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Microfinancing in Pakistan: A Case Study of Local Support Organizations in Northern Areas

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ABSTRACT

Pakistan is one of the developing countries, where the majority of the population resides in rural areas with a high poverty rate. Microfinance in rural areas is considered an effective tool not only making the people financially strong but at the same time improving their standard of living. The current research investigates the impact of local NGOs on rural life in the northern areas of Pakistan. In this regard, a parametric approach, Structural equation Modelling (SME) was applied to analyze the impact of microfinance projects on welfare using a case of four microfinance NGOs. The data was collected from 566 respondents using a pre-designed questionnaire. The results show the welfare of the people increased in terms of income, consumption, empowerment, employment. The findings imply that the loan size should be increased so that the respondents' would be able to save and acquire more assets. In addition, Ngo microfinance organizations initiate programs such as education and health awareness along with training on entrepreneurial skills before granting loans so that the microfinance loan can be utilized efficiently.

Keywords: Microfinance, NGOs, Structural Equation Modelling, Welfare

1. INTRODUCTION

Poverty has become a multidimensional trend that covers the social and economic capabilities of an individual and its alleviation requires a great deal effort that can empower the marginalized, socially as well as economically (World Bank, 2006). In 2015, about 702 million people in the world live in extreme poverty (Gill et al., 2016, Ending Extreme Poverty, 2016). According to Lipton and Ravallion (1995), "poverty exists when one or more persons fall short of economic welfare deemed to constitute a reasonable minimum, either in some obsolete sense or by standards of a specific society"

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(p.2553). In broad terms poverty can be defined as an absence of well-being in the form of meagre access to education facilities, poor health conditions, low income, lack of security, lack of freedom and lack basic facilities to improve one life, thus poverty is not only a social issue but also related to many other issues that affect social wellbeing of the people (World Bank, 2010). Although through the effective policies of millennium developing goals the poverty level in the world reduced to half by 2015 but still more efforts are required to reduce the remaining half and in this regard, United Nations Sustainable Development Goal have been initiated which is in continuous with MGDS with the purpose to minimize poverty till 2030 with the help of government and non-governmental stakeholders (SDGs, 2016). Though there are many ways to reduce poverty, in the current area microfinance is considered the best solution for alleviating poverty and sustainably reduce the number of people below the poverty line (Anim, 2011). The basic motive of the microfinance organization is to grant loans to the underprivileged sections of the society where the government resources are limited to reach. According to Yaqoob et al. (2017) in the recent year's microcredit has gain global attention especially for the marginalized that are unable to get a loan from the formal financial institutions that are based on complicated lending procedures.

Despite the apparent success and popularity of microfinance past studies conducted on the impact of microfinance and poverty show mix results. Some of the studies depict that due to the high-interest rate and the borrower were over-indebtedness became more poorer after getting the loan (Coleman (1999; Barman et al., 2009; Copestake et al., 2001; Atiur Rahman 2005; Armendariz de Aghion & Morduch 2010; Field et al., 2012; Goetz & Gupta, 1996; Guerin et al., 2015), similarly Banerjee et al. (2015) conducted a study on the effects of microfinance in countries in four continents and found microfinance less effective in terms of reducing poverty. In addition, Yaqoob et al., 2017 conducted a study in the Oyo State of Nigeria and the results showed a non-significant impact on the poverty alleviation of the rural areas. In contract Kapila et al., 2017 study shows a positive impact on the beneficiaries' income and also on the employment opportunities in the rural areas of Punjab in India. Similarly, a study carries out in china by Rahman et al. (2015) also shows a positive impact on the four indicators

including income, general expenditure, savings and women empowerment. Likewise, Ahmed, I. (2016) conducted study in Bangladesh and concluded that microfinance has a positive impact on the welfare of the beneficiaries similarly other studies (Rahman, 2000; Zohir et al. 2001; Li et al. 2011; Al-Mamun & Mazumder (2015) show a positive side of microfinance on welfare). Overall, it is widely acknowledged that no well-known study robustly shows any strong impacts of microfinance (Armendáriz de Aghion & Morduch 2005). Duvendack et al. (2011) emphasize on re-investigate the effectiveness of the existing microfinance organizations on poverty alleviation, due to the inconclusive results of past literature.

In the context of Pakistan, a limited number of studies have been conducted on the effectiveness NGOs on welfare, for instance, Shirazi, 2012; Ghalib, 2011; Setboonsarng & Parpiev, 2008; Noreen et al., 2011; Qamar et al., 2017; Zaidi, 2017; Alia et al., 2017. The findings of the studies reveal a mixed result regarding the socio-economic. The inconclusive evidence forms the basis for a systematic review.

1.1. Hypothesis Development

Poverty is the main hindrance to the uprising of any nation. Poverty has been defined as a lack of basic needs in the form of shelter, clothes, education, employment, health facilities and lack of social networks (World Bank, 2000). For alleviating poverty microfinance is considered the In the present area microfinance organizations are the efficient tool for breaking the vicious circle poverty and contributing to the welfare in the form of improving not only the financial status like income, assets, saving and expenditure but also the non-financial position such as health, education, empowerment and job opportunities (Wright, 2000; Afrane, 2002; Beck at al., 2004; Hietalahti & Linden, 2006; Hossain & Knight, 2008; Odell, 2010).

According to Lipton, (1996) microfinance intervention can only be effective in reducing poverty if both socio and economic indicators are considered simultaneously. Likewise, Setboonsarng and Parpiev (2008) consider microfinance an important tool for the uplift of poor health, education empowering. Each indicator has a unique role of impact like many of the researchers used employment as a mean of reducing poverty, for instance, Pitt (2000), Chen and Snodgrass (2001) and Shahnaz, Rahman and Sadaf,

(2018) research shows a significant impact of microfinance on employment generation. Similar results were confirmed by Khandker (1998) that studied the impact of microcredit on employment. A study on microfinance in context to education impact was carried by Chen and Snodgrass (1999), Chemin (2008) and Khandker (1998) and the results of the studies show a positive impact of microfinance on enrolment of students (Chemin 2008) and Viswanath, (2018). While a study conducted by Banerjee et al. (2009) and Islam (2011) present a negative impact on education. In addition, Garikipati (2008) Pitt et al. (2006) and Swain and Wallentin (2009), Deininger and Liu (2013) studies confirm a positive impact on women's empowerment and employment. In relation to the social impact, economic impacts are also served great importance. Studies of Pati and Lyngdoh (2010), Rahman (2010), Woutersen and Khandker, (2014), Saha (2014), Khanam et al. (2018), Obebo, (2018), Banerjee, Duflo, & Hornbeck, (2018), Yostrakul, (2018) show a significant impact of microfinance on income, consumption, savings, and assets.

Thus in the light of the above literature, the following hypotheses are developed

H₁: There is a positive relationship between microfinance and income

H₂: There is a positive relationship between microfinance and saving

H₃: There is a positive relationship between microfinance and consumption

H₄: There is a positive relationship between microfinance and assets

H₅: There is a positive relationship between microfinance and education

H₆: There is a positive relationship between microfinance and health

H₇: There is a positive relationship between microfinance and empowerment

H₈: There is a positive relationship between microfinance and employment

2. RESEARCH METHODOLOGY

This study undertakes an assessment of the impact of microfinance organizations on the welfare in the Northern Areas of Khyber Pukhtun Khawa, Pakistan. Primary data was collected in terms of income expenditure, saving, assets, education, health, empowerment and employment through Survey method. Structural equation modeling was applied to evaluate the impact of microfinance on welfare. A total of four NGOs namely the Biyar Local Support Organisation, Karimabad Area Development Organisation, Integrated Chitral Development Programme and Garamchashma Area Development Organisation were taken into account consisting of 566 beneficiaries.

Simple Random sampling procedure was used to select the samples. To analyze data; first, the Statistical Package for Social Sciences (SPSS 16) was used. Then, in order to confirm the proposed structural model, the researchers used partial least squares variance-based structural equation modeling (PLS-SEM) which is an exploratory technique used to tests the relationship among latent variables and to analyze the path relationships in models. The analysis is divided into two parts measurement model and structural model.

2.1. Assessment of Measurement Model

To validate the measurement model, confirmatory factor analysis is employed through indicator reliability, internal consistency reliability, convergent validity, and discriminant validity, as described by Hair et al. (2012). As all the items are between 0.40 and 0.70 (Hair et al., 2018) so it satisfies the criteria of indicators reliability whereas the internal consistency is measure through the suitability of measurement models was measured by Composite Reliability Score which also meets the threshold of above 0.70 (Raykov, 1997). Convergent validity is met through Average Variance Extracted (AVE) of 0.50, respectively (Hair et al., 2011). Table 2 shows the Discriminant Validity which is checked by HTMT with criteria of below

Table 1: Loadings, CR and AVE				
Construct	Loading	CR	AVE	Convergent Validity (AVE > 0.5)
Assets	0.792-0.909	0.902	0.699	YES
Education	0.628-0.88	0.848	0.585	YES
Employment	0.644-0.947	0.92	0.745	YES
Expenditure	0.532-0.921	0.932	0.586	YES
Empowerment	0.595-0.845	0.907	0.584	YES
Health	0.571-0.973	0.941	0.765	YES
Income	0.830-0.878	0.948	0.724	YES
Interest	0.562-0.907	0.900	0.648	YES
Saving	0.855-0.955	0.960	0.827	YES
Supervision	0.538-0.936	0.908	0.670	YES
Loan Size	0.843-0.958	0.96	0.802	YES

Table 2: Discriminant Validity

Constructs	Assets	Edu	Employ	<u>Empow</u>	Expend	Health	Interest	Loan Size	Saving	Supervision	Income
Assets											
Education	0.788										
Employment	0.633	0.87									
Empowerment	0.547	0.778	0.744								
Expenditure	0.839	0.783	0.784	0.676							
Health	0.818	0.776	0.813	0.685	0.766						
Interest	0.467	0.242	0.211	0.132	0.32	0.245					
Loan Size	0.402	0.233	0.133	0.127	0.186	0.125	0.87				
Saving	0.771	0.591	0.552	0.491	0.692	0.659	0.429	0.327			
Supervision	0.546	0.393	0.207	0.145	0.400	0.246	0.799	0.845	0.372		
income	0.523	0.315	0.21	0.448	0.468	0.41	0.301	0.179	0.439	0.343	

2.2. Structural Model

Table 3 shows the results of hypotheses testing. Out of the 7 hypotheses, 4 are significant. The results show a mixed impact of microfinance on social-economic indicators. Among the economic indicators, income and consumption expenditures are significant same with (Khandker, 2005; Copestake, et al., 2005; Armendáriz de Aghion and Morduch 2010; Venkata and Yamini 2010) while the remaining saving (Banerjee et al. (2010) Pati AP, Lyngdoh BF 2010; Swain RB & Varghese A 2009) and assets (results are aligned with Kondo et al., 2008; Noreen, Imran, Zaheer & Saif, 2011; Swain & Varghese, 2009), whereas they contradict the findings of others who found a significant effect (Kondo, 2007; Sebstad and Chen, 1996; Sengsourivong, K., 2006). Whereas the socio indicators show that empowerment is significant and in line with the lecture (Lakwo, 2006; Pitt et al., 2006; Saha, 2014; Czura, 2010; Weber & Ahmed, 2014) and employment is also significant (Gubert & Roubaud (2005) while microfinance impact on education is non-significant same with lecture (Nanor 2008; Shimamura & Lastarria Cornhiel 2009; Gaile, et al., 2001; Brannen, 2010; Gubert & Roubaud, 2005) and also a non-significant effect on health (De Mel et al., 2009; Banerjee et al., 2009). The significance of income and consumption shows that the beneficiaries were able to make day to day expenditures but due to the low size of the loan they were not able to make any savings or build any assets. On the socio side, the NGO microfinance organizations not only created job opportunities for the respondents but were able to enhance their

confidence in making decisions especially among the female respondents.

Table 3: Hypothesis Results						
Hypothesis	Relationships	Beta	SD	t-value	Supported	
H₁	Microfinance -> Empowerment	0.373	0.032	11.528	Yes	
H₂	Microfinance -> Education	0.215	0.131	1.639	No	
H₃	Microfinance -> Assets	0.109	0.134	0.818	No	
H₄	Microfinance -> Saving	0.200	0.158	1.269	No	
H₅	Microfinance -> Expenditure	0.510	0.034	15.031	Yes	
H₆	Microfinance -> Health	0.108	0.132	0.819	No	
H₇	Microfinance -> Income	0.391	0.041	9.519	Yes	

3. DISCUSSION

This study employed a structural equation model, cross-sectional design and random sampling method for data collection. Findings indicated that most of the respondents were better off in terms of income, consumption, employment, and empowerment. But in terms of education, health, assets and saving there were no significant change between the borrowers and non-borrowers. The study recommends programs such as education and health awareness should be initiated along with training on entrepreneurial skills before granting loans so that the microfinance loan can be utilized efficiently and in addition, there is a need of increase in the loan size so that the borrowers would be able to save and increase their assets.

3.1. Future Direction

The current study suggests an assessment of microfinance organizations at the national level. In addition, for deep study, the mix method will be useful to understand the impact of NGO microfinance on a broad level.

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