

The Role of Micro-Enterprises in the Four-Dimensional Framework of Women's Empowerment

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Research

Keywords: Women empowerment, women entrepreneurs, micro-enterprises, self-help groups, enterprise performance.

Posted Date: September 21st, 2022

DOI: <https://doi.org/10.21203/rs.3.rs-1861289/v1>

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Abstract

This paper empirically evaluates the impact of micro-enterprises on women's empowerment. A quantitative research approach and a cross-sectional research design were adopted in the study. Survey research and purposive sampling technique were used to select 384 individual respondents (women entrepreneurs under the Kudumbashree Mission of Kerala state in India). The data gathered from a structured questionnaire was used for confirmatory factor analysis, model fit evaluation, and making a structural equation model to test the proposed relationship in the four-dimensional model of women's empowerment. The study asserts that micro-enterprises play an important role as they can contribute to women's empowerment by providing opportunities for employment.. In order to establish an enterprise more successful and sustainable, women should be taught entrepreneurial skills, technical knowledge, skill training, and marketing skills. The study discovered a strong correlation between the performance of micro-enterprises and women empowerment attributes. The study aids the government and policymakers in better understanding and implementing strategies to boost women's micro-enterprises, resulting in the overall empowerment of marginalized women.

Introduction

India is a multilingual, multicultural, and multireligious nation. There are women with many creeds and castes, as well as other disadvantaged groups found in such a diverse society (Chakraborty & Borman, 2012). Women, in particular, are disadvantaged in all areas, and they have fewer opportunities in terms of health, education, sanitation, autonomy, decision-making, empowerment, and so on. Women have traditionally been restricted to formal domestic responsibilities such as childcare, cooking, and other family routines (Pradeep & Rakshitha Rai, 2016). Women have a harder time raising finances to start their own business enterprises and grow their careers. Women from low-income families are learning about financial independence as a path to empowerment. Women empowerment is a practice in which all structures and sources of power are addressed (Vijayakumar & Jayachitra, 2013). Individually and collectively, such a process should function effectively to promote women's empowerment. Poor women cannot overcome their feebleness on their own. Poor women can only organize it as a group (Vasanthakumari, 2012); (Borkakoty & Bhattacharjya, 2017).

Women's participation and empowerment are recognized as critical long-term tools for economic advancement (Pharm & Sritharan, 2013), and entrepreneurship is widely regarded as the most suitable option for accomplishing this goal (Muhammad et al., 2021); Khursheed et al., 2021). In any country, only economic development that is fair and balanced can be called holistic and long-term sustainable. In addition to other positive outcomes, women's economic empowerment increases productivity, diversifies the economy, and improves income equality (IMF, 2018). Women's entrepreneurship development is required to empower women and assist them in improving their financial circumstances. Women Small Medium Enterprises (SMEs) improve their financial potential by encouraging them to start and run their own businesses (Anselme & Qamruzzaman, 2022).

Micro, small, and medium enterprises (MSME) play a significant role as they can contribute to women's empowerment by providing opportunities for employment. There are approximately 14 million SMEs in India, with women owning less than 5% of them. Of such SMEs, 60% are small businesses, 15% are large manufacturers, and the rest are micro-businesses (Choudhury et al 2020). By establishing self-help group-managed micro-enterprises, women can become self-employed and empowered. It gives them a sense of accomplishment as well as an opportunity to prove their worth (Sebastian & P.K, 2020). In developing nations, micro-enterprises constitute most of the small business sector. These micro entrepreneurs operate microbusinesses not out of choice, but out of necessity. It is a major force in improving women's economic conditions by providing jobs (Dutta, 2021) to both highly qualified and less qualified women for their overall development, as well as recognizing their inherent ability to work in non-agricultural sectors when agricultural employment is stagnant. Micro-enterprises add value to a country's economy by generating jobs, increasing purchasing power, lowering costs, and incorporating business convenience (Arul Paramanandam & Packirisamy, 2015). Government policy, competition, globalization, market shifts, technology, and consumer requirements have all influenced changes in the post-liberalized economy on women-run micro-enterprises. As a result, micro-enterprises have created enormous potential for women entrepreneurs both within and outside of the economy (Khamurduddin, Sk and Kalvakolanu, 2012). Women can become self-employed and empowered by establishing self-help group-managed micro enterprises.

The Grameen Bank of Bangladesh, established by Mohamed Yunus, is where Self-Help Groups (SHGs) first emerged. SHGs began and were established in 1975. SHG was started in India by the National Bank for Agriculture and Rural Development (NABARD) between 1986 and 1987. SHGs have laid the foundation for the economic independence of rural women. SHGs were established to advance and empower society's underprivileged groups, particularly women (Nayak & Panigrahi, 2020). SHG participants engage in small-scale business and the extraordinary rise in credit and thrift emphasises the opportunity for the poor to build savings and assets through a collective strategy. As a result, the self-help model serves as a group with advocacy, training, savings, and credit functions, resulting in the development of micro-enterprises and economic empowerment (Arun et al., 2006). The idea of organising and empowering poor women via a three-tier community-based network distinguishes Kudumbashree programmes from other initiatives for poverty eradication (OOMMEN, 2008). In essence, Kudumbashree is a community network that spans the entire state of Kerala. Neighbour Hood Groups (NHGs) are the primary level units, followed by Area Development Societies (ADS) at the ward level and Community Development Societies (CDS) at the local government level. It is arguably one of the world's largest women's networks. The Kudumbashree network's structure, functions, and administration have close ties to the local government but retain the leverage of a non-governmental organisation. Since the Kudumbashree network is conceptually and operationally linked to local government institutions, 25% of the anti-poverty sub-plans would be allocated to women's projects through the establishment of micro-enterprises and minimum needs assets (John, 2009). Kudumbashree has thus far covered 2,94,436 NHGs affiliated with 19,489 ADSs and 1064 CDSs with a total membership of 45,85,677 women in 2021 (*Kudumbashree Mission Report, 2022*). Membership in Kudumbashree is open to all adult women,

with a limit of one membership per family. In 2011, the Government of India's Ministry of Rural Development (MoRD) designated Kudumbashree as the State Rural Livelihoods Mission (SRLM) under the National Rural Livelihoods Mission (NRLM).

Empowerment has been increased while resources have been made available to women, enabling them to provide better care for their families, particularly children (Mayoux, 2001); (Kabeer, 2005); (Hulme et al., 1997); (Yadav & Verma, 2015). While feminist scholars agree that increased access to financial services opens more opportunities for women and promotes their empowerment (Yadav & Verma, 2015).

Numerous researchers have discovered that microfinance is essential for the empowerment of women. In 2009, Bali Swain (Swain & Wallentin, 2009) discovered that joining self-help groups had a positive effect on women's empowerment through financial services and training. Microfinance has been viewed as a tool for empowering women economically and fostering development (Yadav & Verma, 2015).

The purpose of this study is to evaluate women's empowerment through entrepreneurial activities in the Indian context and to assess the mediating role of enterprise performance on women's empowerment. Individual characteristics that determine participation in SHG-based micro-enterprises under the Kudumbashree Mission in Kerala State, India (popularly known as the "*Kerala Model*" of development), are examined using primary survey data. The subsequent research seeks to comprehend the effect of participation in micro-enterprise activities on various facets of women's empowerment.

Background Of The Study

The micro enterprises not only contribute to increased national productivity and job creation, but also to poor women's economic independence, personal and social capacities (Carmichael & Mazonde, 2016). On the contrary to that lack of acquaintance about loan procedures, government welfare programs, certification procedures, availability of financing agencies, self-motivation to succeed, technical talent, and family support, regulation of government, and involvement of other organizations are the main challenge to the poor women. Therefore, suitable encouragement initiatives are required for establishment and growth of impoverished women entrepreneurs' businesses (Khan et al., 2019). Therefore, such initiative assists low-income women by providing technical assistance in the areas of processing, marketing, production, management, and procurement of their micro firms. This action would undoubtedly encourage disadvantaged women to engage in micro-enterprise operations, thereby increasing family income and national productivity (Prasad et al., 2013).

Formation of micro enterprises are an indispensable part of a nation strategy for achieving a balanced growth of the economy of underprivileged women. Poor women are far more likely to participate in micro enterprises to get improved life (Subbarayudu, C. and Rao, 2021). The main reason is mainstream of women's small business operations provides financial support to discharge their daily routines. With the growing problem of unemployment in today's world, entrepreneurship appears to be an appropriate solution to the financial problems among the poor women. The establishment of micro firms aids in the creation of constant employment for a lot of disadvantaged women (Imran, M. and Aiman, 2019). This is

especially advantageous for disadvantaged women because it allows them to do their household chores at the same time. They have the advantage of having adequate resources to start their own businesses (Agrawal, 2020). Micro enterprises growth helps impoverished women improve their personal talents and boost their decision-making standing in the family and society as a whole, making them an important component of the system (Talavera et al., 2012).

As women gained the required skills to produce a product, handle funds, and organize the operations of micro enterprises that managed with a self-help group, it is a cause to increase its position in family and society (Rajapriya, 2008). It enables women to make their own income by fostering microenterprises in low-income areas through a better understanding of market dynamics, which equip entrepreneurs to deal with changing market behaviour and competition (Nichlavose & Jose, 2017). Because of the group being a small and exposed to access of small investment, the enterprise is always at risk, and its long-term success is dependent on both internal and external supports (Karthika, 2019). Micro enterprises support women members with no educational, industrial, or entrepreneurial background are taught to be self-sufficient and self-reliant through improving decision-making skills, strengthening their tenacity, and gaining confidence in their ability to solve challenges.

Literature Review

The empowerment of women has constantly been a challenge, especially for those prevailing in poverty. The solution to the problems for impoverished women is to start micro-level firms with the joint effort of self-help groups (Imran, M. and Aiman, 2019); (Alemu et al., 2018); (Khobarkar et al., 2016); (Duflo, 2012). Micro-enterprise is a powerful tool for achieving women empowerment in a balanced way. It helps to generate employment (Subbarayudu, C. and Rao, 2021); (Brody et al., 2017) for a large number of people within their own social structure (Murugesan, 2014). Women's empowerment is bolstered through micro entrepreneurship, which eliminates gender disparities (Agarwal, 2018). It not only improves national efficiency and creates jobs (Imran, M. and Aiman, 2019), but also helps in economic independence and improves the personal and social capacities of poor women (Sujisha, A. S. and Biju, 2019); (Carmichael & Mazonde, 2016); (Husain et al., 2014).

Women's entrepreneurship development is essential to empower and assist women in improving their financial circumstances (Gracelin, J. and Beulah, 2016). Empowerment of women through micro-enterprises is considered an important aspect to create friction between small-scale and large-scale business enterprises. The establishment of women-run micro-firms is also critical for the family's financial well-being (Dutta, 2021), as well as the mental and physical well-being of disadvantaged women (Alemu et al., 2018). Micro-enterprises are acknowledged as a critical component that contributes greatly to job creation, poverty alleviation, and women's empowerment (Kondal, 2014); (Kabeer, 2005). The form of self-help group has laid the foundation to address the bottlenecks of women empowerment (Harika et al., 2020). Self-help groups linked micro-enterprises provides employment and income safety to women entrepreneurs (Brody et al., 2017). A self-help group is a suitable remedy for economically and socially backward women, to bring out their talents, skills, and capabilities to enhance their participation in micro-

business ventures and empowerment (Brody et al., 2017); (Alemu et al., 2018). Women's self-help groups help them improve their self-confidence, enhanced their position, in family functions, and so on (Hussain et al., 2015). In India, the rise of women entrepreneurs and their contributions in the form of micro-enterprises is gradually increasing (Gupta et al., 2021). As women gain necessary skills to produce a product, manage funds, and organize the operations of micro-enterprises, their position in the family and society improves (Rajapriya, 2008). They have a wide range of opportunities to sell their products in a variety of markets (Shireesha, 2019) to better understanding of market dynamics, which equip them to deal with changing market behaviour and competition (Nichlavose & Jose, 2017).

While studies on women empowerment and micro-enterprises were available in other countries, only limited research were found in India. Further, no studies have been conducted to examine the impact of micro-enterprises on rural women empowerment using multi-facets of micro-enterprises such as immersion (level of participation), financial access, market sustenance, and social gratitude (social capital). The purpose of this study is to assess the role of multi-facets of self-help group-based micro-enterprises in the empowerment of rural women as well as the mediating role of enterprise performance in women's empowerment in the Indian context. The findings have significant policy ramifications for the growth and strategic direction of the SHG-initiated microenterprise programmes in the Indian context. A conceptual framework has been developed to achieve the goals of the study. This framework is shown in figure 1.

(Figure 1 to be inserted here)

Research Objectives and Problem

A micro-enterprise is a business initiated, owned and operated by a self-help group of women not more than twenty in number with the active support of Kudumbashree, a poverty-eradication measures in Kerala. The study sought to establish the influencing factors for conquest of women self-help group managed micro enterprises and its impact in women empowerment. The stimulus for conquest of women-led micro enterprises can be identified in the form of women immersion, financial access, market sustenance and social gratitude. Similar to that women empowerment can be reflected in terms of financial (economic) empowerment, political empowerment, edifying (social) empowerment and family empowerment. Women empowerment can be established with their participation in micro enterprises. Therefore, how can micro enterprises capable and responsible for transforming enslaved women into empowered women is investigated.

The theoretical frameworks used in the study

Empowering women is a multi-dimensional process (Malhotra & Mather, 1997);(N.Amudha, 2010); (Pitt et al., 2006); (Kabeer, 1999) and different underlying factors in a woman's life cannot be brought into focus by a single factor (Pitt et al., 2006). Empowerment has been conceptualised by some scholars as a process (Batliwala, 2007), while others see it as a product or an outcome (Mahmud et al., 2012). Others

still view it as both a process and an outcome (Kabeer, 1999); (Goldman & Little, 2015). The study follows the definition provided by (Kabeer, 2005) which states 'The expansion of people's ability to make strategic life choices in a context where this ability was previously denied to them'. The definition also proposes that empowerment is a dynamic process of change: a transformation from a "disempowered" to a "more empowered" state. The popular theory of "Learned Hopefulness," developed by Zimmerman (Zimmerman, 1990), is used in the current study. The theory explains how participation and empowerment are related. A participatory approach is used for empowerment through SHGs, and the theory of learned hopefulness discusses this approach. As a result, we used this theory as the foundation for our research.

Empowerment is a gradual process triggered by a number of factors (Nayak & Panigrahi, 2020). According to the theoretical framework, one would anticipate that a woman's major decisions are significantly influenced by factors such as her level of education, income capacity, social awareness, decision-making capacity in the family, and so on. Therefore, in this study, women's empowerment was measured using four interrelated dimensions: economic, familial, political, and social dimensions. Each dimension is measured with several indicators.

Design and Methodology of the study

The study is based on data obtained from a survey of individual members of group-owned micro-enterprises under the Kudumbashree Mission in the state of Kerala. A total sample of 384 members from micro-enterprise members was chosen to assess the impact of micro-enterprises on women's empowerment. The technique of purposive sampling is used to collect samples from the members of micro-enterprises. The primary criterion for sample selection is that members should have completed a minimum of five years of enterprise activities, assuming that the impact can be studied effectively due to the members and that enterprises would have been relatively well stabilized during this period. The sample size is determined using Cochran's (1977) formula, yielding 384 samples ($n_0 = z^2pq/e^2 = 384$; 5 percent margin of error) (Cochran, 1977).

To examine the stimulus for the success of micro-enterprises performance and its impact on women's empowerment, the required data was collected from the selected members of group-owned micro-enterprises using a structured questionnaire. The questionnaire is formulated into two parts. The first part seeks socio-demographic background like age, academic qualification, marital status, monthly income, family size, and experience in the business. The second part seeks the precursors and consequences of women self-help group-owned micro-enterprises. Owing to diverse nature of demographic background, structured questionnaire is used to enhance data precision efficiency and reduce response bias. The content and face validity of the interview schedule are pre-tested with field experts, policymakers, and academicians prior to the final survey. The design of questions, words, meaning, scaling, and measurement is intensively discussed with the experts in the pre-test.

Necessary instructions and clarification of questions helped to get full responses with due diligence. Further, confirmatory factor analysis and structural equation modelling are performed using the AMOS

22.0 software. The path or regression coefficients between the components are presented in structural equation modelling to authorise the relationship between theoretical constructs. In this procedure, data analysis is divided into two parts. First, confirmatory factor analysis is used to assess overall measurement quality, as well as the instrument's reliability and validity. Subsequently, structural equation modelling is used to observe if the model matches the results of the proposed theoretical model. TLI, NFI, CFI, RFI, GFI, AGFI, IFI, CMIN/DF, and RMSEA are also employed to assess model fit. In addition, the independent link between the precursors of micro-enterprises is being investigated.

The SEM analysis mainly seeks to address the following two main hypotheses

Hypotheses 1: Immersion, financial access, market sustenance, and social gratitude are the basis for micro-enterprises conquest.

Hypothesis 2: Microenterprises conquest is the basis for financial, political, edifying, and family empowerment of women.

Two main hypotheses about the relationship between antecedents and the performance of micro-enterprises and women empowerment attributes are tested using the structural equation modelling.

Results And Discussions

Socio-demographic Background Analysis

The socio-demographic background of women entrepreneurs who participated in the survey are described in table 1.

(Table 1 to be inserted here)

Majority of the respondents (83%) were aged 30 years or more, which correlates with the fact that about 72% of the respondents were married. This would point out the fact that self-help groups contribute to the overall economic well-being of the families to which the respondents belong. Two thirds of the respondents earned at least Rs. 25000 per month. About 71% of the respondents had educational qualifications beyond the secondary school level, which confirms the generally high literacy levels in the state. Most of the respondents (66%) belonged to small families with five or less members.

Performance of Micro-enterprises and their influence on Women Empowerment

Structural equation modelling (SEM) is used to test the relationship between observed and latent variables. It is a suitable statistical technique for assessing the causal relationship with the selected variables. Confirmatory factor analysis is executed to develop a measurement model, which aims to determine perfect fit of the model with data. At foremost, data reliability is estimated, then convergent validity is assessed. Reliability is acknowledged as the internal consistency of each factor that is used to evaluate latent construct variables (Fornell & Larcker, 1981). The variables such as immersion (IMRS),

financial access (FLAS), market sustenance (MRST), social gratitude (SLGT), micro-enterprise performance (MEP), financial empowerment (FLEM), political empowerment (PLEM), edifying empowerment (EFEM), and family empowerment (FYEM) used to perform Pearson correlation coefficient matrix. Its results are depicted in table 2.

(Table 2 to be inserted here)

Table 2 reveals that there is a perfect positive correlation found among the variables, as its values are found between 0.411 to 0.762. The sensible values assure that there is no scope of multi-collinearity issues among the constructs.

Measurement Model

SEM is used to determine the impact of both exogenous and endogenous factors on the precursors and consequences of women-led micro-enterprises. As a result, it creates a path for the simultaneous investigation of the entire model in search of various potential linkages. A two-step test is carried out in this manner. The latent components of a measurement model are examined first, followed by the hypothetical relationship amongst all variables in a structural equation model. Nine latent constructs are described from 37 observable variables, based on assumptions proposed in the theoretical development section. In this method, a measurement model for examining the latent constructs' reliability and validity is tested. Consequently, the results are shown in Figure-2.

(Figure 2 to be inserted here)

(Table 3 to be inserted here)

Table 3 shows that latent constructs have factor loading values ranging from 0.758 to 0.916, indicating high support for each construct's validity. The average variance retrieved for all precursors and consequences of women-led micro- firms exceeds the 0.50 threshold. Similarly, the composite reliability coefficient values for all latent constructs are found to be greater than 0.60, indicating that the model has a high internal reliability.

(Table 4 to be inserted here)

Table 4 shows that practically all the requirements for authorizing a first-order measurement model have been met. The confirmatory factor analysis results of the measurement model show that the chi-square value is 1522.362, with $p = 0.000$, CFI = 0.917, and RMSEA = 0.057. As a result, the goodness of fit test shows that the model is a perfect fit. The model is tested after each variable's validity and reliability have been determined.

Structural Equation Modelling

The proposed hypotheses are tested to observe if the proposed measurement model is stable with the data. Figure 3 depicts the possible relationship between the various constructs. Totally, eleven

hypotheses are constructed in the hypothetical association construct, with a path significance threshold of 0.05. Following that, the motive of the study is to confirm that there is significant and positive association among the variables.

(Figure 3 to be inserted here)

Figure 3 indicates that all path values in the model are significant at $p < 0.05$. The study looked at the models depicted in the chart; it used to create a flow chart for precursors and consequences of women led micro-enterprises. In general, in structural equation modelling, estimating model fit using the chi-square test is difficult because it is dependent on sample size. Different types of fit indices have been estimated based on these constraints, and it denotes independent sample size. Table 5 show the goodness of fit.

(Table 5 to be inserted here)

Table 5 presents the goodness of fit test, and it has perfect fit with the data. CMIN/df values are safely less than 3 (Steiger, 2007). The computed values of GFI (0.914), AGFI (0.902), NFI (0.913), RFI (0.924), IFI (0.923), TLI (0.919), and CFI (0.912) are higher than the threshold value of 0.9. Moreover, the RMSEA value is 0.054, it is lower than the threshold value of 0.06. SEM has close association with goodness of fit indices; therefore, consistency is found on all the suggested values. Data reliability is also confirmed. The extensive relationship is tested with the help of hypotheses, and it is presented in table 6.

(Table 6 to be inserted here)

Table 6 depicts the relationships between variables that are tested using hypothesis. The coefficient value of immersion (-0.006), financial access (-0.038), market sustenance (0.347) and social gratitude (0.828) for micro-enterprise performance. It has negative and significant relationship with immersion (significant at 5% level) and financial access, but it has positive and significant relationship with market sustenance and social gratitude. The results are significant at 1% level and hypothesis (H_1) validated. Micro-enterprise performance has positive and significant relationship with its antecedents. Therefore, micro-enterprise performance is intensively supporting for women empowerment. The results are statistically significant at 1% level, and hypothesis (H_2) is supported. The findings confirmed that antecedents such as immersion, financial access, market sustenance and social gratitude are the basis for micro-enterprise performance. Similarly, micro-enterprise performance is the basis for financial, political, edifying and family empowerment of women.

The quantum of relationship among independent factors in women self-help group-led micro-enterprises is also examined. The test of estimates of independent factors are described in table 7.

(Table 7 to be inserted here)

Table 7 shows that immersion has 60% impact on women's financial access, 57% impact on market sustenance, and 41% impact on social gratitude, and its results are significant at the 1% level. Immersion

guides women entrepreneurs how to participate in micro enterprise operations, which has led to greater financial autonomy, market nourishment, and social recognition. Financial access has 79% impact on market sustenance and 40% impact on social gratitude, and its results are significant at the 1% level. Better financial availability for women-led micro businesses ensures market viability and social gratitude for female entrepreneurs. Market sustenance has 43% impact on social gratitude, which is statistically significant at the 1% level. Market sustainability makes women entrepreneurs better recognition from the society. Precursors such as immersion, financial access, market sustainability, and social gratitude are intertwined and serve as the foundation for micro-enterprise performance.

The results confirmed that antecedents (such as immersion, financial access, market sustenance, and social gratitude) have a positive and significant impact on the performance of micro-enterprises and that it results in a strong relationship between the performance of the micro-enterprises and women's empowerment attributes. economic empowerment of participants by bringing in employment opportunities, increased income, job security, and improved entrepreneurial skills. Besides, social empowerment is reflected in positive changes in communication skills, self-esteem, and social relationships. Greater involvement in family decision-making results in greater familial empowerment. Finally, political empowerment among members is attained in the form of higher political participation and better community mobilization.

Discussions

The rationale of the study is to evaluate the stimulus for conquest of micro enterprises and its similitude in women empowerment. Women in both personal and professional life have to conquer several criticisms, which encumbers their empowerment. Establishment of micro enterprises helps women to equip with relevant quality and empowerment in all respects. Women participation in micro enterprises have played immense success in life of women. In this way, the study intends to assess precursors and consequences of women-led micro enterprises. Findings disclosed that the fundamental premise for creating women immersion in micro enterprises is personal financial contribution to business, active engagement in business affairs of micro enterprises, inspiring others to participate in business, and thrust for income generation. Women immersion is heavily reliant on their ability to contribute funds to the start-up of their business in a micro level. Immersion is also driven by active participation in business activities, the desire to inspire others to take part in micro enterprises, and the need to generate revenue for personal, family, and professional development. Such factors have a significant impact on women entrepreneurs to become immersed in micro enterprises. Micro enterprises serve as a lender of last resort for women entrepreneurs in numerous ways. It assists women entrepreneurs in improving their savings habits, obtaining credit, ensuring regular income and expenses, and being able to repay debts. Micro enterprises increase their savings and investments, seek bank loans and settle in simple ways, and maintain a stability between income and expenses in their family. It is undeniable that financial access has a significant association with such antecedents.

Women entrepreneurs can easily attain market sustenance by developing a distinctive selling proposition that distinguishes their business from others. Women entrepreneurs put in more effort to preserve good relationship with customers. They also have a ready market and can apply a predetermined price strategy for their product or services. As a result, such factors have significant impact on the market sustenance of micro enterprises. Social gratitude and recognition are heavily reliant on members' mutual understanding and cooperation in microenterprise operations, as well as trust in government care and Kudumbashree initiatives. It is also concerned with their ability to resolve disagreements and disputes among the group's members. Further, a sense of social gratitude is established through trust in knowledge sharing and discussion of ideas and issues among members. As a result, these factors have a significant impact on the social gratitude of micro enterprises women entrepreneurs.

Conclusions

Women, in both personal and professional life have to conquer several criticisms, and also encumbers their empowerment. The establishment of micro-enterprises helps women to equip with relevant quality and empowerment in all respects. Women participation in micro-enterprises have played immense success in life of women. Economic participation of women is crucial not only for reducing the disproportionate levels of poverty among women, but also for increasing household income and fostering economic growth. Societies need to see women less as passive recipients of help and more as dynamic promoters of social transformation. The empowerment of women is one of the central issues in the process of development of countries all over the world. Women self-help groups are the focus of various development interventions in India. Women, individually, face many difficulties to empower financially and politically, both in family and society. Participation in micro business ventures through self-help group is a boon to avail employment, finance, and autonomy especially for women. Government should develop conducive plans, policies, and subsidies towards the establishment of micro-enterprises among deprived women segments. It is that suggested the women in backward areas, hilly places, deprived segment in urban areas should be paid more attention to strengthen their standard of living. It helps them to uplift their children able to easily attain balanced nutrition food, higher education, a healthier marriage, and awareness against women harassment. Timely assistance can enhance their ability to operate, ability to market, ability to manage their micro-enterprises, which will ultimately boost empowerment in all respects.

The study significantly contributes to the body of knowledge by developing multi-facets of micro-enterprises as a measure of evaluating enterprise participation instead of considering membership alone as the proxy for evaluation of participation in enterprises. In addition, it develops a contextually relevant and comprehensive measure of women's empowerment by creating items that capture its four key dimensions: economic, social, familial, and political. This metric may be useful for researchers working on women's empowerment in developing nations (especially in South Asian countries). This study provides government and non-government organisations working to empower and uplift women in developing regions with invaluable insights with the adoption of the Kudumbashree model (Kerala model) of women empowerment.

Abbreviations

SMEs
Small Medium Enterprises
MSME
Micro, small, and medium enterprises
SHGs
Self-help groups
NHGs
Neighbour Hood Groups
ADS
Area Development Societies
CDS
Community Development Societies

Declarations

Availability of data and materials

Researchers collected the primary data for this study through a field survey. All relevant data are presented in the paper. However, any details regarding the datasets used and/or analyzed during the current study are available from the corresponding author (Ms. Jain Jacob M) on a request.

Funding

This article is not supported by any funding agency.

Authors contributions

Both authors contributed to the design of the research, data collection, empirical analysis, and interpretation of the results.

Ethics statement

The studies involving human participants were reviewed and approved by the Director of Kudumbashree Mission (State Poverty Eradication Mission, Kerala State). Further participants provided their written informed consent to participate in this study.

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Tables

Table 1: Socio-demographic Background

S. No	Socio-demographic Background	Variables	Frequency
1.	Age	Below 30 years	17.45%
		30 – 50 years	40.89%
		Above 50 years	41.67%
2.	Marital Status	Married	72.40%
		Unmarried	27.60%
3.	Monthly Income	Less than Rs.25,000	33.07%
		Rs.25,000 - 50,000	35.68%
		Above Rs.50,000	31.25%
4.	Academic Qualification	School Education	28.91%
		UG/ Diploma	42.45%
		PG	28.65%
5.	Experience in Business	Below 3 years	20.57%
		3 – 7 years	48.44%
		Above 7 years	30.99%
6.	Family Size	2 members	26.82%
		3 – 5 members	39.06%
		Above 5 members	34.11%

Source: Survey data

Table 2: Pearson Correlation Coefficient Matrix

Factors	IMRS	FLAS	MRST	SLGT	MEP	FLEM	PLEM	EFEM	FYEM
IMRS	1	.661**	.691**	.575**	.762**	.762**	.547**	.508**	.708**
FLAS	.661**	1	.789**	.462**	.634**	.646**	.458**	.491**	.663**
MRST	.691**	.789**	1	.540**	.661**	.705**	.476**	.478**	.647**
SLGT	.575**	.462**	.540**	1	.553**	.577**	.411**	.421**	.470**
MEP	.762**	.634**	.661**	.553**	1	.735**	.523**	.491**	.688**
FLEM	.762**	.646**	.705**	.577**	.735**	1	.464**	.488**	.677**
PLEM	.547**	.458**	.476**	.411**	.523**	.464**	1	.653**	.431**
EFEM	.508**	.491**	.478**	.421**	.491**	.488**	.653**	1	.431**
FYEM	.708**	.663**	.647**	.470**	.688**	.677**	.431**	.431**	1

Source: Survey data

** Significant at 1% level.

Table 3: Results of Confirmatory Factor Analysis

Latent Constructs	Variables	Factor Loadings	Cronbach Alpha	Composite Reliability	Average Variance Extracted
Immersion	IMRS1	0.881	0.887	0.884	0.775
	IMRS2	0.892			
	IMRS3	0.865			
	IMRS4	0.854			
Financial access	FLAS1	0.916	0.911	0.912	0.762
	FLAS2	0.851			
	FLAS3	0.863			
	FLAS4	0.868			
Market sustenance	MRST1	0.912	0.895	0.901	0.753
	MRST2	0.866			
	MRST3	0.872			
	MRST4	0.853			
Social gratitude	SLGT1	0.913	0.905	0.902	0.757
	SLGT2	0.836			
	SLGT3	0.799			
	SLGT4	0.787			
Micro-enterprise performance	MEP1	0.885	0.921	0.916	0.768
	MEP2	0.859			
	MEP3	0.843			
	MEP4	0.838			
	MEP5	0.829			
Financial empowerment	FLEM1	0.834	0.915	0.922	0.688
	FLEM2	0.887			
	FLEM3	0.833			
	FLEM4	0.758			
Political empowerment	PLEM1	0.825	0.904	0.899	0.704
	PLEM2	0.821			
	PLEM3	0.836			

	PLEM4	0.855			
Edifying empowerment	EFEM1	0.844	0.898	0.892	0.711
	EFEM2	0.810			
	EFEM3	0.803			
	EFEM4	0.836			
Family empowerment	FYEM1	0.868	0.917	0.908	0.724
	FYEM2	0.787			
	FYEM3	0.772			
	FYEM4	0.791			

Source: Survey data

Table 4: CFA Model Fit

Chi-Square	Df	Sig.	CMIN/df	CFI	RMSEA
1522.362	620	0.000	2.455	0.917	0.057

Source: Survey data

Table 5: Goodness of Fit Test

S. No	Goodness of Fit Indices	Statistics	Threshold Value
1.	CMIN/DF	2.377	<3
2.	Goodness of Fit Index (GFI)	0.914	>0.9
3.	Adjusted Goodness of Fit Index (AGFI)	0.902	>0.9
4.	Normed-Fit Index (NFI)	0.913	>0.9
5.	Relative Fit Index (RFI)	0.924	>0.9
6.	Incremental Fit Index (IFI)	0.923	>0.9
7.	Tucker-Lewis Index (TLI)	0.919	>0.9
8.	Comparative Fit Index (CFI)	0.912	>0.9
9.	Root Mean Square Error of Approximation (RMSEA)	0.054	<0.06

Source: Survey data

Table 6: Testing of Hypothesis

Hypothesized Path Relationship			Estimate	S.E.	C.R.	P
Micro-enterprise performance	<--	Immersion	-.006	.049	-2.718	0.011
	-					
	<--	Financial Access	-.038	.114	-2.733	0.008
	-					
Financial Empowerment	<--	Market Sustenance	.347	.126	2.751	.006
	-					
	<--	Social Gratitude	.828	.170	4.870	***
	-					
Financial Empowerment	<--	Micro Enterprise Performance	1.086	.113	9.615	***
-						
Political Empowerment	<--		1.149	.114	10.046	***
-						
Edifying Empowerment	<--		.529	.101	5.221	***
-						
Family Empowerment	<--		1.122	.118	9.519	***
-						

Source: Survey data

*** Significant at 1% level

Table 7: Estimates of Independent Factors

Independent Variables			Estimate	S.E.	C.R.	Sig.
Immersion	<-->	Financial Access	.604	.073	8.251	***
Immersion	<-->	Market Sustenance	.565	.066	8.583	***
Immersion	<-->	Social Gratitude	.411	.068	6.039	***
Financial Access	<-->	Market Sustenance	.794	.088	9.057	***
Financial Access	<-->	Social Gratitude	.403	.072	5.642	***
Market Sustenance	<-->	Social Gratitude	.430	.071	6.047	***

Source: Survey data

Figures

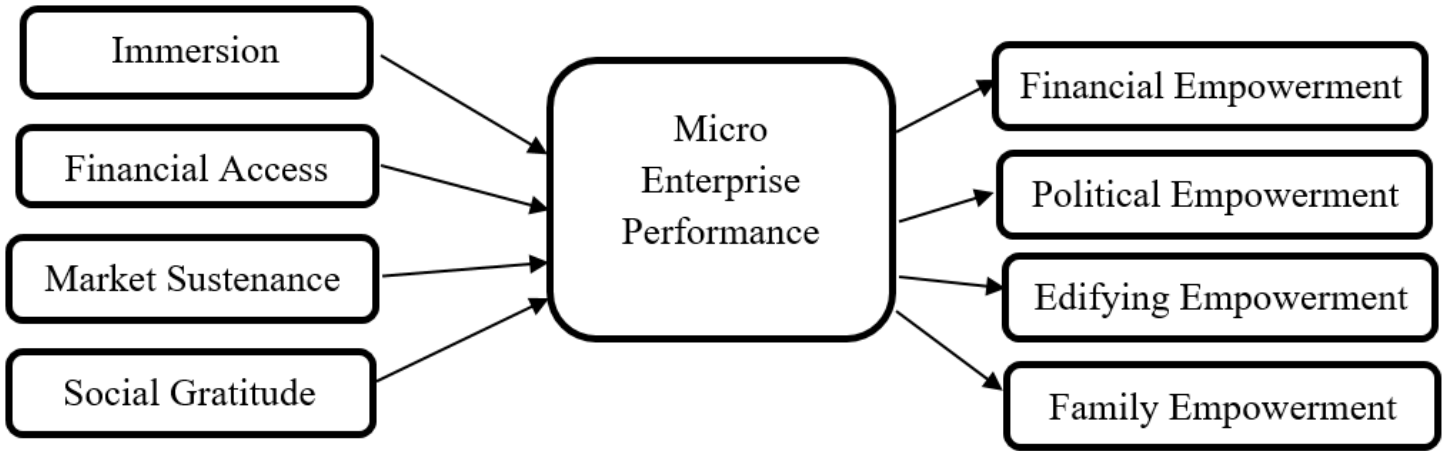


Figure 1

Conceptual Framework

Source: Authors

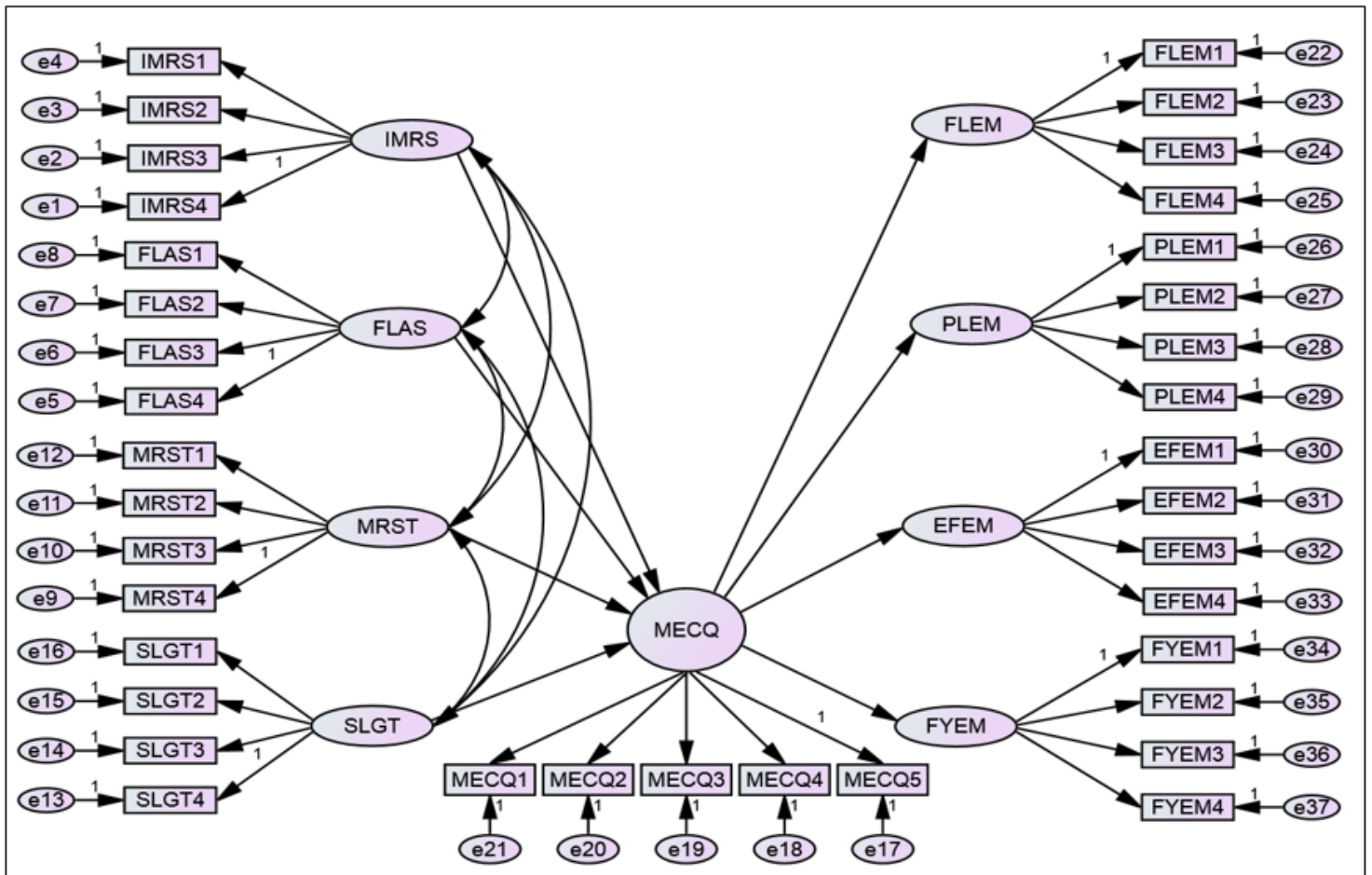


Figure 2

Measurement Model

Source: Survey data

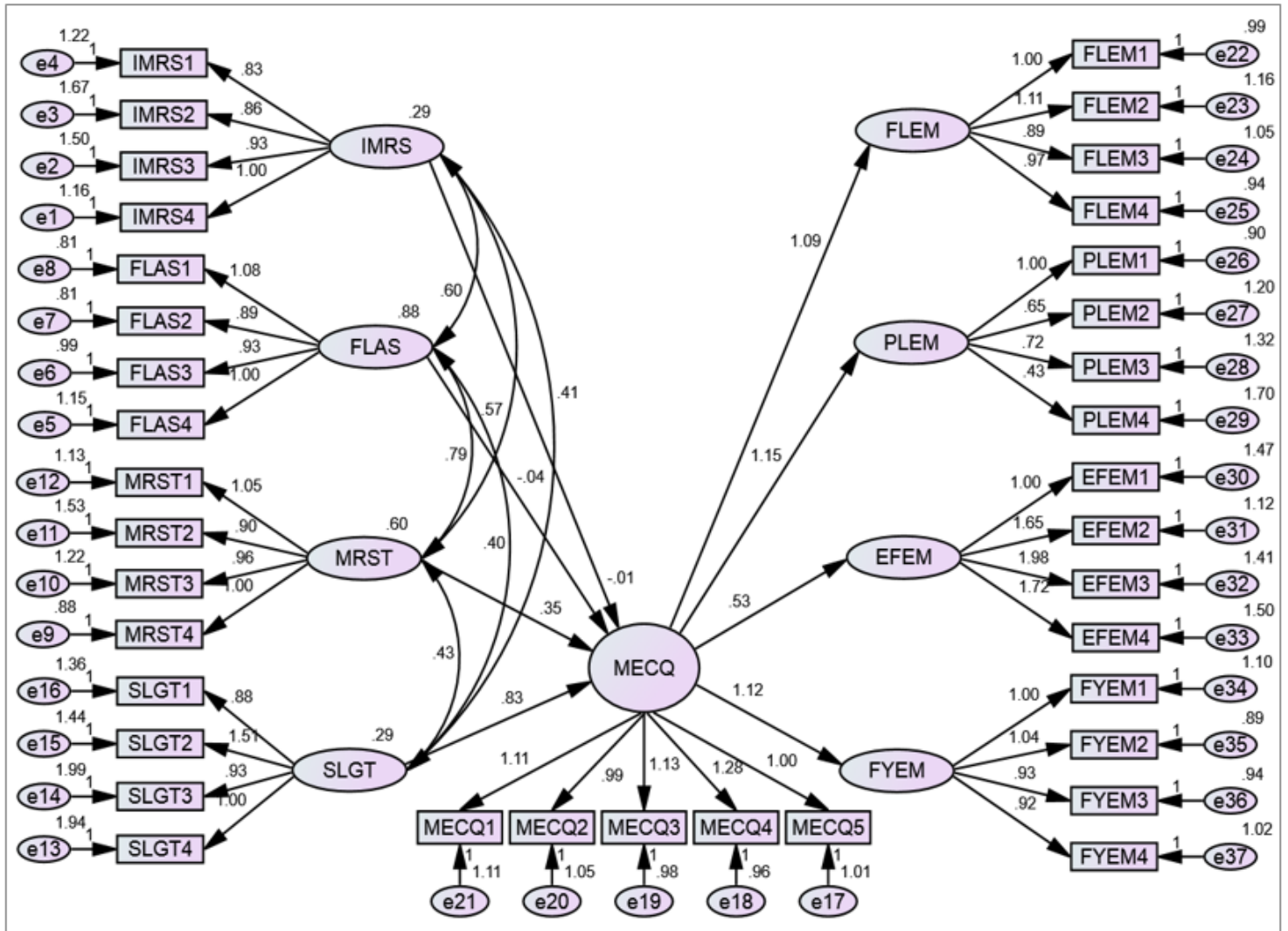


Figure 3

Structural Equation Modelling

Source: Survey data