



Microfinance Paths and Economic Empowerment of Women Borrowers: Evidence from Iran

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Abstract

The relationship between women's empowerment and microfinance has been studied in many countries, including Iran. But, few studies have examined the impact of women's microfinance consumption path on their empowerment. Therefore, this study aims to answer the important question of what effect the path of microcredit consumption has on women's empowerment. Given the importance of the type of loan used in women's economic empowerment, 13 ways of spending by women were identified. These routes can be divided into three general paths: (1) starting a small business, (2) indirectly investing with the possibility of return, and (3) spending the loan without the possibility of its return. The main question was how much women are empowered if they choose each of these paths. The statistical population consisted of 800 women in Nahavand Township. The sample size was determined to be 260 people according to Krejcie and Morgan's table taken by the stratified sampling technique with the proportional assignment. The questionnaire's reliability and validity were confirmed by computing Cronbach's alpha coefficient (more than 0.7) and content validity, respectively. Data were analyzed by SPSS20 software. The results showed that women in the first path became more empowered than the other two groups. The other two paths did not make a significant difference in the empowerment level although the second path slightly outperformed the third path in empowering the women. Credit-paying institutions must exercise greater control over how women use their credit by fundamentally reviewing payment laws.

Keywords:

Empowerment; microfinance; small business; women

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INTRODUCTION

Promoting women's political participation and reducing violence against women are among the programs designed and implemented to enhance women's standing in society (Eckert et al., 2017). The establishment of women's microfinance funds is also one of the other programs implemented in this regard (Garikipati, et al., 2017; Serrano-Cinca & Gutiérrez-Nieto, 2014). It has been claimed that lending to poor women is imperative for sustainable economic and social development in the 21st century (Norwood, 2005). Undoubtedly, asking a fundamental question and researching it can significantly help answer some of these possibilities. The problem is: To what extent do women use microfinance in different ways to empower them? So, this study tries to determine how women borrowers use their loans. We will then examine the level of women's economic empowerment (WEE) in each path so that we can compare the mean WEE of different paths.

Gender inequality and undermining women's rights

In human rights and development issues, women's empowerment is a fundamental concern (Boden & Zoe, 1997). Social anomalies around the world have led women to face disadvantages in education, employment, political representation, and intra-household violence (Akinsanmi, 2005; Armendáriz & Morduch, 2010). The gender inequality index strongly supports this claim (Malik, 2014). Said-Allsopp and Tallontire (2015) also mentioned gender inequality against women's employment in their study. The lack of women's right to participate in the processes that lead to their empowerment is also one of the inequalities against them (de Moraes & Rocha, 2013; Raha et al., 2013). The most crucial characteristic of poor rural women is that they do not have access to the resources needed for entrepreneurship and empowerment (Sengupta & Aubuchon, 2008). However, rural women have essential

tasks, such as planting and processing crops, providing water and firewood, cleaning their homes, and raising their children (Kaur et al., 2007). Women need to be given more attention as half of the population. Some studies have shown that the primary need for these women is to earn a decent income (Akin-sanmi, 2005). There is a belief that gender inequality is an obstacle to sustainable development (Duflo, 2012). Microfinance can promote women's rights and the quality of their life. Garikipati, Johnson, et al. (2017) also mentioned the role of microcredit in reducing gender gap between men and women.

Empowerment

Empowerment is a multidimensional concept (Fetterman, 1994) and there are many definitions of empowerment (Ibrahim & Alkire, 2007). Empowerment reflects increased participation in decision-making (Kabeer, 2009; Malhotra & Schuler, 2005; Ngo & Wahhaj, 2012). Empowered people have the right to choose and the ability to act (Ferreira & Walton, 2005). Empowerment is about increasing people's ability to make choices in life, especially when that ability has been taken away from them (Alsop et al., 2005; Kabeer, 1999; Narayan, 2005). Empowerment can be considered a continuous process in which people will be able to make decisions in the face of useful options for improving their personal and social lives.

Women's empowerment

Women's empowerment is a process that increases the capability of women to make choices about favorite activities and results as well (Krishna, 2003). Women's empowerment is a multifaceted issue that covers many aspects of their lives, e.g., access to resources, psychological feelings of efficacy, decision-making power (Ali & Hatta, 2012; Klein, 2014), freedom and gender equality (Arestoff & Djemai, 2016), feelings of agency and social networks (Hansen, 2015), bargaining power (Mishra & Sam, 2016), and participation in business (de Jong et al., 2017). Different di-

mensions of women's empowerment include three types of personal, relational, and societal empowerment (M. A. Huis et al., 2017). By definition, women's empowerment is a continuous process in which they are made able to make decisions in the face of useful options for improving their personal and social lives.

Women's economic empowerment (WEE)

Empowerment has different aspects including social, individual, psychological, legal, and economic. One of the essential aspects is economic empowerment to establish sustainable employment, increase family income, and consequently, reduce their poverty since employment status could be effective in poverty and its various aspects (Ashburn & Warner, 2010). Thus, WEE is a continuous process in women's lives that empowers them to be decisive in their financial relationships so that, with the right choices, they can improve their economic conditions and their families, such as employment, income, livelihood, savings, capital, and assets.

Microfinance and women empowerment

Early microfinance programs have grown exponentially to date (García-Pérez et al., 2017). The term microfinance refers to the provision of financial services to customers with low-income levels (Nader, 2008; Serrano-Cinca et al., 2016). In the past few decades, microfinance has begun with Grameen Bank's initiative in Bangladesh to lend to women and has made significant progress in many countries around the world (Al-Amin & Chowdhury, 2008; Morduch, 1999). Even in developing countries, competition between microfinance institutions has increased dramatically (McIntosh & Wydick, 2005). Microfinance programs have helped empower developing countries by developing and supporting entrepreneurial activities to a great extent (Khandker, 2005). Women's access to formal banks and conventional credit is often limited. This problem may be due to a lack of collateral or cultural barriers

to interacting with male bank employees (Nithammer et al., 2007). Microfinance is a service that can solve the problem of women's access to finance to start or maintain a small business (A. Rahman, 1999; Weber & Ahmad, 2014). Women's access to these services will help increase their empowerment (Anderson et al., 2002; M. A. Huis et al., 2017). Microfinance programs are also capable of changing the power relationships and empowering poor men and women (Cheston & Kuhn, 2002). For two reasons, microfinance institutions prefer to lend to women: more trust in women and more significant social impact (Aggarwal et al., 2015). The situation in less developed countries has highlighted the importance and necessity of micro-investment programs for the economic empowerment of vulnerable groups such as rural women.

The positive and negative effects of microfinance on women's empowerment

Despite many studies, the relationship between access to micro-services and empowerment is still questionable (Kabeer, 2009; Weber & Ahmad, 2014). The results of a study have shown that women have greater financial security and confidence by using microfinance (Kim et al., 2009). Other research also argues that access to microfinance has empowered and enhanced women's rights (Armendáriz & Morduch, 2010; Kulkarni, 2011). It has also been shown that the relationship between access to microfinance and women's decision-making power in their families is not significant, indicating relational empowerment (Banerjee et al., 2015; Crépon et al., 2015; Tarozzi et al., 2015). Economic empowerment may also lead to conflict between men and women because of disagreements over the allocation of additional income (Chin, 2012; Garikipati, 2008; Johnson, 2004). Qualitative research has also showed microfinance women experience violence from their partners (A. Rahman, 1999). Some also believe that microcredit does not usually reach vulnera-

ble people (S. Amin et al., 2003). Whether women's empowerment has a positive or negative impact remains an open question (Duflo, 2012). In the study area, the same question arose for us. Therefore, in this study, we intend to answer part of this question from the perspective of the path in which women use loans.

Literature review

Literature review shows that the importance of microfinance for the empowerment of women, and especially their economic empowerment, is inevitable. This claim could be detected in extensive research by multidisciplinary authors. Many studies on microfinance argue that this tool has been effective in empowering women (Garikipati, et al., 2017; Hossain, 2015; Kabeer, 2009; Pitt & Khandker, 1996; Schuler et al., 1996). Several studies have also reported that microfinance is a key strategy for poverty reduction in rural households (Ahlin & Jiang, 2008; Amin & Becker, 1998; Garikipati, et al., 2017; Hulme, 1997; Johnson & Rogaly, 1997; Kabeer, 1998; Marconatto et al., 2016; Mayoux, 1998; Mosley, 2001; Rahman, 1999; Reinke, 1998; Roodman & Morduch, 2014; Schuler et al., 1996; Wright, 1999). Paying microfinance to rural poor peoples could result in improving production and consumption (Cuong, 2008) and increasing income (Hoque & Itohara, 2009; Khandker et al., 1998; Tedeschi, 2008), so not only has it resulted in increasing their accessibility to credits but also increased income in rural areas (Rahman & Naoroze, 2007; Swain & Wallentin, 2009). Microfinance could increase the economic empowerment of rural women by helping them launch new small businesses (Drolet, 2009) and extending current activities on various scales (Misra, 2006). Hoque and Itohara (2009) found that in Bangladesh, although microfinance was successful in empowering rural women, their empowerment was only confined to the economic dimension. A case study in rural areas of Nigeria concluded that microfinance pro-

grams had positive impacts on family economic indices such as income, savings, consumption costs, and gaining stock, and the onset of the program in studied areas improved living standards (Fasoranti, 2010). Van Rooyen et al. (2012) reported the impact of microfinance and micro-savings on increased income, savings, costs, and asset accumulation in sub-Saharan Africa. The result of a study in Pakistan showed that women in the loan cycle had higher levels of empowerment. The authors confirmed that microfinance had an impact on empowering female borrowers (Weber & Ahmad, 2014). Microfinance increases household income, improves food security for families, facilitates education for children, and overall empowers women and reduces their vulnerability (Adhikari & Shrestha, 2013). Research findings in Malaysia showed that microfinance empowered women and enhanced gender equality. It enabled these women to access financial capital, create their small businesses, and make earnings that helped them contribute to household expenses (Al-Shami et al., 2016). The results of Farashi et al. (2018) showed that the use of credit in livestock, poultry, beekeeping, turkey, fisheries, saffron cultivation, mushroom cultivation, cultivation of medicinal plants, and horticulture had a direct and significant effect on the empowerment of rural women. In their study, Nassani et al. (2019) concluded that loans stimulated women's empowerment through the development of tourism activities. A research study in Mexico showed that microfinance had a positive impact on women's empowerment (Feldhoff et al., 2019). Saha and Sangwan (2019) concluded that women's education had a greater impact on women's empowerment than loan volume. In contrast, some other studies have reported that the inability to repay high debt and fund debt has disenfranchised women (Garikipati, 2008; Goetz & Gupta, 1996; Guérin et al., 2013). Research in Ghana showed that some women were empowered as a result of their access to credit; some had little control over the use

of loans, and some were subjected to harassment and were worse off due to their inability to repay loans in time (Ganle et al., 2015).

A review of the literature on the effects of microfinance shows that most studies have reported the positive impacts of microfinance on the economic empowerment of women. However, we can find few studies that have revealed the negative effects of microfinance on WEE. Undoubtedly, if women use microfinance for employment creation, it will result in their economic empowerment. But, if these credits are not spent on pre-determined targets, it could worsen the economic inabilities of these already vulnerable groups.

METHODOLOGY

Study area

The studied area is located in Nahavand Township, southwest of Hamedan province. The area was between the latitudes 34°3' and 34°12'N and the longitudes 48°20' and 48°24'E. Hamedan province is located in the west of Iran (IRIMEAF, 2017).

Research model

Figure 1 shows the research model. According to this model, women spend their loans on three different paths. These paths also include 13 cases. These cases and pathways

were identified by an initial interview with 30 women who were directors of the fund microfinance and eight experts from the Hamadan province agricultural office. These thirty people were randomly selected out of the members of the board of directors of the funds before designing the questionnaire. They were asked to anticipate all possible loan routes. Then, we used these paths in the questionnaire.

According to the designed model, the use of the loan in either path leads to a certain level of WEE. Based on our interviews with these 30 people, we found that women use their loans in one of the three cases presented in the model. After meeting with these people and consulting them, we categorized the 13 cases into three categories. We found that women used their loans in three main paths: Group 1: women who started a small business with the loan ((a) Husbandry: poultry, bee-keeping, and aquaculture, b) Shop-keeping, c) Farming: saffron, mushroom cultivation, and horticulture, d) Handicrafts: carpentry, sew, art activities), Group 2: women who invested the loan to be able to repay the initial capital ((a) Jewelry purchasing, b) Investing in the bank, c) Giving a loan to husband for business), Group 3: women who spent the loan on activities that it would not be possible to re-

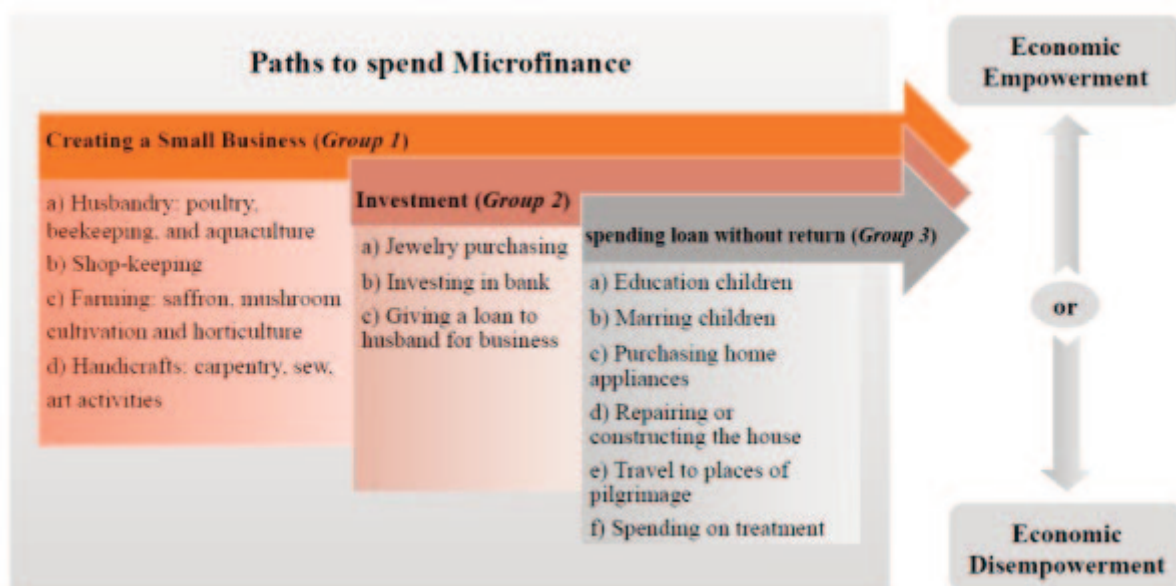


Figure 1. Research Model

turn the capital ((a) Educating children, b) Marrying children, c) Purchasing home appliances, d) Repairing or constructing the house, e) Travelling to places of pilgrimage, f) Spending on treatment).

In this model, we also measure the level of WEE through the 13 items extracted from the literature review. Based on the designed model, it was hypothesized that:

H1: The level of WEE is higher in group 1 than in group 2, and the mean difference between the two groups is significant.

H2: The level of WEE is higher in group 1 than in group 3, and the mean difference between the two groups is significant.

H3: The level of WEE is higher in group 2 than in group 3, and the mean difference between the two groups is significant.

We also compared the means of economic empowerment level in different groups of women, including marital status, being the head of the family, educational level, family size, income, the size of the loan taken, level of fund control on the proper consumption of the loan, and frequency of attending a training course on the appropriate consumption of loan.

Data collection

The research was conducted in 2019. The statistical population was composed of women in Nahavand Township who received a loan. According to the acquired data, they amounted to 800 people. The statistical sample was determined to be 260 people through the Morgan table. Sampling was conducted as the proportional classified state so that proportion to the number of women who received the loan at any part of Nahavand Township, choice percent of the sample in each part identified. Then, at any part, the samples were randomly selected, and the collected data were obtained using a questionnaire.

Questionnaire design

The questionnaire designed for data collection consisted of the following sections: 1) demographic information about women, 2)

information about loans, and 3) assessment of women for their economic empowerment level including 13 items. The measures of WEE were assessed using a Likert-type scale.

Reliability and validity analysis

Composite reliability (CR) was used to measure the internal relationship degree among the indicators. The CR value was 0.876, which was above the standard value of 0.7 (Fornell & Larcker, 1981), indicating a high degree of internal consistency among the items. The reliability was obtained by calculating Cronbach's alpha coefficient for 30 distributed questionnaires in pre-test collection data. The Cronbach's alpha of the measurement scale was 0.976, which was above the standard value of 0.7 (Nunnally & Bernstein, 1978). Therefore, the data had good internal consistency and reliability.

Data analysis

The SPSS20.0 software was used to encode the questionnaire data and carry out descriptive statistics analysis and hypothesis confirmation tests on the collected data. Kruskal-Wallis and Mann-Whitney U were used to compare the mean WEE among the groups.

RESULTS

The characteristics of the women

The characteristics of the women studied are presented in Table 1. According to the results, 70 percent of the women were married. The remaining included the women who were single (7.7%), divorced (8.5%), or widows (13.8%) were single. In addition, 26.1 percent of the women were family heads, and the rest (73.9%) were in families with someone else taking care of their families. The age range of the women was 23-55 years with a mean of 39.4 years. Most women (42.3%) were in the age range of 35-44 years. The family size of the respondents was 1-12 with a mean value of 4.4 people. The education levels of 55.4 percent of the women were primary, secondary, and high school. Addition-

ally, 15.4 percent had academic degrees. According to the results, 20.8 percent of the women were illiterate. More than half of the respondents (55.4%) were housekeeping and the remaining had an occupation. The range of personal annual income was from 0 to 400 million IRR, and the mean income was 45 million IRR. Approximately half of the women (50.8%) had no income.

The range size of the loan taken was from 10 to 250 million IRR, and the mean was 80 million IRR. Additionally, 23.1 percent of the respondents said that the amount of control of the fund on how women use the loan is low.

Furthermore, 37.7 percent and 39.2 percent believed that the level of control was moderate and high, respectively. The results showed that 40.8 percent of the studied

Table 1

The Comparison of Means for Economic Empowerment in Different Groups of Women (Kruskal- Wallis / Mann-Whitney U)

Characteristics	Groups	Descriptive Statistics		Means comparison for WEE between different groups	
		N	(%)	Mean Rank	Chi-square or Z (p-value)
Marital status	Married	182	70	112.7	47.16** (0.000)
	Not married	20	7.7	119.5	
	Divorced	22	8.5	189.6	
	Widow	36	13.8	190.4	
Being the head of the family	Yes	68	26.1	187.7	-7.3** (0.000)
	No	192	73.9	110.2	
Age (years) Means: 39.4 23-55 Range:	≤ 34	78	30.0	107.8	10.6** (0.005)
	35-44	110	42.3	36.1	
	≥ 45	72	27.7	34.6	
Level of educational	No education	76	29.2	143.1	10.8* (0.028)
	Primary	54	20.8	140.9	
	Secondary	34	13.1	139.5	
	Higher	56	21.5	117.7	
	College education	40	15.4	102.4	
Size of the family Means: 4.4 Range: 1-12	≤ 2	20	7.7	79.6	9.9** (0.007)
	3-4	128	49.2	134.6	
	≥ 5	112	43.1	134.8	
Occupation status	Homemakers	144	55.4	87.8	-10.1** (0.000)
	Employed	116	44.6	183.4	
Income (million IRR/year) Means: 45 Range: 0-400	No income	132	50.8	90.3	95.7** (0.000)
	10-80	56	21.5	138.8	
	≥ 80	72	27.7	197.6	
Size of the loan taken (million IRR) Means: 60 Range: 10-250	≤ 40	98	37.7	114.2	14.4** (0.005)
	40-80	104	40.0	128.5	
	≥ 80	58	22.3	161.4	
Level of fund control on the proper consumption of loan	Low	72	27.7	96.1	28.4** (0.000)
	Medium	112	43.1	131.1	
	High	76	29.2	162.1	
Frequency of attending a training course on the appropriate consumption of loan	No attendance	102	39.2	13.7	28.3** (0.000)
	One time	92	35.4	135.8	
	Two times or above	66	25.4	165.5	
Total		260	100	---	---

Notes: Standard errors are shown in parentheses; **p-value < 0.01; *p-value < 0.05; n's Non significant

women did not attend any training courses on the proper use of loans. Also, 34.6 percent and 24.6 percent had attended one and two or more courses, respectively.

Table 2 also shows the number of women in the three groups in terms of the variables studied. This table will help us to have better interpretations of the empowerment situation in different groups. In the following, we used Table 2 results to provide a better analysis of Table 1 results.

Means comparison for economic empowerment in different groups of women

In the last two columns of Table 1, the mean WEE among different groups of women is compared. In the following, the results of the means comparison in each group are reported separately:

Marital status

Table 1 shows that the mean WEE of the two groups of “divorced” and “widow” is much higher than that of “single” and “married”

Table 2

The Distribution of Women in the Three Groups Consuming Loans in Terms of Variables Studied

Characteristics	Category	The number of women in the three groups consuming loans			Total
		Group1	Group2	Group3	
Marital status	Married	80	40	62	182
	Not married	0	18	2	20
	Divorced	18	2	2	22
	Widow	30	0	6	36
Being the head of the family	Yes	56	4	8	68
	No	72	56	64	192
Age (years)	≤ 34	22	30	26	78
	35-44	64	26	20	110
	≥ 45	42	4	26	72
Level of educational	No education	46	4	26	76
	Primary	32	8	14	54
	Secondary	20	4	10	34
	Higher	24	20	12	56
Size of the family	College education	6	24	10	40
	≤ 2	6	6	8	20
	3-4	62	26	40	128
Occupation status	≥ 5	60	28	24	112
	Homemakers	40	44	60	144
	Employed	88	16	12	116
Income (million IRR/year)	No income	36	40	56	132
	10-80	32	14	10	56
Size of the loan taken	≥ 80	60	6	6	72
	≤ 40	38	28	32	98
	40-80	56	20	28	104
Level of fund control on the proper consumption of loan	≥ 80	34	12	12	58
	Low	16	26	30	72
	Medium	56	26	30	112
Frequency of attending a training course on the appropriate consumption of loan	High	56	12	8	76
	No attendance	30	18	54	102
	One time	58	24	10	92
	Two times or above	40	18	8	66

women, and the differences between the groups are significant. In [Table 2](#), 18 out of 22 divorced women and 30 out of 36 widow women used their loans to create a small job. Also, 102 women out of 182 married women and all 20 single women used their loans in non-productive paths. As other studies have confirmed home employment ([de Jong et al., 2017](#); [M. Huis et al., 2019](#)), we recommend that married women be encouraged to pursue occupations that are possible at home. For example, online sales at home are among the jobs being developed in Iran today. If homemakers are involved in such activities, they can both do housework and achieve a level of empowerment by starting a business. It is also recommended that other researchers investigate the feasibility of running small businesses that are possible at home.

Being the head of the family

According to [Table 1](#), the mean WEE for those who were the head of their own families was higher than that of the other women, and their difference ($p < 0.01$) was significant maybe because 56 out of 68 women who were heads of the family had used their loans to create a small business ([Table 2](#)). Also, 120 out of 192 women who were not heads of the family had used their loans in non-productive activities. Contrary to the results of this study, some studies have reported the negative impacts of microfinance ([Banerjee et al., 2015](#); [Crépon et al., 2015](#); [Tarozzi et al., 2015](#)). Because female heads of families are vulnerable groups in society, empowering them is more helpful in reducing their class differences with other members of society ([Garikipati, et al., 2017](#)). The positive impact of microfinance has been proved in many other studies ([Garikipati, Agier, et al., 2017](#); [Hossain, 2015](#); [Kabeer, 2009](#); [Pitt & Khandker, 1996](#); [Schuler et al., 1996](#)). We advise organizations supporting orphaned and abused women to consider empowerment loans by monitoring their use instead of making low monthly payments to women.

Level of educational

[Table 1](#) showed that the mean WEE of academically educated women was lower than that of the women with no college degree. According to [Table 2](#), only six out of 40 women with a university degree used their loans to create a small business. As the chances of educated women for employment are meager in rural areas, these women are less economically empowered than lowly-educated women. Given that most educated women use loans in a non-productive way and most women with low literacy levels use loans in manufacturing jobs, it is recommended that lending organizations prioritize less literate women in lending.

Family size

According to the results in [Table 1](#), women with family sizes of two were less empowered than women with family sizes of three or above. Their WEE differed significantly ($p < 0.01$). The fact that microcredit creates part-time employment for children has been proved by [Van Rooyen et al. \(2012\)](#). According to [Table 2](#), 60 of the 112 women with family sizes of more than 4 could start a small business with a loan. Therefore, it is recommended that lending organizations prioritize women with more children in paying loans.

Occupation status

The results of [Table 1](#) showed that employed women were significantly more empowered than homemakers ($p < 0.01$). This result is quite expected in many societies because employed women have access to direct income. As such, women gain more personal control over how they spend their money, have more savings, and have higher purchasing power. The fact that income increases women's decision-making power has been proved in other studies ([Alsop et al., 2005](#); [Kabeer, 1999](#); [Narayan, 2005](#)). The recommendation given to married women is also available here.

The Income of the respondent

According to the results of Table 1, WEE is higher in group 3 than in group 2 and higher in group 2 than in group 1. The differences between the groups are significant ($p < 0.01$). As mentioned in the previous section, women's access to income gives them greater control over spending, increasing their savings, and increasing their purchasing power. Higher income also makes it easier for women to repay their loan installments, giving women a portion of their income and even using it to improve the family's food security. On the other hand, we saw in this study that these components are among the components of WEE. Although earning money for women is not equivalent to their economic empowerment, some studies confirm that it is one of the most important components of WEE (Adhikari & Shrestha, 2013; Akinsanmi, 2005; Al-Shami et al., 2016; Hoque & Itohara, 2009; Van Rooyen et al., 2012).

Size of the loan taken

Table 1 shows that women with more loans were more empowered. The difference between the mean WEE between the groups was significant ($p < 0.05$). Probably the reason for this result is that greater amounts of loans give women more maneuverability to create a micro business. Although some studies argue that microfinance can help develop small businesses (Al-Shami et al., 2016; Drollet, 2009; Misra, 2006), the results of this study showed that if the loan amount was small, it would probably not be possible to start a small business. Ghosh and Van Tassel (2013) also emphasize the effect of loan size on empowerment. The conclusion that more credit always leads to more empowerment may be misleading in some other societies because the interpretation of this variable requires that the other conditions are considered. Other variables, such as the loan consumption paths, training courses on the proper consumption of loans, and fund control on the proper use of the loan, were examined in this study.

Level of fund control on the proper consumption of loan

According to the results of Table 1, if credit funds control the use of loans properly, the empowerment of the borrower women will increase so that the differences between groups are significant. Based on Table 2, 56 of the 86 women in group 3 used their loans to create jobs. But, 56 of the 72 women in the first group used their loans for non-productive purposes. Therefore, another important suggestion in this study is that the lending institutions should monitor and control the correct consumption of the loan. Two factors are involved in the practice of monitoring by most funds. First, the policies and laws related to the activities of the funds should be reviewed and the funds should be given more authority in loan control. Second, it is necessary for the agricultural organization of the county or province to teach the members of the board of directors of the funds how to monitor more closely.

Effect of the frequency of attending training courses on the appropriate consumption of loan

Table 1 shows that the mean WEE was lower for women who did not participate in training courses than that of women who did participate in the courses. This result shows that even attending a training course to learn how to use a loan properly can help empower women. The positive effect of women's education on their empowerment has been demonstrated in another study (Saha & Sangwan, 2019). These courses were in the fields of vocational training such as carpet weaving, poultry farming, handicrafts, saffron cultivation, as well as accounting and marketing courses. Table 2 also shows that 40 of the 66 women, who had attended classes twice or more, used their loans to create jobs. Therefore, we recommend that the funds lend to women who have attended training classes.

Description of loan consumption paths by women

Results show that 49.2 percent of women

had spent their loans for creating a small business (Group 1). In addition, 23.1 percent (Group 2) had invested in a path that they would be able to repay the initial capital. Finally, 27.7 percent had spent their loans on a path that they could not repay (Figure 2).

Hypothesis testing (Compare means of WEE among three groups of women consumer loans)

In this study, three hypotheses were designed based on the research model. Table 3 shows that the test results of each of these hypotheses are as follows:

H1: *The mean WEE was higher in group 1 than in group 2, and the mean difference between the two groups was significant ($p < 0.01$). Therefore, the first hypothesis is confirmed.*

Group 1 is a group of women who start a small business. Confirmation of this hypothesis clearly shows how much starting a small business can empower women economically. The result also shows how much microfinance strategy can impact WEE if they are on the path to employment. Especially if women are directed to jobs that start with low capital. Encouraging women to engage in productive activities can be achieved through greater control by microfinance funds.

H2: *The mean WEE was higher in group 1 than in group 3, and the mean difference between the two groups was significant ($p < 0.01$). Therefore, the second hypothesis is confirmed.*

The reasons for the low WEE in group 3 can be found in the items used to measure WEE. Increasing variables such as personal income,

family income, initial capital, purchasing power, assets, the ability to repay installments, and the ability to decide to spend income are among the key determinants of WEE. Undoubtedly, if women pay off their loans in a way that they cannot earn, they will not be empowered in most of the items mentioned.

H3: *The mean WEE was higher in group 2 than in group 3, but the mean difference between the two groups was not significant ($p < 0.05$). Therefore, the third hypothesis is not confirmed.*

Before this study, we might have imagined that if women spent their loans on path 2, their empowerment difference with the third group would be significant. However, the test results showed that there was no significant difference in empowerment between the two groups. Hence, jewelry purchasing, investing in the bank, and giving the loan to the husband for business are not appropriate paths for women to be empowered.

CONCLUSION

The purpose of this study is to answer the important question of what effect the path of microcredit consumption has on women's empowerment. The results show that some characteristics of women affect the women economic empowerment as well as the way they use loans. Our suggestion to other researchers is that if they want to do research similar to ours in other areas, they should note that consumption items in other communities are likely to be different from our study area. Therefore, it is necessary to iden-

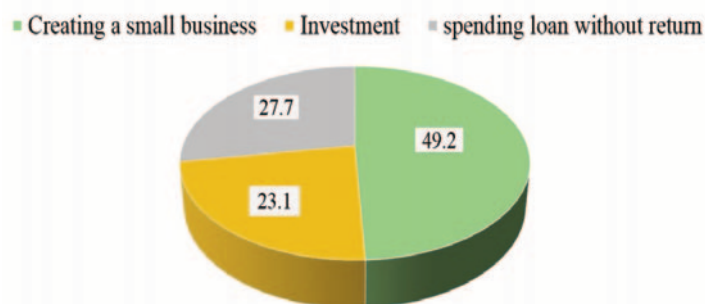


Figure 2. Percent Distribution of Loan Consumption Paths by Women

Table 3

Description of Loan Consumption Paths by Women and Comparison of the Mean of WEE between Groups (Mann-Whitney U)

Characteristics	Compare groups together	Group	Descriptive statistics		Compare means of WEE between different groups	
			N	(%)	Mean Rank	Chi-square or Z (p-value)
Loan consumption paths	1 with 2	1	128	49.2	115.0	<i>1 with 2: -7.59** (0.000)</i>
		2	60	23.1	50.5	
	1 with 3	1	128	49.2	131.5	<i>1 with 3: -10.12** (0.000)</i>
		3	72	27.7	45.3	
	2 with 3	2	60	23.1	71.0	<i>2 with 3: -1.23^{n.s} (0.217)</i>
		3	72	27.7	62.7	
Total			260	100	---	---

Note 1: Standard errors are shown in parentheses; ** $p < 0.01$; ^{n.s} Non-significant.

Note 2: Group 1: Creating a Small Business, Group 2: Investment, Group 3: spending loan without a return

tify the specific details of each region and then continue the research. But, the components used in this research for evaluating women's economic empowerment can be used by other research. The next suggestion for future research is to compare other researchers with women's economic empowerment levels in terms of different variables, such as membership in social groups, the use of virtual networks, and so on. It is also suggested that the same research be conducted on women's social empowerment.

Finally, based on the results of this study, the following suggestions are presented:

According to the results of the means comparison among different groups of women in terms of marital status, we recommend that married women be encouraged to pursue occupations that are possible at home. For example, online sales at home are among the jobs being developed in Iran today.

The mean WEE of women who were the heads of their own families was higher than that of the other women. Also, 56 out of 68 women who were heads of their families used their loans to create a small business. We advise organizations supporting orphaned and abused women to consider empowerment loans by monitoring the use of loans instead

of low monthly payments to women.

Given that most educated women use loans in a non-productive way, and most women with low-literacy loans in manufacturing jobs, it is recommended that lending organizations prioritize less literate women in lending.

Because women with families of two are less empowered than women with families of three or above, it is recommended that lending organizations prioritize women with more children in paying loans.

According to the results, women with more loans are more empowered. Therefore, it is suggested that the relevant organizations provide the ground for increasing the amount of loans to women.

According to the results, if credit funds control the use of loans properly, the empowerment of borrower women will increase. Therefore, another important suggestion in this study is that the lending institutions monitor and control the correct consumption of the loan.

The results show that the mean WEE of women who did not participate in training was lower than that of women who did participate in the courses. Therefore, we recommend that the funds lend to women who have attended training classes.

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