

# **Original Research Article**

## **Influence of Group based Micro-financial services on Business Performance of Rural Based Micro, Small and Medium Enterprises (MSMEs) in Kagera Region Tanzania**

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### **ABSTRACT**

The objective of the study was to determine influence of group based micro-financial services (credit) on business performance of rural based MSMEs in Kagera region Tanzania. The Study was guided by the theory of Group Based Micro-financing (GBM) model. It was undertaken in four districts of Kagera region Tanzania. Data were collected using a structured questionnaire from 279 group based borrowers of two commercial banks and two microfinance institutions (MFIs). Multiple Linear Regression Analysis (MLRA) was conducted to estimate the influence of group based micro-financial services on business performance of rural based MSMEs. The study found out that some determinants of micro-financial services variable such as loan disbursement and loan repayment policy had positive and significant influence on business performance of rural based MSMEs. However, loan usage despite that had positive influence its influence was insignificant on business performance of rural based MSMEs. Conclusively, this finding implies that an increase/ improvement in loan disbursement and loan repayment policy are essential for increased business performance and hence compliance to loan repayments. It is thus recommended that because most rural borrowers invest their loans in agriculture micro-financial service providers (lenders) should improve their loan repayment policies and also make timely disbursement of loans so as make them marry with agricultural sessions in rural areas.

**Key words:** *Micro-financial services, business performance, rural based, MSMEs*

### **1. INTRODUCTION**

The establishment of microfinance institutions (MFIs) all over the world was regarded as a tool for fighting poverty among the poor, both in rural and urban areas (Bayai, 2017; see also Cull & Morduch, 2018; Donou-Adonsou, & Sylwester, 2017; Mutua et al., 2020). Micro-financing poor communities intends to enable the impoverished families sustain livelihoods by meeting basic needs such as better shelters (houses), clothes, food, education for children, etc. In rural areas microfinance is a movement whose goal is a world in which as many poor and near-poor households as possible have permanent access to an appropriate range of high quality micro-financial services, including not just credit but also savings, training, insurance and fund transfers (Donou-Adonsou & Sylwester, 2016; Rahman & Khan, 2019).

Financial exclusion among the poor, particularly those in rural areas of countries practiced by commercial banks has increased the number of people borrowing through group based micro-financing (GBM) model all over the world (Rahman, et al., 2017). In the eyes of commercial banks and some other financial institutions (FIs), it is risky to loan poor people especially those engaged in agriculture because are regarded as non-capable of either pledging loan securities or repaying back loans (Rahman & Khan, 2019). As a result of aforesaid problems poor people

particularly those in rural areas have found themselves entangled in a massive poverty basket due to lack of capital (Rahman & Khan, 2019; Cull & Morduch, 2018). Following an increase of low-income people who were typically excluded from traditional banking systems catalyzed the establishment of group based microfinance services for the poor all over the world (Cull & Morduch, 2018; Rahman & Khan, 2019).

Through continuous provision of group based microfinance services the world has witnessed significant changes in the living condition, psychology, and expectations among the impoverished in developed and developing countries across the world (Sharma et al., 2017). Because of these changes in the lives of poor people Group based microfinance services were believed to play an important role in financial sectors and economic development, particularly those in rural areas (Sharma et al., 2017).

With the GBM model, “group based micro-financial service” is one of the main services of MFIs which refers to small amount of credit (loans) given to poor people in a group at reasonable interest for generating income through self-employment (Sharma et al., 2017). Group based micro-financial services are the driving force of the socio-economic development of poor people in regard to poverty reduction (Rahman, et al., 2017); see also Simmons & Tantisantiwong, 2018). With the current study “*Group based micro-financial services*” refers to financial services provided by commercial banks and other financial institutions to a group of three to five borrowers running group based MSMEs. They include loan disbursement, loan usage and loan repayment policy.

Group based micro-financing (GBM) model, specifically refers to arrangements by individuals without collaterals who get together and form groups with the aim of obtaining loan(s) from lenders (Rahman & Khan, 2019). The special feature is that loans are made individually to group members, but all in a group shoulder the consequences if any member runs into severe repayment difficulties (Rahman, et al., 2017; see also Sharma et al., 2017; Simmons & Tantisantiwong, 2018).

All over the world, it is debated on influence of group based micro-financial service (microcredit) on business performance of rural based MSMEs under the GBM model. To date there is no consensus on the influence of group based micro-financial service on business performance of rural based SMEs. Supporters of the model argue that group based micro-financial services positively influence on borrowers’ business performance, particularly those in rural areas (Rahman & Khan, 2019; Donou-Adonsou & Sylwester, 2017). Their argument is hinged on the fact that the impoverished can easily access collateral free loans that increase their opportunities to engage in income earning businesses and thus improve their livelihoods (Kumar & Rakhin, 2016; Banerjee & Jackson, 2017). On the other hand, critics argue that group based micro-financial services alone cannot positively influence on business performance of borrowers (Attanasio et al., 2015; Njiraini et al., 2018). Their argument is hinged on issues related to corruption of banking/ micro-financing systems, unnecessary and time-consuming meetings, too much mandatory loan servicing costs, high and unreasonable transaction costs, unsuccessful attraction of getting deposits, etc. (Banerjee & Jackson, 2017).

The lack of consensus has created a room for the current study to work on previous study weaknesses so as to come up with a more realistic view on the influence of micro-financial services on business performance of rural based SMEs in Kagera region, as a case study for Tanzania.

## **2.0 RESEARCH METHODOLOGY**

This paper discusses on the research methodology that was used by the researcher to capture information required for undertaking the study. Basically, it focuses on research philosophy,

study location and population, sample size determination and sampling design. Furthermore, the paper concludes by discussing on data collection, data processing and mean scores interpretation, and finally on data analysis.

## 2.1 Research Philosophy

The current study used descriptive cross-sectional study to collect information from June to September 2020 which enabled the researcher to accurately and systematically determine the influence of group based micro-financial services on business performance of rural based MSMEs in Kagera region. With this design data were collected through questionnaire made up of independent and dependent variables. After collection of required data the results were analyzed so as to determine the influence of micro-financial services on business performances of rural based MSMEs.

## 2.2 Study location and population

The study was conducted in four districts of Kagera region, namely Bukoba rural, Karagwe, Missenyi and Muleba. The four districts were selected on basis of randomly picking 4 written papers from a basket of 7 representing the study target rural districts of Kagera region. The targeted research population was 2,791 owners of MSMEs who had borrowed under group based micro-financing (GBM) model from commercial banks and other microfinance institutions (MFIs) which were providing group based loans in the past five years prior to this study (i.e. 2015-2019). Two banks, namely CRDB Bank Plc and Mkombozi Commercial Bank were purposefully identified to have operations in Kagera region as at the time of study, they were only two commercial banks providing group based microfinance services with their operations extended to rural parts of Kagera region. On the other hand, FINCA Microfinance Bank and BRAC were also purposefully identified as non-commercial banks with group based microfinance services in both urban and rural parts of Kagera region. Four lists of borrowers from the four mentioned financial institutions were obtained from the studied MFIs' reports.

## 2.3 Sample size determination and sampling design

The sample size was determined using Stevens' (1996) formula in equation 1, which was proposed to estimate the minimum sample size for multiple regression analysis. The multiple regression analysis with the largest number of independent variables was used to estimate the sample size. In this case, equation 1 presents how the number of independent variables was computed.

$$N \geq 50 + 8m \dots\dots\dots (1)$$

Where N = Sample size and m = Number of independent variables. In that respect the minimum sample size for this study was  $N = 50 + 8(3) = 74$  respondents. However, the actual maximum sample size for this study was 279 respondents accounting for about 10% of the population.

A systematic random sampling method was conducted based on the consolidated list of microcredit borrowers in each district from four institutions. There were four consolidated lists of borrowers. Applying a systematic random sampling method each of the 10<sup>th</sup> borrower listed in the population was selected to be part of the sample for respective district.

## 2.4 Data collection

The study adopted quantitative data collection method from MFIs' borrowers in order to emphasize objective measurements and the statistical, mathematical or numerical analysis of data collected through questionnaires from rural based borrowers in Kagera region. Primary data were collected using questionnaire as the only data collection tool. Self-administered five point Likert Scale questionnaires were distributed to 279 MFIs' borrowers. With the scale, respondents

were asked to rate items on a level of agreement, from 1 = Strongly Disagree to 5 = Strongly Agree.

## 2.5 Data processing and mean scores interpretation

Data processing and mean scores interpretation involved three determinants of independent micro-financial services (with a total of eighteen items) and three determinants of dependent business performance variable (with a total of twelve items). In that regard, micro-financial services variable had 18 items with its scale measurements and mean scores ranging from 18–90. Business performance had twelve items. Its scale measurements and mean scores ranged from 12–60.

## 2.6 Data analysis methods

Variables were described using descriptive statistics where frequencies, percentages, summated ratings, mean, median and mode were used, after which multiple regression analysis was carried out in the general model format presented in equation (2).

$$BP = f (FS) \dots\dots\dots(2)$$

Where BP= Business Performance and FS = Micro-financial Services

BP was an index that was calculated by summing up the three variables of: Borrower increased knowledge (BIK), Borrower increased income (BII) and Borrower increased household performance (BHP). FS was made up of Loan disbursement (Loandisb), Level usage (Loanusa) and Loan repayment policy (Loanrep). Therefore equation (2) was transformed as shown in equation (3):

$$FS = f (\text{Loan disbursement, Loan usage, Loan repayment policy})\dots\dots\dots (3)$$

In regard to Micro-financial services (FS), it was measured using the mean score indices while observing expected variable signs. The measurement results showed that the three determinants (Loan disbursement, Loan usage, Loan repayment policy) of FS were all moderate and had positive signs. Equation (3) was therefore presented as shown in structural equation (4).

$$BP = f (\text{Loan disbursement, Loan usage, Loan repayment policy})\dots\dots\dots(4)$$

Since Micro-financial services (FS) was composite structural equation (4) was therefore presented as indicated in equation (5):

$$BP = a + d_1 * \text{Loandisb} + d_2 * \text{Loanusa} + d_3 * \text{Loanrep} \dots\dots\dots (5)$$

Where Loandisb = Loan disbursement, Loanusa = Loan usage, Loanrep = Loan repayment policy, a = Constant; d<sub>1</sub> – d<sub>3</sub>= Coefficients; α = Error term

## 3. RESULTS AND DISCUSSION

### 3.1 RESULTS

#### 3.1.1 Percentages of agreement for micro-financial services

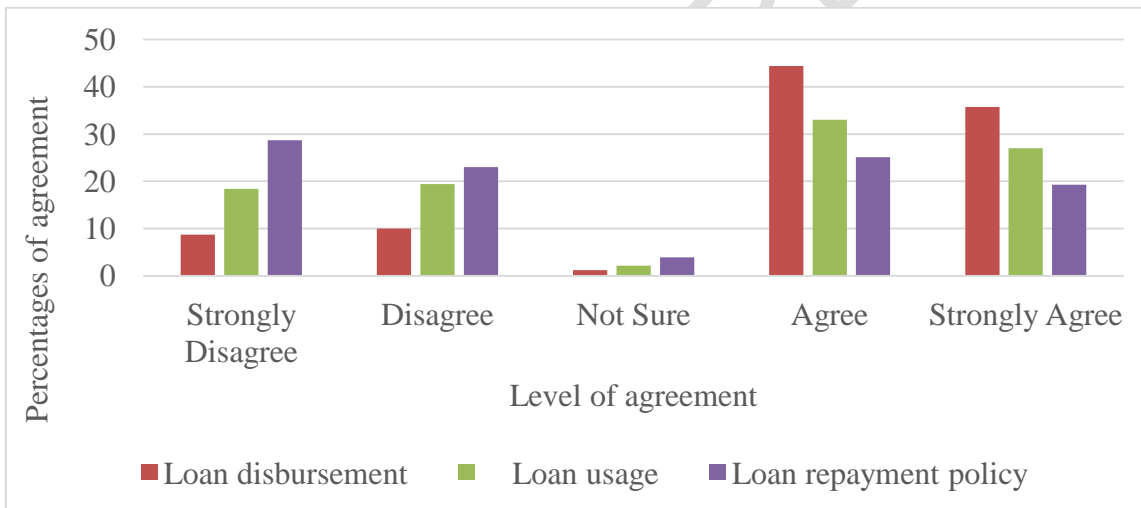
Pie chart 1 shows the percentages of agreement for group based micro-financial services on business performance of rural based MSMEs. The aim was to find out whether group based micro-financial services had or had no any influence on business performance of rural based MSMEs in the Kagera region. The table shows that among the three determinants of micro-

financial services loan disbursement was the highest and loan repayment policy was the lowest. This

Variable	Measures of central tendency				
	Mean	Median	Mode	Min.	Max.
Loan disbursement	23.3	23	22	14	30

means, among the three determinants of micro-financial services loan disbursement had high influence on business performance, followed by loan usage and lastly by loan repayment policy. This is because when loan is timely disbursed to borrowers and/ or disbursed in the same amount as requested the possibility of one implementing his/ her business and recording good results is higher than when loan is delayed or disbursed in less amount than requested.

Furthermore, in general the study results showed that the majority of respondents agreed to have their businesses performance increased after using group based micro-financial services and few of them claimed that their business performance did not improved after using group based micro-financial services. Basing on the fact that the majority of respondents agreed to have their business performance improved as a result of using group based micro-financial services the implication drawn from these results is that group based micro-financial services variable had positive influence on business performance of rural based MSMEs in Kagera region.



**Chart 1:** Percentages of agreement for micro-financial services

### 3.1.2 Measures of central tendency for micro-financial services

Table 1 shows the measures of central tendency for group based micro-financial services. The table shows that the total mean, median and mode score indices for overall group based micro-financial services were equally distributed with mean, respectively, which are interpreted moderate. These results ascertained the research objective: *“To examine influence of group based micro-financial services on business performance of rural based MSMEs in Kagera region”*

Table 1: Measures of central tendency for micro-financial services

Loan usage	19.9	20	19	12	30
Loan repayment policy	17.01	17	16.8	6	28
<b>Total</b>	<b>60.14</b>	<b>59</b>	<b>58</b>	<b>44</b>	<b>79</b>

**Source:** Study findings (2020)

### 3.1.3 MSME's Business performance

Pie chart 2 shows the percentages of agreement for business performance. In regard to business performance the majority of respondents agreed to have increased knowledge, family income and household performance (assets) as a result of using group based loans. From the study, among the three determinants of business performance variable *increased family income* ranked high, meaning that, family income was highly influenced by micro-financial services. This is because the majority of borrowers measure their business performance by looking at income and profit made by businesses. The fact that the majority of respondents agreed to have increased knowledge, family income and household performance (i.e. increased assets) as a result of engaging in group based businesses the implication drawn from these results are that group based micro-financial services had influence on business performance of rural based MSMEs in Kagera region.

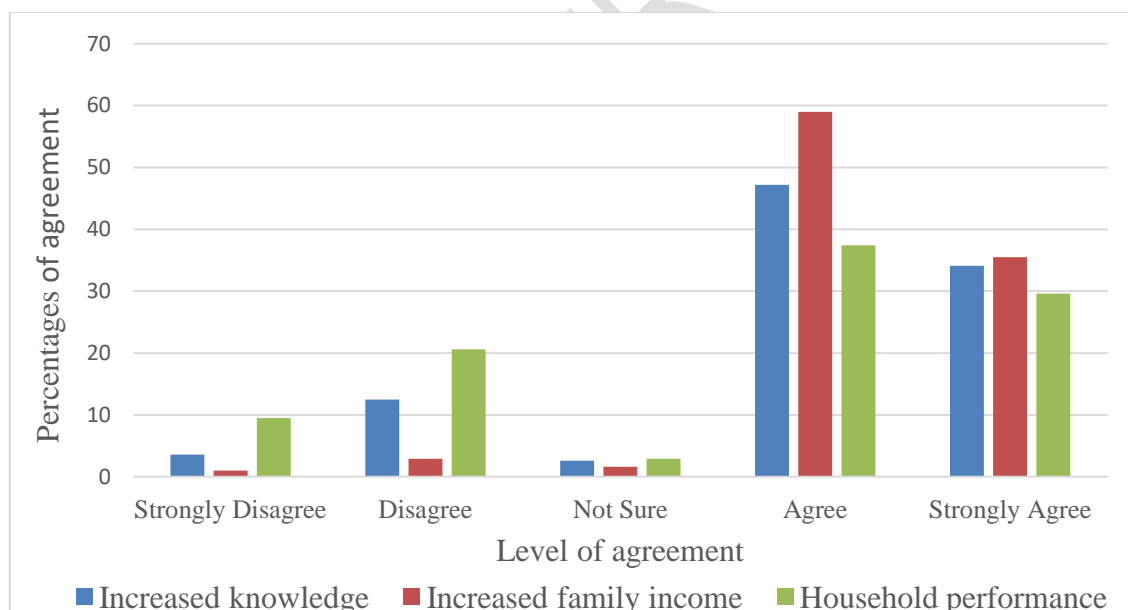


Chart 2: Percentages of agreement for business performance

Table 2 shows the measures of central tendency for business performance. The table shows that the total mean, median and mode score indices for overall business performance were equally distributed with mean, respectively, which are interpreted as moderate. These results ascertained the research objective: *“To determine the influence of group based micro-financial services on business performances of rural based MSMEs in Kagera region.”*

Table 2: Measures of central tendency for MSMEs business performance

		Business performance	Micro-financial services
Person correlation	Business performance	1	.343**
	Micro-financial services	.343**	1

**Source:** Study findings (2020)

### 3.1.4 Correlation analysis for aggregated micro-financial services variable

Table 3 shows the correlation between the independent group based micro-financial services and dependent business performance. Group based micro-financial services variable had positive correlation with business performance variable as shown in the table. This indicates that when micro-financial services increased the business performance of rural based MSMEs in Kagera region increased as well, and vice versa. That was because the variable reduced the costs incurred by borrowers to run their businesses.

Table 3: Correlation matrix for micro-financial services and business performance

	Loan disbursement	Loan usage	Loan repayment policy
Business performance	.318**	.174**	.217**
Loan disbursement	1	.175**	.115
Loan usage	.175**	1	.180**
Loan repayment policy	.115	.180**	1

**Source:** Study findings (2020)

### 3.1.5 Correlation matrix for disaggregated micro-financial services variable

Table 4 shows the correlation of micro-financial services variable determinants and business performance. From the table some determinants like loan disbursement and training on skills acquisition had the highest and lowest positive correlations with business performance, respectively. That means, when loan disbursement increased the business performance increased as well, and vice versa. That was because this determinant and the rest two brought *down* the costs borne by borrowers hence the same borrowers would like to have much of them in order to increase their businesses performance.

Table 4: Correlation matrix for disaggregated micro-financial service variables

Variable	Measures of central tendency				
	Mean	Median	Mode	Min.	Max.
Increased knowledge	15.84	16	16	10	20
Increased family income	17.01	17	16	8	20
Household performance	21.42	22	22	14	27
<b>Total</b>	<b>54.26</b>	<b>54</b>	<b>55</b>	<b>40</b>	<b>64</b>

**Source:** Study findings (2020)

### 3.1.6 Model Summary

Table 5 shows a model summary that the  $R^2$  is 0.627. The fact that the study  $R^2$  is 0.627 indicates that 63% of the variability observed in the target variable were explained by the input variables.

Table 5: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.792 <sup>a</sup>	0.627	0.620	2.35535

**Source:** Study findings (2020)

### 3.1.7 Regression analysis for aggregated variables

Table 6 shows the regression analysis for aggregated micro-financial services variable. From the table the resulted values were as presented for micro-financial services. Group based micro-financial services variable had positive influence on business performance and its influence was significant at  $P = 0.05$ . For that reason the null hypothesis ( $H_0$ ): *There is no significant influence of group based micro-financial services on business performance of rural based MSMEs in Kagera region* was not accepted because at  $P = 0.05$  the data did not provide sufficient statistical evidences to accept the null hypotheses. Instead, the alternative hypothesis ( $H_1$ ) was accepted.

Table 6: Regression coefficient for aggregated micro-financial services

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	18.817	3.060		6.150	.000
	Micro-financial services	.111	.043	.147	2.589	.012

**Source:** Study findings (2020)

### 3.1.8 Magnitude (Coefficient) of group based micro-financial services

The magnitude (coefficient) of group based micro-financial services variable was  $\beta_1 = 0.147$  (see table 6). That means, at the level of significance of 0.05 a unit increase in group based micro-financial services increased the business performance by 0.147 units. These results imply that, in general, the influence of group based micro-financial services variable, though positive, had influence of about 14.7% on business performance of rural based MSMEs in Kagera region. Such influence could be felt by borrowers, however, not as big as expected.

### 3.1.9 Regression coefficients of disaggregated micro-financial service variables

In regard to magnitude (coefficient) for disaggregated micro-financial services variable table 7 shows that *loan usage* recorded the lowest magnitude and *loan disbursement* recorded the highest magnitude among the studied determinants of group based micro-financial services variable. The magnitude for *loan usage* and *loan disbursement* were  $\beta = 0.049$  and  $\beta = 0.152$ , respectively. That means, at the level of significance of  $P = 0.05$  a unit increase in loan usage

increased the business performance by 0.049 units. On the other hand, a unit increase in loan disbursement increased the business performance by 0.152 units. The implication drawn from these results is that loan usage, had the lowest positive influence of about 4.9% on business performance of rural based MSMEs in Kagera region. Such influence could hardly be felt by borrowers as compared with other studied determinants of micro-financial services variable. On the other hand, loan disbursement had the highest positive influence of about 15.2% among the studied determinants of micro-financial services variable. Such influence could be felt by borrowers as compared with other studied determinants.

Table 7: Regression coefficients of disaggregated predictor variables

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	17.071	3.218		5.305	.000
Loan disbursement	.292	.107	.152	2.729	.007
Loan usage	.074	.084	.049	.884	.378
Loan repayment policy	.131	.066	.105	1.972	.050

Source: Study findings (2020)

### 3.2 DISCUSSION

Under this section the paper discusses and compares the results under the current study with those of previous researchers/ studies. The paper tries to give out implications of the findings to the theories concerned as follows:

#### 3.2.1 Influence of group based micro-financial services (MFS) on business performance of rural based MSMEs

With this study the resulted values show that group based loan disbursement, loan usage and loan repayment policy had positive influence on business performance. However, contrary to the theoretical expectation the influence for *loan usage* was insignificant at 5% because most borrowers, particularly the rural farmers, in their economic undertakings are largely affected by loan disbursement (amount of loan sanctioned and time taken by lender to disburse the loan) and loan repayment policy (e.g. loan repayment grace period). The rest, that is loan disbursement and loan repayment policy had significant influence on business performance of rural based MSMEs in Kagera region. at 5% level of significance. However, group based micro-financial services in general had significant influence on business performance of rural based MSMEs in Kagera region.

The current study findings to a large extent concur with those of Kapila et al. (2016, June); Kumar & Rakhin (2016); Asante-Addo et al. (2017); Banerjee & Jackson (2017); Chen et al. (2017) and Sharma et al. (2017) who argued that provision of micro-financial services to the poor aimed at up-lifting them out of poverty. That, micro-financial services were predominant poverty

alleviation strategies that spread rapidly and widely over the last few decades and were currently operational across several developing countries in Africa, Asia, and Latin America (Sharma et al., 2017; see also Asante-Addo et al., 2017; Banerjee & Jackson, 2017; Chen et al., 2017; Kapila et al., 2016, June; Kumar & Rakhin, 2016; Pantaleo & Chagama, 2016). Sanda (2020) argued that credit and motivational factors significantly influenced towards good performance of enterprises.

## **4. CONCLUSION AND RECOMMENDATIONS**

### **4.1 CONCLUSION**

Generally, this study assessed the influence of group based micro-financial services on business performance of rural based MSMEs in Kagera region. The study was guided by the theory of GBM model. For the research problem statement the study had answered the question of “why one should take trouble to undertake a research on group based micro-financial services?” The fact that there were two unanswered schools of thought among scholars and researchers created a room for the researcher to undertake this study.

Data collection exercise was carried out in four rural districts of Kagera region Tanzania from June to September, 2020. Generally, the exercise was conducted peacefully and successfully despite the outbreak of COVID-19. The exercise of entering data into software was successfully done which allowed for subsequent descriptive quantitative data analysis. Quantitative data processing was carried out by SPSS (16.00) which helped the researcher prepare tables. The descriptive analysis procedures included frequencies, percentages, summated ratings and means. Correlation and regression techniques were also used in quantitative data analysis to verify research hypothesis.

Generally, the exercise confirmed that group based micro-financial services was moderate and had significant positive influence on business performance (BP). That means, as the variable increased the business performance of rural based MSMEs in Kagera region increased as well, and vice versa. Additionally, the study confirmed that the majority of borrowers increased businesses performance by comparing the percentages and means of responses from respondents who agreed against those who disagreed to have increased knowledge, family income and household assets after using group based loans.

The  $R^2$  was 0.627 which was sufficient to report the strength of the relationship between micro-financial services variable and business performance variable. The fact that the  $R^2$  was 0.627 indicates that 63% of changes in business performance were explained by the selected group based micro-financial services determinants. Finally, the research hypotheses testing was done to determine the calculated  $p = 0.05$  level of significance which led to failure to accept the null hypothesis ( $H_0$ ): *There is no significant influence of group based micro-financial services on business performance of rural based MSMEs in Kagera region.*

### **4.2 RECOMMENDATION**

As a result of undertaking this study the following are recommended for future researchers:

In order to draw inference on the actual influence of group based micro-financial services on business performance of rural based MSMEs: (i) A study undertaken with rural based microcredit borrowers should be compared with the one undertaken with urban based microcredit borrowers, as a control. (ii) A study undertaken with group based microcredit borrowers should be compared with the one undertaken with individual based microcredit borrowers, as a control. This is

because the possibility of drawing false inference on the influence of group based micro-financial services on businesses performance of rural based MSMEs is high if at all it is not compared with others of the same nature.

## REFERENCES

1. Bayai, Innocent. *Financing structure and financial sustainability: Evidence from selected Southern Africa development community microfinance institutions*. Diss. Stellenbosch: Stellenbosch University, 2017.
2. Cull, Robert, and Jonathan Morduch. "Microfinance and economic development." *Handbook of finance and development*. Edward Elgar Publishing, 2018. 550-572.
3. Donou-Adonsou, Ficawoyi, and Kevin Sylwester. "Growth effect of banks and microfinance: Evidence from developing countries." *The Quarterly Review of Economics and Finance* 64 (2017): 44-56.
4. Mutua, Rebecca Nundu, Ambrose Jagongo, and Eddie Simiyu. "Financial outreach and financial sustainability of licensed deposit taking microfinance institutions in Nairobi City County, Kenya." *International Journal of Finance and Accounting* 5.2 (2020): 69-94.
5. Donou-Adonsou, Ficawoyi, and Kevin Sylwester. "Financial development and poverty reduction in developing countries: New evidence from banks and microfinance institutions." *Review of development finance* 6.1 (2016): 82-90.
6. Rahman, Mujib Ur, and Junaid Athar Khan. "The Mediating Role of Group Lending Between Poverty and Microfinance." *NICE Research Journal* (2019): 1-11.
7. Rahman, Mohammad Mafizur, Rasheda Khanam, and Son Nghiem. "The effects of microfinance on women's empowerment: New evidence from Bangladesh." *International Journal of Social Economics* (2017).
8. Sharma, Sudhir, et al. "Group Lending Model-A Panacea to Reduce Transaction Cost?." *Zagreb International Review of Economics & Business* 20.2 (2017): 46-63.
9. Arp, Frithjof, Alvin Ardisa, and Alviani Ardisa. "Microfinance for poverty alleviation: Do transnational initiatives overlook fundamental questions of competition and intermediation?." *Transnational Corporations* 24.3 (2017): 103-117.
10. Simmons, Peter, and Nongnuch Tantisantiwong. *Evaluation of Individual and Group Lending under Asymmetric information*. No. 18/01. 2018.
11. Kumar, Ashutosh, and Jasheena Rakhin. "Kudumbashree: Promoting the Self-Help Group Model of Empowerment Through Women Entrepreneurship in Kerala-A Study." *Available at SSRN 2795415* (2016).
12. Banerjee, Subhabrata Bobby, and Laurel Jackson. "Microfinance and the business of poverty reduction: Critical perspectives from rural Bangladesh." *Human relations* 70.1 (2017): 63-91.
13. Attanasio, Orazio, et al. "The impacts of microfinance: Evidence from joint-liability lending in Mongolia." *American Economic Journal: Applied Economics* 7.1 (2015): 90-122.
14. Njiraini, Peter, Paul Gachanja, and Jacob Omolo. "Factors influencing micro and small enterprise's decision to innovate in Kenya." *Journal of Global Entrepreneurship Research* 8.1 (2018): 1-9. Kapila, M., Singla, A., & Gupta, M. L. (2016). Impact of microcredit on women empowerment in India: An empirical study of Punjab State. *Lecture Notes in Engineering and Computer Science*, 2224, 821–825.
15. Kapila, Munish, Anju Singla, and M. L. Gupta. "Impact of microcredit on women empowerment in India: An empirical study of Punjab state." *Proceedings of the World Congress on Engineering*. Vol. 2. London, United Kingdom: Newswood Limited, 2016.
16. Asante-Addo, Collins, et al. "Agricultural credit provision: what really determines farmers' participation and credit rationing?." *Agricultural Finance Review* (2017).
17. Chen, Juanyi, Amber Y. Chang, and Garry D. Bruton. "Microfinance: Where are we today and where should the research go in the future?." *International Small Business Journal* 35.7 (2017): 793-802.

18. Sanda, CRISTINA MARIA. "Parallel between motivational factors in SMEs and the motivation to become an entrepreneur." *Agora Psycho-Pragmatica* 14.2 (2020): 74-83.

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