

## Demystifying Nonparticipation in Microfinance: Case for Bangladesh

Mohammad A. Ashraf

Assistant Professor and Head, Department of Economics, United International University  
80/8A Dhanmandi, Dhaka 1209  
Email: [mashraf@eco.uui.ac.bd](mailto:mashraf@eco.uui.ac.bd)

### Abstract

The purpose of this study was to evaluate the factors affecting nonparticipation of the rural poor in MFIs in Bangladesh. To this aim, the study investigated the measurement and predictive structure of decomposed multiple components of attitudes (fear and preference), subjective norms reference (religious leaders, spouse and friends) and perceived behavioral control (PBC) (resources, knowledge and illness) in the domain of microfinance and its nonparticipation. The study postulated eight factors from the microfinance literature which are modeled together in examining nonparticipation of the rural poor in MFIs in Bangladesh. Data were collected based on stratified random sampling procedure through face to face interview from the respondents of 280 nonparticipating rural poor from six major areas of Bangladesh. The Structural Equation Modeling (SEM) along with AMOS was employed in analyzing data. Among the eight variables only four variables such as fear of getting into risk of loan, individual preference of taking loan, insufficient resources and ill-health or vulnerability to crises were appeared statistically significant for influencing the poor villagers' intention to participation in MFIs in rural arena. Besides, intention and all the three constructs of PBC were found statistically significant to directly influence the participation behavior of the rural poor in Bangladesh.

**Keywords:** Microfinance, MFIs, Barriers of participation, Rural poor, Bangladesh

### Introduction

After the failure of several programs (such as integrated rural development program and trickle-down development program) for economic development in developing countries, microcredit scheme pioneered by Professor Muhammad Yunus was incepted in Bangladesh and subsequently considered as a panacea by the national and international communities for alleviating rural poverty through raising income and enhancing economic growth (Yunus, 2011). Following this motive, microcredit scheme was formally institutionalized as Grameen Bank in Bangladesh in 1983. Since then a plethora of articles were sprinkled in research journals and books in national and international arena designed on this poverty-focused development program in order to investigate the role of microcredit in alleviating poverty. Several assessments of individual microcredit programs find them highly successful (i.e. "micro-success") in contrast to a very modest impact of these interventions at an aggregate level (i.e. "macro-failure") (Razzaque, 2010). Though the related empirical findings are mixed (Islam, 2007), the weight of evidence favors a positive association between poverty reduction and microfinance participation (Khandaker 2003; Zahir, Mahmud and Sen, 2001; Hossain 1998; Pitt and Khandaker 1998; BIDS 1990). In this account, the question may arise: if microfinance programs are so successful, why is the rate of poverty reduction so low?

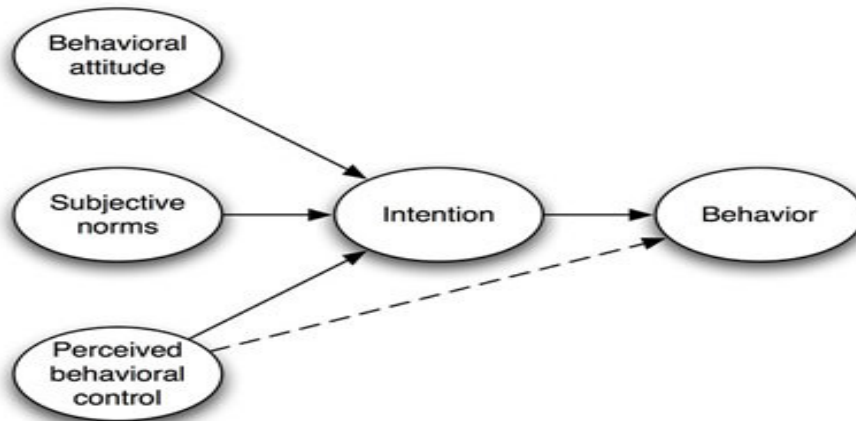
There have been numerous attempts where microfinance borrowers are found to have lower poverty incidence. This finding may hinge on potential bias and flaws, because where microfinance participants are found to select the programs by themselves, there could have been several other factors that influence nonparticipation decisions of the rural poor. Since these factors are unobservable, the improvement in economic well-being of the participant-borrowers may wrongly be attributed to program participation (Razzaque, 2010). Thus, both microfinance and program participation are a serious issue and failure to address the problem which could yield to misleading evidence (Pitt and Khandker, 1998). Hence, microfinance participation behavior of the rural poor is truly an important issue that requires identifying the factors that affect the nonparticipation of the rural poor in MFIs.

### Theoretical Framework

The theory of planned behavior (TPB; Ajzen, 1991) is a popular theoretical model which has been frequently applied to understand different patterns of behavior including participation in different programs. According to TPB, the proximate antecedent of volitional behavior is an individual's intention to engage in that behavior (Ajzen, 1991). Attitude and subjective norms influence actual behavior through the mediating role of intention. While attitudes emphasize the overall personal subjective evaluations of performing the behavior by an individual, subjective norms signify the social pressures on an individual to perform or not to perform a specific behavior. Nevertheless, the TPB accentuates to predict behaviors that are not fully volitional but are incorporating perceptions of control over engagement in the behavior as an additional influence of intention towards actual behavior (Ajzen, 1991). Perceived behavioral control (PBC) is the understanding of the ease or

difficulty to perform the behavior in question and is idealized to attain the perceived behavioral belief about resources, knowledge or skill and illness or vulnerability to crises of an individual (Ajzen, 1991).

**Figure 1: The conceptual model of the Theory of Planned Behavior (TPB)**



Source: Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50, pp. 179 – 211.

Of course, the predictive ability of the TPB has been well-established by empirical findings of a wide range of behaviors (George, 2004; Biddle and Nigg, 2000; Courneya and Bobick 2000; Armitage and Christian 2003; Ravis and Sheeran 2003), including microfinance participation (Ashraf, 2013). In the case of microfinance participation behavior, intention, attitude, subjective norm and PBC have been found to explain 64%, 61%, 76% and 84% of the variance (Ashraf, 2013).

The present study followed the research framework of Rhodes, Blanchard and Matheson (2006) which used the Multicomponent model of the TPB in exercise domain. Though Ajzen (1991) has suggested items to measure TPB constructs, he appears to be flexible to employ an alternative TPB measures as long as these measures hold the conceived measurement properties of the original theory. As a general theory, any change in the measures of TPB constructs such as reconsideration, addition and potential re-imagination (Rhodes et al., 2006) is left up to the researchers (George, 2004).

#### **Attitude**

For TPB, attitude towards the behavior in question is considered to influence intention and it is the least controversial construct in the TPB (Armitage and Conner, 2001). The TPB mainly concerns with a comprehensive attitude construct which operationally characterizes two distinct affective (e.g. fear) and instrumental (e.g. individual preference as beneficial or harmful) attitudinal constructs (Rhodes et al., 2006). Empirically, there are supports for these two distinct independent constructs to represent the behavioral assessment which is observed consistent in TPB research and attitude research more generally (Ajzen and Driver, 1991). Rhodes and Courneya (2003) investigated with a single attitude construct in compare to independent affective and instrumental attitude constructs in order to check whether there is any loss in the level of predictive variance. However, the findings of this study were inconclusive. In any case, it is imperative to have a better predictive model consisting operational attitudinal constructs that helps to understand its influence on actual behavior. In this study, fear of getting into the risk of loans and individual preference for having loans from the MFIs are taken into consideration to see whether they have any real influence on participation of the rural poor in MFIs in Bangladesh.

#### **Subjective Norm**

Subjective norm is a more controversial measure in the TPB literature (Rhodes et al., 2006). Traditionally, the TPB model includes injunctive norm component which endeavors to see whether some one important who wants the individuals to perform or not perform a particular behavior. This type of models has not predicted the behavior in question well (George, 2004; Hagger, Chatzisarantis and Biddle, 2002). Consequently, many researchers consider subjective norm as not an important construct, because it fails to measure subjective norm adequately (Donald and Cooper, 2001). Some earlier studies include a descriptive norm which describes one's social network induces some one to perform a particular behavior in question and this type of studies has found to improve the prediction performance (Okun, Karloy and Lutz, 2002). Recent studies suggest that descriptive and injunctive norms may be considered as components of a formative (i.e. aggregate) subjective norm measure (Rhodes and Courneya, 2003). Thus, present study incorporated the aggregate components of both injunctive (e.g. religious leaders' instructions and spousal dislike as female head of household) and descriptive (e.g. friends' advice) in the subjective norm measures.

#### **Perceived Behavioral Control**

The Theory of reasoned action (TRA) (Ajzen and Fishbein, 1980), which was extended in the form of TPB by

Ajzen (1991) incorporating an additional construct of PBC to TRA in addition to its two original constructs of attitude and subjective norms to influence intention towards the targeted behavior due to TRA's inability to deal with behavior over which individual's have incomplete volitional control (George, 2004). This addition of PBC construct to TPB appeared to be the most controversial issue in the TPB literature (Dawson, Gyurcsik, Culos-Reed, and Brawley, 2001). Early work with TPB found potential problems with PBC items which exhibit low level of internal consistency (Ajzen, 1991; Conner and Armitage, 1998). Recent studies identified two distinct item-clusters using factor analyses which were labeled as self-efficacy (e.g. ease or difficulty, confidence) and controllability (e.g. personal control over behavior) (Trafimow, Sheeran, Conner and Finlay, 2002).

However, the results of the more recent studies regarding these two constructs of PBC were not very satisfactory, because the power of these two item clusters as distinct measures in predicting behavior was found to be low. Rhodes and Courneya (2004) reported that in compare to self-efficacy items which appeared to be complex, the controllability items were observed to have better performance in terms of correlations between intention and PBC constructs. In this account, Rhodes and Courneya (2004) argued against the use of self-efficacy-items in TPB and recommended that Ajzen's intended PBC subcomponent of perceived skills or ability, resources and opportunity help form a better component model of PBC (Rhodes et al., 2006). In the present study, skill as knowledge, resource as inadequacy of resources and time, and opportunity as illness or vulnerability to crises are regarded as the integrated components of PBC. As there is no previous research which has addressed this specific topic within the PBC domain, the present study will attempt to shed light on this of microfinance participation of the rural poor in Bangladesh.

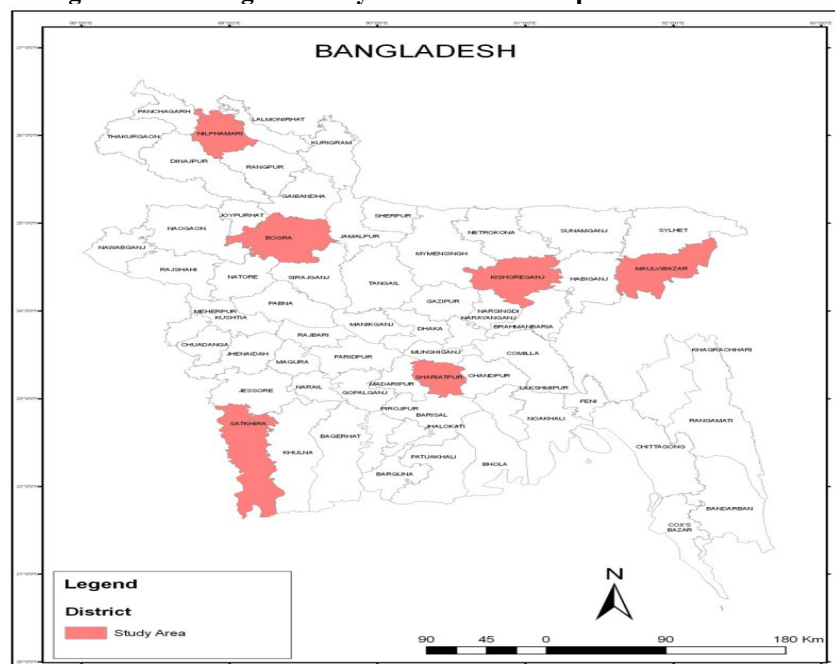
The prime objective of this study was to examine multiple components of attitude (affective: fear and instrumental: individual preference), subjective norm (injunctive: religious and spousal restrictions and descriptive: friend's or peer's advice) and an alternative measure of PBC (skills: knowledge, opportunity: illness or vulnerability to crises and resources; inadequacy of resources and time) for the prediction of intention and microfinance participation behavior by the rural poor. According to TPB model, it is postulated that intention would mediate the TPB components of attitude subjective norms and PBC to predict the participating behavior of the rural poor in MFIs in Bangladesh.

## Method

### Participants and Procedure

The sample of this study is 280 which were drawn through snowballing methods using closed-end questionnaire from the nonparticipating rural villagers in six different districts of Bangladesh. The districts are Moulavibazar, Satkhira, Shariatpur, Kishoreganj, Nilphamary and Bogra (see Figure 2). Nonparticipating rural poor (also referred to as non-members of the MFIs) are those individuals who choose not to be involved in borrowing microcredit from their local existing MFIs. The districts are selected based on the comparatively longer duration of the operations of the MFIs and the higher concentration of poverty incidence in Bangladesh declared by the concerned government departments (GoB, 2010). The sample statistic is provided in the Table I.

**Figure 2: Map of Bangladesh showing the Study Areas in shaded spots**



**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

**Instrument**

Participation is defined, in a stricter sense, an involvement by which individuals are active members or simply borrowers borrowing funds from the MFIs. If one or more members of a household participate in one or more MFIs, the particular member is identified as participant. Nonparticipants are defined as individual rural poor who never participated in MFIs or drop-outs who never come back to rejoin in borrowing from MFIs (Zohir, 2001). Interviewers used this definition of nonparticipants from who were asked to answer all TPB questions.

*Attitude* towards microfinance participation was measured using 5-point bipolar items as suggested by Ajzen and Fishbein (1980). Three items were used to tap the *affective* (e.g. fear of getting into risk of loans) aspect and two items were used to tap the *instrumental* (e.g. individual preference for taking loans) aspect as suggested by Ajzen (2002). Three items of fear is: (1) 'I believe that I will in financial troubles taking loan from MFIs;' (2) 'I believe that I will be losing my other belongings if I become default;' and (3) 'I believe that I will not get out of the loans once I take it from MFIs.' Two items of individual preference include: (1) 'I believe that I should not take loans from MFIs;' (2) 'I believe that I should take loans from MFIs.'

*Subjective norm* was measured by items similar to those suggested by Ajzen (2002). There are two *injunctive* components such as religious leaders' instruction and spousal dislike as female head of household as well as one *descriptive* component such as friends' advice. There were four items to measure the religious leaders' instruction such as: (1) 'My religious leaders believe that I should not take loans from MFIs, because it is based on interest which is forbidden in religion;' (2) 'My religious leaders believe that MFIs are spreading anti-Islamic system in society;' (3) 'My religious leaders believe that I would be in risk of taking loans from MFIs;' and (4) 'My religious leaders believe that I may face social isolation in participating in MFIs'. There are two items to measure the spousal dislike as female head of households which are: (1) 'My spouse believes that female should remain in the house to comply with *purdah*;' and (2) 'My spouse believes that female should not be involved in

business outside home.’ And there have been three items to measure the friends’ advice on taking the loans those are: (1) ‘My friends believe that I should take loans from commercial banks;’ (2) ‘My friends believe that I should take loans from relatives or friends;’ and (3) ‘My friends believe that I would be in risk of taking loans from MFIs.’

*Perceived behavioral control* was measured by three components such as *perceived resources* referred as insufficient resource; *perceived opportunity* referred as ill-health or vulnerability to crises; and *perceived skills* referred as lack of knowledge. For insufficient resources, four items were used; for lack of business knowledge, four items were used; and for ill-health two items were used as recommended by Ajzen (1991, 2002). Four items of insufficient resource are: (1) ‘I believe that I have ability to pay registration fee for taking loans from MFIs;’ (2) ‘I believe that I have time to attend the weekly meetings;’ (3) I know that I have cash money for savings; and (4) ‘I believe that I have energy and motivation for microfinance activities.’ Four items are there for lack of business knowledge: (1) ‘I believe that I have sufficient business knowledge to invest loan money in successful enterprises;’ (2) ‘I believe that I have sufficient financial knowledge to mobilize loan money;’ (3) ‘I believe that I have sufficient marketing knowledge to sell the products;’ and (4) I believe that I have other skills of doing business.’ Ill-health or vulnerability to crises belongs to the items that are: (1) I feel that my physical health condition is sound to utilize loans;’ and (2) I feel that my mental health is sound to operate loans.’

*Intention towards microfinance participation* was measured by three items such as: (1) ‘I am eager to participate in MFIs;’ (2) I intend to participate in MFIs in the future; and (3) I intend to participate in Islamic MFIs.’

*Participation behavior* in microfinance programs was measured by three items as well those are: ‘I wish to change my decisions to participate in MFIs;’ (2) I can participate actively in MFIs;’ and (3) ‘I may participate in Islamic MFIs.’ Notably all items of the TPB constructs were utilized with 5-point scales that ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Only four questions were sketched with dichotomous style of *yes/no* for identifying the active participants and nonparticipants in microfinance programs.

## Results

The study used the structural equation modeling (SEM) to investigate the research questions. As the structural equation modeling provides both an assessment of statistical significance tests for the size of each theoretical relation in the model and overall model fit. Models were estimated with maximum likelihood procedures and assessed using AMOS (Ashraf, 2013). The study also used actor analyses, correlation ratios and Cronbach’s alpha for checking reliability for the internal consistency. The items reported in the instrument section were reduced in confirmatory factor analysis which appeared to improve the Cronbach’s alpha level substantially. There were seven items in demographic questions included in the questionnaire. The descriptive statistics of the sample were provided in Table II.

**Table II Descriptive Statistics for Constructs**

Construct	n	Min	Max	Mean	SD
Participation	280	1.00	5.00	3.0083	1.00036
Intention	280	1.00	5.00	3.1226	1.04214
Fear	280	1.00	5.00	3.0857	.97182
Preference	280	1.00	5.00	2.5750	.69670
Religion	280	1.25	5.00	3.9527	.92324
Female Head	280	1.33	5.00	4.1893	.95032
Friend	280	0.75	3.75	2.3759	.51020
Resource	280	1.00	5.00	3.2759	.72819
Knowledge	280	1.00	5.00	3.4937	1.23556
Ill-health	280	1.00	5.00	4.0071	.99548

The results of correlation analyses were reported along with Cronbach’s alpha values in the Table III. The Cronbach’s alpha values are enlisted in the table along the diagonal in italic. All have been commonly used in the study of participatory behavior in general (Li, 2009; Phillips, 2009). The correlation coefficients are estimated based on Spearman’s correlation in binary fashion.

**Table III: Correlations for TPB model and Reliabilities (on Diagonal in italic)**

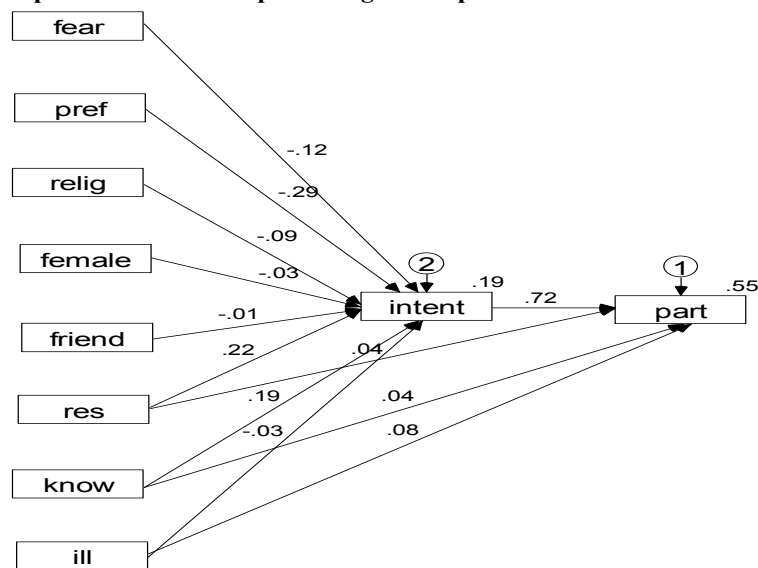
	1	2	3	4	5	6	7	8	9	10
Participation(1)	<i>.72</i>									
Intention (2)	.76**	<i>.77</i>								
Fear (3)	-.17**	.22**	<i>.71</i>							
Preference (4)	-.34**	-.34**	.10	<i>.62</i>						
Religion (5)	-.09	-.16**	.58**	.02	<i>.85</i>					
Female (6)	-.07	.08	.19**	-.08	.27	<i>.72</i>				
Friend (7)	-.02	-.02	-.04	.07	-.04	-.04	<i>.78</i>			
Resource (8)	.33**	.35**	-.25**	-.20**	-.14*	-.14*	-.01	<i>.61</i>		
Knowledge (9)	.26**	.25**	.11	-.15**	.17**	-.17**	.00	.32**	<i>.92</i>	
Ill-Health (10)	.27**	.23**	-.15*	-.25**	-.07	-.07	-.02	.48**	.38**	<i>.83</i>

**Note:** \* indicates significance at  $p < .05$  and \*\* indicate significance at  $p < .01$

Next, the research model was run by AMOS to have the path measures. The results of the path measurements have been shown in Figure 3. The statistical significance of the paths in the model was also tested using  $t$ -values, with a sample size of 1, for 280 samples of the rural nonparticipants in MFIs in Bangladesh. Estimation results of evaluated model were provided in the Table IV in which the variables influenced the intention variable.

As in original TPB framework, Ajzen (1991) formulated the relationship between PBC and actual behavior in question in two ways. One is to have an influence on the targeted behavior through the mediation of intention of individuals and the other is to exert the influence on that of the behavior directly. The evaluated result of the estimation of this relationship is provided in the Table V in which  $\beta$ etas,  $t$ -statistics and significance levels for the independent variables are provided. Beneath the table, the values of  $R^2$  and F-statistics are also provided along with their degrees of freedom and statistical significance levels.

**Figure 3: A Multicomponent TPB Model predicting Participation in MFIs**



**Table IV Estimations of Evaluated Model influencing Intention**

Variables	Betas	t-statistic	Significance
Fear of getting into risk	-.116	-1.726	.086*
Individual Preference	-.274	-4.939	.000***
Religious Restrictions	-.082	-1,215	.225
Spousal dislike as female head	-.031	-.544	.587
Friends' advice	-.005	-.091	.927
Insufficiency of resources	.210	3.322	.001**
Knowledge of Business	.180	2.929	.004**
Ill-health	-.032	-.498	.619

$R^2 = 25\%$ ,  $F = 11.292***$  ( $df 8, 271$ ) \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .10$

**Table V Estimations of PBC in Evaluated Model influencing Participation**

Variables	Betas	t-statistic	Significance
Insufficiency of resources	.237	3.678	.000***
Knowledge of Business	.145	2.378	.000***
Ill-health	.106	1.064	.100*

$R^2 = 15\%$ ,  $F = 15.776^{***}$  ( $df\ 3, 276$ )  $***p < .001$ ,  $**p < .01$ ,  $*p < .10$

### Discussion

In this study, we investigated multiple components of attitude (affective: fear and instrumental: preference), subjective norm (injunctive: religion and spouse and descriptive: friend), and an alternative measure of PBC (skills/ability: knowledge opportunity: ill-health, and resources: resource) for the prediction of intention and participation behavior in microfinance programs in Bangladesh. In this study, the main focus is to identify the variables that hinder the participation of the rural poor in MFIs.

The results of the study revealed that affective (i.e. fear) and instrumental (preference) attitude are distinct constructs both in their measurement domain and in their predictive influence on microfinance participation behavior of the rural poor in Bangladesh. Therefore, the aggregation of these components into either an affective or instrumental scale has been worthy strategy and recommended for further studies. Similar findings are also available in other studies such as Rhodes, Courneya and Jones (2003), Rhodes and Courneya (2003a) and Crites et al., (1994). This finding supports most previous research which showed better performance of the component model of TPB in the effects of affective and instrumental attitude on actual behavior in question (Eves, Hoppe, and McLaren, 2003; Lowe, Eves and Carrol, 2002; Rhodes et al., 2004).

In terms of predictive validity within a composite TPB structure, both fear as affective and individual preference as instrumental attitude had statistically significant influence on intention and microfinance participation behavior through the mediation of intention variable. That means these two variables are found as significant barriers for participation of the rural poor in MFIs in Bangladesh. Fear of risk into getting loans from microfinance programs is a derivative of several incidence happened in the past in different locations of the rural areas of Bangladesh. Similarly, individual preference is also found as a barrier of participation in MFIs. This implies that the rural poor prefer to choose the MFIs to have the loans which would serve their interest best. In many locations, due to unavailability of competitive MFIs, the rural poor appear to be unable to choose the right MFI. Hence, this result identified it as a potential barrier to the rural poor.

Investigation into the measurement structure and function of subjective norm found that injunctive norm and descriptive norm are distinct constructs in their measurement domains, but not in their predictive influence upon intention and microfinance participation behavior of the rural poor in Bangladesh. In earlier studies, aggregation of these components into a single scale (i.e. a single-order one-dimensional measurement structure) does not represent the measurement structure as well as a Multicomponent measurement model (Rhodes and Courneya, 2006). In this TPB structure, modeling separate effect of injunctive norm and descriptive norm on microfinance participation did not fit well. This finding suggests that injunctive and descriptive norm act as a formative scale on participation behavior of the rural poor in microfinance programs (Rhodes and Courneya, 2003a). In this respect, it is imperative to note that there is no particular emphasize on the part of researchers to aggregate injunctive and descriptive norms into a composite one. Therefore, these findings do not outlaw any earlier study that has subsumed injunctive and descriptive norms as separate constructs in regression models.

Yet, subjective norm was found not to predict participation behavior in MFIs when considering Multicomponent TPB framework. The study identified no significant indirect influence of subjective norm on microfinance participation through intention for injunctive and descriptive norm. This outcome supports the discussion of Hagger et al., (2002) where subjective norm and appeared to have relatively little direct influence on the prediction of the particular behavior after attitude and PBC holding controlled. In this connection, it is advisable to researchers to consider alternative social constructs or indirect influence of subjective norm in the TPB structure. Nevertheless, there is an alternative proposal that subjective norm may yield better output, if it is conceptualized as an antecedent of behavioral beliefs or attitude (Sutton, 2002). Hence, further researches are suggested in this regard.

The findings of this study show that measures of perceived resources, skills: knowledge and opportunity: ill-health are distinct constructs both in measurement domains and in their predictive influence on participation behavior of the rural poor in MFIs. Though opportunity: ill-health or vulnerability to crises is found not to influence intention significantly, the aggregate PBC measures for at least two variable sets appeared to show a significant impact on intention towards microfinance participation.

Besides, the study measures the direct effect of the aggregate constructs of PBC on participation behavior of the rural poor in MFIs. The results suggest that all three aggregate measures have statistically significant influence on microfinance participation.

Therefore, it may be advisable that Multicomponent TPB model for at least two antecedents of attitude and PBC is suitable for predicting the rural people's behavior in the microfinance participation domain.

In terms of predictive validity within a composite TPB model, perceived resources and perceived ability, but not opportunity, had significant influence on intention towards participation in MFIs. In addition, perceived resources and perceived ability had a total (direct + indirect influence through intention) influence on participation in MFIs. This result is important for at least two reasons. Firstly, the findings validate the new integrated PBC measure as a suitable measure of PBC; and secondly, these outcomes support Ajzen's original PBC construct which is denoted by controllability items. Hence, these findings show that the PBC measure of skills, opportunity and resource support the controllability items as measures of PBC.

Overall, the findings of the study reveal that intention is found to significantly influence the participation behavior of the rural poor in MFIs and among the eight perceived variables, four variables such as fear of getting into risk of loans, individual preference, inadequate resources and lack of knowledge about microenterprises appear to be the potential barriers to the rural poor in participating in MFIs in Bangladesh. These findings would shade light on the perspectives of policy planning in order to increase the participation of the rural poor in MFIs. Although limitations are commonly inherent in any studies, the findings of research can put an important contribution to all types of research. Nonetheless, this study is also warranted to mention some of the shortcomings along with recommendations for further research. First, the hypotheses linking causal effects between measured indicators were drawn in the structural equation models in the present study that represented one type of research framework. While the framework seems to have a moderate fit, different other models could have been employed to analyze the data. Second, the snowballing method of sampling was followed to collect the data rather than random sampling, which may limit the predictive ability of the model to some extent. However, the practice of new PBC measures indicates that some other alternative components of PBC can be employed to analyze the data in order to predict the microfinance participation behavior. Third, the present study is based on cross-section data rather than longitudinal data which may be a better method for predicting the participation behavior of the rural poor in MFIs.

Lastly, the practice of such a Multicomponent of TPB constructs ought to be deemed one step advance in social psychological research of microfinance participation. And the phrasing of the items could have been improved by which better measurement may be result better output. Further studies using this Multicomponent model of TPB may render improved performance in terms of measurement as well as predictive validity of the measuring constructs.

Overall, the inherent shortcomings described above do not restrict either the validation or generalization of the research results. However, addressing above shortcomings, future research could be improved in terms of its predictive power. More research should be done in this area, because the TPB has not yet been previously utilized in microfinance participation models. Hence, further investigations that address the limitations should lead to increased amounts of variance accounted for in the models and expand our understandings of the potential barriers that obstruct the rural poor participation in the MFIs.

## References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Ajzen, I. and Fishbein, M. (1980), *Understanding Attitudes and Predicting Social Behavior*. Prentice-Hall, Englewood Cliffs, NJ.
- 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.
- Armitage, C. J. and Christian, J. (2003). From Attitudes to Behavior: Basic and Applied Research on the Theory of Planned Behavior. *Current Psychology: Developmental, Learning, Personality, Social*, 22 (3):187 – 195.
- Ashraf, M. A. (2013). *An Investigation into the Barrier to the Rural Poor Participation in MFIs: The Case of Bangladesh*. An unpublished Ph.D.Thesis. University of Utara Malaysia, Kedah Darul Aman, Malaysia.
- Biddle, S. J. H., and Nigg, C. R. (2000). Theories of Exercise Behavior. *International Journal of Sport Psychology*, 31: 290 – 304.
- BIDS (Bangladesh Institute of Development Studies). (1990). *Evaluation of Poverty Alleviation Programs in Bangladesh*. Mimeo, BIDS, Dhaka.
- Courneya, K. S. and Bobick, T. M. (2000). Integrating the Theory of Planned Behavior with the Processes and Stages of Change in the Exercise Domain. *Psychology of Sport and Exercise*, 1: 41 – 56.
- Dawson, K. A., Gyurcsik, N. C., Culos-Reed, S. N., and Brawley, L. A. (2001). Perceived control: A construct that bridges theories of motivated behavior. In G. C. Roberts (Ed.), *Advances in motivation in sport and exercise*. Champaign, IL: Human Kinetics.
- George, J.F. (2004). The Theory of Planned Behavior and Internet Purchasing. *Internet Research*, 14(3): 198 –



212.

- Hossain, M. (1998). Credit for Alleviation of Rural Poverty: The Grameen Bank in Bangladesh. Research Report No. 65. International Food Policy Research Institute, Washington, D.C.
- Islam, T. (2007). Microcredit and Poverty Alleviation. Hampshire, UK: Ashgate Publishing.
- Khandker, S. (2003). Microfinance and Poverty: Evidence Using Panel Data from Bangladesh. World Bank Policy Research Working Paper 2945. Washington, D.C.
- Pitt, M. and Khandaker, S. (1998). The Impact of Group-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of Participants Matter? *Journal of Political Economy*, 106: 958 – 96.
- Razzaque, M. A. (2010). Microfinance and Poverty Reduction: Evidence from a Longitudinal Household Panel Database. *The Bangladesh Development Studies*, 33(3): 47 – 68.
- Rivis, A. and Sheeran, P. (2003). Descriptive Norms as an Additional Predictor in the Theory of Planned Behavior: A Meta-Analysis. *Current Psychology: Developmental, Learning, Personality, Social*, 22(3): 218 – 233.
- Rhodes, R. E., Blanchard, C. M. and Matheson, D. H. (2006). A Multicomponent model of the theory of planned behavior. *British Journal of Health Psychology*, 11: 119 – 137.
- Trafimow, D., Sheeran, P., Conner, M., and Finlay, K. A. (2002). Evidence that perceive behavioral control is a multidimensional construct: Perceived control and perceived difficulty. *British Journal of Social Psychology*, 41, 101–121.
- Yunus, M. (2011). Credit for Self-Employment: A Fundamental Human Right. In Osmani, S. R. and Khalily, M. A. B. (eds.) *Readings in Microfinance: Reach and Impact*. Dhaka: University Press Limited
- 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.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:  
<http://www.iiste.org>

## CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

**Prospective authors of journals can find the submission instruction on the following page:** <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

## MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

## IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

