

FROM LOANS TO BETTER LIVES: ASSESSING THE ROLE OF MICROFINANCE IN TRANSFORMING LIVING CONDITIONS

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Abstract

The examination of microfinance and its impact on livestock, transport, electricity and gas, appliances, and sanitation and the resulting changes of standard of living of the low-income households has been outlined in this study. Despite the availability of microfinance to the general public, the impact it has on changes of living conditions on the other dimensions has not been detailed. A structured questionnaire was used to collect information from 263 people and the information was analyzed using the Pearson and linear regression and reliability analysis within SPSS. Results from the studies showed microfinance and better living conditions a positive relationship. Regression analysis showed microfinance helps improve living conditions of the households by the investment of several productive assets to better move around and access the utilities and the home appliances and sanitation upgraded. The study showed those people in the low socio/economic communities do benefit from microfinance programs; however, the study was self-reported, was cross-sectional, and was very particular to a particular sample. The variation of the study showed the people making the microfinance and the microfinance programs of great value to diversify the microfinance programs and the technical assistance to and the microfinance further the socio/economic benefits of microfinance.

Keywords: *Microfinance, Living Standard, Livestock Resources, Transportation Resources, Utility Bills, Electric Appliances, and Sanitation system.*

1. Introduction

The microfinance sector is a tool to address the special needs of the vulnerable sector by providing a range of financial services that formal financial institutions do not offer (Chen et al., 2025). Microfinance Institutions (MFIs) globally have made an impact toward closure of the financing gap by promoting micro-enterprises/ businesses, and improving the welfare of poor households (Rovidad, 2020). Microfinance in the context of developing countries like Pakistan is to improve the economic conditions of the vulnerable by empowering them to make investments and acquire income-generating assets, and improve their overall economic status (Bros et al., 2023). Improving economic status is a complex, multifaceted issue, and this explains the correlation of microfinance to the improvement of other economic indicators like livestock possession, transportation, energy, and other infrastructure such as sanitary and household (Hameed et al., 2022). This explains the importance of microfinance, and the need to assess its impact on vulnerable communities (Farooq et al., 2024).

Although there are many microfinance programs, the extent to which they affect microfinance impact the households beyond theory still remains a Publisher (Khan et al, 2023). There are numerous microfinance programs which microfinance participants impact have participants yet scant evidence on the impact of the programs on the attainment of improvements on (Haroon, 2025). There are even mentioned Some studies active improvements and others no improvements or questions of short-term improvements therefore

suggesting Microfinance impact on the households not to leave concerns and questions sustainable development economically active households (Ali & Nasir, 2023). This vague evidence supports the dependence for microfinance programs for level, or even, for the minimum, for the microfinance, providing minimum impact to households live (Iqbal et al 2024).

While several scholars have attempted to assess the relationship between microfinance, how it affects poverty reduction, and improve income levels, there has been very little, if any, research that attempts to capture how microfinance affects the multiple facets of household standards of living (Kasoga & Tegambwage, 2021). The dominant focus of most studies has been on the income level, profits from business ventures, and the overall expenditure patterns (consumption), and there has been little to no focus on how these studies affect the level of assets, livestock, and means of transport an individual possesses (Hagawe et al., 2023). Furthermore, research on microfinance and improvement of access to amenities such as electricity, gas, and sanitation facilities (modern toilets) systems which are very often in rural and peri-urban areas, remain very few (Dhungana et al., 2023). Empirical evidence is also very thin that tries to explain all these matters under a single endeavor to assess the overall impact of microfinance on the living standards in Pakistan (Zitouni & Ben Jedidia, 2022). These studies have largely underlined the need for research that takes into account all these dimensions collectively, in a single framework.

The relevance of this study stems from the composite understanding of microfinance and its impact on the quality of life of households with respect to evaluating microfinance's impact on the resources of livestock, transport, electricity and gas, electrical appliances, and sanitation facilities (Russell et al., 2024). The study also provides an understanding of the relevance of microfinance to sustainable non-income welfare improvement (Herreño & Ocampo, 2023). The results of this study are beneficial in guiding policymakers, microfinance institutions, and development agencies in identifying the most microfinance-sensitive dimensions of household well-being (Elsafi et al., 2020). The study also presents the empirical case from Pakistan, characterized by country's socio-economic disparities and restricted access to essential services, which makes the microfinance impact assessment highly significant (Yazıcı Cörüt & Coeruet, 2022).

The rest of this document is organized as follows: Section 2 of this paper discusses pertinent literature and theory around the influences of microfinance and household improvement with respect to livestock, transport, electricity and gas, certain household gadgets, and sanitation. Section 3 describes the study design and the methods of sampling, data gathering, and data analysis which focus on the various aspects of microfinance. Section 4 discusses the findings of the study and is analyzed to show the varied aspects on the standards of living and the effect of microfinance. In the final section, Section 5 provides the study's conclusions and policy-related influences, the boundaries of the research, and suggestions for further research focusing on enhancing the effectiveness of microfinance to alleviate poverty at the household level.

2. Literature Review

This paper will focus on synthesizing prior work pertaining to micro finance and standard of living and examining specifically, micro finance and its effects on household and living standards, specifically on the assets of and household sanitation and on the livestock owned, and the transportation, appliances and sanitation of the household as well as the sanitation and other systems/ means of the household and systems of the household and the means of the household. This paper will examine the socio economic the micro finance and the socio economic the micro finance has been studied and will examine the conditions, and will examine

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2.1. Microfinance and Living Standard:

Microfinance has empowered low-income households because it has opened the door to credit that is usually unavailable to them. Many scholars have observed the link that microfinance borrowers are able to undertake value enhancing investments that improve their income from activities such as livestock farming, petty trading and provision of transport services (Pandhare et al, 2024). Many scholars have already observed the general positive impact of microfinance on asset accumulation at household level. Specifically, such households have been observed to accumulate livestock, motorcycles, rickshaws, and other income generating tools (Datta & Sahu, 2021). Many microfinance borrowers have been reported to make investments that enhance household infrastructure, such as loans to improve electricity and gas connections, purchase of minor electrical gadgets, and sanitary facilities (Subramaniam et al, 2021). Microfinance's contribution to economic and social development is, therefore, a positive contribution on its own.

Although many of the studies on microfinance have shown positive impacts on the lives of clients, there remains a significant portion of criticism on microfinance impacts on the living standards of clients. Some critics argue that microfinance doesn't lead to welfare improvement due to the various structural systems that are repressive, such as high interest rates on micro loans, short repayment cycles, as well as the misuse of loans obtained (Robert et al, 2021). Studies have shown that borrowers of micro loans do not invest the loans in productive ventures, rather, they utilize the loans in fulfilling their immediate consumption needs. This, in turn, limits the benefits as it are productive. Consequently, they do not have the ability to invest in productive assets such as livestock or means of transport (Bika et al, 2022). In addition, there are areas that are macro economically poorly structured, such as, inadequate access to electricity, gas, and poor sanitation. In such areas micro finance cannot bring about significant improvements as such improvements rely mostly on public systems (Solarin et al, 2022). The poor consequences of microfinance such as over borrowing and the lack of positive results in a business, are symptoms of the lack of improvement in living standards, and these symptoms are present in various microfinance clients. These consequences are not what microfinance proponents have in mind for the clients. These studies highlight that there is little to no improvement in living standards, illustrating the many micro finance systems.

Given the gap in prior research, there is a need for a study that investigates the effects of microfinance on more than one dimension of the overall living standard at once. The rest of the literature tends to focus on income and/or entrepreneurial activity to the exclusion of other welfare measures such as ownership of agricultural livestock, means of transport, availability of electricity and gas, possession of electrical appliances, and improved sanitation facilities (Asongu & Odhiambo, 2024). This is a clue that prior research is ignoring the important microfinance impacts on households as a unit. The present study is important because it aims to be the first in the literature to help gain a more nuanced understanding of microfinance and its effect on the various elements of living standards in a country that is largely poor, has weak facilities, and is socio-economically uneven (Fayyaz & Khan, 2021). By focusing on ignored

welfare aspects, the research improves understanding of microfinance's effectiveness for policy and actionable insights to microfinance practitioners, development planners, and institutions aimed at sustainable household development.

H₁: Microfinance has a significant positive impact on the improvement of living standard of the borrowers.

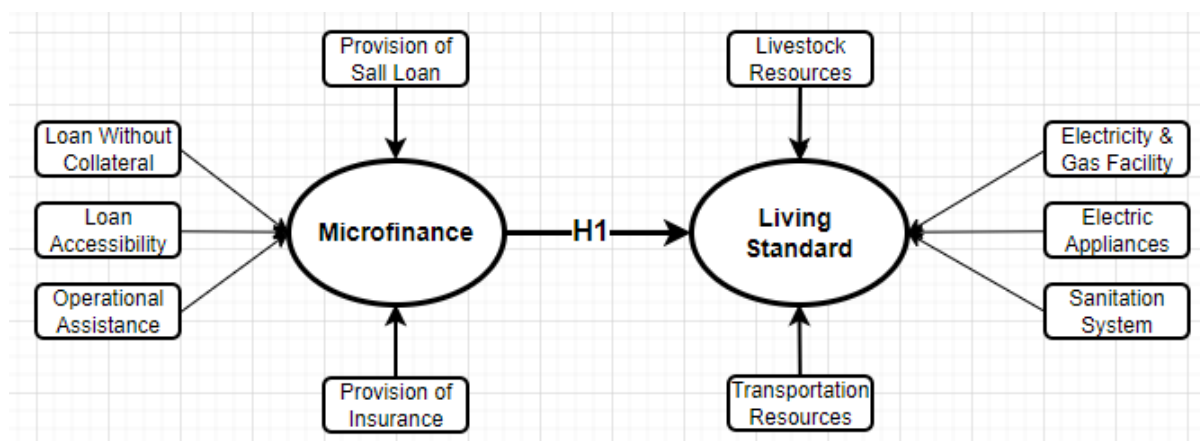


Figure-1: Conceptual Framework

3. Methodology

The author analyzed the effect of microfinance on the enhancement of household living standards, particularly on the household livestock, household transport, electricity and gas facility, provision of household electrical appliances, and on the sanitation facilities (Choudhury & Asan, 2021). A quantitative method was the most suitable as it provides the opportunity to objectively quantify the relationships of different variables, and to perform statistical hypothesis testing to ascertain the direction and the strength of microfinance effect on several dimensions of the living standards (Chan et al., 2023). Primary data was collected through a structured questionnaire that was designed to gauge respondents' access to microfinance services and the subsequent shifts in several living standards indicators. The SPSS software developed by IBM that is broadly accepted in the field of social sciences for its accuracy and user-friendliness in processing intricate datasets is used (Ali et al., 2021). The first stage of the analysis consists of screening the data for completeness, missing values, or outliers to determine the overall accuracy and readiness of the database for advanced procedures (Basir et al., 2021). The next phase is a reliability analysis by means of Cronbach's alpha to measure the multi-item internal consistency of a measurement scale for the dimensions of living standards in which all scales had to meet the acceptable reliability quota of 0.70 (Tang et al., 2023). Only then were the constructs relevant to the present study verified to be valid to measure the components of microfinance outreach (Gupta & Yadav, 2022).

Following the completed, of the study, the descriptive, and the reliability, the study employed a battery of inferential statistical methods to assess the hypotheses, and to assess the nature of the relationships between microfinance and the selected variables of living standards (Abegaz et al., 2023). Pearson correlation analysis was conducted to assess the strength, and the direction of the association between the independent variable microfinance and the dependent variables such as livestock enhancement, transportation improvement, access to utilities, purchase of electrical devices, and sanitation improvements (Harris & Gleason, 2022). Such correlations gave a glimpse of whether microfinance had positive, negative, or no relationship at all. Following this, Sahin et al., (2023) proposed microfinance predictive

potential on various facets of a person's standard of living by conducting a linear regression analysis based on the mean of all the possible measurements within each construct. This analysis also allowed Omomule et al. (2020) to assess the degree and importance to which microfinance is a factor in the improvement of low-income families' open assets, as well as the availability and quality of house sanitation and domestic equipment. This combination of descriptive, reliability, correlation, and regression analyses Li et al. (2020) to fully and rigorously assess microfinance's impact on a person's standard of living on various components of welfare. Certain statistical approaches which enhance the predictive and support the findings led to viable conclusions on microfinance's potential as a development aid.

- **Living Standard (LS) = $f(\text{Microfinance})$**
- $LS_i = \beta_0 + \beta_1 MF_i + \epsilon_i$
- **LS_i** = Living Standard *i* (dependent variable).
- **MF_i** = Microfinance participation or microfinance access level for respondent *i* (independent variable).
- **β₀** = Intercept (baseline level of basic needs without microfinance).
- **β₁** = Slope coefficient showing how microfinance affects fulfillment of basic needs.
- **ε_i** = Error term capturing unobserved factors.

4. Results and Analysis

4.1. Demographics and Socio-Economics Characteristics of Respondents.

As illustrated in Table-I, of the 263 people surveyed, 98% of acknowledged respondents were male. The remaining 2% of acknowledged respondents were female. The most popular age for respondents was 31-40, which made up 40% of the age demographics. 29% of the respondents were aged between 41-49. Next, 19% were between 18-30 years of age, and 13% of 51+ were the oldest. Those surveyed were mostly married, totaling to 76% of respondents. 19% of the respondents were single and 5% were divorced. Breaking down the education level, 31% completed up to the secondary education level (matric), 21% held education beyond that (intermediate), 31% graduated, while 10% had a master's degree and 6% held a M. Phil or even higher. The structure also showed various occupations, 32% of which were unemployed, 22% of which worked for themselves, 15% were civil servants, while 31% worked in the agriculture sector. In terms of respondents and the family members (dependents) they care for, 30% had 2 or less, 33% had 3-5, 25% had 5-8, and 12% had 9 or more. To summarize, the respondents were mostly male, within the earlier mentioned 31-49 age range, married, held a secondary education, and held various jobs, while also having large family workloads.

Table:- I - Demographic & Socio-Economic Characteristics of Target Population

Variables	Category	Frequency	Percent	Cumulative Percent
Gender	Male	259	98	98
	Female	4	2	100
	Total	263	100	
Age	18-30	49	19	19
	31-40	105	40	59
	41-49	76	29	87
	51-Above	33	13	100
	Total	263	100	
Marital Status	Single	49	19	19
	Married	200	76	95

	Divorced	14	5	81
	Total	263	100	
Basic Education	Metric	82	31	31
	Intermediate	56	21	52
	Graduation or above	81	31	83
	Master	27	10	
	M.Phil and Above	17	6	100
	TOTAL	263	100	
Occupation	Unemployed	83	32	32
	Self-Employed	59	22	54
	Government Employees	39	15	69
	Farmer	82	31	100
	TOTAL	263	100	
No. of Dependent	0-2	78	30	30
	3-5	86	33	62
	5-8	67	25	88
	9-Above	32	12	100
	TOTAL	263	100	

4.2.Response Rate

Out of 300 questionnaires given out, 263 were filled out and turned back, resulting in approximately 87.7% response rate which is considered excess of acceptable standard in social science. Moreover, all 263 questionnaires returned were deemed valid and able to be analyzed. A 263 out of 300 response means there is a 87.7% effective response rate with statistics to back correlation. The percentage of valid response was high which adds to the scholarship of the conclusions drawn from the study and good reason for meaningful correlation to be drawn from the data.

Table-II: Response Rate

Total Questionnaire Distributed	Total Questionnaire Received	Percentage of Recived Questionnaire	Affective Questionnaire	Percentage of Affective Questionnaire
300	263	87.7%	263	87.7%

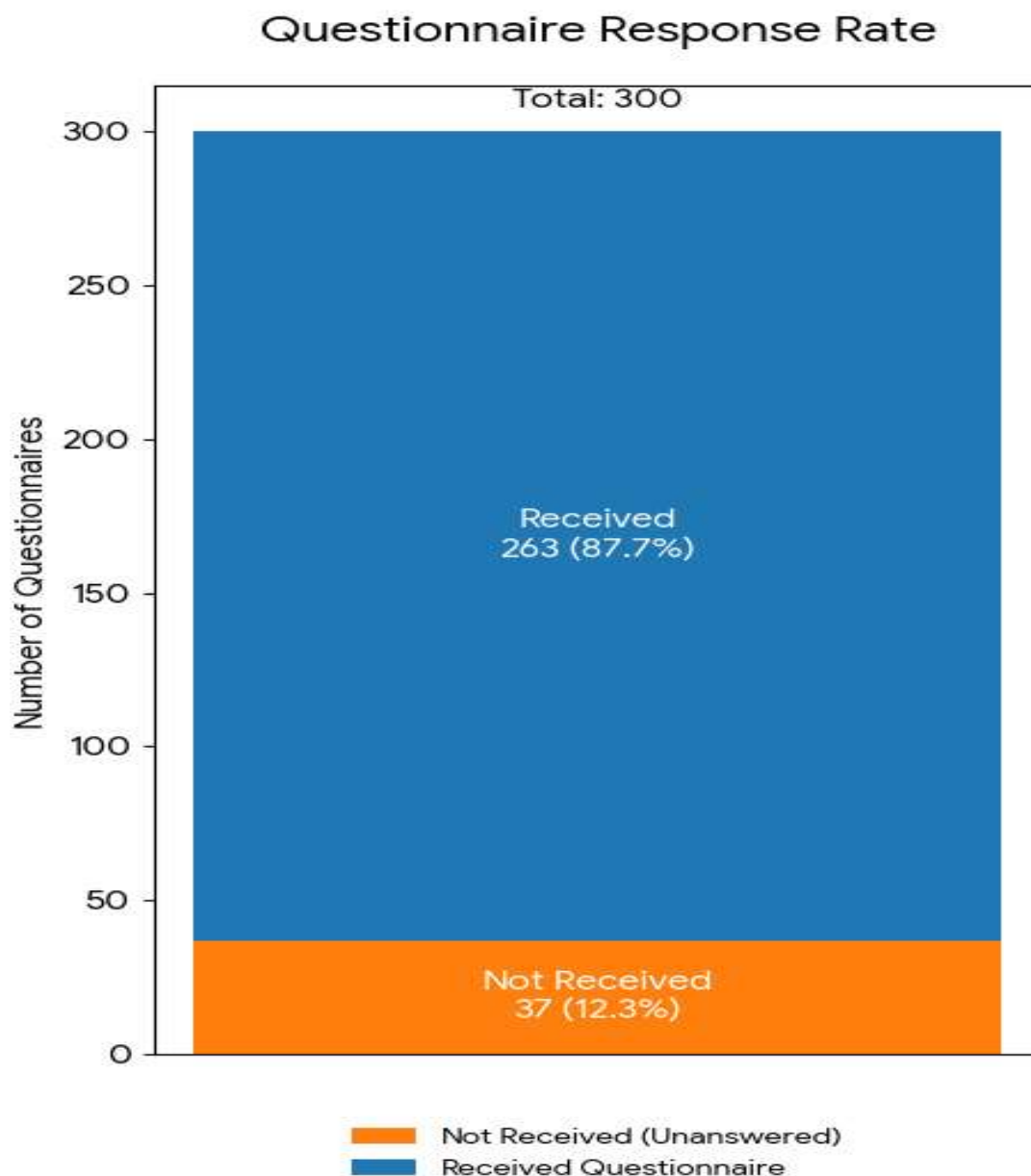


Figure-2: Response Rate

4.3. Reliability Analysis:

The data were collected to measure each construct to ascertain measurements manifested on the students. Cronbach's alpha was then computed to find the internal reliability of the constructs measured. It was found that the construct Living Standards (LS) achieved a value of 0.788 which is above the required value of 0.70. This depicts a considerably high internal reliability on the consistency of the construct measuring Living Standards. On the other hand, the construct Micro financing (MF) was found to have a Cronbach's alpha of 0.668 which falls short of being significantly high, but is high enough to be accepted for a value under the exploratory social sciences. It can then be concluded that the scale of Micro financing is consistent enough, although to a moderate degree, to be accepted for interpretative analysis. The reliability results, to the greater extent, gave confidence to the arguments on the degree of

coverage and the significance of the tools utilized in examining the constructs of the variables in this study (Jawa, 2022).

Table-III: Reliability Analysis

Sr. No	Description	Cronbach's Alpha
1	Living Standards (LS)	0.788
2	Micro Financing (MF)	0.668

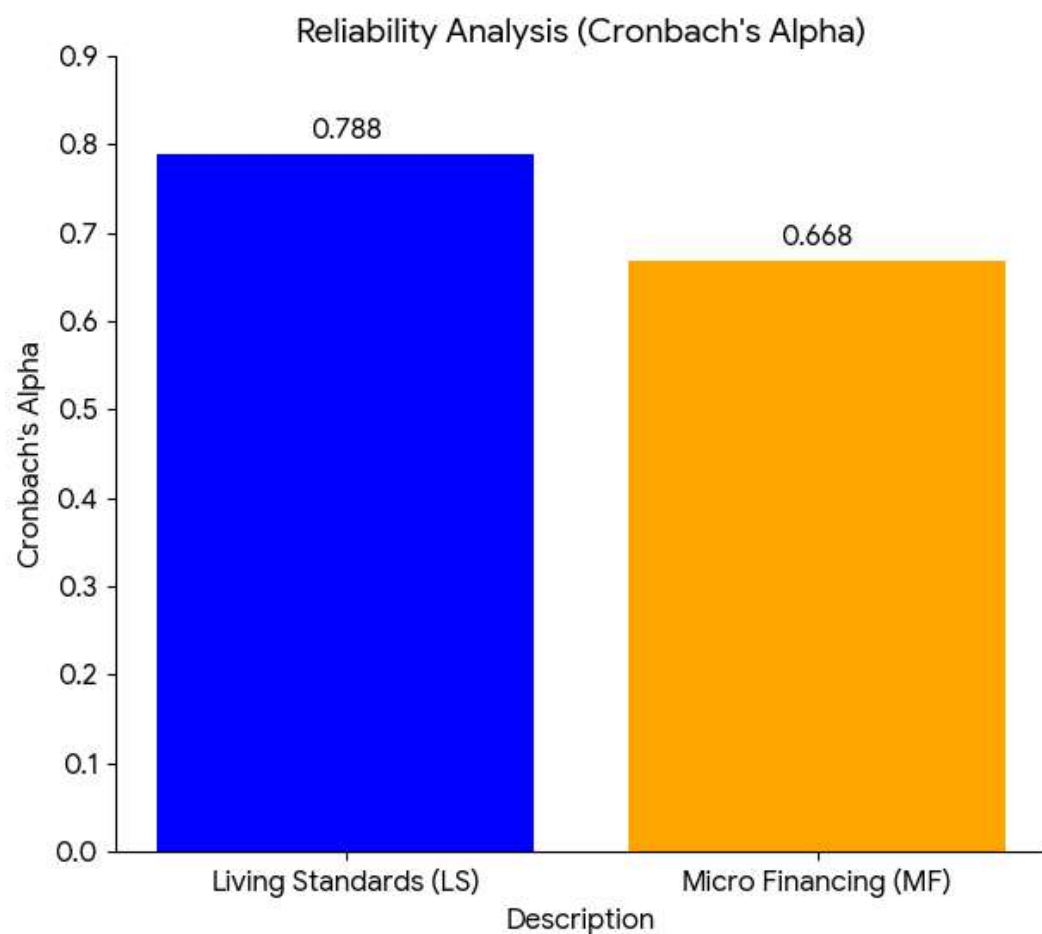


Figure-3: Reliability Analysis (Cronbach's Alpha)

4.4. Correlation Analysis:

The degree and direction of correlation within the data is being examined for Micro Financing and Living Standards among the respondents. It has been determined that there is a degree of positive correlation between Micro Financing and Living Standards as indicated by the error of the Pearson correlation coefficient of 0.662 which is very highly concerted. This degree of correlation shows that the greater the access to and or use of Micro Financing Services, the greater the improvement to one's standard of living. The calculated significance value of p is equal to 0.000 which is much less than 0.01 has confirmed that the correlation coefficient is significant at the 1 % level which means that the degree to which this correlation is given to a phenomenon of luck is very small, nearly 0. It has been determined that there is a positive

correlation between various Micro Financing factors and Living Standards of the target population which statistically confirms that Micro Financing is being utilized and is of great importance to the target population. This clearly affirms the outcome of the positive correlation factors between Micro Financing and the various socio-economic factors within the target population which have been determined by various socio-economic factors to be conclusive (Joshi and Patil 2020).

Table-IV: Correlations Analysis

Constructs and Relationship		LS	MF
LS	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	263	
MF	Pearson Correlation	.662**	1
	Sig. (2-tailed)	.000	
	N	263	263

**, Correlation is significant at the 0.01 level (2-tailed).

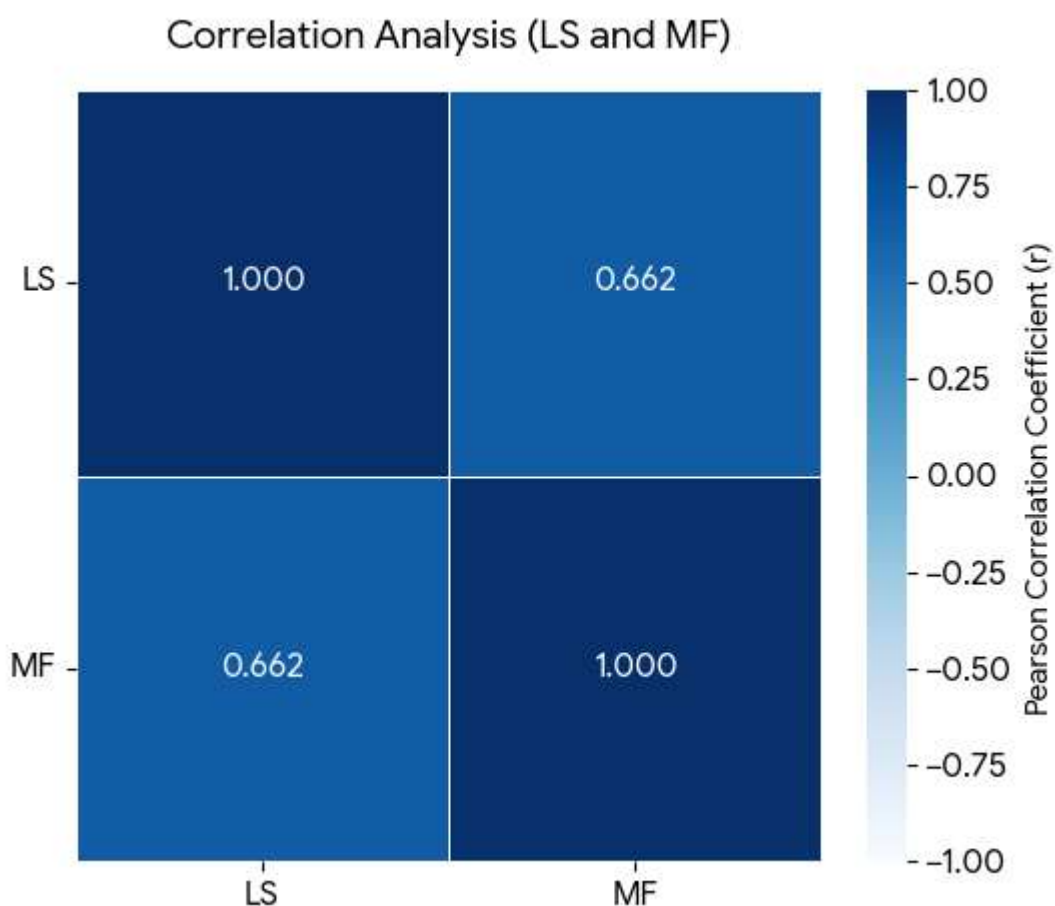


Figure-4: Correlation Analysis

4.5.Moel Fitness:

The summary of the results shows the strength and impact of the regression analysis which is aimed at finding impact of Micro Financing (MF) on Living Standards (LS). The value of the coefficient of correlation ($R=0.662$) shows a strong correlation between the predictor 'MF' and the dependent variable 'LS'. The value of R Square of 0.438 shows that microfinance can explain 43.8% of the changes in the living standards of the target population and so, close to half the changes that take place in the living standards of the target population can be attributed to the services of microfinance. The value of Adjusted R Square (0.436) is only slightly lower holding the number of predictors in the model constant which also indicates that the model is robust and can be generalized. The value of standard error of estimate (0.51661) shows the distance between the observed value and the regression value of the dependent variable and a small standard error indicates better fit of the model. Therefore, Microfinance is correlated to a significant extent to the changes in the living standards and in this way also contribute to the socio-economic changes (Selvamuthu & Das, 2024).

Table-V: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.662 ^a	.438	.436	.51661

a. Predictors: (Constant), MF

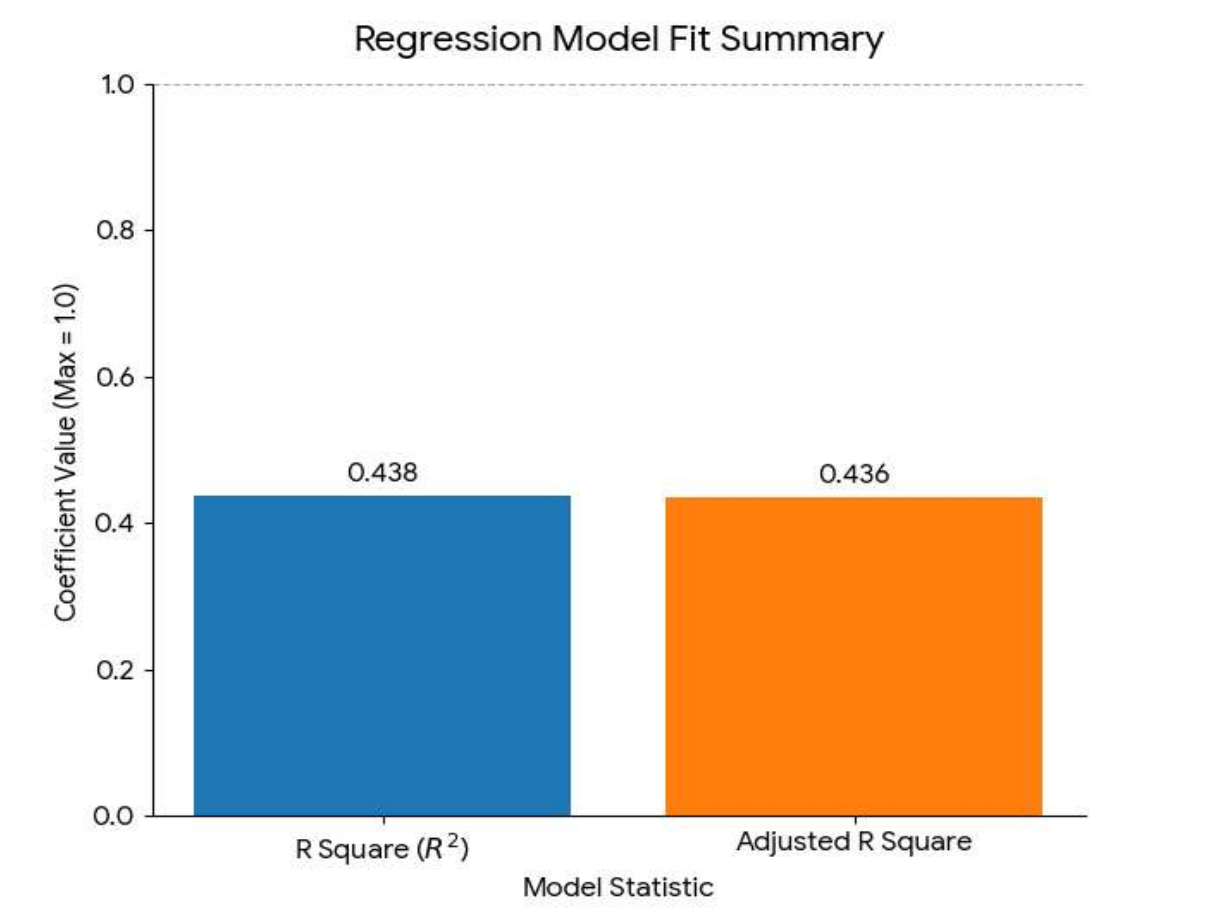


Figure-5: Mode Fitness

4.6. Model Significance:

The ANOVA table is used to determine whether the regression model explains any variation in the Living Standards (LS) due to Micro Financing (MF). In the current case, the regression sum of squares is 54.281 which is the amount of explained variation in microfinance. On the other hand, the residual sum of squares is 69.656, which is the variation the model does not explain. Together, these constitute the total sum of squares 123.937. Further, the F-value of 203.388 is extremely large, indicating that microfinance has a significant effect on living standards. More importantly, the significance (0.000) is extremely low, which is well below the 0.05 line of acceptance; thus, the regression model is statistically significant. This is to say that the effect of microfinance on living standards is not due to random chance, and microfinance positively impacts the living conditions of the sample population. Certainly, the ANOVA supports the conclusion that microfinance has a significant effect on and positively predicts living standards (Pareek et al., 2022).

Table-VI: ANOVA (b)

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	54.281	1	54.281	203.388	.000 ^a
	Residual	69.656	261	.267		
	Total	123.937	262			

a. Predictors: (Constant), MF; b. Dependent Variable: LS

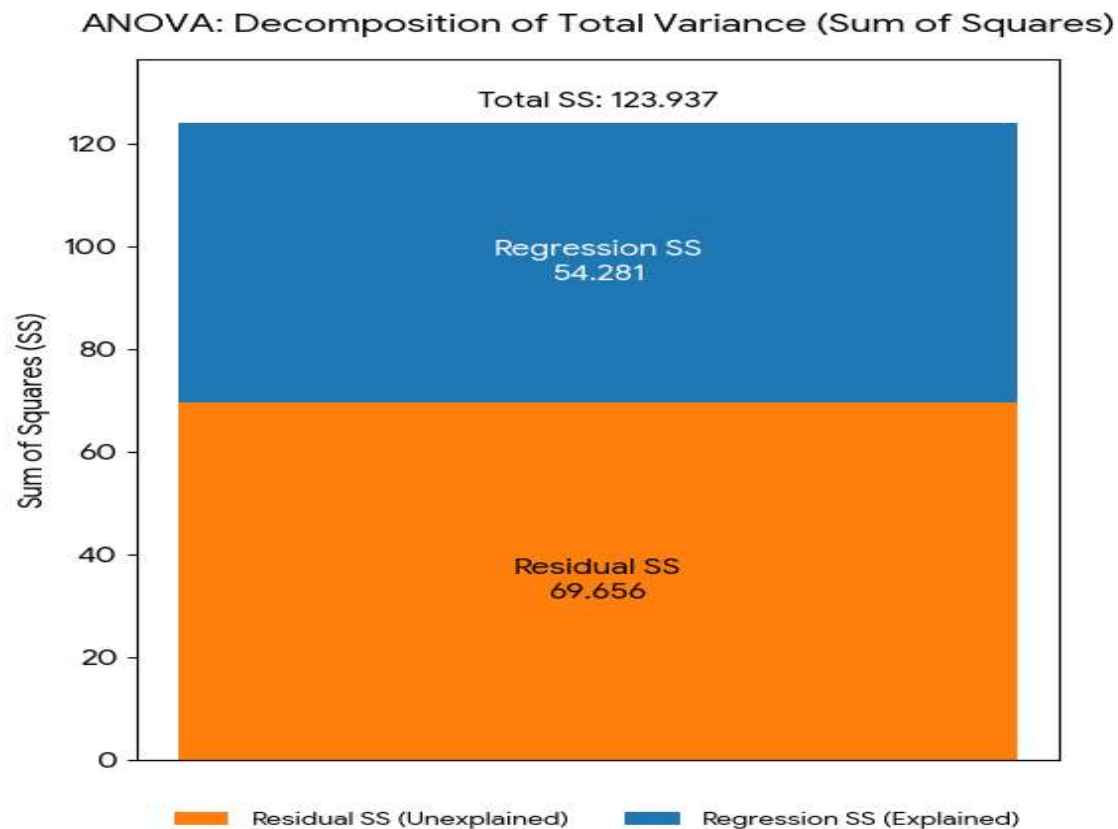


Figure-6: Significance of Model

4.7.Coefficient Analysis:

The coefficients table shows us the contribution of the predictor variable, Micro Financing (MF), towards the dependent variable, Living Standards (LS). The unstandardized weight (0.863) indicates that with every unit of microfinance provided, the living standard score will increase by 0.863, *ceteris paribus* (all other factors are kept constant). This shows us the strong positive impact microfinance has with respect to improving the living standard. The constant term here (0.458) denotes the average living standard that one expects to enjoy when one has zero microfinance. However, this is not statistically insignificant (0.065), suggesting that this model has no predictive power, and most of that is attributed to microfinance. The Beta (standardized weight) has these numbers (0.662) to indicate the strength of the relationship with respect to standard deviations and tells us that microfinance has a great impact on the living standard. The t value here is 14.261 and the significance, 0.000. Hence, it is insignificant (over 0.01 significance level) as level 01 means it is of high significance). Hence it shows microfinance is a predictor (provision of which other variables will depend on). Hence, the outcome was that it was microfinance that had a positive impact on the living standard (Hasan et al. 2025), with respect to livestock, transport, electrical and gas facilities, electrical appliances, and improved sanitation.

Table-VII: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	.458		1.852	.065
	MF	.863	.662	14.261	.000

a. Dependent Variable: LS

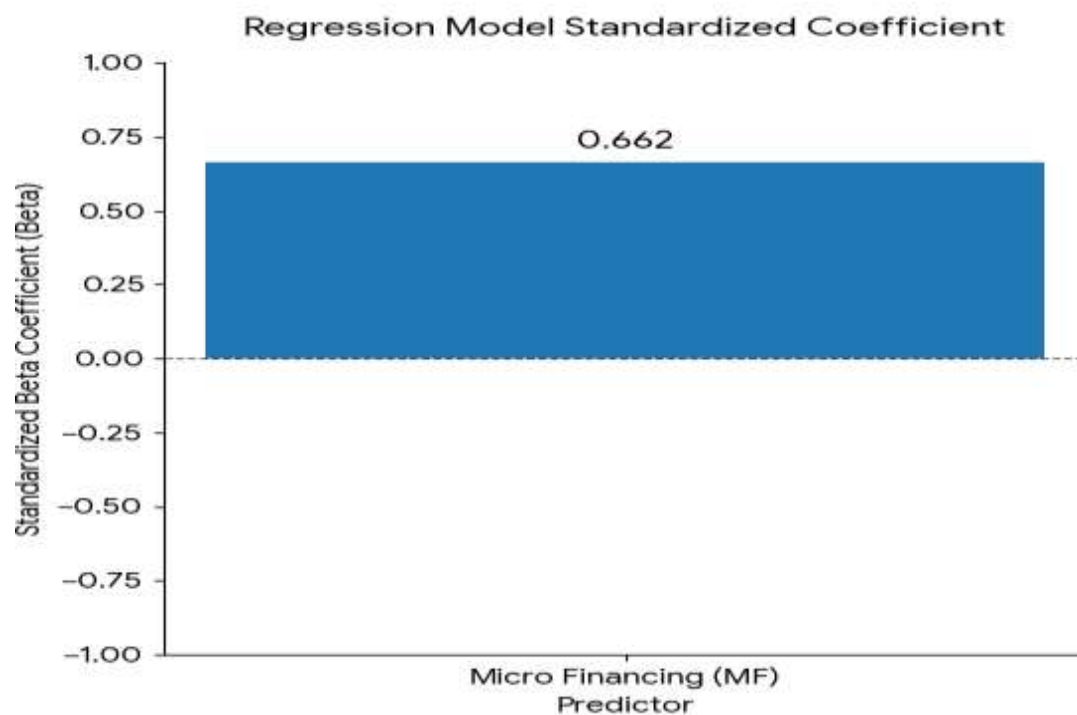


Figure-7: Coefficient Analysis

5. Discussion

The results of the current investigation are in agreement with previous scholarship in the same field of study, giving credence to the notion that microfinance contributes to the upliftment of the living standards of the respondents in the study. Correlation and regression analyses demonstrate that microfinance access, to some degree, improves the overall living condition, as evidenced by the respondents' possession of livestock, means of transportation, access to fuels, possession of various electrical appliances, and improved sanitation. Such findings are consistent with previous work in the field which indicate that access to microfinance results in increased income, amplified asset accumulation and overall welfare gains, especially for the economically vulnerable households (Singh et al., 2022). The results of the study provide further credence to the notion that inclusion of financially marginalised households into the microfinance scheme permits and justifies the needs to acquire and use productive assets that enhance their living standards (Ranabahu & Tanima, 2022). The results of the current study are about microfinance constructs for the rest of the constructs demonstrating that microfinance had a lower reliability coefficient of 0.66. While the microfinance coefficient is lower than the recommended 0.7, for the purposes of the current exploratory investigation into the field of social science, the results are acceptable, thereby indicating that the research instruments were sufficiently rigorous (Adnan & Kumar, 2021).

While the study demonstrates several beneficial outcomes, the study also recognizes the impact microfinance represents is not fully positive across all households, reflecting mixed outcomes from prior studies. For example, some researchers argue that microfinance is often associated with over-indebtedness, low revenue, or even anaemic advancement in standard of living when the loan amounts are small, or the loan is directed towards unproductive assets (Serrano-Cinca et al., 2023). This suggests that microfinance is impactful with regard to alleviating fundamental challenges surrounding destitute living conditions; however, some of its benefits are diluted by the loan efficiency, the household attributes, the available resources and the local marketplace (Sarker & Khan, 2024). However, the substantial regression results document that microfinance has achieved its primary objective of alleviating poverty in its target population which consists of rural and per urban Pakistan. This calls for the regulatory authorities of microfinance and the control of disbursed loans towards social outcomes to derive the highest benefits for low-income clients.

5.1. Practical/Managerial Implications

Microfinance institutions (MFIs), policymakers, and practitioners aiming to improve impoverished households' socioeconomic conditions value this study's results. There is conclusive evidence that microfinance impacts the living conditions (e.g., livestock resources, transportation, electricity and gas access, sanitation, and ownership of appliances) positively. Therefore, MFIs should develop products that meet the above needs. More consistent client segmentation based on expected household economic activity and income should be adopted to promote MFIs managers' more effective and efficient use of resources. Additionally, MFIs should revise their efforts on facilitating properly directed investments, particularly into the livestock and micro business enterprises where the study documented significant impacts. Policy frameworks should encompass microfinance within rural development strategy. Expected impacts on living conditions can be enhanced through the introduction of community livestock vaccination, subsidized use of agricultural inputs, and infrastructure provision. State regulatory agencies, for example, the State Bank of Pakistan, should strengthen their supervision to prevent excessive indebtedness while protecting the most vulnerable borrower to ensure responsible MFIs lending is within regulatory frameworks. The increased operational efficiency, via cost-effective transactions, along with the use of digital financial services, would

greatly increase the outreach of microfinance (MFIs) and enhance their ability to serve the underserved. Finally, the evidence indicates the boundary and contact that MFIs should form with the public and voluntary sector for the provision of microfinance complementary services, i.e., entrepreneurship training, market linkage and sanitation education, to realize the greater welfare benefit derived from microfinance. Thus, the evidence suggests that MFIs should provide microfinance in an integrated, demand-driven, and socio-economic development framework in order to respond to the microfinanced clients' development needs as well as to alleviate poverty more effectively.

5.2.Limitations and Avenue for Further Studies

There are numerous limitations regarding the study which in the future, can be developed in future research. First, the study used self-reported data which may be skewed because of bias of the respondent or missing information. Second, the research is cross sectional meaning there are limits in the long-run causal relations microfinance may have had in the enhancement of living standards. Third, the study examined the microfinance participants of one area which severely restricts the findings of the study. Thus, the conclusions of the findings may not apply to or be relevant for other areas or communities with opposing socioeconomic statuses. Moreover, the study only examined a few of the variables correlating to living standards such as animals, means of transportation, electricity and gas, appliances, and means of waste disposal. What the study neglected are of other significant variables such as education, health, and social empowerment. Such limitations only means that microfinance research should evolved into longitudinal, geographically expansive, and conceptually encompassing.

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