

Conference Paper

How Education Level and Household Power-Relation Affect Women Entrepreneurial Intention: Case Study of Micro-Waqf Bank's Revolving Fund Participants

Deden Dinar Iskandar

Diponegoro University

Abstract

This study aims to look at the influence of education level and household power-relations on entrepreneurial aspirations in women, using the women participating in the Micro-Waqf Bank (MWB) revolving fund program in Gunung Pati, Central Java as a case study. The study uses primary data obtained from the survey, analysed with descriptive statistical techniques and Two-way ANOVA. The results show that household power-relations significantly influence women's entrepreneurial ambitions. The greater their power in the household, the higher their entrepreneurial intentions. Meanwhile, the education level does not have a significant effect. The results of this study have important implications for women's economic empowerment. Every program to increase entrepreneurial intentions and women's economic empowerment needs to be balanced with social education for households about the importance of giving recognition and appreciation to the woman's role in household decision-making. Adequate room for women to be active in productive economic activities needs to be provided in the household.

Keywords: Women Entrepreneurial Intention, Household Power-Relation, Micro-Waqf Bank.

Corresponding Author:
Deden Dinar Iskandar
deden_dinar@live.undip.ac.id

Received: 2 May 2020
Accepted: 4 July 2020
Published: 14 July 2020

Publishing services provided by
Knowledge E

© Deden Dinar Iskandar. This article is distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the ICIEHI Conference Committee.

1. Introduction

In the discourse of entrepreneurship, women's entrepreneurship is a matter that is still rarely discussed. Women's entrepreneurship refers to businesses that are established and managed by women. A business that involves women in entrepreneurial activity as a business owner and the main person in charge of decision making.

The rise of women entrepreneurs around the world has received attention both from the academic side and from the policy makers. The involvement of women entrepreneurs in entrepreneurship is very important in transforming and empowering society through women's participation in the productive activities. This involvement is believed to be one of the efforts to reduce the problem of poverty and unemployment

OPEN ACCESS

in most developing countries (Apergis and Pekka-Economou, 2010; Bhardwaj, 2014). In line with this, women's access to entrepreneurship is increasingly widespread in most countries that are previously dominated by men (Gundry et al., 2002; Cheragi, 2013).

Women entrepreneurs are specifically defined as women or groups of women, who start, manage and operate a business venture. The success of women as entrepreneurs began to emerge both on a national and global scale (Agarwal et al., 2016). In addition, to prove their existence to the family and community, women voluntarily join entrepreneurship which enables them to control and manage all entrepreneurial processes and activities (Carter and Shaw, 2006; Sharma, 2013). Thus, policymakers cannot deny the fact that women are in an increasing trend as a force to be reckoned with in the economy in this era of globalization and liberalization.

One effort to improve women's entrepreneurship is to provide financial access and skills training for women, both of which are carried out by government institutions. One of the government programs is the Micro-Waqf Bank (MWB), which uses waqf fund for revolving fund program to empower marginal community groups with below average income levels. In addition to that, most of the revolving fund participants are women. Thus, in this case, the revolving fund program that aims to increase the entrepreneurship of women participants is equivalent to women empowerment program.

Power is associated with the capacity to make choices. Accordingly, empowerment can be defined as the process of enabling those who have been lack of capacity to make choice to obtain such capacity (Assaad et al., 2014). Deepa (2002) refers to empowerment as the extension of "freedom of choice and action".

MWB is an informal non-bank financial institution in the form of a Sharia Micro Financial Institution established with permission from the Financial Services Authority, which provides access to capital or financing for small communities who do not have access to formal financial institutions. In its operations, the Financial Services Authority cooperates with Amil Zakat Institutions, traditional Islamic boarding schools (*pesantren*) and also community leaders, in guiding and mentoring the waqf beneficiaries. MWB provide services and access to business capital assistance through soft loans without collateral.

However, the availability of capital assistance will not in itself increase entrepreneurial motivation. It is important to examine factors that make a person have the intention to become an entrepreneur. This issue becomes even more relevant when we deal with women's intentions to become entrepreneurs.

Ownership of economic resources and availability of capital will not directly lead to empowerment, although those may serve as triggers for empowerment. In the absence

of women's capability to manage and to utilize the economic resources according to their own choices, economic resources less likely result in empowerment (Malhotra, Schuler, and Boender, 2002). Thus, women entrepreneurship as part of women empowerment cannot be separated from the concept of agency, which is associated with the capability to freely make one's choices according to one's interests (Desai, 2010; Sen, 2009). It has been alleged that households do not distribute the opportunities within the household in a fair manner. Decision of household regarding the role of its members frequently depend on the preferences of the dominant decision maker with power, which in most cases is the husband (Wouterse, 2016). Therefore, having a power in an intra-household decision-making is desirable for women since it can determine directly how opportunities (including the opportunity of empowerment) are distributed within the household (Peterman et al., 2015).

Accordingly, this study aims to observe the effect of power relations in the household of women participants of the MWB revolving fund program, as a manifestation of agency concept, towards their intention to be entrepreneurs. This study also controls for the education level, since education has been generally accepted as playing important role in women empowerment. Research on the determinants of women's entrepreneurial performance, especially in Indonesia, is still relatively few. Moreover, this research examines the influence of power relations in the household as well as education level on the entrepreneurial intentions of women, the issues that are rarely observed in quantitative studies. This study is expected to contribute to the literature on entrepreneurship, and bring new insights to policy makers and academics.

This research takes a case study of women who participated in a revolving fund program of MWB in Gunung Pati, Central Java. Information about entrepreneurial behavior and the factors that influence it are obtained through surveys. The data obtained are analyzed using descriptive analysis and statistical analysis.

2. Research Method

In this study, a survey with questionnaires is used as a method to collect the required data. This method is chosen because questionnaires are usually cheaper to administer, relatively easy to administer, and are an efficient way to gather information from a large number of respondents. In addition, the tradition in entrepreneurial research is to use questionnaire-based surveys, so this method will be comparable with previous studies. This method also enables capturing a large number of respondents whose characteristics vary (Saunders, Lewis, & Thornhill, 2003).

Specifically, the data obtained by the survey included entrepreneurial intentions, education level, and power relations in the households of women participating in the BWM's revolving fund program. Education level indicates the last formal educational degree completed by the respondents. The answers to these questions are classified into 5 categories (Elementary School, Junior High School, Senior High School, College, University). Power-relation within household is measured using the following questions; "Who is the decision maker in your family?" The answers to these questions are grouped into 5 categories (only husband, mostly husband, neutral, mostly wife, only wife) which are used as indicators of the power of women in the household. The respondent's entrepreneurial intentions will be assessed using the set of statements in Table 1 as follows, which are assessed using a Likert scale on a scale of 1-5.

TABLE 1: Statements of Entrepreneurial Intention

No.	Statement
1	I am willing to sacrifice more of my time, energy, and mind to run my own business
2	I am willing to work harder to run my own business.
3	I have a plan to develop my own business.
4	I prepare to carry out my own business plan.

A set of questionnaires is given to women respondents participating in the MWB's revolving fund program in Gunung Pati, Central Java. From all distributed questionnaires, 148 questionnaires are returned (more than 75% of all respondents) and could be used for further analysis.

The data collected are analyzed with descriptive analysis approach and ANOVA statistical analysis. ANOVA, or "analysis of variance", is one of the statistical techniques to test the difference in mean data of more than two groups. More specifically, this study uses the two-way Anova Technique or two-factor Variant Analysis, a variant of ANOVA that compares the average difference between groups that have been divided based on two independent variables or factors. The use of two-way ANOVA will allow observations of differences in entrepreneurial intentions of program participants (as the dependent variable), which are grouped by education level and household power-relation characteristics (as an independent variables).

Prior to analysis, the validity of the questionnaire will be tested statistically using Cronbach's Alpha. Post-estimation tests are also carried out after ANOVA, especially to test multicollinearity and heteroscedasticity problems using the Variance Inflation Factor (VIF) and Breusch-Pagan / Cook-Weisberg tests for heteroskedasticity. Multicollinearity is a condition in which there is an almost perfect linear relationship between two independent variables, while heteroscedasticity is a condition where the residual

variance is not homogeneous. Both of these problems will cause the unreliable statistical conclusions. The statistical software used in this study is STATA.

3. Research Results

Firstly, this paper will display a description of each variable obtained from the survey. The first variable is the respondent’s education level. Details on the level of education are shown in the Table 2 below.

TABLE 2: Education Level of Respondents

No.	Education Level	Percentage
1	Elementary School	34.27%
2	Junior High School	37.06%
3	Senior High School	25.17%
4	Colledge	1.40%
5	University	2.10%

Nearly all respondents have a high school education level and below. Only 3.50% of the total respondents have education levels above high school, with more than half had education levels below high school. The majority of respondents have Junior High School education (37.06%). Those figures show that the education level of participants in the revolving fund program is generally low. However, this characteristic of low level of education is in accordance with the characteristics of the target recipients of the MWB, which is the people from low-income groups.

Next is the description of power-relation within household. This variable is measured by observing who is the most dominant in family decision making, as demonstrated by the respondents’ answer on the question “Who is the decision maker in your family?”. Details are shown in Table 3 below.

TABLE 3: Power-relation within Household

No.	Decision Maker in the Household	Percentage
1	Only husband	8.57%
2	Mostly husband	12.86%
3	Balanced between husband and wife	47.86%
4	Mostly wife	16.43%
5	Only wife	14.29%

In general, the majority of respondents claim that household decisions are made together by husband and wife in a balanced manner (47.86%). Interestingly, the second largest proportion shows that wives are quite dominant in household decision making,

with 16.43 % and 14.29% of respondents answer that the decision maker in the family are “mostly wife” and “only wife” respectively. However, there are still a considerable proportion of respondents whose role in the family decision making is less than their husband. Even more so, there are respondents claiming that the husband is the only dominant decision maker in the family, although they represent the lowest part of the respondents.

The next variable is entrepreneurial intention among program participants, which is approached by four statements. Respondents’ perceptions of each of these statements are measured on a Likert scale of 1-5, with a range of perceptions from strongly disagree to strongly agree. The data obtained is displayed in Table 4 as follows.

TABLE 4: Indicators of Entrepreneurial Intention (%)

No.	Statement	SD	D	N	A	SA
1	I am willing to sacrifice more of my time, energy, and mind to run my own business	0	4.86	11.11	41.67	42.36
2	I am willing to work harder to run my own business.	0	2.80	4.90	51.75	40.56
3	I have a plan to develop my own business.	3.50	4.20	16.08	41.96	34.27
4	I make preparations to carry out my own business plan.	0	0.70	11.19	54.55	33.57

SA: Strongly Agree; A: Agree; N: Neutral; D: Disagree; SD: Strongly Disagree

Based on the survey results, the majority of respondents respond by choosing either agree or strongly agree with the four statements used as indicators of the entrepreneurial intention of women participants of the revolving fund program. Summary in the Table 4 demonstrate that most respondents are willing to sacrifice more of their resources and to work harder in order to run their own business. They have a plan to develop their business and they prepare to actualize that plan. This indicates that women who participate in the program have high entrepreneurial intentions.

Before the survey data is analyzed further, firstly a statistical validity test needs to be conducted on the entrepreneurial intention variable, to see whether the four statements are valid measures of entrepreneurial intentions. Validity test is done using Cronbach’s Alpha. Cronbach’s Alpha is a measure of reliability with the values ranging from zero to one. If the Cronbach’s Alpha value is greater than 0.7, the indicators that make up the variable are statistically valid (Hair et al., 2010). Estimation results show a Cronbach’s Alpha value of 0.87, so it can be concluded that the entrepreneurial intention variable passes the validity test.

The next step is to conduct a two-way ANOVA, with entrepreneurial intentions as the dependent variable and the level of Education and household power-relations as independent variables (or in the context of ANOVA, those independent variables are referred to as factors). For this purpose, respondents' perceptions of the four statements are converted into numbers. "Strongly disagree", "disagree", "neutral", "agree", and "strongly agree" are converted to the number of one, two, three, four, and five respectively. The value of the entrepreneurial intention variable is the accumulation of the figures for each statement.

Afterward, this study conducted a post-estimation test to ensure that the drawn statistical conclusions have fulfilled the statistical assumptions. The first thing to do is to examine the existence of multicollinearity by using the Variance Inflation Factor (VIF) indicator. If the VIF value is more than 10, the estimated model suffers from multicollinearity problems (Chen et al., 2003). The test results show that the VIF value is 6.68, so we can conclude that the estimated model is not affected by multicollinearity problems. Breusch-Pagan / Cook-Weisberg test for heteroskedasticity produces a P-value of 0.5780, so it fails to reject the null hypothesis of homoscedasticity. Thus, the estimated model is also free from the heteroscedasticity problem.

Based on the results of the two-way ANOVA estimation, the overall F statistic value for the estimation model is 2.61, with a P-Value of 0.0009 which is smaller than the alpha value of 0.01. This shows that all variables can explain the variation in entrepreneurial intentions significantly, at a significance level of 1%. While the significance of each variable individually is summarized in the Table 5.

TABLE 5: Estimation Results of Two-way ANOVA

Variable	F Value	Prob > F
Education Level	1.63	0.1719
Household Power-Relation	4.87	0.0011*
Interaction of Education Level and Household Power-Relation	0.98	0.4655

* significant at 1%

Estimation results show that the only variable that influences entrepreneurial intentions is household power-relation, with a P-Value (Prob>F) of 0.0011 which is smaller than alpha 0.01, indicating that household-relation has a significant effect at the significance level of 1%. On the other hand, other variables such as level of education and the interaction between the level of education with household power-relations do not significantly influence entrepreneurial intentions. With a P-Value of 0.1719 and 0.4655, each of which is greater than alpha 0.05, the two variables have no significant effect

on entrepreneurial intentions at 5% significance level. The insignificance of variable interaction between education level and household power-relation indicating that the effect of education level on entrepreneurial intention is not dependent on household power-relation, and vice versa.

The role of women in household decision-making affects their entrepreneurial intentions. This finding implies that there is significant difference in entrepreneurial intentions between groups of program participants who have different levels of influence in their respective household. The greater their power in decision making, the higher their entrepreneurial intentions. This happens because the greater power in the household will provide space for women to make decisions, including decisions in running a business venture. With enough space, women will be encouraged to optimize their abilities to carry out productive activities outside of household caring activities. These productive activities include entrepreneurial activities. This finding to some extent supports the existing literature on women's empowerment, which argues that once women enjoy a bigger role in intra-household decision-making, the well-being of household will improve (Sell and Minot, 2018). On the contrary, when women do not have the power to make household decisions, their space to optimize their abilities will be limited. They will have a tendency to allocate most of the resources, especially time, to take care of the household. Thus, their intention to become entrepreneurs will be reduced to the minimum.

On the other hand, the variable of education level does not significantly influence entrepreneurial intentions. This finding indicates that there is no notable difference in entrepreneurial intentions between groups of program participants with different levels of education. The Table 2 shows that almost all participants have a low level of education (below the level of university education), with the majority of participants having elementary school and junior high school educational background. With near homogeneous education characteristics, the entrepreneurial intentions of program participants cannot be distinguished based on their level of education.

4. Conclusion

This study aims to examine the influence of the level of education and household power-relation on the women entrepreneurial intention, by taking the case of women participating in the Micro-Waqf Bank's revolving fund program in Gunung Pati, Central Java. The survey results indicate that the education level of program participants is still low, almost all of them have high school education or below. Meanwhile, the

household power-relation of the majority of program participants shows the balanced power characteristics between husband and wife in the household. While the characteristics of entrepreneurial intention indicates that the majority of participants have high entrepreneurial intention.

This study finds that household power-relations significantly influence the intention of women entrepreneurs. there are significant differences in entrepreneurial intentions between groups of program participants who have different levels of influence in the household. The greater their power in household decision making, the higher their entrepreneurial intentions. Meanwhile, the education level does not have a significant effect.

The results of this study have important implications for women's empowerment, including programs to increase women's entrepreneurial intentions and participation in productive economic activities. Every program related to women's empowerment must always take into account aspects of the position of women in the household. To increase women entrepreneurial intentions, and to promote women economic empowerment in general, social education about the importance of recognition and respect for women's role in household decision making needs to be provided for the targeted households. Providing space for women to be active in productive economic activities outside the household caring activities is at the utmost importance. In the case of Micro-Waqf Bank's program, social education can be carried out in collaboration with traditional Islamic boarding schools (*pesantren*) and amil zakat institutions.

References

- [1] Malhotra, A. Schuler S.and Boender. C. (2002). Measuring Women's empowerment as a variable in international development. *World Bank workshop on poverty and gender: New perspectives*.
- [2] Peterman, A., et al. (2015). Measuring women's decisionmaking. indicator choice and survey design experiments from cash and food transfer evaluations in Ecuador, Uganda, and Yemen. IFPRI Discussion Paper 01453, International Food Policy Research Institute.
- [3] Sen, A. (2009). *The idea of justice*. Harvard University Press, Cambridge.
- [4] Bhardwaj. B.R. (2014). Impact of education and training on performance of women entrepreneurs, a study in emerging market context. *Journal of Entrepreneurship in Emerging Economies*, vol 6, pp. 38-52.

- [5] Wouterse. F. (2016). The distribution of power and household behavior. Evidence from Niger. *IFPRI Discussion Paper*. International Food Policy Research Institute.
- [6] Hair, et al. J.F. (____). *Multivariate Data Analysis 7th ed.* Pearson Education Ltd, New Jersey.
- [7] Gundry, L.K., Ben-Yoseph M. and Posig. M. (2002). Contemporary Perspectives on Women's Entrepreneurship: A Review and Strategic Recommendations. *Journal of Enterprising Culture*, vol. 10, pp. 67-86.
- [8] Cheraghi. M. (2013). Innovation by entrepreneurs in China: the increasing prominence of women. *Journal of Knowledge-based Innovation in China*, vol. 5, issue 3, pp. 172–187.
- [9] Sell M. and Minot. N. (2018). What factors explain women's empowerment? Decision-making among small-scale farmers in Uganda. *Women's Studies International Forum*, vol. 71, pp. 46-55.
- [10] Desai. M. (2010). Hope in hard times: Women's empowerment and human development. Human development research paper 2010/14, UNDP.
- [11] Saunders, M., Lewis P. and Thornhill. A. (____). *Research Methods for Business Students*. Prentice Hall, London.
- [12] Apergis N. and Pekka-Economou. V. (2010). Incentives and female entrepreneurial activity: evidence from panel firm level data. *International Advances in Economic Research*, vo. 16, issue 4, pp. 371-387.
- [13] Deepa, N. ed. (2002). *Empowerment and poverty reduction - a sourcebook (English)*. The World Bank, Washington, D.C..
- [14] Assaad, R. Nazier H. and Ramadan. R. (2014). Individual and household's determinants of women empowerment: application to the case of Egypt. *Working Paper 867, The Economic Research Forum*.
- [15] Agarwal S. and Lenka. U. (2016). An exploratory study on the development of women entrepreneurs: Indian cases. *Journal of Research in Marketing and Entrepreneurship*, vol. 18, issue 2, pp. 232–247.
- [16] Carter S.L. and Shaw, E. (2006). Women's business ownership: recent research and policy developments. *Women's Business Ownership Report for BIS*, pp. 1-96.
- [17] Sharma, P. Women entrepreneurship development in India. *Global Journal of Management and Business Studies*, 3(4), 2013, pp.371-376.
- [18] Chen, X. et al. (203). *Regression with Stata*. Available at <https://stats.idre.ucla.edu/stat/stata/webbooks/reg/default.htm>. [downloaded at March 1, 2020]