Dhaka.
- Brooks, C. and Brady, D. (1999). Income, Economic Voting and Long-term Change in the U.S. 1952 – 1996. *Social Forces*, 77(4): 1339 – 1374.
- Daniel, D., Gerber, A. S. and Green, D. P. (2006). Personal Income and Attitude toward Redistribution: A Study of Lottery Winners. *Political Psychology*, 27(3): 441 – 458.
- Dyal-Chand, R. (2007). Human Worth as Collateral. *Rutgers Law Journal*, 38: 793 – 845.
- Ecob, R., Smith, G. (1999) Income and health: what is the nature of the relationship? *Social Science &*

- Medicine , 48: 693-705
- Evans, T. G., Adams, A. M., Mohammed, R. and Norris, A. H. (1999). Demystifying Nonparticipation in Microcredit: A Population-Based Analysis. *World Development* 27(2): 421 – 424.
- Ferdous, F. and Uddin, G. M. (2010). Microfinance. *First News*, 8 August: 36 – 47.
- Fishbein, M. and Ajzen, I. (1975). *Belief, Attitude, Intentions and Behavior: An Introduction to Theory and Research*. Boston: Addison – Wesley.
- George, J.F. (2004). The Theory of Planned Behavior and Internet Purchasing. *Internet Research*, 14(3): 198 – 212.
- George, J. F. (2002), “Influences on the intent to make Internet purchases”, *Internet Research*, 12 (2): 165-80.
- Halder, S. R., and Mosley, P. (2004). Working with the Ultra-poor: Learning from BRAC Experiences. *Journal of International Development*, 16: 387 – 406.
- Huq, H. (2001). *People’s Practices: Exploring contestation, counter-development and rural livelihoods*. Dhaka: CDL.
- Karim, L. (2011). *Microfinance and Its Discontents: Women in Debt in Bangladesh*. Minnesota: Minnesota University Press.
- Kawasaki, M. and Yamaguchi, Y. (2012). Effects of Subjective Preference of Colors on Attention-Related Occipital Theta Oscillations. *NeuroImage*, 59: 808 – 814.
- Khalifa, M. and Limayem, M. (2003). Drivers of Internet Shopping. *Communications of the ACM*, 46(12): 233 – 239.
- Knabe, A. P. (2012). *Applying Ajzen’s Theory of Planned Behavior to a Study of Online Course Adoption in Public Relations Education*. Ph.D. Thesis, Marquette University, Wisconsin, USA.
- Kodongo, O. (2013). Individual Lending Versus Group Lending: An Evaluation with Kenya’s Microfinance. *Review of Development Finance*, 3: 99 – 108.
- Lane, J. (2001). New Public Management. *International Public Management Journal*, 4: 115 – 118.
- Lee, S. J. (2011). *Volunteer Tourists’ Intended Participation: Using the Revised Theory of Planned Behavior*. Ph.D. Thesis, Virginia Polytechnic Institute and State University, Virginia, USA.
- Lu, W. C., Lin, S. H. and Cheng, C. F. (2011). Sports Spectator Behavior: A test of the Theory of Planned Behavior. *Perceptual and Motor Skills*, 113(3): 1017 – 1026.
- Mahmud, S. (2000). The Gender Dimensions of Program Participation: Who Joins a Microcredit Program and Why? In R.S. Osmani and M. A. Baqui Khalily (Eds.), *Readings in Microfinance: Reach and Impact*, Dhaka: Institute of Microfinance, 2011, 101 – 127.
- Naylor, M.E. (2011). *An Alternate Conceptualization of the Theory of Planned Behavior in the Context of Sport Participation*. Unpublished PhD thesis, The Florida State University, USA.
- Neidhart, M. W. (2005). *Participation: A Model of Individual Willingness to Participate in the Transportation Planning Process*. An Unpublished PhD Thesis, University of Central Florida, Orlando, Florida, USA.
- Rahman, A. (2001). *Women and Microcredit in Rural Bangladesh: An Anthropological Study of Grameen Bank Lending*. Colorado: Westview Press.
- Razzaque, M. A. (2010). Microfinance and Poverty Reduction: Evidence from a Longitudinal Household Panel Database. *The Bangladesh Development Studies*, 33(3): 47 – 68.
- Rice, J. (2011). *Examining black and white men’s willingness to participate in domestic violence prevention activities*. Unpublished PhD thesis. Morgan State University, USA.
- Sengupta, R. and Aubuchon, C. P. (2008). The Microfinance Revolution: An Overview. *Federal Reserve Bank of St. Louise Review*, 90(1): 9 – 30.
- Shrestha, S. K., Bums, R.C., Deng, J., Confer, J. Graefe, A. R. and Covelli, E. A. (2012). The Role of the Elements of Theory of Planned Behavior in Mediating the Effects of Constraints on Intentions: A Study of Oregon Big Game Hunters. *Journal of Park and Recreation Administration*, 30(2): 41 – 62.
- Smith, J.R., Terry, D.J., Manstead, A.S.R., Louis, W.R. Kotteman, D. and Wolfs, J. (2008). The Attitude-Behavior Relationship in Consumer Conduct: The Role of Norms, Past Behavior and Self-Identity. *Journal of Social Psychology*, 148(3): 311 – 334.
- Song, J. and Jahedi, F. M. (2001). *Web Design in E-Commerce: A Theory and Empirical Analysis*. Paper presented in 22<sup>nd</sup> International Conference on Information System, Texas, USA.
- Verba, S., and Nie, N. H. (1972). *Participation in America: Political democracy and social equality*. New York, NY: Harper and Row.
- Zaman, H. (2004). “The Scaling-up of Microfinance in Bangladesh: Determinants, Impact and Lessons.” World Bank Policy Research Working Paper Series, No. 3398.
- Zohir, S. (2001). *Understanding the Nature of MFI participation: Evidence from Bangladesh*, in Monitoring and Evaluations of Microfinance Institutions. Final Report, Bangladesh Institute of Development Studies, Dhaka.

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